DRY CARGO Mermanonal

WWW.DRYCARGOMAG.COM

ISSUE NO. 295 OCTOBER 2025



FEATURES

- **European Coal Trades**
- **Bulk Loading Systems**
- **Stockyard Equipment**
- **Biomass Handling & Storage**
- Self-Unloaders
- **Coal Handling Directory**

The world's leading and only monthly magazine for the dry bulk industry









Trac-Mount™ Slider Cradle



Combination Cradle



High Speed Impact Cradle

artin Engineering's range of transfer point belt cradle solutions effectively absorb the impact forces from raw material transfer — reducing dust, spillage, belt mistracking, and equipment breakdowns that lead to costly downtime. Each is built tough to withstand the punishing demands of varying transfer point operations, maintaining optimal belt support regardless of material type, drop height, or operating conditions. Martin cradles deliver consistent performance — maximizing throughput, extending equipment life, and ensuring environmental compliance.





SP-PUR-ZINCING ONCE USED WILL BE USED AGAIN AND AGAIN: cathodic long-term corrosion protection in

shipbuilding and hydraulic constructions. For highly stressed steel segments, wherever cheap standard products fail after a short period of exposure. SP-PUR-Systems are relatively expensive, but offer the superior more reliable protection that is required. DRYDOCKS WORLD SHIPYARD, DUBAI, UNITED ARAB EMIRATES. VESSEL: 'MV ANTONIE OLDENDORFF'. OLDENDORFF CARRIERS, LÜBECK, GERMANY.

Steelpaint GmbH

W: www.steelpaint.com

PUBLISHERS

Jason Chinnock Andrew Hucker-Brown andrew@dc-int.com

EDITORIAL

Louise Dodds-Ely Editor

louise@dc-int.com

Jay Venter editorial@dc-int.com Samantha Smith

directories@dc-int.com

Bernice van Wyk accounts@dc-int.com

Deputy Editor

Directories

Office Manager

SALES

Matthew Currin Senior Sales sales2@dc-int.com Executive **Zack Venter** Advertisement Sales sales@dc-int.com Executive

CORRESPONDENTS

India Kunal Bose Europe **Barry Cross** Maria Cappuccio Michael King UK UK **Richard Scott**

ADMINISTRATIVE OFFICE

Business Publishing International Corporate Park, 11 Sinembe Crescent La Lucia Ridge, South Africa, 4051 Tel: +27 31 583 4360 Fax: +27 31 566 4502 Email: info@dc-int.com Twitter: twitter.com/drycargomag

HEAD OFFICE

Trade Publishing International Limited Clover House, 24 Drury Road, Colchester, Essex CO2 7UX, UK Tel: +44 (0)1206 562552 Email: info@dc-int.com Website: www.drycargomag.com Twitter: twitter.com/drycargomag ISSN 1466-3643

Insta: www.instagram.com/drycargointernational

Trade Publishing International Ltd does not guarantee the information contained in Dry Cargo International, nor does it accept responsibility for errors or omissions or their consequences. Opinions expressed herein are not necessarily those of Trade Publishing International Ltd

© Trade Publishing Int'l Ltd 2025



WWW.DRYCARGOMAG.COM

OCTOBER 2025 issue

featuring...



TRADE & COMMODITIES

Grain and soya trade pickup expected 2 BARRIERS FOR EUROPE'S COAL IMPORTS PREVAIL 4 12 HIGH EXPORTS ROB STEEL OF LEVEL PLAYING FIELD

SHIPPING & TRANSPORT

Steelpaint coating: breakthrough in Wilhelmshaven dock gate renewal 15 Successful installation of Anemoi Rotor Sails on U-Ming's 'Grand Pioneer' VLOC 16 WATER RELAY TEAMS: FLOATING CRANES, OFFSHORE STEVEDORING, TRANSSHIPMENT & SELF-UNLOADERS 19

PORTS, TERMINALS & LOGISTICS

Brazil restarts coal imports from Argentina 29 HOST expands terminal portfolio with acquisition of Impala Terminals Burnside 30 Steelpaint coating: breakthrough in Wilhelmshaven dock gate renewal 31 Landlord Port of Brussels' diversification helps weather throughput fluctuations 32 ABP to invest £15 million to bring forward new industrial open storage sites 34 NSBT celebrates ten years of growth and partnership 35

ENGINEERING & EQUIPMENT

TJSC "RIKON" wins tender to supply double jib level luffing cranes to France 37 40 Mobile Ship-unloaders: unleashing the potential of multipurpose ports 44 STATE-OF-THE-ART STOCKYARDS: EQUIPPED FOR ALL EVENTUALITIES 74 GETTING A LOAD OF... MODERN BULK LOADING TECHNOLOGIES 94 BIOMASS HANDLING TECHNOLOGIES: SERVING A GREENER FUTURE AS FOSSIL FUEL USAGE FALLS 105 CRANK THAT DIAL: BULK HANDLING DRIVES, SYSTEMS & CONTROLS

COAL HANDLING DIRECTORY

125



B DCi

Grain and soya trade pickup expected

Support for commodity import demand in a range of countries seems to be improving based on recent signs. Nevertheless weakening influences elsewhere are still prominent, suggesting that world seaborne dry bulk trade growth may be minimal or nil in 2025 as a whole and some restraints may continue into next year.

In the principal countries affecting global dry bulk commodity import demand, this year's economic growth remains lacklustre and there are no indications at present of an upturn in 2026. A slightly more encouraging perspective, in a recent OECD organization report published last month observed that "global growth was more resilient than anticipated in the first half of 2025". But forecast world gross domestic product growth next year is estimated at below the current year's estimated 3.2%.

GRAIN & SOYA

In the new 2025/26 marketing year now beginning, prospects for world grain and soya trade point to a recovery after the downturn seen in the previous period. Lower imports into China were the biggest influence on the reduced world volume in 2024/25, and an expected revival in Chinese buying is expected to be a large contributor to the global upturn during the twelve months ahead.

The outlook for a part of the segment — soyabeans and meal trade — is shown by the figures in table 1. US

Department of Agriculture calculations suggest that soya trade in the current marketing year starting October could grow by 9.4mt (million tonnes) or 4% to 264.9mt, following a 3% decline to 255.5mt in the preceding period. While European imports may weaken, cargoes to Asian and some other destinations may strengthen, boosting overall activity.

COAL

Trends in recent months have tended to confirm expectations of a reduction in global seaborne coal trade during 2025 as a whole after continued expansion in the past few years. Currently further weakening looks quite likely next year also. Clear signs have been pointing for some time to a downwards trajectory in this trade.

Numerous Asian importers are experiencing adverse influences on coal import demand both in the coking coal and the dominant steam coal categories. Weaker steel industry activity has affected coking coal imports negatively. In India and China higher production of steam coal in domestic mines, more electricity generation from renewable sources and other factors have caused coal imports growth to moderate or reductions to unfold.

IRON ORE

Positive drivers of iron ore trade have been largely absent in 2025, and the result may be a flat global total compared with last year's 1,600mt. This

possible outcome mainly reflects a lack of further growth in China's imports comprising three-quarters of the total. But slacker buying patterns are also evident in many other steel raw materials importing countries.

During the first eight months of 2025, China's iron ore imports were about 2% lower than the volume seen in last year's same period, at 802mt. Weaker requirements reflected lower crude steel production, which was down by 3% to 672mt in that period.

Expectations for the current year as a whole still suggest at least a marginal decrease in iron ore imports, and there are no convincing indications yet of any reversal of the trend in the following twelve months.

MINOR BULKS

Recently some elements of the extensive minor bulk commodity trades segment have been performing solidly, and the result may be a sizeable advance in the total during 2025. Among notable positive contributions, bauxite/alumina movements have been showing signs of vigorous expansion.

BULK CARRIER FLEET

The Panamax (70-99,999 deadweight tonnes) size group including Kamsarmax vessels — comprising a quarter of the world bulk carrier fleet — continues to grow steadily at over 3% annually. Table 2 shows how the main components are evolving.

TABLE 1: WORLD SOYABEANS AND SOYAMEAL IMPORTS (MILLION TONNES)							
	2020/21	2021/22	2022/23	2023/24*	2024/25*	2025/26*	
European Union	31.3	31.0	29.1	30.0	34.5	31.9	
China	99.8	90.4	104.5	112.0	106.6	112.1	
Other Asia	38.4	38.2	36.7	38.2	41.0	43.1	
Others	62.1	62.0	61.5	67.9	73.4	77.8	
World total	231.6	221.6	231.8	248.1	255.5	264.9	
% change from previous year	+1.1	-4.2	+4.4	+7.1	+2.9	+3.6	
source: US Dept of Agriculture, 12	September 2025	October/September marketing years		* forecast			

	2020	2021	2022	2023	2024	2025*
Newbuilding deliveries	12.0	8.6	9.8	10.9	10.0	10.5
Scrapping	1.0	0.7	0.7	2.3	1.6	1.5
Losses	0.0	0.0	0.0	0.0	0.2	0.0
Plus/minus adjustments	-0.1	0.0	0.0	0.0	0.0	-0.2
World fleet at end of year	228.5	236.3	245.4	254.0	262.2	271.0
% change from previous year-end	+5.0	+3.5	+3.9	3.5	3.2	3.4



The World's Most Recognised Brand in Containerised Bulk Handing

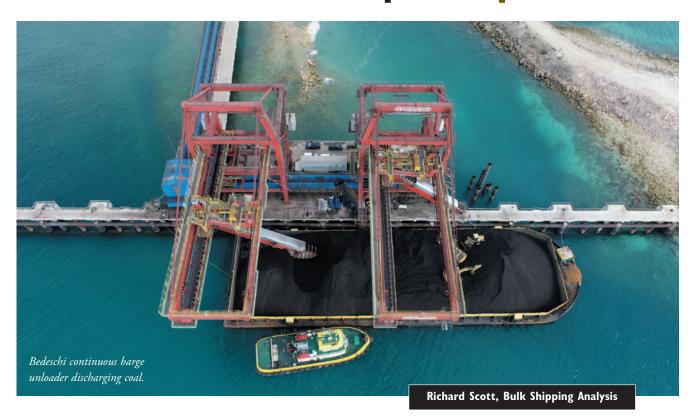
Eurospec MH42-360 with Multilid®-2

WLL 42 Tonnes, 360 Degree, Multi-Directional Mobile Harbour Crane – Ship to Shore – ISO 20ft Electric/Hydraulic – Diesel Hydraulic Fully Integrated or Remote Control



www.Rotainer.com or scan the Q.R. code for further details

Barriers for Europe's coal imports prevail



Over the past couple of years a dramatic reduction in coal imports into Europe has unfolded, and restraints look set to continue. Since the upsurge seen three years ago, boosted by the effects of the energy crisis caused by the war in Ukraine, changes among energy sources with additional emphasis on renewables have been disadvantageous for coal consumption. Sustained downwards pressure on coal usage and imports is foreseeable.

Although still amounting to a substantial amount of activity for bulk carriers and ports, annual volumes into Europe have

receded to a diminished role in the world coal market. Long-haul cargoes to destinations around Europe are still numerous, carried by bulk carriers of varying capacities. Discharging these cargoes is a feature at many bulk commodity handling ports throughout the region, both in northern European countries and in the Mediterranean area.

During 2024 imports into the European Union plus United Kingdom saw a second consecutive year of weakening amid a continued strengthening of world seaborne coal trade as a whole. Steam coal, used

mainly in power stations, previously the largest proportion received, formed about half of the regional volume. Coking coal for steel industry use comprised the remaining half. Adverse influences last year and in the preceding twelve months were most visible in the steam coal category, reflecting the energy crisis receding and the accompanying shift towards cleaner alternative energy sources.

Germany is by far the biggest among individual importing countries, forming about two-fifths of the regional volume, as shown in the table below. The Netherlands

EUROPE'S SEABORNE COAL IMPORTS (MILLION TONNES)						
	2020	2021	2022	2023	2024	2025*
France	6.8	7.5	7.6	6.0	4.6	4.4
Germany	29.2	37.4	41.8	29.8	24.3	25.0
Italy	7.6	8.4	11.9	7.1	3.5	3.8
Netherlands	4.4	12.8	11.3	8.1	7.8	8.0
Spain#	1.9	3.3	7.7	4.5	2.1	2.2
other EU+UK	21.1	25.4	42.8	28.8	19.8	18.9
total EU+UK	71.0	94.8	123.1	84.3	62.1	62.3
% change	-38.6	33.5	29.9	-31.5	-26.3	0.3

* forecast #steam coal

source: Clarksons Research, Bulk Shipping Analysis, 30 September 2025



WE MOVE WHAT MOVES THE WORLD

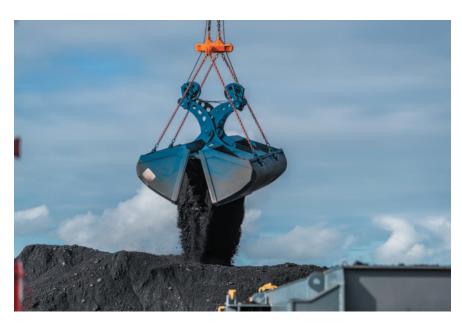
Rocktree is a leading infrastructure and logistics service provider with over 1,500 employees in 13 offices worldwide. We offer an integrated network of offshore floating terminals, tugs and barges, and port terminals to deliver seamless logistics services to our valued blue-chip customers.

is the next largest albeit with only a oneeighth share, followed by France and Italy. Coal-fired power station closures that started many years ago have been a common theme explaining the diminishing annual consumption and imports volumes.

SUPPORTING ENERGY USE

Broad macro-economic trends shaping energy usage are reflected in Europe's coal demand and imports, although this influence often is not the most noticeable factor shaping volumes. Regional and national government environmental and energy policy pressures are usually more prominent. In the past few years the European economy's performance has been sluggish.

Focusing on the most widely used broad indicator of progress in economic activity, gross domestic product (GDP) growth in the eurozone group of countries was a slow 0.8% in 2024 after achieving a minimal 0.4% in the previous twelve months, according to the latest assessment of the world economy published by the OECD organization in late September. Moreover, 2025 may see only a slight improvement to a 1.2% growth rate and in 2026 another low 1.0% is forecast, emphasizing how



activity is being restrained by headwinds.

Slow progress in economic activity amid constraints on business investment and consumer spending has weakened the demand for energy with implications for coal consumption. The subdued OECD forecasts for GDP growth reflect prevailing uncertainties about spending patterns amid adverse geopolitical influences and the ongoing restraint of relatively high albeit falling interest rates and difficulties in

returning growth to a more robust trajectory.

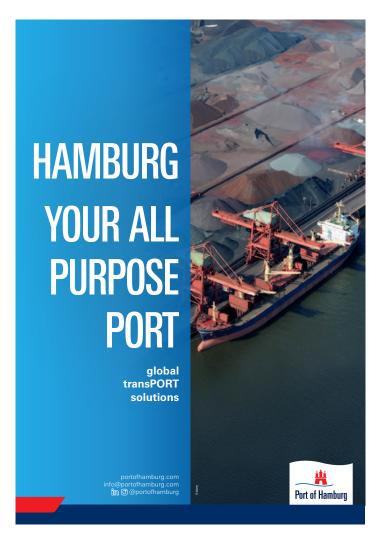
Despite the cautious tone of the recent report, OECD economists observed that "global growth was more resilient than anticipated in the first half of the year" although "the full effects of tariff increases have yet to be felt". The analysis suggests that "easier credit conditions" could prove beneficial in supporting economic growth over the period ahead. But the envisaged modest acceleration to a pace remaining low seems to be a tentative expectation, and probably will not have a noticeable impact on demand for energy.

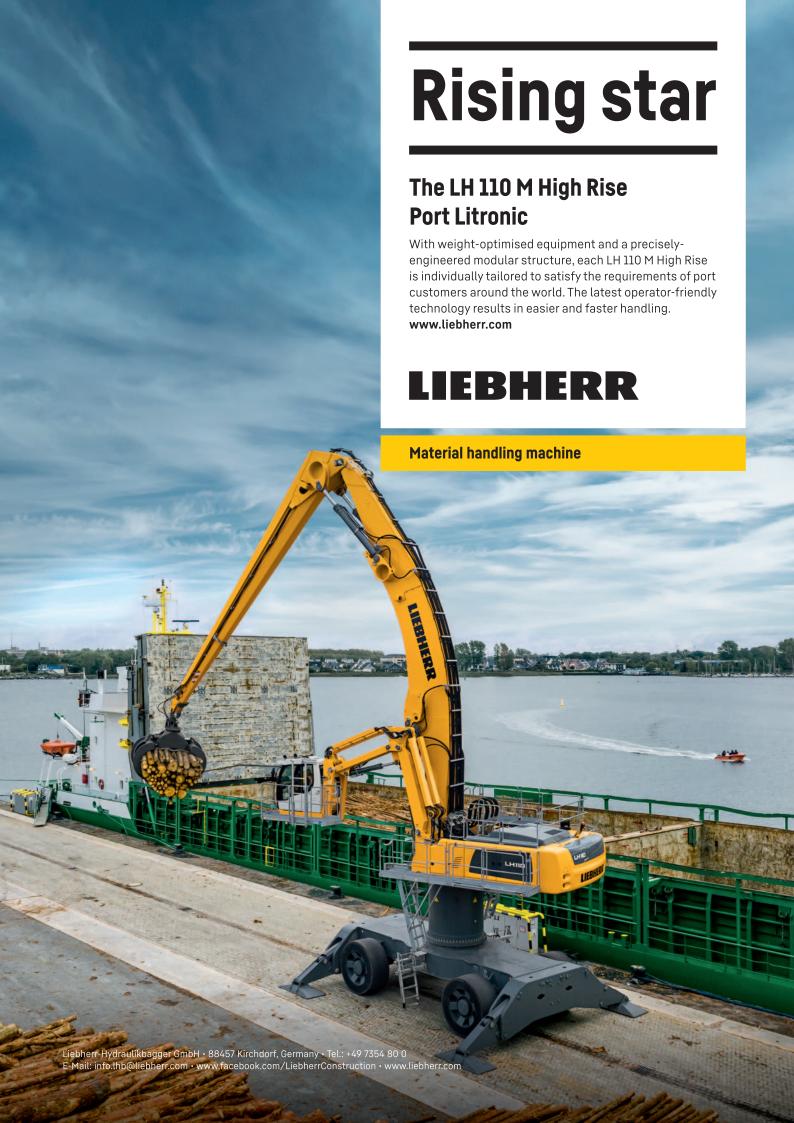
Coal consumption trends will depend upon how activity in the main consuming sectors – power stations and steel mills – progresses. Output trends in these sectors are likely to remain subdued. Assuming that overall energy supplies in the region are adequately maintained, coal usage and imports especially of steam coal grades may be further restricted in the years ahead.

CHANGES AMONG IMPORTERS

In 2024 imports of coal into the European Union plus United Kingdom (EU+UK) were reduced very sharply again, down to about half of the high volume seen two years earlier. All the principal importing countries recorded declines in the past twelve months. But based on available data for the trend so far this year, and signs of volumes in later months, there are tentative signs that in 2025 as a whole the decline may be leveling off.

Coal imported by sea into the EU+UK in 2024 totalled 62mt (million tonnes), a fall of 22mt or 26% compared with the previous year's 84mt, based on Clarksons Research data and Bulk Shipping Analysis calculations, summarized in the table. Large reductions were seen in Italy and Spain and









in the 'other Europe' category. The regional decline followed a 39mt (32%) downturn in 2023.

European imports within the coking coal segment decreased by 8% to about 35mt in 2023, before falling by 10% to 31mt last year. In the greatly diminishing steam coal component a 42% reduction to 50mt in 2023 was followed by a 38% fall to 31mt in 2024. Coking coal is an essential ingredient used in steel produced by the blast furnace/pig iron process, and is hard to replace with another energy source. Steam coal, especially as used by power stations, can be substituted in the electricity generating sector by other fuels or replaced by renewable power generation.

EU+UK imports, at under 5% of the world total last year, are far below the much larger proportion of global seaborne coal trade seen in earlier years. The earlier proportion of global trade is not likely to be regained, because of European environmental policies that permanently eliminate coal consumption and the capacity to use it.

The largest European coal buyer is still Germany, even though its annual volumes are lower than seen previously. Seaborne steam and coking coal received by German power stations, steel mills and other users totalled 52mt in 2016, comprising 36% of the EU+UK quantity. Last year's 24.3mt total — 5.5mt or 18% below the volume seen in the preceding twelve months — saw Germany retaining the biggest percentage share of the overall European volume, at 39%.

Large reductions were also experienced by other importers in 2024, compared with the previous year. Spain's steam coal imports were 53% down at 2.1mt, while Italy's steam and coking coal total fell by 51% to 3.5mt. In France a 23% decline to 4.6mt was recorded, accompanied by a 4% decrease in the Netherlands to 7.8mt, as shown by the table. The category in the table labelled 'other EU+UK' coal imports saw a decline of 31% last year to 20mt. UK imports, included, were down to below 2mt, a 40% annual fall.

Adjacent to the European area, in a country sometimes included in regional import totals, is Turkey, where the trend was in the opposite direction to that seen elsewhere. Turkey has a prominent role in the international coal market, receiving large annual volumes in recent years. The 2024 total reached almost 30mt, 17% above the previous year's volume. Steam coal mainly for power station use is the chief component, comprising four-fifths.

SHAPING THE MARKET

One of the main trends adversely affecting coal usage and imports, in numerous European countries, over recent years was an extensive programme of coal-fired power station closures. Many plants were permanently shut down or idled, or experienced lower capacity utilization. According to Euracoal, the European Association for Coal and Lignite, this trend reflected high Emissions Trading System carbon prices, effectively rendering coal uncompetitive against other energy sources.

Accompanying this trend was a rapid shift towards alternative energy sources. Increasing availability of renewable energy supplies in particular, especially wind-turbine generated electricity, became a prominent feature.

Drivers of coal consumption were temporarily disrupted and modified by European energy market changes occurring in the 2021–2022 period. These changes were caused by an economic recovery from the coronavirus pandemic recession, and then by the energy supply crisis resulting when gas imports from Russia were drastically cut following that country's invasion of Ukraine. When energy supplies improved in 2023 and later, underlying negative influences affecting coal requirements were reasserted, weakening import purchases.

Another influence is variations in domestic coal production volumes within Europe, and effects on overall market supplies, although these now have only a limited impact on import demand because this domestic output is relatively small. Closures of uneconomic mines have been a feature in recent years. Hard coal production is now mostly confined to Poland. Additionally, low grade lignite (brown coal) is mined, mostly in Germany and Poland.

In 2024 Germany produced 92mt of lignite while hard coal output since 2018 has been nil, according to Euracoal figures. Poland's production last year was 41mt lignite plus 44mt hard coal. There was also a minimal quantity under 0.1mt of UK hard coal output from remaining small mines.

Among other EU importing countries domestic hard coal production was nil.

Consequently, as a result of the diminished influence of changes in domestic coal output within Europe, variations in the coal consumption trend are the main influence affecting European countries' purchases on the international market. Users are the two principal industries still using coal — steel production and electricity generation — and also cement and other industrial processes.

Steel mills' use of, and import demand for, coking coal has weakened since recovering from a downturn during the pandemic period. Imported volumes weakened again last year despite slightly higher steel output across the European region. Disruptive influences in recent years had a huge impact in the much bigger steam coal segment. Both economic and political drivers were evident. As already mentioned, lower energy use when the pandemic unfolded was followed by an upturn, while the later gas shortages supported coal usage temporarily until downwards pressures resumed.

During 2024 Europe's electricity generation from coal contributed 12% of all electricity generated, two percentage points lower than in the previous year and well below the proportion recorded earlier, according to Energy Institute calculations. Meanwhile renewables generation from wind, solar, hydro and biofuels has risen strongly. These figures emphasize the restraints on coal use in power stations and underline the direction of the trend.

Europe's electricity generation in 2024, in addition to coal, was comprised mainly of renewables wind and solar power — (31%), and nuclear (20%). The remainder was comprised mostly of gas (15%) and hydro-electric (18%). Nevertheless, the renewables contribution is characterized by short-term variations because of its dependence upon often unpredictable weather, while hydropower also can be affected by weather variations. But, coal is no longer seen as a valuable back-up alternative source of power supplies, a role mainly now focused on natural gas and nuclear generation plants.

IMPACT OF POLICIES

A long-established priority for environmental policy within the European Union is the promotion of cleaner energy resources and reduction of air pollution. The central aim contributing to cutting greenhouse gas emissions is decarbonizing energy-consuming activities. Coal-fired power stations, especially large-scale plants, most of which have been phased-out, were one major focus for the strategy. Also, intensive development of renewable energy — with wind power generation becoming a feature — has been evident in recent years.

Coal usage has been adversely affected by policy measures agreed by EU member countries, such as the Emissions Trading Scheme, air pollution directives and renewable energy targets. The objective is to ensure sustainability, mitigating climate change in particular. Additional aspects such as energy security and industrial competitiveness have been given more

attention as well. Unfavourable impacts on economic activity when uncertain or disrupted energy supplies and prices emerged have been clearly seen in the past few years.

Dependence on coal continues to be part of the 'baseload' reliable generation capacity still needed in a number of European countries, but its role has diminished greatly. A few EU member countries retain import-dependent coal-fired plants operating, amid an intention to reduce and eliminate coal's contribution in the power sector. This policy imperative probably will ensure a further decline in the steam coal market.

Plans previously revealed by European countries involved ceasing power generation from coal by set dates during the period up to the end of the present



decade. In France, Italy, Netherlands and the UK deadlines announced were within the 2022–2029 period. In Germany, which has the largest coal-fired plant sector, a later target date of 2038 was proposed for phasing out electricity generation from both hard coal and lignite. The last UK coal-fired power station was closed twelve months ago.

This process is assisted by the reduced cost of renewable power technology. Enhanced wind and solar power efficiency and often lower costs have altered the economics of and perceptions for alternative energy supplies. However, while the transition provides clear benefits, switching to other energy sources to replace all coal-fired capacity is a large-scale change that could be prolonged. In some countries closing coal-fired power stations is a major and extended procedure likely to continue over a number of years.

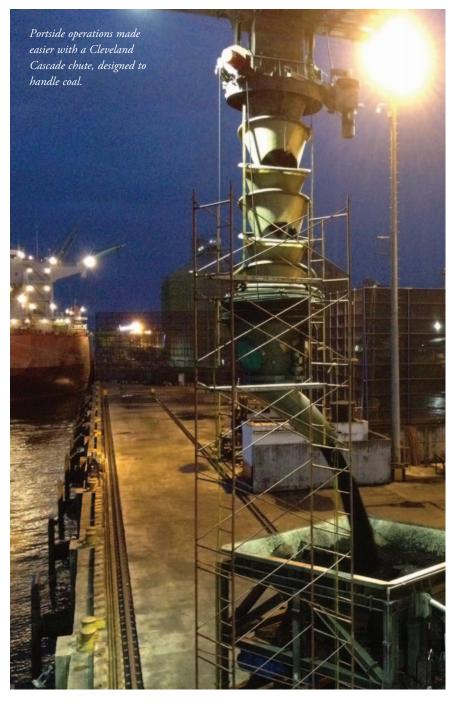
More than three years ago in August 2022 a significant additional policy implemented was the European Union's ban on coal imports from Russia, as part of the EU sanctions regime. Russian volumes previously formed a large proportion of regional coal imports. This action resulted in European buyers turning towards other suppliers and altered the global pattern of coal trade.

SUBDUED OUTLOOK

In the aftermath of the energy crisis ample energy availability in Europe seems to have been largely restored, although there is still recurring uncertainty about short-term gas supplies, especially when winter months — implying demand increases — approach. Currently shortages of energy are limited by restrained economic activity, reflected in particular by energy consumed by the main users, which seems unlikely to accelerate rapidly in the near future. Demand for the output of coal-consuming industries — electricity generation and steel production especially — could remain lacklustre in the period ahead.

The downtrend in Europe's overall demand for coal is likely to persist, according to analysts at the International Energy Agency, in a recent (July) update on the global coal market. Regional European coal demand fell by almost 25% in 2023 compared with a year earlier, followed by another annual decline of almost 11% in 2024, perhaps tapering off to an under 2% reduction this year. Altogether these estimates imply a reduction in the European coal market of over one-third over three years since 2022.

Amid this background and other more

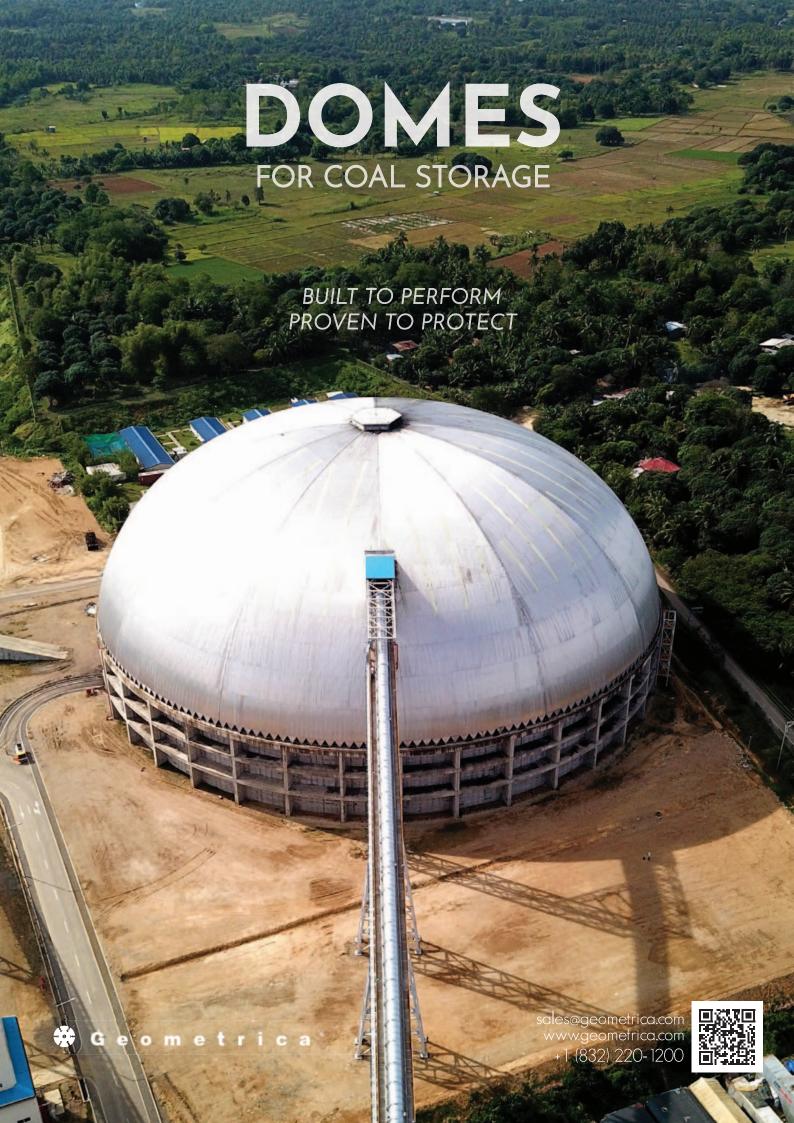


specific influences, a subdued outlook for European coal imports is implied. Recent signs indicate that the 2025 annual seaborne coal volume imported by the EU+UK area could be flat compared with last year's volume, as shown in the table, at around 60mt, based on Bulk Shipping Analysis calculations. Some calculations suggest that a reduction in the coking coal segment could reflect lower steel production. Conversely, slightly larger steam coal purchases by several countries may be seen, resulting in the overall EU+UK imports total remaining broadly unchanged.

Attempts to forecast Europe's coal imports in 2026 and beyond are largely speculative, because of a variety of uncertainties surrounding energy market trends and the participation of coal. It

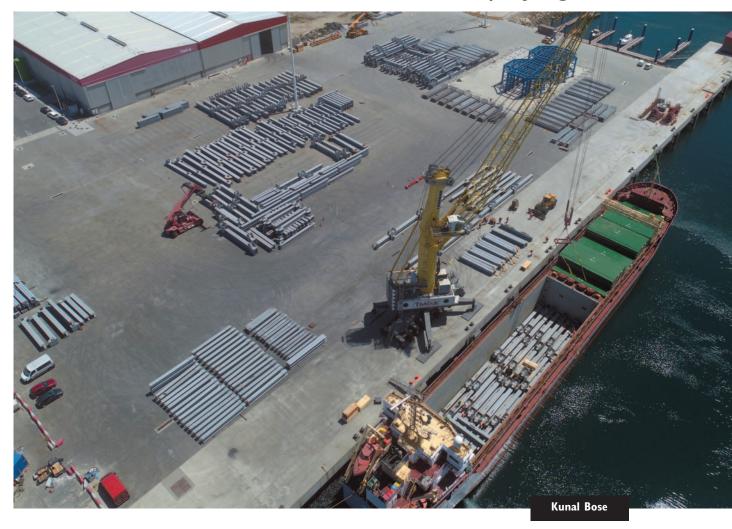
seems quite likely though that downwards pressure on imports — mainly reflecting the imperative of continuous switching towards alternative energy sources to mitigate global warming — can be expected to persist, with negative effects on coal use.

Looking ahead over an extended period of more than two decades to mid-century, when limiting and largely eliminating greenhouse gas emissions remains a global target, environmental pressures are set to intensify. European energy consuming industries still using coal are focusing on decarbonizing their activities, so demand is likely to diminish. Although the actual timing and magnitude of coal import reductions is not predictable, the general implications for Europe's trend are fairly clear.



High exports rob steel

of level playing field



Major new steel capacity building, particularly in Asia in the face of low demand is the principal reason for the industry's poor working. At the same time, export aggression by China is robbing the world industry of a level playing field.

One single factor that is primarily responsible for the weak finances of the world steel industry is installed capacity staying well in excess of demand. If that is not enough to stand in the way of most mills across the continents to generate surpluses to support decarbonization of steelmaking and use of hydrogen as a reductant in place of metallurgical coal, the industry is seeing significant new capacity in the pipeline. This and other related issues came up for scrutiny by industry officials and observers at the steel conclave in New Delhi, brilliantly curated by Alok Sahay, secretary general of the Indian Steel

Association (ISA).

Ubiquitous in its application from construction to automobiles to machinery and defence products, steel is considered a strategic material, of which every country wants to have its own manufacturing capacity. Being also highly labour intensive, all steelmaking countries, including the OECD (Organisation for Economic Cooperation and Development) member states, have remained highly protective of the industry. In his campaign to return to the White House for a second term, Donald Trump made a promise to revive the rust belt industries, including steel and aluminium. Since becoming President, Trump has used the tariff card to give protection to steel made in the US. Incidentally, the global steel industry provides employment to around 6m people, including Im in OECD countries.

Genuine anticipated demand driven capacity growth apart, quite a few economies, China in particular, stands out as an example of how market-distorting subsidies and non-market policies lead to bloating of steel capacity. In its report on steel outlook, 2025, OECD says: "The rise in China's position in the global steel industry is not a purely market driven outcome." State intervention in various forms has helped China to own steelmaking capacity of around 1.3bn tonnes or well over half the estimated global capacity of 2.472bn tonnes. Ex-China common concern is China making annually around a billion tonnes of steel when its demand continues to fall, leading the country to become a market distorting exporter.

No wonder, steelmaking countries in the West are miffed at the prospect of

global steel capacity rising by a hefty 165mt [million tonnes] (or by 6.7% on present capacity) during 2025-27. This happens when the industry is confronting sluggish demand growth and low metal prices. One common fear is with the commissioning of that volume of new capacity, the mills will be further constrained to limit production. What needs to be factored in, the world has started experiencing moderate steel demand growth after four consecutive years of contraction in steel use. Talking to Dry Cargo International, Anthony de Carvalho, steel division head at the OECD gives the warning that a significant difference between capacity and demand will contribute to financial stress for the industry. Even the most efficient steelmakers will not be spared the pain of presence of capacity not in alignment with

OECD estimates that with the excess capacity growing to 721mt by 2027 from an already high of 602mt in 2024, the industry's capacity use will be inching towards 70% from the present around 78%, making it a big challenge for mills to stay in the black. The agency foresees further "appreciable decline" in steel demand in China where house building and construction will continue to face headwinds and metal requirements of OECD member countries will stay "roughly constant." As a result, the world demand will grow at a tepid rate of 0.7% through 2030. Whatever happens to steel demand in China or in developed economies, India, which is the world's second-largest producer and user of steel, will remain the global industry's brightest centre.

India has not only remained the strongest driver of steel demand growth among all countries, but it is also making important strides in steel capacity building. The positive feature is that thanks to impressive growth in domestic demand, which is to remain the case for years to come, India is not contributing to world surplus capacity. At the same time, the



OECD foresees strong demand growth to continue in ASEAN (Association of Southeast Asian Nations) and MENA (Middle East and North Africa) regions. Both the regions are seeing construction of new steel capacity in anticipation of growing local requirements of steel for infrastructure development and construction and manufacturing work. Even then, countries such as Vietnam, the Philippines and Thailand continue to push more and more steel in the world market, thereby often being the cause of market disturbances.

Carvalho says Asian countries, including China and India, will contribute 58% to the new capacity buildup of 165mt. With much fanfare, China launched steel capacity swap system in 2018 restricting building of new mills in place of scrapped units claiming to fulfil two objectives: freeze capacity growth and eliminate energy guzzling polluting capacity. But here the twist in the tale was that in many cases modern mills designed to make high value steel came up in place of virtually non-functioning units. technologically advanced new capacity is getting created in China under the guise of capacity replacement. What is particularly disturbing is that China is seeing building of new capacity, of course with the connivance of local provincial administrations when domestic steel demand is falling.

Reflective of the continuing crisis of the real estate sector and slowing infrastructure development, China's local steel demand hit a six-year low at 892.87mt in 2024 when its steel production slid 1.7% to

1.005bn tonnes. Much to the concern of the rest of steelmaking countries, poor domestic demand — leaving China with considerable surplus - led the country to export in 2024 a record volume of 118mt. Even while the Chinese steel production is down so far this year on 2024, its steel exports in the first eight months up to August were up 10% year-on-year to 77.49mt. The development has not come as a surprise, since domestic steel consumption in the first half of 2025 saw a significant drop over the previous year's corresponding period. Some demand improvement is expected in the current half. But that will not be enough for China to apply a brake on exports.

While the Indian steel industry is much smaller in size compared to China with current capacity around 205mt, the growth is so planned that the local demand is comfortably met by supplies from within. Even then, India remained a net importer of steel during 2024-25 with imports at 9.551mt and exports at 4.858mt. Backed by robust demand from the construction, infrastructure and automobile sector, Indian finished steel, including stainless steel consumption was up the world best at 11.5% to 152mt. According to ISA president Naveen Jindal, demand for steel will continue to grow at a healthy clip. He is expecting Indian steel consumption to rise at double digits in the current half after growing at 7-8% in the first half.

The pace at which capacity is growing in India gives confidence to industry officials that by 2030, the country will have built capacity well in excess of the official target of 300mt. Jindal now holds the prospect of India becoming a 500mt-capacity nation by 2047, coinciding with it becoming a developed nation that will demand per capita steel consumption rising to around 300 tonnes. The present per capita use in India is just over 100 tonnes against the world average of 221kg. From what Jindal says, it becomes clear that India will need all the extra steel to build world class infrastructure and housing. The government wants India to become the world's next major shipbuilding nation and



once that happens a new steel demand stream will open up. Incidentally, India is already making grades of steel suitable for building of ships. Whatever the capacity build-up, India will not at any stage become an aggressive seller of steel products overseas and thereby, cause market distortions.

The OECD says in the projected world steel capacity growth by 2027, crossborder investments will have a new tonnage share of 16%. China, already burdened with serious over capacity at home and facing official resistance to building new mills have ventured out in ASEAN in particular and also African countries with investments in steel. As it would happen, almost three-quarters of cross-border investments are leading to creation of BF-BOF route of steelmaking, which will leave a carbon footprint much bigger than when steel is made through EAF (electric arc furnace). Consideration of cementing political influence and submitting to resource nationalism in host countries have also been behind China making cross-border investments in steel and other metals. The net result is accretion in capacity, creating in the process all kinds of market distortions denying a level playing field.

Weighed down by excessive high capacity and production not in alignment with demand, the Chinese industry is left with no option but to export at any cost. OECD points out, "the surge in exports of low-priced steel from China has disrupted

international markets, resulting in growing trade tensions that seem likely to persist in the near term." Over the past many years, Beijing and also provincial governments have been providing incentives, open and also hidden first to build capacity and then support production and exports. Subsidies in different forms that Chinese mills enjoy are ten times those available in the OECD.

Chinese mills have benefited from below market rate borrowings, direct grants, paying for energy at lower than market rates and preferential tax treatment. No doubt, quite a few mills in China will cease operation without heavy doses of subsidy. Moreover, instances are not few where incentives are extended to commercially unjustified steel ventures. But China is not the only country indulging in anticompetition, anti-market practices benefiting the industry.

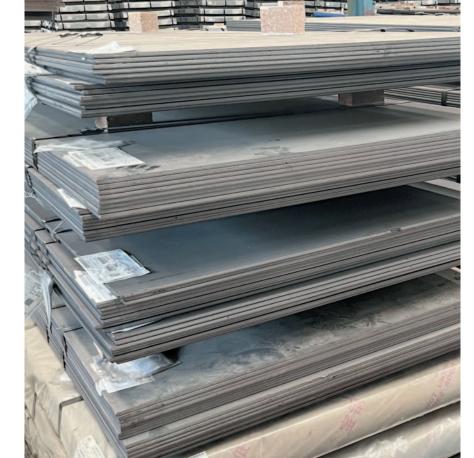
Subsidy as obtains in China and some other countries robs the ones who play by the rules of a level playing field. No wonder then, as OECD points out, the burden of surplus capacity and production is robbing the industry of profitability it needs to invest in new technologies for decarbonization. This besides, rises in exports of artificially low-priced steel, mostly from China have proved to be trade disruptive resulting in growing trade tensions that are likely to persist in the near term. Expectedly, low priced exports proving disruptive for industries of recipient countries of such steel are the cause of growing trade tensions leading to

tariff and non-tariff barriers. No wonder, recent times have seen affected countries filing antidumping cases in good numbers as a shield to predatory imports. As the OECD says, "during 2024, 19 governments initiated 81 antidumping investigations involving steel products, a five-fold increase from the 2023 level and near the 2016 steel crisis level." Here Asian steelmakers are in the dock accounting for nearly 80% of antidumping complaints, with China alone accounting for more than one-third of the total.

The challenge for OECD member countries will be to pressuring China to genuinely trim steel capacity and stop subsidizing its steelmakers, specially in their export drive. That will return the world steel industry to sustainably healthy working, boosting decarbonization drive.

In the midst of sustainability dialogue, a subject being animatedly discussed is if the outcome of the Trump tariff blitz is in alignment with the President's objective to secure fresh investment in the industry. The acquisition of storied US Steel by the Japanese Nippon Steel at \$14.9bn, representing considerable premium over the market price in June after months of uncertainty because of reservations of politicians and trade union leaders brings with it a commitment to build a greenfield mill at an investment of up to \$4bn. Furthermore, Nippon Steel will invest \$11bn through 2028 to modernize the US Steel infrastructure. No one will grudge Trump taking credit for securing the golden share in US Steel to protect national security and interest. Initially opposed to the buying of US Steel, the powerful United Steelworkers Union finally came on board with Nippon Steel making commitment to preserve American jobs and honour the existing agreements with USU.

In the meantime, South Korean Hyundai Steel is making ready a 2.7mt EAF in Louisiana to make HR and CR sheets for use mainly in the automobile industry. The unit, built in collaboration with Posco, will start production in 2029. Investment in steel is part of Hyundai Group's planned major investment of \$26bn in the US during 2025-28, mostly in automobile. The steel unit to create over 1,400 direct jobs will be supplying steel to South Korean automobile factories in the US and also American automakers. Investments by Nippon Steel and Hyundai are seen as a strategic response to the US tariffs on imported steel. Owning mills locally will allow these companies to avoid paying the import tax as they get a big foothold in a major market. DCi



Cavotec MoorMaster Systems Operational at

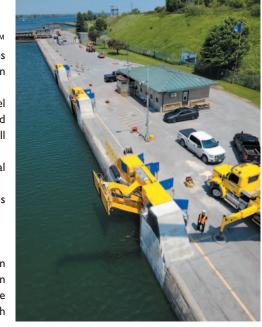
Iroquois Lock in Canada

Cavotec has successfully delivered and commissioned three MoorMaster™ automated mooring systems at the Iroquois Lock in Ontario, Canada. The systems were officially handed over to the Saint Lawrence Seaway Management Corporation (SLSMC) on 30 June 2025.

With this latest installation, Cavotee's MoorMaster™ systems support vessel transit at nearly all locks of the St. Lawrence Seaway, with only Lock 8 in the Welland Canal remaining to be equipped in 2026. The new systems at the Iroquois Lock will contribute to operational benefits, including:

- Enhanced safety for crews and operations through the elimination of traditional mooring lines.
- Less manual handling and more efficient positioning through large vacuum pads that securely hold vessels steady.
- Reduced onboard power consumption for vessels during lockage

"We're proud to see the latest MoorMaster™ systems are fully operational in Canada," said Nicklas Vedin, Head of Ports & Maritime Division, Cavotec. "It's an important milestone that brings us closer to supporting the entire Saint Lawrence Seaway system with our automated mooring technology, helping improve both operational performance and sustainability."



With the Iroquois project completed, a total of 51 MoorMaster™ units are in operation across the Seaway as of 2025.

ABOUT CAVOTEC

Cavotec is a renowned engineering company with 50 years of heritage in innovation, design, and delivery of advanced connection and electrification solutions that drive the decarbonization of ports and industrial applications. With five decades of experience, our systems ensure safe, efficient, and sustainable operations for a diverse range of customers and applications worldwide.

Global marine fire service agreement between VIKING and Johnson Controls International

Johnson Controls International (JCI) and VIKING Life Saving Equipment (VIKING) have entered into a global marine fire service partnership.

The Marine and Navy division of Johnson Controls International is a leading global manufacturer of firefighting systems, having delivered thousands of high-quality and innovative systems to the maritime and offshore industry. JCI Marine and Offshore offers a comprehensive range of firefighting systems, including CO₂, foam, drypowder, water-mist, sprinkler, and alternative gases.

VIKING is a global expert in maritime safety solutions, renowned for manufacturing and servicing lifesaving products of the highest quality, dedicated to protecting and saving human lives. Under this agreement, VIKING has been appointed as the globally approved, trained, and certified service provider for all systems and equipment delivered and installed by Johnson Controls

Marine and Navy.

VIKING will have access to and maintain a stock of the full range of JCI system spare parts necessary to support customers worldwide.

This 'partnership in safety' reflects a shared vision and commitment of the two companies to deliver high-quality services globally. They are confident that this synergy will help them achieve new levels of safety, service excellence and customer satisfaction.

ABOUT VIKING

VIKING Life-Saving Equipment is a global market expert in maritime and offshore safety. Headquartered in Denmark, the corporation manufactures, supplies and services everything from chute and slide-based evacuation systems to liferafts, lifejackets, immersion suits, firefighting equipment, aviation safety gear, lifeboats, hooks, davits and more.

VIKING brings its customers all the elements needed to simplify safety,

including the world's broadest range of safety products and a highly efficient, worldwide servicing network. And it stands out in the ability to offer complete safety compliance solutions all certified in accordance with the latest IMO, SOLAS, EU and USCG requirements. Known as VIKING Shipowner and Offshore Safety Agreements, these uniquely customizable solutions incorporate safety products, global servicing, exchange, single-source management, and financing in a variety of fixed price structures.

In 2018, VIKING acquired Norsafe, the Norwegian boatbuilder whose lifeboats are used throughout the world, adding further strength to an unmatched product and service offering in the global maritime safety industry.

Founded in 1960, the privately held corporation manufactures in Denmark, Norway, Bulgaria, Greece, China and Thailand, and provides safety solutions in all significant markets and locations.

Successful installation of Anemoi Rotor Sails on U-Ming's 'Grand Pioneer' VLOC at COSCO **Zhoushan Shipyard**



U-Ming Marine Transport Corporation (U-Ming) and prominent wind propulsion technology provider Anemoi Marine (Anemoi) Technologies Ltd. announced the successful completion of the Rotor Sail installation on U-Ming's Grand Pioneer, a 325,000dwt Very Large Ore Carrier (VLOC).

U-Ming is the first Taiwanese shipowner to adopt Rotor Sails, marking a major milestone in the company's decarbonization strategy and underlining its role as a first mover in deploying innovative clean technologies.

The four 35m-tall, 5m-diameter folding (tilting) Rotor Sails were delivered fully assembled and dynamically balanced from Anemoi's production base on the Yangtze River and transported by barge to COSCO Zhoushan shipyard.

In a streamlined plug-and-play process unique to Anemoi, the sails were lifted directly onto the deck and secured in place. This method significantly reduces the shipyard's scope of work and keeps installation time short. For this installation, it took only 1.5 days to lift and fix the Rotor Sails in position onboard, with a further five days for commissioning and testing all four Rotor Sails and folding systems once the shipyard had completed its works during the vessel's scheduled drydock in September 2025.

Anemoi's specialist team was present throughout the process overseeing the installation; the team will also sail on the vessel's maiden voyage from Zhoushan to Singapore, with the Rotor Sails deployed and operational. This is to ensure crew training and operational handover will be completed smoothly, equipping U-Ming's seafarers with the skills and confidence to operate the technology from day one.

Jeff Hsu, Vice Chairman of U-Ming

added, "The installation of Rotor Sails on Grand Pioneer marks an important step in U-Ming's decarbonization journey and reflects our belief that the future of global shipping must be both sustainable and competitive. Through the collaboration with our forward-thinking partner Anemoi, we are turning strategy into action by reducing emissions, enhancing efficiency, and delivering long-term value. initiative also demonstrates commitment to innovation and our contribution to the industry's shared ambition of achieving net zero by 2050."

Clare Urmston, CEO of Anemoi, commented "We are proud to have delivered another successful Rotor Sail installation, providing fully assembled technology that minimizes time in the yard and maximizes value for our customers. U-Ming's decision to adopt Rotor Sails, particularly as the first in the Taiwanese



market to do so, demonstrates their strength, ambition and clear focus on decarbonization. Our collaboration reflects the growing momentum behind wind propulsion as a critical pathway to lower emission shipping, and we look forward to analysing the performance data from upcoming voyages."

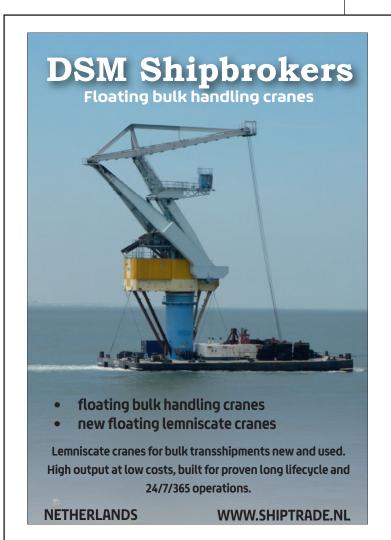
Following completion of the installation,

Grand Pioneer will resume deep-sea service between Brazil and China under a long-term charter with Brazilian mining company Vale. The vessel is projected to achieve annual fuel and emissions reductions of approximately 10–12% on average.

This milestone underscores the importance of industry collaboration in

driving meaningful change. By taking decisive action as a first mover, U-Ming is reinforcing its decarbonization strategy while setting an important example for the global shipping community, demonstrating how innovative partnerships and proven technologies like Rotor Sails can accelerate the sector's transition towards a net-zero future.









Clean shipping commitment

Cut carbon emissions

The need to improve sustainability in the shipping industry is accelerating. The global industry must cut carbon emissions, protect marine biodiversity and leverage the use of data for smarter decision making.

With nearly 100 years of experience of charting through unknown waters, Jotun is committed to continuously innovate and develop advanced products and solutions designed to protect biodiversity and cut carbon emissions to support global sustainability ambitions and achieve cleaner operations for all industry players. A clean hull ensures cleaner operations.



Protect biodiversity



Preserve fuel



Super Terminais announces new grain transshipment port in Itacoatiara (AM)

R\$150 MILLION INVESTMENT TO BOOST NORTHERN LOGISTICS, CREATE JOBS, AND BEGIN OPERATIONS IN 2026

Super Terminais, a prominent logistics and port operator in Brazil, has received unanimous approval from the National Waterway Transportation Agency (Antaq) to operate a new floating port terminal in Itacoatiara, Amazonas. The project, known as Porto Verde, represents an investment of R\$150 million and will focus exclusively on the transshipment of solid bulk commodities, primarily soybeans and corn.

Strategically located 175 kilometres from Manaus on the Amazon River, the new terminal is scheduled to begin operations in January 2026, reinforcing the region's position as a key logistics hub within Brazil's Northern Arc export corridor.

"Our goal is to bring to Itacoatiara the standard of operational efficiency that is already a hallmark of Super Terminais," said Marcello Di Gregorio, Director at Super Terminais. "This initiative will generate jobs, stimulate the local economy, and drive growth in bulk exports from the Northern Arc — transforming traditional grain logistics in Brazil."

A SUSTAINABLE, HIGH-CAPACITY FLOATING

Approved as a Private Use Terminal (TUP), Porto Verde will be equipped to handle Panamax-class bulk carriers, which already operate in the region. The floating pier will be anchored to the Amazon riverbed and span 240 metres in length, 18 metres in width, and cover a total area of 4,320 square metres. It will feature three

high-capacity cranes, each capable of moving up to 2,100 tonnes per hour.

Unlike traditional ports, Porto Verde will function exclusively as a transshipment terminal, transferring bulk cargo directly between ocean-going vessels and barges without the need for storage, ensuring high efficiency and rapid turnover.

ECONOMIC AND REGIONAL IMPACT

The project is expected to create 130 direct jobs and 250 indirect jobs in Itacoatiara and surrounding municipalities. In addition to employment generation, Porto Verde will contribute to economic growth, improve export logistics, and help consolidate Itacoatiara's role as a strategic gateway to global markets, especially Europe and Asia.

REGULATORY AND ENVIRONMENTAL COMPLIANCE

The project was presented by Antaq rapporteur Wilson Pereira de Lima Filho, who confirmed its legal, technical, and

environmental compliance. His report emphasized the absence of operational or competitive conflicts, and his recommendation was supported unanimously by Antaq directors Caio César Farias Leôncio, Alber Furtado de Vasconcelos Neto, and Flavia Morais Lopes Takafashi.

ABOUT SUPER TERMINAIS

With over 25 years of experience in transportation and logistics, Super Terminais is recognized as an efficient private terminal in the Manaus Industrial Hub. It is the only port in Brazil designated as 'green', operating with state-of-the-art equipment and a strong commitment to sustainability, forest preservation, and employee development.

The company specializes in containerized cargo, project cargo, and breakbulk, maintaining the highest operational standards while promoting sustainable development in the Amazon region.



Dry bulk transshipment: continuous customization



LD Ports & Logistics (LDPL), is part of LD Armateurs (LDA), founded in 1851. LDPL is a pioneer in providing maritime solutions such as offshore dry bulk transshipment and barging offering its expertise to myriad clients in Australia, United Arab Emirates, Guinea, Indonesia, India, Sierra Leone, Romania, Dominican Republic and Columbia. It has successfully implemented different types of transshipment solutions worldwide depending on customer's requirements.

company commenced transshipment in Asia (Indonesia), quickly expanding its reach to the other extreme in South America (Columbia). continuously expanded its offerings in line with customer's requirement commencing with the simplest but versatile solution of floating cranes adding a tug dumb barge combination offering an entire marine solution. As business grew, it ventured into self-propelled barges custom built for project offering unique advantage over standard market offerings. It continued backward integration offering port handling solutions as well as at one point of time owned shipyard which was used for construction of its own designed and engineered vessels including floating cranes which are still in operation. Thus the company turned into an integrated maritime infrastructure player offering both construction and operating expertise.

Change is only constant in the world. The constant is accelerating as world progresses. Accordingly company traversed its journey pivoting its strategy. This article highlights LDPL's ability to

navigate through this using its assets and adaptability.

LDPL won a large bauxite transshipment contract in Guinea, West Africa which commenced operations in 2019. Gruelling deadline required to deploy assets in quickest possible time, hence newbuild was not an option and had to resort to secondhand/conversion.

Thankfully LDPL had an asset floating crane, *Miramar*, its own design and built at its own shipyard in Batam, however a single asset would not have been sufficient for peak targeted handling volumes of over 18mt (million tonnes) per year, which zeroed down on available transshipment assets suitable for modification.

The modification project involved modifying an existing transshipper Magdragon which was in use in Australia for loading iron ore from barges. This transshipper required modification to be suited for loading bauxite either from barges or Panamax/Kamsarmax to Capesize/Newcastlemax. This required the 3000B series crane modification to make it suitable to discharge vessels up to 32.2m beam. The cranes were modified, increasing outreach with consequential derating and changes to ensure crane operators visibility, the most critical component in dry bulk transshipment.

The modification was successfully completed and the transshipper commenced operations in Guinea rechristening herself ALM Tinka, carrying out all potentially envisaged operations of discharging barges and Kamsarmax and loading into vessels up to Newcastlemax

and handling around 13.5mt during project duration accounting for almost one third of the total project tons.

ALM Tinka achieved an average handling rate of about 1,400tph (tonnes per hour) during dry season; however, handling efficiency dropped during the rainy season. Ergo, at several transshipment locations, clients prefer to stop the operations during the rainy season — although in certain countries, they prefer to continue with reduced throughput. Guinea was one Operations were such operation. continued during the rainy season and, after initial trials and the learning curve, about 70-80% of handling rates compared to the dry season - were achieved. A key factor impacting handling rates and throughput reduction is the cargo wetness - especially if it is stockpiled in the open, as the wetness or moisture content of cargo results it being stuck to belts and transfer points thereby impacting overall handling rate. The rainy season typically lasts three months in Guinea and the overall impact on tonnage handled during the rainy season varied between 15-35% of dry season tonnage.

In 2023, Metro Mining of Australia was planning to expand its mining and exports in Australia. It needed an additional transshipment capacity to augment its fleet. After thorough evaluation of newbuilt versus existing, associated costs, risks, mining plan etc., *ALM Tinka* was the preferred choice.

It was full circle for the transshipper traversing back to its start, although in North Australian geography this time.

MOVING FORWARD



www.lionmarinegroup.com







Transshipment is a very customized solution, and not all proposed assets are ready to be deployed as on any other project especially considering the objective of the project and governing regulatory authority. This project too required a different set of requirements compared to Guinean operations, albeit for the same cargo, bauxite. Even when the transshipper operated in Australia, the different port location and environment require specific aspects of Australian Maritime Safety Authority to be considered. Therefore, it was time to modify her again. The

transshipper was towed to China where she completed her modifications once again and landed on the Skardon river in Queensland, where she was renamed *lkamba*.

The vessel commenced operations in 2024, and has completed more than one year of operations. *Ikamba* aims to enable the faster loading of vessels, loading of larger vessels up to 220,000 tonnes and due to its size, can operate safely in more difficult weather conditions.

With its modification and extended maintenance period during the rainy

season in the Weipa region the system nameplate capacity is 3,000tph with expected operational throughput of up to 2,000tph.

In this case, the same vessel was modified to suit different project requirements. These modifications appear minor prima facie but these need meticulous planning and execution and are long lead activities in project management. These modifications were executed according to project requirements, thanks to the support from LDPL customers, shareholders, suppliers and contractors.

ESL Shipping is renewing its fleet, sells 'Kallio' to Norwegian company

ESL SHIPPING SELLS 'KALLIO' TO THE QRILL COMPANY AS.

Divesting *Kallio*, taken into use in 2006, is helping to speed up the green transition of ESL Shipping and strengthens the financing of the new vessels currently under construction.

The sales price of *Kallio* is about €18 million. The sales gain for Aspo [of which ESL Shipping is a subsidiary] is expected to be approximately €10 million.

"We are investing heavily in Green Handy vessels, which can be operated fossil-free and have an ice class of IA. Development of the Green Handies has progressed according to our plan. By divesting *Kallio*, we strengthen the balance sheet of ESL Shipping and implement our strategy," says Rolf Jansson, CEO of Aspo and Chairman of the Board of ESL Shipping.

"Ensuring sufficient capacity and reliable customer deliveries are our priorities in all circumstances. The first new generation Green Handy vessel will join our fleet in about two years. During the transition period, we will consider chartering or acquiring additional vessels, when needed," says Mikki Koskinen, Managing Director



of ESL Shipping.

Kallio has sailed under the Finnish flag. After the divestment, the aim is to assign the vessel crew to ESL Shipping's other vessels whenever possible. Kallio has now been handed over to the new owner, operating in the marine feed ingredients business.

ABOUT ESL SHIPPING

ESL Shipping is a carrier of dry bulk cargoes in the Baltic region. ESL Shipping's competitive edge is based on its ability to

responsibly secure product and raw material transportation for industries and energy production all year round, even in difficult weather conditions.

The shipping company loads and unloads large ocean liners at sea as a special service. ESL Shipping Ltd has been in business for over 75 years and is a subsidiary of Aspo Plc.

The combined fleet of ESL Shipping and AtoB@C Shipping consists of around 40 vessels with cargo capacity ranging from 4,000 to 25,000dwt.



GENMA product safety technology: Safeguarding offshore engineering



Dampness, corrosion, huge waves, strong winds... In the vast and boundless ocean, offshore engineering is constantly facing severe ordeals and challenges.

To ensure that these engineering works can work safely and efficiently, GENMA offshore cranes born for this purpose, providing advanced safety technology to safeguard offshore engineering.

ACCURATE AND STABLE LIFTING AND HOISTING TECHNOLOGY

* Stable hook technology: GENMA offshore cranes adopt advanced stable

hook technology to achieve precise lifting, ensuring efficient and safe operation.

- PLC control system: GENMA offshore cranes adopt advanced PLC control system to achieve precise control and improve operational safety and efficiency
- Variable motor and hydraulic drive: the GENMA offshore cranes adopt a variable motor and hydraulic drive system, which can maintain a continuous and stable working state even under heavy load conditions.
- Automatic limit device: GENMA

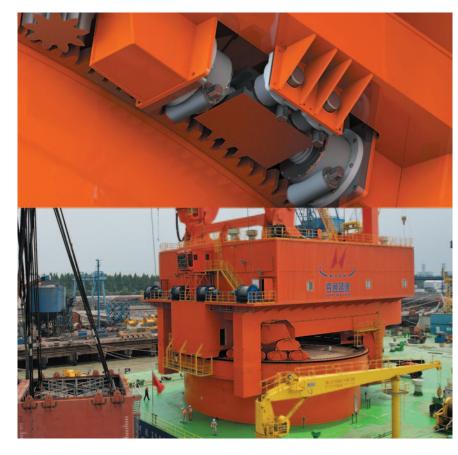
offshore cranes are equipped with hook and boom upper and lower limit functions, which can effectively prevent equipment overload and excessive extension, and improve operational safety.

COMPREHENSIVE SAFETY EMERGENCY RESPONSE SYSTEM

- * Rotary locking mechanism: the GENMA offshore crane's rotary locking mechanism is closely linked with the rotary drive system, providing instant response to ensure stable operation of the equipment even in harsh sea conditions.
- Safety emergency system: the GENMA offshore crane is equipped with a heavy object emergency release system, an anti-back tilt mechanism for the boom, an automatic anti fault braking device, and a motor overheating protection mechanism to ensure that the crane can safely respond in emergency situations.

CORROSION RESISTANT AND DURABLE STEEL STRUCTURAL MATERIALS

- . High strength materials: the GENMA offshore crane adopts an ultra-high strength steel integrated truss boom design, which is lightweight, has strong wind resistance and high operating efficiency.
- Anti-corrosion technology: the GENMA offshore crane adopts advanced coating technology, which can effectively resist the erosion of harsh factors such as high temperature, high salinity, and high humidity in the marine environment, and extends the service life of the crane.







SYNCHRONOUS INTELLIGENT REMOTE MONITORING SYSTEM

Remote monitoring automation control: operators can grasp the synchronous status of GENMA offshore crane, flexibly adjust operation parameters, and achieve efficient and operation safe

management.

Safety is a prerequisite for offshore operations. GENMA offshore cranes provide strong lifting support for various offshore engineering projects such as offshore wind power installation and oil ` gas development with their reliable performance and professional safety technology. In the future, GENMA will continue to uphold the concept of professionalism and innovation, and contribute more brand wisdom and strength to the development of offshore engineering.



www.shieldserviceslogistics.com



Shi.E.L.D. Services





maintenance and compliance to

daily operations management and

performance monitoring, ensuring

your fleet runs safely, efficiently and always to the highest standards.



Safety & Specific Training

Newbuilding Supervision

Technical Consulting

Design







BEST SHIPLOADING UNLOADING SYSTEM

next generation of Starnes is on the way.

Mibau Stema Group orders two new self-unloaders



Mibau Stema Group recently announced that two state-of-the-art self-unloading vessels have been ordered for the Group's fleet, scheduled for delivery from September 2028. The newbuilds are a key part of the Group's long-term growth strategy, ensuring increased transport capacity, improved operational flexibility, and a further step towards sustainable shipping.

Based on the proven blueprint of the Starnes and Fjordnes delivered in 2020–2021, the new vessels will feature significant design enhancements to meet growing customer demands and evolving environmental standards.

KEY VESSEL HIGHLIGHTS:

Increased cargo capacity: +3,500 tonnes compared to Starnes/Fjordnes, enabling each vessel to transport approximately 2.5mt (million tonnes) per year.

- Wider beam: increased from 29 metres to 32 metres, allowing greater cargo planning flexibility per hold.
- Enhanced discharging system:

- capable of self-discharging at 5,500 tonnes per hour with a modified boom system.
- Dual-fuel propulsion: equipped with engines capable of running on B100 biofuel from day one, with the flexibility to switch to green methanol as it becomes available.
- Optimized hull design: improved underwater lines for greater fuel efficiency.

These advances will deliver not only increased efficiency and capacity but also greater fuel flexibility and reduced emissions. "Our investment in these two new vessels is a clear commitment to our customers, our partners, and our environmental goals," said Claus Boisen, CEO of Mibau Stema Group. "By increasing capacity, improving operational flexibility, and introducing the latest in fuel technology, we are securing our long-term growth and ensuring that Mibau Stema remains the leading and most sustainable choice for aggregate shipping."

The vessels will be built in partnership

with Mibau Stema's co-shareholder Hartmann family and Canada Steamship Lines (CSL) in the Chengxi Shipyard and are expected to enter service in a threemonth window progressively from September 2028. They will join Mibau Stema's modern self-unloading fleet, which plays a crucial role in delivering high-quality aggregates to markets across Northern and Western Europe.

MIBAU STEMA GROUP

Mibau Stema Group is a European supplier of sustainable aggregates for the construction industry. From its three quarries, including Europe's largest in Jelsa, Norway, it extracts around 17mt of high-quality crushed rock each year for major infrastructure projects. The group's modern self-discharging vessels and 40+ terminals along the North and Baltic Seas ensure fast, efficient delivery. With over 500 employees in seven countries, it is committed to innovative rock solutions, sustainable resource use, and environmental protection.

Brazil restarts coal imports from Argentina

In Argentina, the Port of Punta Loyola has recommenced the export of coal to Brazil after a six-year closure. Yacimientos Carboníferos Río Turbio (YCRT) exported an initial 30,000-tonne consignment from what is the acknowledged logistics hub for the south of the country. A second, similar shipment is also planned, in a contract amounting to a total of 60,000 tonnes. The coal is needed for electricity generation in the neighbouring country and each shipment is estimated to make more than \$2 million..

YCRT transports the coal from Río Turbio to Punta Loyola using rail. However, this has also required renovation of the port's coal terminal to ensure loading productivity of 300 to 400 tonnes per hour, bringing back much needed skilled jobs for the local community.

South America is distinct in that while many countries throughout the globe are deactivating coal power plants, the need for coal still exists in Brazil both for electricity generation and industry in general. Concerns are therefore being raised as to how environmental factors can be balanced should this trade be re-established in the



longer term, although to date the current shipments are being viewed as individual events. Nevertheless, there is also a project to build a thermal plant in Río Turbio too, which will also make use of local coal reserves.

Barry Cross



B DCi

HOST expands terminal portfolio with acquisition of Impala Terminals Burnside, now Ascension Bulk Terminal

On 29 September, T. Parker Host (HOST), a premier provider of ship agency and terminal services across the United States, announced the acquisition of Impala Terminals Burnside (Impala Burnside), a bulk facility located in Burnside, LA, at Mile Marker 169 on the East Bank of the Lower Mississippi River. Effective immediately, the site will be renamed Ascension Bulk Terminal. Encompassing 230 acres — 190 of which are available for future development — Ascension Bulk Terminal is a multipurpose facility positioned to support both current operations and long-term growth along the Lower Mississippi River. Additionally, HOST is investing \$6 million in upgrades to the facility and equipment to expand capabilities and improve operations.

"Our investment in Ascension Bulk Terminal is a strategic step that solidifies our long-term presence in Louisiana and along the Lower Mississippi River," said Adam Anderson, Chairman and CEO of T. Parker Host. "With more than 500 employees and over \$200 million invested in the region, this investment underscores our commitment to supporting prosperity and growth in Ascension Parish, the surrounding communities, and the state of Louisiana."

With this addition, HOST expands its

portfolio to three privately owned terminals — United Bulk Terminals in Davant, LA; Avondale Global Gateway in Avondale, LA; and now Ascension Bulk Terminal. HOST also operates at Port Allen in Baton Rouge, LA, providing terminal and stevedoring services. Together, these sites comprise more than 1,500 acres of terminal property, including over 1,000 acres available for future development. The acquisition of Impala Burnside further strengthens HOST's long-term strategic presence on the Lower Mississippi River.

The acquisition of Ascension Bulk Terminal crowns a landmark year of growth for HOST. Earlier in 2025, the company completed its acquisition of Transmarine Navigation Corporation (Transmarine), expanding its agency operations to the West Coast and Hawaii. Along with Impala Terminals Burnside, HOST has also acquired Impala Fleeting Burnside, which is responsible for barge fleeting at the terminal. Together, these milestones highlight HOST's momentum and reinforce its commitment to being a trusted partner for its customers.

ABOUT T. PARKER HOST

T. Parker Host is a total solutions provider for the maritime industry,

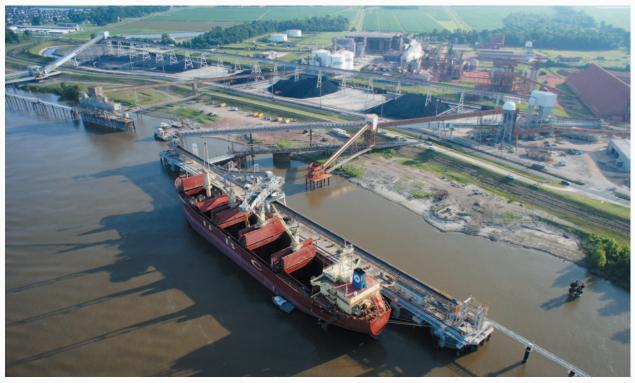
specializing in agency services, terminal operations, stevedoring and marine assets. Founded in 1923 and guided by its Core Principles, the company has developed a strong reputation for its expertise, transparency and high standards of service.

The entire HOST team focuses on customer needs while adding value to every operation with increased efficiency and tenacity. In 2022, HOST reopened the former Avondale Shipyard as Avondale Global Gateway, a center of multimodal commerce, employing hundreds of Louisianians. In 2023, recognizing the success and centrality of the Louisiana sites to HOST's business, the company relocated its headquarters to Jefferson Parish, Louisiana.

ABOUT IMPALA TERMINALS BURNSIDE

Impala Terminals Burnside, located in Ascension Parish, Louisiana, at mile marker 169 on the Lower Mississippi River, handles and stores coal, petroleum coke, bauxite, alumina, and other dry commodities.

Impala Terminals Burnside was previously wholly owned by Trafigura, a leading commodities group, having operated under the Impala Terminals brand.



Steelpaint coating: breakthrough in Wilhelmshaven dock gate renewal

Steelpaint has delivered a decisive breakthrough in the renewal of Wilhelmshaven's Great Sea Lock, applying corrosion protection to some 26,000m² of steel on one of the world's largest sluice gates.

At 60m long, 20m high, and with a depth of 10m, the 1,700t gate provides access to Germany's only deepwater port for naval vessels, commercial ships and energy carriers. The completion of the main coating work marks a significant step forward in a challenging project that started in 2018.

Steelpaint's Stelpant coating system was selected after a two-component epoxy system from another supplier was found to be incompatible with an autumn/winter application, when freezing temperatures and near-saturated humidity can make epoxy coatings unusable.

Muehlhan Germany GmbH, which worked together with Hermann Maschinenbau GmbH in a working-group for port authority WNA Hannover &

WSA Weser-Jade-Nordsee, opted for Steelpaint's single-component polyurethane system Stelpant, which can cure at temperatures down to --5°C with a relative humidity up to 98%. Its use allowed the coating application work to continue through winter, ensuring the gate could be floated back into position and reinstalled for interim use.

The coating package consisted of a $75\mu m$ zinc-rich-primer of Stelpant-PU-Zinc followed by two $225\mu m$ coats of Stelpant-PU-Combination 300. Together, the layers provide advanced corrosion protection against saltwater, abrasion and mechanical stress in one of Europe's harshest marine environments.

The zinc primer provides cathodic protection and excellent adhesion, while the polyurethane intermediate and top coat delivers abrasion resistance, flexibility and durability even under aggressive marine exposure. The system is certified by the Federal Waterways Engineering and





Research Institute in Karlsruhe for use in hydraulic steel structures and for environments from Im1 to Im3 under DIN EN ISO 12944-5.

"This was one of the largest and toughest projects we have been involved in the last few years, but it showed exactly what our technology can do," said Fynn Baumfalk, Key Account Manager at Steelpaint. "The schedule slipped again and again and even now some areas remain unfinished, yet our coatings went on when and where they were needed and performed exactly as intended." Our market presence in Wilhelmshaven is growing more and more. First the Jade-Weser-Port, now the gate refurbishment and currently in progress is the refurbishment of sluice "Hooksiel".

The main corrosion protection on the refurbished gate is complete, though minor rework is required and some hot work also needs to be redone before recoats.

Baumfalk confirmed that the Stelpant

coating system will also be used in these areas, with full commissioning of the gate expected in 2026.

The Wilhelmshaven Sea Lock sits at the mouth of the Jade, where the river meets the North Sea. Its location exposes it to salt corrosion, tidal erosion and abrasive silt, demanding the highest levels of protection.

The lock regulates water levels Wilhelmshaven's inner harbour, strengthens flood defences and provides safe access for both naval and merchant fleets. The port handles a major share of Germany's crude oil, coal and LNG imports, while JadeWeserPort is country's only deep-water container terminal and the German Navy's principal North Sea base. It has a natural depth of about 18m and can accommodate ships with an LOA (length overall) of up to 430m and a 16.5m draught.

The success of the Stelpant coating could see Steelpaint selected for further phases of JadeWeserPort dock's

wider renewal. Three entirely new dock gates are being discussed for commissioning towards the end of the decade. A feasibility study updated in 2019 confirmed the economic viability of a second container terminal 2km north of the existing one.

ABOUT STEELPAINT GMBH

For more than 40 years, Steelpaint has enhanced the life and durability of heavy-industry facilities, particularly in the maritime sectors. Thanks to one-component polyurethane resins, the Germany-headquartered company's special high-tech coatings have raised the technological bar in corrosion resistance, offering impressive benefits over conventional epoxy coatings solutions. Steelpaint has origins dating back to the 1890s. Its products are used widely in port and offshore facilities, sheet pilings, internal and external linings, tanks, bridges, and ship structures. They can be used in combination with cathodic protection.

Landlord Port of Brussels' diversification helps it



The Port of Brussels is a landlord port. This means that all cargo handling operations are carried out by its concessionaires, while the port's role is to provide and maintain the infrastructure (quays, terminals, warehouses) that its concessionaires use.

In 2024, total waterway traffic at the

Port of Brussels reached 6.26mt (million tonnes), an increase of 2.6% compared with 2023. Of this, 4.76mt were 'own traffic' handled at Brussels, and 1.50mt were transit traffic along the Antwerp–Brussels–Charleroi axis.

The breakdown by commodity in 2024 was as follows:

- Construction materials: 2.79mt (-3.5% vs 2023).
- Petroleum products: 0.89mt (+21.6%).
- Containers and various goods: 0.59mt (-18.1%).
- Agricultural products: 0.24mt (+15.3%).



weather cargo throughput fluctuations

- * Foodstuffs: 0.07mt (+44.0%).
- **♦ Minerals and scrap:** 0.15mt (−15.2%)
- Chemicals and metallurgical products: smaller volumes, but showing double-digit growth

Overall, this diversity of traffic categories helps cushion sector-specific downturns. For example, the slowdown in the construction and renovation market in 2024 was partly offset by the strong increase in petroleum products and agricultural/food flows.

The factors influencing annual throughput are therefore primarily external: the state of the construction market, energy demand, recycling activity, the agro-food sector, as well as broader macroeconomic and supply-chain conditions.

As regards infrastructure, the Port of Brussels continues to invest in maintaining and upgrading its facilities. The works at the container terminal quay are nearing completion, and new logistics spaces are being developed to support future growth.













With almost 9 decades of experience, at GRUPO ETE we have become a recognised logistics organisation, combining efficiency and know-how, providing customized solutions in Shipping, Port Operations, Inland Waterways, Shipping Agents, Logistics and Engineering, Ship Building and Repair, all over the world.

Thanks to our presence in 9 countries – Portugal, Spain, United Kingdom, Belgium, Cape Verde, Mozambique, Colombia, Uruguay and Dubai - we create new business opportunities and value-added services to our clients.

Find out more at www.ete.pt



ABP to invest £15 million to bring forward new industrial open storage sites in Cardiff and Newport

Associated British Ports (ABP), the UK's leading port operator, has announced an investment of £15 million to unlock over 40 acres of industrial open storage land across its ports in Cardiff and Newport. This strategic move responds directly to rising market demand for flexible, high-specification logistics space in South Wales.

This marks the start of an exciting new strategy to make ABP the go-to landlord for open storage, with a vast choice across its 21 ports and all four corners of the UK.

ABP is one of the only UK landlords actively investing in bespoke open storage platforms across its portfolio, offering occupiers a tailored solution in strategic port locations with multimodal connectivity. This investment will deliver secure, surfaced, and accessible sites ready for immediate occupation.

Helen Thomas, ABP's Head of Property, commented: "ABP is more than a port operator, we're a strategic landowner and commercial landlord with over 2,000 acres of land in Wales, the second largest landowner in Wales and offering unmatched access to South Wales' industrial heartlands and the M4 corridor.

"We're proud to be leading the way in open storage. Few other landlords have the capability to invest at this scale and offer their tenants the flexibility we can. This £15 million investment programme is about unlocking potential, for our customers, for South Wales, and for the UK supply chain."

The investment will bring forward four key sites, with the first available in Q1 2026. These sites include:

Queens Road South and Longships





Atlantic Terminal and West Way Road at the Port of Newport

These locations are ideally suited for sectors such as steel, renewables, aggregates, and logistics, and benefit from direct access to ABP's port infrastructure, road and rail links, and on-site security.

Thomas, added: "Our sites are in high demand, and that tells us that the market is hungry for quality, well-connected space.

"This investment marks a significant milestone in ABP's commitment to supporting South Wales' industrial and logistics sectors."

Occupiers will benefit from 24/7 on-site security and multimodal access via road, rail, and sea. ABP's South Wales ports also offer high-specification equipment for handling bulk and break-bulk cargoes, supported by a team of experienced stevedores.

Jeff Gibb, Lead Property Asset Manager at ABP also highlighted ABP's collaborative landlord approach: "We take pride in working closely with occupiers to flex and

expand their space as business needs evolve.

"Over the past 12 months, ABP has helped several tenants relocate, consolidate, and grow within our Welsh portfolio."

Kate Openshaw, Associate – Industrial and Logistics at JLL, said: "ABP's investment represents a significant opportunity for the South Wales industrial and logistics market.

"We're seeing strong demand for open storage across the UK — it's emerging as a distinct asset class due to constrained supply and growing occupier requirements for surfaced, secure and accessible open storage land close to major road networks with rail and port access.

"ABP's investment in South Wales sets a new benchmark for the sector, offering occupiers a rare combination of scale, readiness, and strategic location with multimodal connectivity."

ABP welcomes over 100 new tenants annually across its UK portfolio, reinforcing its role as a major commercial landlord and property business.



Portugal's biggest industrial port of Leixões has handled its first ever Kamsarmax bulk carrier. The vessel was able to dock in the inner harbour thanks to improved maritime access and the acquisition of more powerful tugs.

The Shun Fu Da, which had sailed to Portugal from China via Taiwan, offloaded 3,550 tonnes of steel coils, each of which weighed anything between 12 and 20 tonnes. It was handled at the port's General Cargo and Bulk Terminal (TCGL). The 229-metre-long vessel is the largest vessel to date to operate at the eastern end of the northern port's mobile bridge. The manoeuvre was only possible thanks to the use of high-traction tugs. Previously, the draught had also been deepened in both the outer channel and the turning basin, while the port breakwater had also been lengthened.



The so-called Kamsarmax class bulk carriers are able to enter the port of Kamsar in the Republic of Guinea, which gives them their name. They are generally larger than traditional 80,000dwt Panamax vessels.

Barry Cross

**

NSBT celebrates ten years

of growth and partnership



Nectar Sierra Leone Bulk Terminal (NSBT) has marked its remarkable tenth anniversary. The Nectar Group is incredibly grateful for the partnerships that it has forged and the progress it has made in facilitating trade and driving economic growth in Sierra Leone.

Nectar Group's presence in Sierra Leone can be traced back to the 1980s when its first operations in the country were handling rice imports on behalf of USAID and the World Food Programme. Today the Group's presence expands on those early years and since 2015 the Group has been operating and maintaining the Bulk Cargo Terminal at Queen Elizabeth II Quay in Freetown.

This important milestone marks a decade of continuous improvement, operation and partnership at NSBT along with key stakeholders such as Sierra Leone Ports and Harbours Authority and the Ministry of Transport.

Over the last decade, NSBT has invested in new and upgraded equipment, training of local personnel, terminal

management software and the refurbishing existing warehouses and other facilities. A land lease in 2017, saw further enhancement such as additional office facilities and larger storage/warehousing capacity.

The company converted its operating

licence into a concession in 2019, that enabled key long-term infrastructure improvements.

As trade increased, it became apparent that the existing two berths were too small and insufficient to support the region's needs as importers were starting





to bring larger vessels with increased cargo volumes.

Despite the Covid-19 pandemic, the design for a new deep-water berth was completed in 2021, opened in 2024, and is now in its first year of operation. Today, NSBT operates three berths and is responsible for all the terminal's activities from unloading of cargo from vessels, stacking, storage in port warehouses, loading onto trucks for inland destinations, as well as the procurement and maintenance of all terminal equipment.

Nectar remains proudly committed to investing in Sierra Leone through its terminal improvement programmes, striving for industry best practices, and supporting our local communities in the region.

The Group is also pleased to announce ten-year work anniversaries for:

- Siamba Kamara General Manager;
- Jerry C Kamara Assistant Operations Manager;
- Aziz Ibrahim Senior Operations Supervisor;

- Musa Sesay Operations Supervisor;
- Abu Bakarr Bah Billing & Invoicing Manager;
- Martin Kpongo Assistant Finance Manager;
- James Bendu Stores Coordinator;
- Ebi Nat Thomas Billing Coordinator; and
- Jah Dumbuya Head of Operations.

From humble beginnings to becoming a vital hub for dry bulk cargo, Nectar could not have achieved this without its dedicated team, loyal partners, and the unwavering support of the Sierra Leonean community.

LATEST NEWS FROM NSBT

NSBT has been shortlisted for prestigious IBJ Awards — NSBT joins other terminals around the globe on the finalist list for 'Best Dry Bulk Port'.

Nectar is proud to be nominated for the recent developments and improvements at Nectar Sierra Leone Bulk Terminal. The 'Best Dry Bulk Port' category recognizes a company that has made a significant positive impact on dry bulk ports.

This category highlights efficient, safe and environmentally friendly bulk ports with strong customer satisfaction, recent innovation in port operations and management to delivering success in their region and also global bulk industry.

NEW THIRD BERTH & IMPROVEMENTS

With an increased capacity and discharging operations at NSBT, the new third berth is a critical piece of infrastructure which facilitates a larger class of vessel size to call at the Freetown terminal, accommodating vessels of 225 metres and 12 metres operational draught (design draught of 13m).

The new berth has increased capacity at the port by more than 30%, strengthening customer supply chains with enhanced global connectivity, increased reliability, and quicker turnaround times. Cargo movements have contained shipments of

bagged rice, flour, crude oil and aggregates.

With the new third berth now fully operational, Sierra Leone's port is better positioned to compete with other regional ports. This upgrade enhances the country's attractiveness to global shipping lines and investors, setting the stage for long-term growth and integration into global trade networks.

Nectar looks forward to the next decade of innovation, efficiency, and continued success.



DCi

JSC "RIKON" ships first A-RMG for Madrid's new Intermodal Terminal

JSC "RIKON" has successfully shipped the first of three fully automated A-RMG (Automated Rail Mounted Gantry) cranes to the new Madrid-Vicálvaro Intermodal Terminal in Spain. The equipment is being supplied for ADIF, the Spanish state-owned company responsible for the national railway infrastructure.

The new A-RMG cranes represent the latest advancement in container handling technology. All three cranes feature fully automated operation with unmanned cabins and are equipped with RROS (RIKON Remote Operation System), enabling complete remote control capability. Key technical specifications include:

lifting capacity: 40 tonneslength of cantilever: 14.3m

❖ span: 36m

The Madrid-Vicálvaro Terminal, currently being developed by ADIF, represents a significant investment in Spain's logistics infrastructure. With a project budget exceeding €300 million, the new terminal is designed to become a crucial logistics hub in central Spain, connecting Mediterranean and Atlantic rail corridors. Upon its scheduled launch in 2026, the facility will handle up to 150,000 intermodal units annually, serving as a key distribution point for goods moving between major Spanish ports and inland destinations.

This shipment represents continued progress in JSC "RIKON"'s European expansion, following the successful implementation of projects in Valencia and other European ports and terminals. The advanced automation technology provided for

Madrid-Vicálvaro enables the terminal to achieve optimal operational efficiency from its launch, while ensuring maximum safety through automated and remote-controlled operations. This project demonstrates capability of RIKON to deliver cutting-edge technological solutions for modern intermodal facilities and confirms the company's position as a trusted partner for national infrastructure projects across Europe.



JSC "RIKON" wins tender to supply double jib level luffing cranes to France

JSC "RIKON" continues with the successful expansion of its presence in the European market by signing a contract for the supply of two fully electric Double Jib Level Luffing cranes to Brest Port, one of Europe's key maritime ports. This contract marks the company's second major project in France following the successful delivery of a portal crane to the Grande Port of Marseille in 2021, demonstrating growing recognition of RIKON's product quality and reliability in the French market.

Brest Port is a major seaport in northwestern France, strategically located on the Atlantic coast of Brittany region. It serves as an important hub for commercial and naval operations, as well

as a centre of shipbuilding and repair. The new Double Jib Level Luffing cranes, designed for hook operation, will be used for ship repair tasks. The equipment features a maximum lifting capacity of 15 tonnes and a significant maximum boom



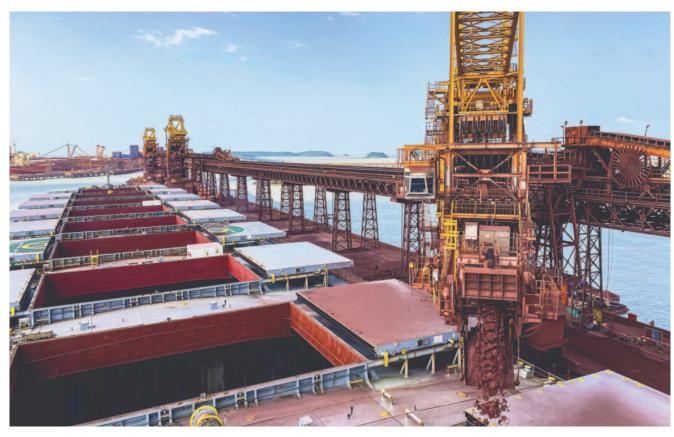
outreach of 70 metres, enabling it to service large-tonnage vessels.

The crane classification complies with group A6 according to ISO 4301/I standard, ensuring reliability and durability even when operating under

intensive operating conditions.

The successful implementation of the project in the port of Marseille and the new order from Brest open new prospects for further expansion of the brand's presence in the region.

Mobile bulk handling solutions: global



The maritime trade and industrial logistics sectors are undergoing an accelerated transformation. In today's environment, operational efficiency sustainability are decisive, dry bulk handling plays a central role in the competitiveness of mining, cement, port and agribusiness operations.

Growing volumes, increasing pressure to reduce logistics costs, and the imperative to comply with ever-stricter environmental standards demand equipment that is more flexible, reliable and technologically advanced. In this context, mobile bulk handling solutions have emerged as strategic enablers: systems that eliminate the rigidity of fixed infrastructure and give operators the agility to adapt quickly to shifting demand.

GBS Group International, headquartered in Latin America with a clear vision of global expansion, has positioned itself as a strategic supplier of these solutions. Its speciality lies in designing, manufacturing and delivering mobile equipment that forms the backbone of bulk logistics chains, from mine to port.

A COMPREHENSIVE PORTFOLIO FOR A **DEMANDING MARKET**

At the core of GBS Group International's portfolio are mobile and modular conveyor systems — the lifelines of bulk operations. Building on this foundation, the company has developed a complete range of equipment that covers every stage of the bulk handling cycle: from stockpiling at the mine or plant, to direct shiploading at the

- Mobile and modular conveyors: designed to move clinker, coal, fertilizers, aggregates and grains with equal efficiency. Their modular design relocation and scaling straightforward, reducing the need for costly civil works and giving operators unparalleled flexibility.
- Telescopic stackers (telestackers): essential for maximizing storage capacity at terminals and yards, these units create well-distributed stockpiles while reducing segregation and material loss. They are particularly valuable in mining and cement, where efficient stock management is critical.
- Mobile shiploaders and unloaders: engineered for multipurpose ports, these systems enable ship loading and discharge without reliance on fixed infrastructure. With capacities exceeding 2,000 tonnes per hour, they deliver fast, adaptable and economically sustainable operations.

This integrated and modular approach allows GBS Group International to serve as more than just an equipment supplier. It acts as a strategic partner, providing solutions designed to integrate seamlessly into clients' logistics portfolios, enhancing their productivity and competitiveness.

GLOBAL REACH, STRATEGIC PRESENCE

While its roots are in Latin America, GBS Group International's reach is global. In recent years, it has supported projects across diverse markets — from expanding port terminals to modernizing cement plants— consistently adapting its equipment to local realities.

GBS Group International's approach goes beyond equipment delivery. provides solutions tailored to each region's specific conditions: material characteristics, climatic challenges, energy availability and environmental regulations. This adaptability has enabled it to serve strategic sectors such as:

- Mining: coal, nickel, gold, aggregates.
- Cement and construction materials: clinker, limestone, gypsum, bulk cement.
- Multipurpose ports: flexible loading and unloading of a wide range of commodities.
- Agribusiness and fertilizers: urea, NPK, grains.

Looking ahead, GBS Group International's

innovation from GBS Group International

ambition is clear: to become a Latin American hub with international projection, capable of competing with global manufacturers through a more flexible, client-centred and sustainable model.

INNOVATION AS A DIFFERENTIATOR

In a market dominated by multinational giants, innovation is GBS Group International's strongest differentiator. Its latest developments focus on integrating IoT sensors and artificial intelligence into conveyors and mobile systems, enabling predictive maintenance capabilities.

This allows operators to anticipate failures, minimize downtime and extend the lifespan of critical components. By connecting these systems to real-time data platforms, GBS Group International provides full visibility of equipment performance, empowering decision-makers with actionable insights.

Complementing this, its solutions incorporate high-efficiency motors and intelligent drives that reduce energy

consumption and carbon footprint — a decisive advantage in industries where sustainability is no longer optional, but a core element of corporate strategy.

A STRATEGIC ALLY IN A COMPETITIVE WORLD

Globalization has intensified competition across all sectors. Companies are seeking partners who deliver not just equipment, but long-term strategic value.

GBS Group International responds with a service model built around proximity and trust:

- Robust, cost-effective designs balancing initial investment with total cost of ownership.
- Customized solutions, adapted to each material and operating environment.
- Local and remote technical support, ensuring availability and operational continuity.
- Commitment to sustainability, with solutions that reduce emissions, dust and energy usage.

For GBS Group International's clients, this means not only meeting immediate operational needs, but also strengthening their long-term competitiveness in the global marketplace.

LOOKING TO THE FUTURE

Bulk handling is set to play an increasingly strategic role in global logistics. The expansion of maritime trade, the growth of port infrastructure in emerging markets, and the demand for cleaner, safer operations will define the coming decade.

Within this landscape, GBS Group International reaffirms its commitment to being a global reference in mobile bulk handling solutions. Its vision is clear: every tonne moved must deliver more productivity, lower environmental impact, and greater value for clients.

The future of the sector will be built on innovation, flexibility and strategic partnerships. And in that future, GBS Group International is ready to lead the transformation.

Thank you

...for proving our point. Advertising really does work.

To find out how you can benefit from advertising in the world's only monthly dry bulk publication contact

Andrew Hucker-Brown on **T:** +27 31 583 4360 **E:** info@dc-int.com





Bruks Siwertell unloaders prove invaluable in a global dynamic port-scape

Flexible dry bulk handling arrangements on the quayside are proving to be invaluable solutions for multipurpose ports; Siwertell ship-unloading systems are offering significant operational advantages to operators that need agile assets that perform on every level

Although many follow trends, global trade in all major and minor dry bulk handing markets fluctuates significantly, and port terminals have to be responsive enough to sustain these vicissitudes. They also have to meet the pressure of increasingly strict environmental regulations if they are to secure or maintain operating licences, and work with the limitations of their geopolitics, organization and infrastructure.

Asset mobility and flexible dry bulk handling arrangements on the quayside are proving to be invaluable, enabling operators to respond, and optimize the profitability of multipurpose quays, where fixed dry bulk handling machinery, such as large, static railmounted ship unloaders, are not suitable or permitted.

How can operators best capitalize on a scenario where jetty utilization rates must be maximized, the highest levels of









 Rugged and dependable magnetic coupler for dusty environments



- Corrosion-resistant, long-life rollers; precision sealed bearings
- Systems customized for the application
- Preassembled option, for easy installation



- Allow infinite rotation
- Combined power, control and media (water, air, oil, vacuum, other)
- Available with ATEX and SIL 3 certification

Rugged Energy & Data Transmission Systems

Conductix-Wampfler has one critical mission: To keep your bulk material handling operations running 24 / 7 / 365. You need proven, worry-free energy solutions - and Conductix-Wampfler has them. Our systems provide reliable electric power and water to stacker/reclaimers, barge and ship loaders/unloaders, bulk conveyors, tripper systems, and gantry cranes. Conductix-Wampfler systems are rugged, low maintenance, and time-tested in tough, dusty environments. All products are backed by the largest sales and service network worldwide!

www.conductix.com







through-ship efficiency need to be achieved, but the quayside must be free when not in use?

FLEXIBILITY AND PERFORMANCE

An excellent solution is mobile shipunloading technology. Siwertell systems are forerunners in this sector, not only capable of handling multiple types of dry bulk material, but they can be offered with a range of capacities and mobilities, deliver unparalleled flexibility, operational efficiency and environmental protection.

"Multipurpose ports and harbours are becoming a cornerstone of modern logistics, and offer numerous benefits when meeting the diverse needs of a global dynamic port-scape," says Jan Karlsson, Sales Director, Bruks Siwertell. "Stakeholders in this arena have to think on their feet and look to state-of-the-art mobile dry bulk handling solutions to support them."

Bruks Siwertell offers numerous systems optimized for mobile dry bulk handling. These can range from portmobile and fully road-mobile models to larger, higher rated capacity machines that have rubber-tyre gantries.

Port-mobile and road-mobile shipunloaders are based on the proven designs of larger-scale screw-conveyor systems, but are available relatively quickly as they comprise standardized components, which offers substantial costs savings and reduction in lead times.

"In-port mobility is significantly advantageous to multipurpose terminals, and offers some good cost arguments when handling one-off consignments at

non-specialist quays, or small-scale operations at dedicated import quays," Karlsson continues.

MULTIPLE MOBILE ASSETS

"Mobile unloaders should not just be considered suitable for smaller-scale, niche operations, however. With multiple portmobile units in operation working alongside each other, directly unloading into trucks, dry bulk material can be moved very quickly to shore, dramatically reducing the time a ship stays in port and freeing up capacity for other activities on the berth," explains Karlsson.

When finished, using a self-propelled





rubber-tyre gantry and an advanced steering system, the port-mobile unloader can be moved away from the quayside and even stowed when not in use. To secure the gantry in all directions when parked, the end pairs of axles, both on the sea-facing and land-facing sides, are turned by 90°.

The port-mobile unloader has a low weight design and does not require rails or any other additional infrastructure or preparatory reinforcement to the quay. It is available in two sizes; a 400tph (tonnes per hour) and a 600tph unit, both of which are capable of servicing vessels of up to 70,000dwt.

As standard, they feature a double-truck loading system, with an optional third system. As they are not interlinked, one, two or all three loading positions can be used independently and simultaneously, delivering the fastest truck loading operation possible; a large-volume intermediate surge hopper also smooths any truck changeovers.

TRANSFORMING QUAYS TO TERMINALS

"When fully road-mobile ship-unloading systems are required, the agility, capability and overall performance of our road-mobile ship-unloading range, is impossible to beat," says Karlsson. "They can literally transform a quay with minimal infrastructure into a terminal."

Road-mobile units have a folding structure, which is mounted on a semitrailer for easy transportation between ports. It only takes 30 to 45 minutes to complete the set-up procedure, with packing away being equally rapid. The road-mobile ship-unloader can be deployed by a single operative, keeping staffing costs low.

Siwertell road-mobile unloaders are available in three different sizes: the Siwertell 5 000 S, 10 000 S and 15 000 S; the largest offering an unloading capacity of up to 500tph for discharging ships up to 15,000dwt. In the last few years, Bruks Siwertell introduced ground-breaking changes to its road-mobile range with the introduction of next-generation models. Over a hundred road-mobile unloaders serve ports all over the world.

When operators need higher capacity ship unloading solutions to serve ports that are receiving vessels up to around 80,000dwt, and are looking for the economies of scale that larger Siwertell ship-unloading models can deliver, these can also be designed to be mounted onto mobile gantries. The most suitable models for this configuration are the Siwertell F-type and Siwertell M-type ship-unloaders.

STEP-CHANGES IN EFFICIENCY

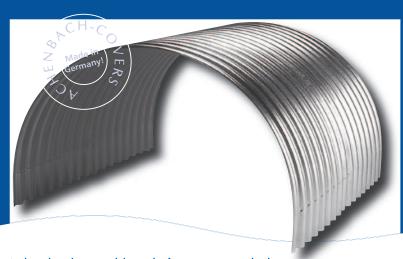
References include those serving the US cement handling industry. For example, in the US Midwest, one operator was looking to secure higher capacities and sustainable cement import growth, and opted for a port-mobile Siwertell 490 F-type ship unloader. It was delivered in 2021 and offers high through-ship efficiencies and a rated cement handling capacity of 800tph, discharging vessels up to 55,000dwt.

Meanwhile, another operator in Tampa, Florida, will make the transition from bagged to bulk cement, using a rubber-tyred gantry-mounted Siwertell ST 640-M ship-unloader. It will handle cement at around 1,500ph, discharging vessels of up to 80,000 dwt.

"Combine all the road and port mobility configuration options with the outstanding performance of Siwertell ship-unloading technology, and you can see why operators are able to turn the challenge of a quayside that has to remain flexible into an opportunity for growth and market agility.

"If you consider this in connection with a Siwertell ship unloader's low weight, its ability to minimize dust, and eliminate spillage, operate dynamically within a hold, and offer market-leading through-ship efficiencies of 70% or more, the clarity of choosing Siwertell technology becomes even more evident; it is a strategic investment in the future of dry bulk handling," Karlsson concludes.

Perfectly covered - with our hoods.



Achenbach metal hoods for conveyor belts

- The modern classic in wordwide use
- Steel, aluminium, stainless the appropriate material at any time
- Four corrugation profiles suitable and cost-effective

Sale of organit-hard-PVC covers made in EU



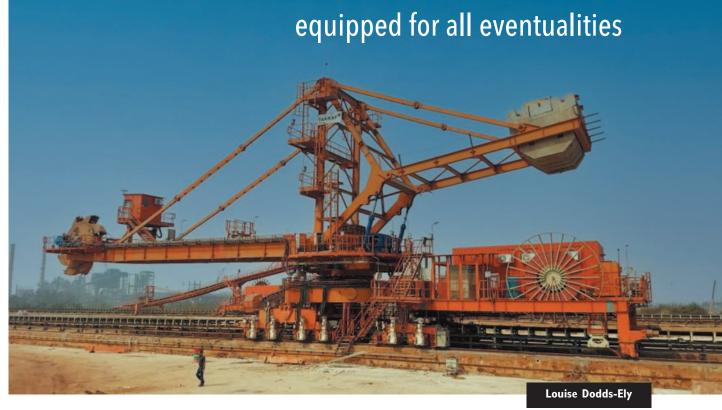
Achenbach GmbH Metalltechnik

Lindestraße 10 · D-57234 Wilnsdorf · Phone +49 (0) 2737/9863-0

Fax: +49 (0) 2737/9863-10 · www.achenbach-siegen.de

DCi

State-of-the-art stockyards



Engineering high-capacity stockyard systems worldwide

TAKRAF GROUP SECURES KEY CONTRACTS FOR ITS ADVANCED STACKING AND RECLAIMING TECHNOLOGIES

TAKRAF Group's stackers and reclaimers are a core element of stockyard operations worldwide, ensuring efficient stacking, blending and reclaiming of bulk materials. Designed for high-capacity performance, they combine precise slewing, luffing and travelling functions to optimize stockpile geometry and guarantee effective material homogenization.

Building on this proven capability, TAKRAF Group continues to secure significant orders for its stackers and reclaimers, with recent contracts including the supply and engineering of a complete bauxite handling system for India's leading producer of copper and aluminum, as well as an order for seven stockyard machines from a major phosphate and fertilizer company in North West Africa.

Notably, both these orders came from longstanding clients, a testament both to

the Group's superior technology and quality of service.

BAUXITE HANDLING

This latest order from India was placed by Hindalco Industries Limited, a flagship company of the Aditya Birla Group, and covers the engineering and supply of a 1,500tph (tonnes per hour) stacking circuit, a 1,200tph reclaiming circuit, a 200tph slewing stacker and a bucket wheel reclaimer. Five in-plant conveyors comprising a total length of 2.6km will also be supplied, as well as two apron feeders and belt feeders, together with supporting equipment. The system is expected to be delivered within 18 months of contract award.

This contract follows earlier projects executed by TAKRAF Group for Hindalco, including, in 2021, India's longest overland conveyor system for the Utkal Alumina Refinery in Odisha. With a rated capacity of 2,850tph, the system was designed to cross difficult terrain and multiple obstacles.

COMPLEX APPLICATIONS

The robust design of TAKRAF machines makes them particularly suited for complex, high capacity operations where they provide reliable operation in demanding conditions. For example, machines were supplied for the bulk handling of urea for a mega fertilizer plant in Nigeria, which required several special design measures. The system consists of a 400tph portal scraper, 200tph conveyors feeding the storage yard and 400tph reclaiming circuit conveyors. The order was for Train-2 of the project and built on the success of a previous handling system supplied by TAKRAF Group for Train-I of the project.

The design measures included sealing all conveyor galleries and transfer towers to prevent moisture ingress and protect the product. The portal scraper was fitted with a 'de-lumper' to break storage-induced lumps. To minimize degradation and dust, the truck loading station features cascading chutes, a pit-less weighing bridge and



Performance delivered

Groundbreaking Solutions

KOCH Solutions stands at the vanguard of material handling, driving progress with over three centuries of combined expertise and a global portfolio boasting 10,000 projects. At KOCH Solutions, we are redefining material handling excellence with our advanced stockyard systems. Meticulously engineered to cater to the dynamic demands of high-capacity operations, our solutions stand out for their modular innovation and seamless integration into existing workflows. Crafted from a blend of tried-and-tested components, each system we devise is a testament to our commitment to tailor-made efficiency. We don't just provide equipment; we deliver comprehensive, turnkey solutions that resonate with your unique specifications, ensuring operational effectiveness paired with economical investment and operating costs. Our ethos is to forge a path of progress in material handling that aligns with your vision of growth and efficiency.

Comprehensive Planning | Precision Manufacturing | Streamlined Delivery | Dedicated Service



de-dusting bag filters.

TAILORED SYSTEMS FOR DIVERSE BULK MATERIAL

TAKRAF Group has extensive references in metals and minerals, including a fast-track contract to design and engineer a 1,993tph radial stacker for Ivanplats' Platreef Project in South Africa and a complete stockyard system to be supplied for a Guinean iron ore complex. This order is part of a contract for an integrated in pit crushing & conveying (IPCC) and material handling system.

In an earlier project in Australia, TAKRAF Group replaced the original stackers at an iron ore mine with fully automated machines that included advanced new features such as the latest generation variable-speed drive control and fibre-optic network infrastructure and an anti-collision system with GPS back up.

Four TAKRAF Barrel Reclaimers were supplied to an Indian steel producer, overcoming the drawbacks of previously installed reclaimers. The machines achieve their rated capacity even at the worst material properties and when the material

is sticky due to high moisture content, and also accommodate the variation in material characteristics during rainy seasons.

For the power industry, the Group supplied four full portal scraper reclaimers to Bharat Heavy Electricals Limited (BHEL) for its Maitree super thermal power project in Bangladesh and four portal reclaimers to a new multi-commodity power plant in Japan.

Similarly, the ports and terminals sector remains an important market, with recent projects including the supply of a replacement stacker for a bulk terminal in Australia, a 7,200tph bucketwheel reclaimer for a long-standing South American client, and the replacement of a 6,000tph railmounted stacker for a customer in Mexico.

Two TAKRAF High-Capacity Bucketwheel Reclaimers ordered for a privately operated port in India are amongst the largest of such machines operating in India, considering boom length and reclaiming capacity. The reclaimers were designed with a number of innovative features for handling various material types and for operation on the same tracks as two existing machines.



COMPREHENSIVE STOCKYARD SYSTEMS WITH FULL LIFECYCLE SUPPORT

TAKRAF Group provides a wide range of advanced stockyard equipment, which is fully supported by specialized maintenance solutions. These range from continuous condition monitoring and spare parts supply right up to major repairs, including complete refurbishments and equipment relocation. For example, a key contract involved refurbishing and relocating a TAKRAF Bucketwheel Reclaimer from a sister operation in Chile to address increased reclaiming capacity needs, driven by a major investment aimed at offsetting declining ore grades and boosting production.

TAKRAF's range includes combined stacker-reclaimers suited to operations requiring flexibility where simultaneous stacking and reclaiming are not needed, while its broad range of stackers serves applications from heaping circular or longitudinal piles to homogenizing and blending materials.

For reclaiming, TAKRAF offers several machine types tailored to flow rates and material requirements from boom-type bucketwheel reclaimers to bridge-type bucketwheel reclaimers and drum reclaimers for precise homogenization. Fully automated scraper reclaimers are increasingly used in open, enclosed or covered storage and are available in side, portal or bridge-type designs.

With proven technology, tailored engineering, and global service support, the Group continues to deliver reliable stockyard solutions that meet the most demanding operational and environmental requirements.

Innovation out of tradition — it pays to talk to a specialist.

Stockyard efficiency: mobile feeding solutions from SAMSON Materials Handling



Running an efficient stockyard is vital to the success of any bulk handling operation. Millions of tonnes of materials such as coal, ores, aggregates, fertilizers, and biomass are moved through stockyards each year. The choice of equipment directly affects throughput, safety, and operating costs. Operators increasingly need solutions that are flexible, reliable, and able to integrate with both existing and new systems.

SAMSON Materials Handling Ltd, part of the AUMUND Group, has built its reputation on supplying mobile intake and feeding equipment for dry bulk handling. Two key solutions are the Mobile Material Feeder and the Boom Feeder (BF0415T and BF0420T). Both are designed to give stockyards a combination of capacity, mobility, and adaptability that fixed installations often lack.

MOBILE MATERIAL FEEDER: FLEXIBLE INTAKE AT GROUND LEVEL

The Mobile Material Feeder is a surface-level intake unit that replaces traditional underground hoppers. Bulk material can be received from trucks or wheel loaders and transferred in a controlled flow to ongoing conveyors. This removes the need for costly civil works while offering much greater flexibility. In a stockyard, feeders can be placed where they are needed most, supplying stockpiling conveyors or reclaim systems. If operations change, the equipment can be relocated quickly. The

controlled discharge helps to reduce spillage, dust, and material degradation, which is especially important when handling friable or dusty commodities.

BOOM FEEDERS: STOCKPILING AND RECLAIM IN ONE UNIT

The Boom Feeder takes the principle of the mobile feeder a step further. Alongside a high-capacity intake, the machine includes a luffing and radial boom conveyor. The BF0415T and BF0420T models are mounted on crawler tracks and supported by outriggers during loading. They are operated by remote control, allowing precise movement and positioning within the yard. In practice, a Boom Feeder can be positioned to receive material from trucks or loaders, then stockpile it in windrows or conical piles. The controlled flow reduces dust emissions and limits segregation of material sizes. The same machine can also feed directly onto ongoing conveyors for transport to plant, rail, or shiploading systems. This dual function makes the Boom Feeder especially useful where yards need both flexible stockpiling and efficient reclaim.

These systems are used worldwide across a wide range of industries, handling commodities such as coal, coke, ores, clinker, limestone, fertilizers, grains, and biomass. Clients include mines, steel plants, cement works, power stations, and ports. Many choose mobile feeders for projects

where operational needs change over time or where infrastructure investment must be kept to a minimum.

COMPETITIVE FOCUS: MOBILITY, DUST CONTROL, INTEGRATION

Bulk handling facilities today face pressure to manage costs, improve safety, and reduce environmental impacts. SAMSON has focused its recent developments on these areas. Mobility and adaptability are key: tracked undercarriages, outriggers, and radio remote control allow machines to be moved and deployed without heavy civil works. Dust control is another priority, with feeders that can be paired with telescopic loading chutes and dust suppression systems to reduce emissions. Compatibility with existing conveyors, stackers, and reclaimers ensures equipment can be integrated easily into both upgrades and new builds. These developments make feeders a practical option where operators want to expand or adapt stockyard capacity without the time and cost of major construction projects.

Recent contracts have highlighted this demand. Boom Feeders have been delivered to coal operations in Africa, while mobile feeders have been integrated into ports and terminals in Europe and Asia. Each project reflects the same requirement: flexible stockyard equipment that can support both receiving and dispatch functions within bulk logistics chains.



WORKING AS PART OF THE AUMUND GROUP

SAMSON Materials Handling, based in Ely, UK, became part of the AUMUND Group in 2002. Within the Group, SAMSON focuses on mobile bulk handling equipment, while AUMUND Fördertechnik provides conveying and storage technologies, and SCHADE Lagertechnik specializes in stackers, reclaimers, and complete stockyard systems. Together, the companies cover the full chain of dry bulk logistics, from mine and plant through to port and terminal.

Modern stockyards demand more than robust conveyors — they require equipment that adapts, moves, and

integrates seamlessly. SAMSON's mobile feeders and boom feeders contribute to this by combining high-capacity handling, controlled discharge, and mobility. Alongside SCHADE's expertise in fixed stockyard systems, they form part of a wider toolbox of technologies designed to help operators manage bulk materials safely, efficiently, and sustainably.

ABOUT SAMSON

SAMSON Materials Handling Ltd, based in Ely, UK, is a key member of the AUMUND Group, specializing in mobile bulk material handling solutions. With over 50 years of experience, SAMSON designs and manufactures flexible, high-performance

equipment for ports, terminals, power plants, and industrial applications.

As part of the AUMUND Group, a global leader in conveying and storage technology, SAMSON benefits from an extensive worldwide network. The group includes AUMUND Fördertechnik GmbH, SCHADE Lagertechnik GmbH, TILEMANN GmbH Chains & Components, AUMUND Group Field Service GmbH, and AUMUND Logistic GmbH.

Operating across 20 locations in Asia, Europe, North and South America, and supported by five strategic warehouses, the AUMUND Group delivers innovative and reliable solutions for bulk material handling worldwide.



Load it up? Designing for conveyor transfer efficiency in ports

Proper loading and distribution at the point where the material touches the belt are linked to the long-term belt and system health, as well as safety and efficiency, writes Dan Marshall/Process Engineer, Martin Engineering. Sharp and heavy raw material in an unobstructed vertical drop onto a belt is not the only factor that reduces belt life and breaks rolling components. Varying sizes of conveyed material - rock, aggregate, sand, slurry — each present unique loading issues at stages throughout the transport cycle. Along with the unique handling issues also come specialized safety concerns that also need to be addressed [see Fig. I].

SIGNS OF IMPROPER BELT LOADING

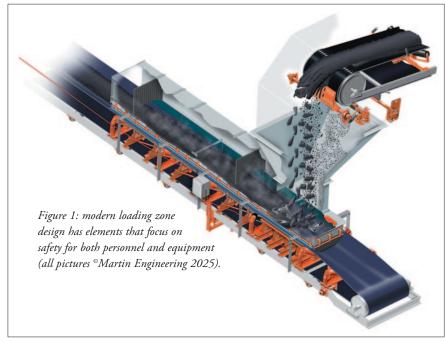
No two operations are alike. Failure to consider all aspects of design will result in unnecessary dust, spillage, and generally shorter belt and equipment life. When designing a loading zone, engineers should account for several elements:

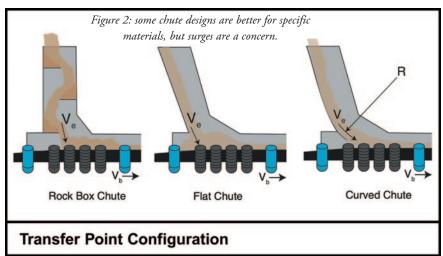
- I. Natural material movement
- 2. Material adhesiveness
- 3. Material distribution
- 4. Material interaction with the belt
- 5. Bulk density
- 6. Safety and maintenance

1. NATURAL MATERIAL MOVEMENT

Some chute designs have rock boxes or shelves that slow the descent of cargo but can result in clogging or sudden surges when deposits of material break free. Flat chutes can produce splashing and backflow that damage components and result in spillage, dust, and uncentered belt loading. A curved design better controls material flow and remedies these issues by slowing the descent and centreing the cargo.

Several chute designs feature rock boxes or shelves that slow the descent of material but can result in clogging or sudden surges when material breaks free. Flat chutes can produce splashing and backflow that damage components and





result in spillage, dust, and uncentered belt loading. A curved design better controls material flow and remedies these issues by slowing the descent and centreing the cargo [see Fig. 2].

Conveyor system designers should be acutely aware of sudden surges caused by a large buildup, abruptly loosening and entering the cargo stream. Sudden heavy

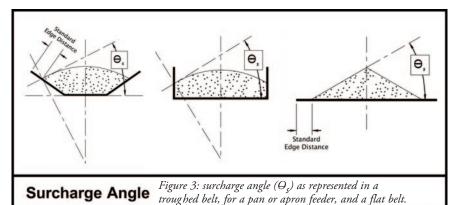
deposits of cargo onto the belt may throw off the center of gravity, leading to mistracking. Surges also cause excessive stress to the system components, particularly the drive motor and belt support system, increasing the cost of operation.

2. MATERIAL ADHESIVENESS

In some mining operations, there are other considerations, such as moisture, magnetic qualities, silica content and the direction of the metal grain on the surface of the chute walls that can contribute to chute plugging and excessive downtime. Systems may not always clog right away; instead, the weight of buildup might cause a sudden surge that overwhelms the loading zone.

3. MATERIAL DISTRIBUTION

The surcharge angle is the angle of the pile in relation to the contact with the belt after



DCi

B DCi it achieves a stable profile [see Fig. 3]. This establishes how quickly and at what angle the belt should be troughed. It also gives insight into the sufficient belt width to create the proper material edge distance to contain the cargo and prevent spillage. Of course, this should be calculated in tandem with the consolidated bulk density — the density of the material due to vibration during transport from tail pulley to head pulley — to determine the proper material edge distance and trough angle. [1]

4. MATERIAL INTERACTION WITH THE BELT

Improper loading of small sharp materials like aggregate, crushed stone and gravel can produce significant dust and spillage along walkways, fouling the return side of the belt and becoming entrapped between the skirtboard and belt, resulting in belt damage. Uneven loading can cause the belt path to shift, causing mistracking and creating spillage along the entire length of the system [see Fig. 4].

Improper loading of smaller sharp materials like aggregate, crushed stone and gravel can produce significant dust and spillage along walkways, fouling the return side of the belt, and becoming entrapped between the skirtboard and belt, with subsequent belt damage as a result.

5. BULK DENSITY

The loose bulk density is the weight per unit of volume of material in a non-compacted condition. Although the consolidated bulk density of some materials can cause the troughed cargo to condense into a much smaller size, once the particulates separate in the transfer chute at the point of discharge, the volume can increase considerably. So loose bulk density should be recalculated and used to determine the geometry of each transfer point based on this change.

6. SAFETY AND MAINTENANCE

When receiving cargo from other



conveyors, feeders, front loaders, railcars, etc., the paramount concern in any design should be safety. Labour and safety issues for monitoring and maintaining the flow of material can and will be costly if overlooked.

It is incumbent upon the designer to take a holistic view of the system beyond the production volume of the operation. Aside from being just a hollow vessel through which material is guided, a well-designed chute must limit individual worker exposure to hazards when maintaining the system. This is achieved by controlling throughput, impeding obstructions and sealing the chute to prevent spillage and dust [see Fig. 5].

PLAN FOR THE KNOWNS, BUDGET FOR THE LINKNOWNS

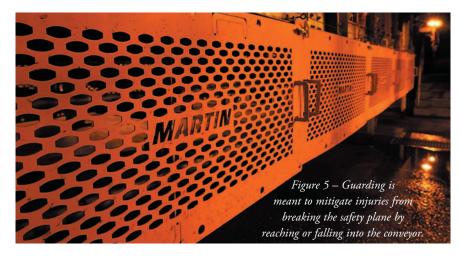
In an ideal world, all of these items would be considered in the design, however, speculative planning can be onerous and wasteful. Once the system is running at full capacity, unforeseen issues with weather, dust or settling can always arise. Several conveyor accessories can compensate for these issues without an extensive rebuild.

PROTECTING THE TAIL PULLEY

Misalignment at the tail pulley is generally a result of a fouled pulley face, inadequate return tracking or a damaged belt. Although a warped belt typically necessitates a replacement, other requirements prior to entering the loading zone include creating an even belt path, centreing the belt on the pulley, shaping the belt into the desired profile for load carrying (flat vs. troughed loading), and sealing the back and edges of the load zone to prevent spillage.

A tail pulley face can be fouled by fugitive material moving against the belt path or spillage migrating to the return side of the belt. The fugitive material rushes toward the tail pulley at the speed of the system and is consumed by the belt and pulley, resulting in one or more of three failures: the belt, the pulley, or the material.

- The belt can fail from material impacts or high-speed abrasion that results in a rip or hole, generally from the underside. Once this happens, a belt replacement is usually the only solution. Splices can also fail due to over-tensioning or unequal tensioning from buildup on the tail pulley.
- If the material fails, it is crushed under the intense pressure between the belt and pulley and adheres to the pulley face and belt, resulting in slippage and mistracking [see Fig. 6].
- A gouged, worn or damaged tail pulley can cause misalignment or component



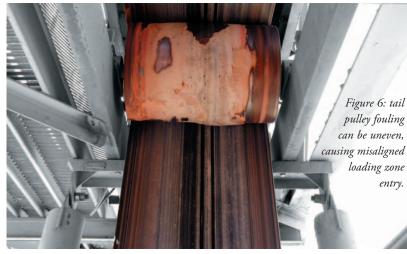
[1] Swinderman, R. Todd; et al.: Foundations™: The Practical Resource For Cleaner, Safer, More Productive Dust & Material Control, Fourth Edition. Ch. 25, pp. 400-401. Martin Engineering. Worzalla Publishing Company, Stevens Point, WI. 2009. https://www.martin-eng.com/content/page/552/foundations-conveyor-systems-book

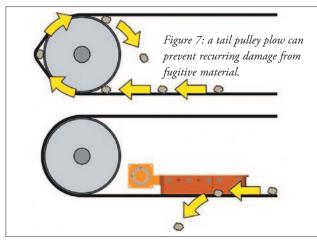
failure, which leads to expensive downtime and repair. If material lumps are large and dense, the pulley can actually be forced out of round.

This can be addressed by placing a plough immediately before the tail pulley with a polyurethane blade that rides lightly on the belt profile, deflecting fugitive material away from the pulley before it is damaged [see Fig. 7].

BACKFLOW AND SPILLAGE FROM THE TAIL PULLEY

Fouling from the loading zone above the tail pulley can happen when cargo backflows against the belt path, either during loading on an incline or at





impact, such causes fugitive material to splash back onto the tail pulley. A tail box can help mitigate some of these issues enclosing the belt's entrance into the loading zone, preventspillage and capturing material moving against the belt path [see Fig. 8].



Figure 8: a tail box helps prevent backflow of spillage and dust at the rear of the chute.



Innovative Stacking & Reclaiming

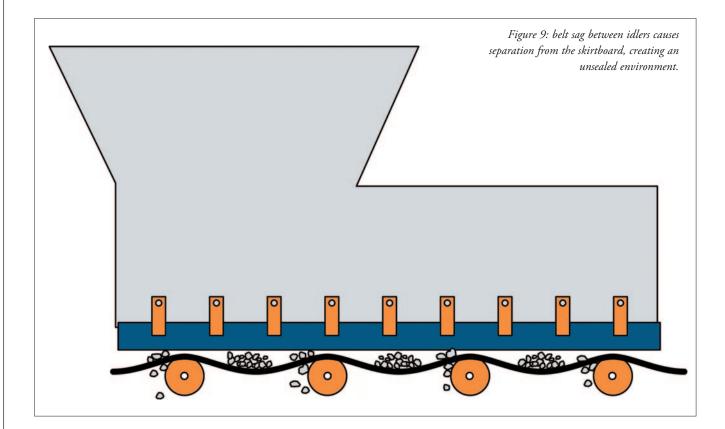
Engineered for Maximum Performance in Dry Bulk Handling



AUMUNDGROUP www.aumund.com

SCHADE

WE CONVEY QUALITY



BELT SUPPORT

Installed directly under the chute discharge, impact cradles alleviate belt damage by absorbing the forces from the landing of material on the belt. Many operators are moving away from moving impact idlers in favour of static cradles that feature a bed of steel angles lined by energy-absorbing impact bars with a top layer of low friction, ultra-high molecular weight (UHMW) polymer or polyurethane. Eliminating moving parts and the requisite lubrication of rolling components drastically reduces the amount of maintenance and improves safety by limiting worker exposure to the equipment. Able to be installed after the

initial construction in most cases, belt support and impact cradles can curtail spillage that often develops in loading zones. Some manufacturers have even developed innovative designs that mount the cradles on rails, allowing slide-out removal to reduce maintenance time and improve safety.

The space between impact idlers can create a small gap between the skirtboard and the belt [see Fig. 9]. The impact of material on the belt can cause a splashing effect of fines and produce air turbulence that seeks exit points from the chute through these gaps, pulling dust and spillage with it. The bar design retains a consistent

seal at the loading point to reduce the amount of spillage and dust emissions. The modular design of the typical cradle system allows the belt support to be extended as far as the circumstances require.

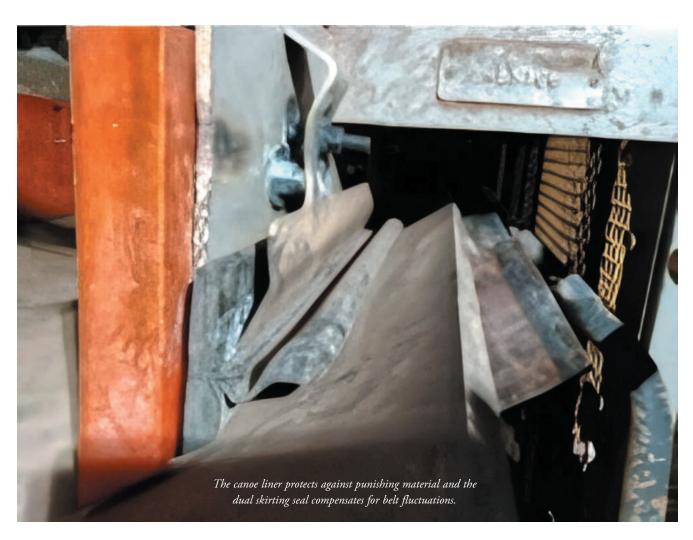
Facilities can reduce the cost of operation by simply installing impact cradles, controlling labour hours needed for cleanup and maintenance while extending the life of the belt and surrounding equipment.

CASE STUDY — BELT SEALING IN RIO DE IANEIRO, BRAZIL

A large port terminal in Rio de Janeiro, Brazil, experienced ongoing issues with material spillage, buildup, and entrapment around the conveyor transfer point loading raw ore. Fines leaked through gaps between the belt and the skirtboard. Abrasive material that didn't escape became trapped between the belt and the skirting. This caused line erosion of the belt, increased the risk of fraying and tearing, and reduced the life of the belt. Significant material spillage required frequent manual cleanup. Additional labour was needed to monitor and adjust the skirting, which further raised the cost of operation.

To address the issues, Martin Engineering was invited to the site. After a detailed assessment, a complete Martin® skirting system was installed for testing. The solution included the Martin® skirtboard liner (mounted on the inner side of the skirtboard) and the Martin®





ApronSeal™ Double Skirting HD (on the outer side of the skirtboard). This setup was designed to effectively contain material spillage, reduce belt wear, and cut down on the need for frequent adjustments, ensuring better performance and reliability for the conveyor system.

After 167 days of continuous operation, operators reported positive results. The Martin® skirting system contributed to:

- A significant reduction in material spillage.
- An average 40% decrease in belt wear in the skirtboard area.
- Longer intervals between preventive maintenance reduce the need for interventions.
- Reliable performance, with components still in good condition at the end of the testing period.

With KPIs met and durability proven, the solution was applied to other areas of the plant for less dust and spillage, a greater belt life, and a lower cost of operation.

CONCLUSION

Loading zone design is not an exact science, and with so many considerations, some details inevitably get missed. Until the system is up and running, engineering

design can only provide highly informed scientific estimates that may change. Unpredictable factors such as weather, foundation settling and variations in the material density can have significant effects in the post-construction operations and efficiency.

Luckily, there is equipment specifically designed to mitigate these design issues and engineered to fit any system retroactively. It is only through experience, observation, and testing — and some smart engineering — that the correct retrofit can be applied.

ABOUT THE AUTHOR

Daniel Marshall received his Bachelor of Science degree in Mechanical Engineering from Northern Arizona University. With nearly 20 years at Martin Engineering, he has been instrumental in the development and promotion of multiple belt conveyor products. He is widely known for his work in dust suppression and considered a leading expert in this area. A prolific writer, Marshall has published over two dozen articles covering various topics for the belt conveyor industry; he has presented at more than fifteen conferences and is sought after for his expertise and advice. He was also one of the principal authors of Martin's

FOUNDATIONSTM The Practical Resource for Cleaner, Safer, and More Productive Dust & Material Control, Fourth Edition, widely used as one of the main learning textbooks for conveyor operation and maintenance.

ABOUT MARTIN ENGINEERING

Martin Engineering is a global leader in bulk materials handling solutions. For over 80 years, Martin has designed, manufactured and installed innovative products that make the world's foundation industries cleaner, safer, and more productive. Based in the USA, the privately owned company has drawn on its unrivalled experience and expertise to help operations improve safety, enhance material flow, reduce spillage and dust, and minimize downtime. With factory-owned facilities in 20 countries, on-the-ground presence in another 40, and a worldwide service partner network, Martin has built an enviable reputation for high performance products delivered with exceptional technical service and support. company's comprehensive Foundations™ textbooks, learning resources, and training programs are the global standard for the efficient and effective design, operation, and maintenance of bulk materials handling equipment.

DCi

Wearing thin

Conveyors are the most efficient method of handling bulk materials, but their cost-effectiveness depends on the length of working life and lack of need for regular intervention to carry out running repairs.

Thanks almost entirely to one or two leading European and North American manufacturers, primarily Fenner Dunlop, the technology used to produce conveyor belts has advanced enormously in recent years. Today's leading brands are providing a working lifetime of up to five times longer than their Unfortunately, most competitors. operators continue to waste money by replacing belts far more frequently than should be necessary. Here, leading conveyor belt specialist Jeremy Clark explains why this is happening.

BELT LONGEVITY — THE BIGGEST INFLUENCE

The quality of the rubber is the biggest single influence on the performance and longevity of a conveyor belt. There are many different types of rubber compound used for rubber multi-ply belts because modern-day belts have to deal with a multitude of different (and often combined) demands including abrasion, heat, oil, ozone, fire and more. These compounds are commonly referred to as known as 'cover grades' or 'cover qualities'. They are almost entirely synthetic because of its greater versatility and, by using literally dozens of different chemicals and substances, they can be engineered and adapted to cope with a multitude of demands.

There are two internationally recognized sets of standards for abrasive



Surface cuts and gouges link up.





wear, EN ISO 14890 (H, D and L) and DIN 22102 (Y, W and X). In Europe, it is the longer-established DIN standards that are the most commonly used. DIN Y (ISO 14890 L) generally relates to 'normal' service conditions. In addition to resisting abrasive wear DIN X (ISO 14890 H) also has good resistance to cutting, impact and gouging. DIN W (ISO 14890 D) is usually reserved for particularly high levels of abrasive wear, which is relatively uncommon in the world of bulk material handling.

Wear on the top cover is primarily caused by the abrasive action of the materials being carried, especially at the loading point or 'station' where the belt is exposed to impact by the bulk material and at the discharge point where the material is

effectively 'accelerated' across the belt surface. Many bulk cargoes such as coal are not especially abrasive but materials that are sharp and hard can cut and gouge the surface causing accelerated deterioration. Although the size of the damaged area is often fairly small, they tend to join up with other damaged areas, resulting in pieces of rubber cover being literally cut out of the belt surface.

WEAR TESTING

The test method for abrasion (ISO 4649/DIN 53516) is actually quite simple. Abrasion resistance is measured by moving a test piece of rubber across the surface of an abrasive sheet mounted on a revolving drum and is expressed as volume loss in cubic millimetres. The most important



thing to remember when comparing abrasion test results is that higher figures represent a greater loss of surface rubber which means that there is a lower resistance to abrasion. Conversely, the lower the figure the better the wear resistance. Regardless of the type of cargo, in bulk handling the absolute maximum volume loss should be no more than 150mm³.

A word of caution here because a good quality DINY (ISO 14890 L) grade rubber can often have a better level of abrasion resistance than a poor-quality DIN X (ISO 14890 H) or even DIN W (ISO 14890 D) grade rubber.

Comparing an offer from one manufacturer to another is made very difficult because the technical datasheets provided by manufacturers and traders only show the minimum figure demanded by a particular test method or quality standard rather than the actual performance that the belt they are offering should be expected to achieve. The only exception to this is Netherlands-based Fenner Dunlop which shows the average results achieved during the strict quality testing regime carried out in its laboratories on every batch of rubber that it produces.

THICKER IS NOT NORMALLY THE ANSWER

Although the thickness of the cover can be an important consideration, the actual wear-resistant properties of the rubber are much more important. If it is felt necessary to increase the cover thickness to compensate for premature wear, then that is a sure sign that the level of abrasion resistance is inadequate. As well as good abrasion resistance, good quality rubber will also have superior tear strength (measured as either N/mm² or MPa) so that it can better resist rip and tear propagation.

Crucially, wear and tear caused by

abrasive action, cutting and gouging, is significantly accelerated due to degradation caused by the unavoidable exposure to ground level ozone and ultraviolet light.

ACCELERATING THE WEAR PROCESS

Contrary to popular belief, the damage caused by ozone (O_3) and ultraviolet light (UV) is not limited to high altitudes or sunny climates. Ground level, 'harmful' ozone, is created by the photolysis of nitrogen dioxide (NO_2) from automobile exhaust and industrial discharges. The reaction is known as ozonolysis.

Tiny traces of ozone in the air attack the molecular structure of rubber. It increases the acidity of carbon black surfaces with polybutadiene, styrene-butadiene, nitrile and natural rubber the most sensitive to degradation. The first signs are cracks that appear on the surface of the rubber. Further attacks occur inside the freshly exposed cracks, which continue to steadily grow until they complete a 'circuit' and the product separates or fails.

Ultraviolet light from daylight and fluorescent lighting also has a seriously detrimental effect because it accelerates rubber deterioration by producing photochemical reactions that promote the oxidation of the rubber surface resulting in a loss in mechanical strength. This is known as 'UV degradation'. Rubber belts that are not fully protected against ozone and UV can start to degrade as soon as they leave the production line. Despite its crucial importance, ozone and UV resistance is very rarely, if ever, mentioned by traders or manufacturers.

Ozone and ultraviolet damage is entirely preventable simply by the addition of antioxidants to the rubber compound mix. Despite this, tests show that more than 85% of belts sold in Europe fail within only 6 to 8 hours of the 96-hour EN ISO 1431





test because most manufacturers see antioxidants not only as an avoidable cost but something that delays the replacement cycle. My advice is to always make ozone & UV resistance a required part of the specification when selecting any rubber conveyor belt.

BUYING CRITERIA

Although making a choice based on lowest price is very rarely the best approach, the fact remains that conveyor belts are usually big budget items. As a result, although they will not admit it, most buyers will invariably have price at the top of their selection criteria. However, certainly in the case of complex components such as conveyor belts, the cost can only truly be measured over the lifetime of the belt. As the old saying goes, price is what you pay but the cost is what you actually spend.

The conveyor belt market is hugely competitive and the reason for this has been the growing market dominance of Southeast Asian manufacturers over the past twenty years, primarily China, who are offering apparently the same specification products at less than half the price of the top European and North American manufacturers. The common explanation

for this disparity is the much lower wage costs in Asia, but this is a huge misconception. Thanks to the everincreasing level of automation, the labour cost element is actually less than 7% of the cost of producing a conveyor belt whereas raw materials represent some 70% of the cost. It is these two crucial facts of life that are the reason why so many operators are

wasting huge amounts of money replacing belts far more frequently than necessary.

IT'S ALL ABOUT THE RUBBER

Rubber represents some 70% of the mass and 50% of the raw materials cost of a conveyor belt. Consequently, it is by far the biggest opportunity for manufacturers to cut costs and improve their price competitiveness. Methods include the use of unregulated, low-grade raw materials, the use of bulking agents such as chalk and clay, the use of increasingly larger proportions of recycled scrap rubber of highly questionable origin and the substitution of essential polymers such as carbon black with low-grade versions created by various means including the burning of scrap vehicle tyres.

Another common method is reduced quantities and often the total omission of key ingredients such as the antioxidants needed to resist the premature degradation caused by exposure to ozone (O₃) and ultraviolet light. Such practices allow unscrupulous manufacturers to massively undercut the prices of the few remaining manufacturers at the quality end of the market.

ONE FOR THE PRICE OF THREE

Fitting and replacing two or three 'economically priced' belts rather than buying a single, good quality belt is invariably a false economy. Helpfully, the quality of a belt is usually best indicated by its price. The lower the price, the lower its resilience and longevity, so it is always worth being suspicious and checking the original manufacturer's specifications very carefully as well as asking for documented evidence of compliance and performance.





WORLD-CLASS CONVEYOR TRANSFER POINT PRODUCTS & SOLUTIONS

Point Cloud Laser Scanning 3-DEM[™] Flow Analysis

Flo-Control™ Transfer Chutes

Point Cloud Scanning
3-DEM® Simulation Analysis
Detailed Engineering/Fabrication
Load Zone Design
Flo-Control™ Transfer Chutes
Dust/Spillage Control













Resilience by design: the answer to stockyard dust control

The volume of dry bulk shipping continues to increase annually with 2024 levels surpassing 2023 by over 4%. Leading the way was iron ore followed by coal²; arguably two of the dustiest commodities to deal with.

Conveyors, haulers, hoppers, and stockpiles seen in dry bulk storage and handling are well known contributors to industrial dust pollution. Windy port environments only exacerbate the issue. The consequence of uncontrolled dust is public health issues, disrupted operations, and material loss. Just to name a few.

Those in the industry are familiar with the use of wind fences for dust control. What many may not be familiar with is the innovation of grading fabric porosities and stress release systems that can make the difference between a mediocre solution and a high-performing, long-lasting one. This difference can equate to substantial savings in the long run to the tune of millions of dollars. It is no secret that a well-designed wind fence ends up paying for itself.



WeatherSolve Structures has been tackling dust control in bulk storage and handling for decades. Years of research and development, combined with the company's world-renowned expertise in porous fabric

on a wind fence



structures, has led to a fine-tuned, practical application of polyethylene and polypropylene woven fabric in graded porosities on industrial wind fences. The result is both effective dust control and material cost efficiency.

The general principle is simple.

- The fabric that is highest on the wind fence structure is more porous so that it exerts less leverage on the poles. This means cost savings on the poles.
- The fabric that is lowest on the wind fence is more solid because that is where 90% of moving dust is located. This means better dust control.

Stockpile areas are often tens of hectares and a kilometre or two long. When it comes to these stockyards, the graded porosity approach is of particular importance. The more porous fabric higher up on the wind fence eases the transition zone between the incoming wind and the fence. This reduces downstream

turbulence to reduce the amount of dust

that is kicked up and eroded off stockpiles.

The results are undeniable. This solution has been proven time and again in harsh industrial and port settings around the globe.

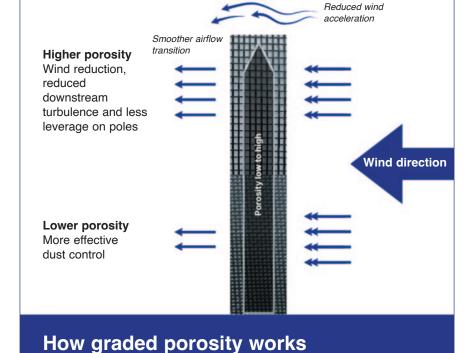
WHY A STRESS RELEASE SYSTEM MAKES A DIFFERENCE

A substantial amount of dry bulk storage and handling occurs at ports where storms and wind related events are common occurrences costing tens of millions of dollars annually. For context, it is estimated that the port of Shanghai incurs costs upwards of \$50 million per year in wind related disruptions.

No one can control the weather; but you can certainly plan for it. When Mother Nature strikes with high winds or a hundred-year storm, wind speeds can reach up to 100–250km/h depending on the storm category³. During these extreme events, excessive loads are exerted on a wind fence and without a stress release system these fences may experience large amounts of panel failure, toppling, or complete catastrophic failure. You might be thinking, well just design the wind fence to be stronger than this. That's all fine and dandy, until you get the bill.

Unlike residential buildings which have lots of functional features like internal walls, wind fences are 90% structural. If you double the strength the cost won't increase by 10% as seen in residential applications, but will increase the cost by 50% or more! The key takeaway here is to ensure that:

I. Wind fence is designed to the correct wind speed by experts who know how to aerodynamically and structurally optimize wind fences to maximize benefits and minimize cost, and,



References & Reading Material

I.Record-Breaking Year for Dry Bulk Trade: 2024 Recap & Beyond https://public.axsmarine.com/blog/ another-record-year-for-dry-bulk-flows-in-2024 Accessed September 18, 2025

2.Van Houtven, G., Gallaher, M., Woollacott, J., et al., "Act Now or Pay Later:The Costs of Climate Inaction for Ports and Shipping" RTI International March 2022

3.NOAA National Centers for Environmental Information (NCEI) Saffir-Simpson Hurricane Wind Scale. https://www.nhc.noaa.gov/aboutsshws.php. Accessed January 29, 2025

DCi

WEATHERSOLVE STRUCTURES STRESS RELEASE CLIP SYSTEM



NORMAL OPERATION

All clips in place. Shock loads absorbed by fabric, cable, and clips.



UP TO 30% OVERLOAD

Upper clips remain in place to keep the panel secure while the bottom clips release to spill approximately 30% of the wind load.



OVER 30% OVERLOAD

Upper clips remain in place to keep the panel secure while the hem cable and fabric sides in lockstrips release to spill additional wind load*.

*In an over 30% overload situation, some panels may require replacement.

2. Your wind fence has an overload or release system incorporated into the design to minimize the risk of fence failure should winds exceed the design speed.

WeatherSolve Structures has the solution. It has engineered and designed an innovative system that allows controlled release of wind loads during extreme events to protect the integrity of the support structure. Here's how it works:

- When the wind fence panel is overloaded by up to 30% (~20-year storm), the upper clips remain in place while the lower clips unzip to spill about 30% of the wind load
- When the wind fence panel is over 30% overloaded (~50-year storm), the upper clips remain in place to keep the panel secure and prevent it from blowing away. The fabric sides in the pole attachment and small hem cable release to spill additional wind load.

Once the storm has passed, the lower clips that released are easily replaced and the wind fence is up and running in a short time. In very extreme events, such as a I in 100-year storm, some panels may require replacement.

This release system has proven itself time and again on multiple continents. From *Hurricanes Andrew* and *Ian* to *Milton* and *Katrina*, WeatherSolve structures are still standing strong.

One real world example occurred in South America where a WeatherSolve wind fence was in the direct path of a one-hundred-year storm. (The fence is a mammoth structure with around 3,000 wind fence panels.) Following the storm, only 1% of the panels required replacement.

In keeping with WeatherSolve's commitment to quality and ongoing advancement the proprietary stress release clips are assessed after each major storm

that occurs on a WeatherSolve Structure. This allows for an individual assessment to confirm expected outcomes or presents an opportunity to tweak current designs to enhance performance.

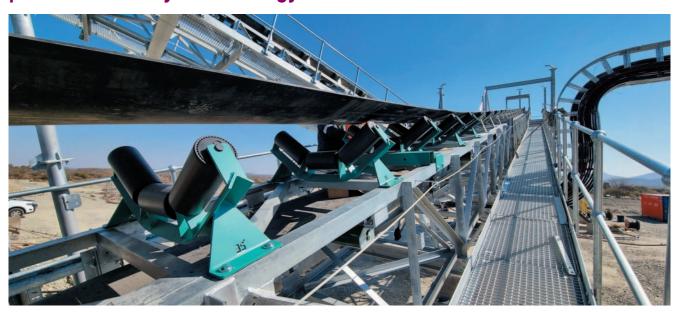
BUILT TO PERFORM

Wind and dust control cannot be left to chance. Weather Solve's expertise, custom designs and patented stress release clip system have continued to set standards worldwide for carefully engineered cost-effective safety and reliability in all weathers. By combining science-driven design with proven performance in the world's harshest environments, these systems deliver both performance and long-term cost savings.

For operators faced with rising throughput and increasing environmental scrutiny, the message is clear: resilience by design isn't just smart engineering, it's an advantage.

DCi

REMATIP TOP acquires key assets of Almex Group, strengthening global position in conveyor technology



REMA TIP TOP has acquired significant assets and operations of the Canadian Almex Group. With the acquisition, the company expands its portfolio in the area of conveyor belt vulcanizing systems and thereby strengthens its position as the world's leading provider of integrated conveying solutions.

"The integration of Almex into the REMA TIP TOP family marks a major milestone. Together we combine technical excellence and innovation, top-class service standards, and customer focus to drive global growth. Our customers will benefit from expanded capacities and our worldwide service network," says Michael Übelacker, CEO of the REMA TIP TOP Group.

In the course of the acquisition, Almex

will maintain its brand identity, global manufacturing network, and experienced teams. As one of the worldwide foremost manufacturers of vulcanizing presses, Almex complements the REMA TIP TOP Group with additional technological strength and decades of expertise in the field. This acquisition targets to utilize Almex's expertise to expand REMA TIP TOP's product portfolio and to optimize efficiency in the supply chains.

Customers can expect a seamless transition and an even faster service from the acquired Almex entities. In Mexico, Brazil, and Africa, REMATIPTOP and Almex Canada Ltd. will serve as channel partners.

With the integration in the REMA TIP TOP Group, Almex is granted access to expanded research and development

(R&D) capacities, international supply networks, as well as a larger global customer base. The expertise of both organizations is combined to develop nextgeneration solutions for conveyor system operators worldwide. Joint teams have already commenced integration planning, focusing clearly on business continuity and long-term customer value.

Founded in Parry Sound, Canada, in 1962, the Almex Group is today recognized as a leading provider of conveyor belt vulcanization and splicing systems, with installations in more than 120 countries. The company's production facilities will remain in Canada, China and Spain. Operational companies in the Netherlands, the United States, Australia, Indonesia, Chile, and Peru will also remain unchanged under REMA TIP TOP.

ABOUT REMA TIP TOP

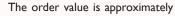
REMA TIP TOP is a globally operating system provider of services and products in the field of conveying and treatment technology as well as tyre repair. The company has a global service network and offers a wide range of rubber products, linings and coatings for both the industrial and automotive sectors. Over almost a hundred years, the company has built up unique expertise in materials development and industrial services and is active in the sectors REMA Conveying, REMA Surface Protection and REMA Motion. At the end of the 2024 financial year, REMA TIP TOP generated sales of about more than €1.5 billion. Worldwide the company employs 10,000 employees and has more than 200 subsidiaries and associated companies.



Metso to provide advanced railcar handling solution to customer in Australia, enhancing safety and reliability

Metso has been awarded a significant order to replace a customer's ageing railcar dumper cells in the Pilbara region of Western Australia. The project marks a continuation of a long-standing partnership, with Metso serving the customer as its major supplier for car dumpers since 2002

The scope of delivery includes design, supply, and technical support for installation and commissioning of the replacement units. The updated railcar dumper includes a new set of cells and the modernization of rotating components and advanced features.



€16 million and it is booked in the Minerals segment's third quarter 2025 orders received.



RELIABILITY, ROBUST DESIGN AND SUPERIOR PERFORMANCE

"We're very proud to continue supporting our valued customer's operations with advanced railcar handling solutions," says Stuart Sneyd, President, Asia Pacific, Metso. "For decades, the current dumper — provided by Metso — has demonstrated impressive reliability through robust design and exceptional durability. With this modernization, they will benefit from the latest advancements and expertise in railcar dumper technology, enjoying industry-best practices, even greater efficiency and superior performance for years to come."

LATEST DESIGN STANDARDS AND ENHANCED MAINTAINABILITY

Strategically engineered to address key operational challenges at the customer site, the new dumper design emphasizes maintainability, reduced downtime through shorter shutdowns, dust and spillage control, and robust structural integrity. These operationally critical machines are designed to meet stringent demands, while ensuring optimal performance in demanding mining environments.

"The railcar dumper is a vital asset in the customer's mining operations, where both reliability and safety are non-negotiable for maintaining consistent throughput and minimizing operational risks. This latest design not only reinforces those core attributes but also introduces a strong focus on maintainability. By aligning with the latest design standards and developments, and emphasizing commonality across the customer's existing car dumper assets, it simplifies operations and ensures consistency in maintenance practices," says Sushanta Dutta, Vice President, Bulk Material Handling, Metso.

Metso's technical expertise and service capabilities will be essential in supporting the operational needs, ensuring smooth transitions and minimizing risk during critical shutdowns and ongoing activities.

Metso's largest service centre globally, located in Karratha, will play a growing role in providing spares, repairs, and long-term support programs tailored to the customer's needs.

FULL LIFECYCLE SUPPORT IN BULK MATERIAL HANDLING

Backed by over a century of expertise and more than 8,000 bulk material handling installations — including 50+ car dumper installations — Metso stands at the forefront of the bulk material handling industry. Metso's offering includes railcar dumpers, apron feeders, belt feeders, conveyors, stackers, reclaimers, shiploaders and unloaders, and cable belt conveyors. Renowned by customers for its expertise in designing, supplying, and comprehensive servicing across the full lifecycle, Metso provides best-inclass solutions, purpose-built to address customers' evolving operational needs.

ABOUT METSO

Metso is a frontrunner in sustainable technologies, end-to-end solutions and services for the aggregates, minerals processing and metals refining industries globally. It improves its customers' energy and water efficiency, increases their productivity, and reduces environmental risks with its product and service expertise. Metso is the partner for positive change.

Metso is headquartered in Espoo, Finland. At the end of 2024. Metso had close to 17,000 employees in around 50 countries, and sales in 2024 were about €4.9 billion.

DCi

Elevating efficiency: the Fuchs Port Line unveiled

Fuchs has announced the launch of its new product line, the Fuchs Port Line. This new range brings together cutting-edge technology and decades of expertise in port handling under one clear name — while expanding the portfolio with three telescopic conveyors and three feeders.

With the Fuchs Port Line, the company responds to the growing demand for efficient, flexible, and robust solutions in port material handling.

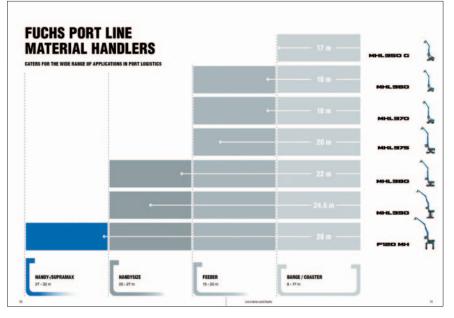
FUCHS TELESCOPIC CONVEYORS — REDEFINING EFFICIENCY IN SHIPLOADING

The new series of telescopic conveyors has been designed specifically to deliver maximum efficiency in shiploading. Thanks to their radial telescopic design, operators can load, trim, and change hatches from a single fixed feed-in point — without constantly repositioning the machine. This reduces machine movements, shortens loading times, and minimizes the risk of demurrage costs.

Standard features include hydraulic raise/lower functionality as well as a robust, mobile design that allows for rapid deployment at the quayside and spacesaving storage when not in use. In addition to shiploading, the telescopic conveyors are also ideal for unloading and stockpiling within the port. Tailored customization for every application highlights the high level of versatility in the Fuchs conveyor range

FUCHS FEEDERS - CONSISTENT MATERIAL FLOW FOR MAXIMUM PRODUCTIVITY

The new feeders are engineered to



optimize material flow, reduce downtime, and increase productivity across a wide range of port applications. In combination with the telescopic conveyors, they deliver a continuous, highly efficient handling process – from material delivery to final loading.

"With the Fuchs Port Line, we are sending a clear signal of innovation and customer focus. Our new solutions help operators make port handling faster, safer, and more economical," says Dominik Vierkotten, Vice President Material Handling & Lifting.

MATERIAL HANDLERS

Fuchs has a wide range of material handlers that are powerful solutions for port

handling. Offering a variety of mobile, crawler and stationary undercarriage versions as well as various equipment combinations, attachments and quick coupling systems, Fuchs material handlers can be tailored for almost any application.

Fuchs's handlers are customizable with various attachments and quick coupling systems for tailored applications.

Key attachments include dippersticks, banana booms, and hydraulic safety features. Advanced upper carriage features include a separated cooling system and high-performance hydraulics.

ENGINE OPTIONS AND PERFORMANCE

Fuchs material handlers are equipped with advanced diesel and electric engines for



optimal performance and efficiency.

Diesel engines meet EU Stage V and US Tier 4 emission standards, ensuring low fuel consumption.

Electric motors provide zero emissions, low maintenance, and reduced noise levels.

Diesel engine power ranges from 160kW to 300kW, while electric motors range from 132kW to 250kW.

UNDERCARRIAGE VARIANTS FOR DIVERSE APPLICATIONS

Fuchs offers various undercarriage options to meet different operational requirements in port logistics.

Available undercarriage types include mobile, crawler, rail-car, and stationary configurations.

Each undercarriage variant is designed to optimize performance based on specific application needs.

ADVANCED CABIN FEATURES FOR OPERATOR COMFORT

Fuchs material handlers feature ergonomically designed cabins to enhance operator comfort and visibility.

Cabins are vertically and horizontally adjustable, providing optimal viewing angles.

Equipped with automatic climate control and large skylights for improved working conditions.



COMPREHENSIVE SERVICE AND SUPPORT

Fuchs provides extensive service and support to ensure the reliability and efficiency of its material handlers.

Regular training for service specialists and comprehensive technical documentation is available.

Fast spare parts service are supplied through a global network of warehouses, ensuring quick access to necessary

components.

Professional customer support includes a hotline and online resources for urgent assistance.

INNOVATIVE ATTACHMENTS AND LOADING FOUIPMENT

Fuchs material handlers can be equipped with a variety of attachments to enhance functionality.

Attachments include cactus grabs, timber grapples, and clamshell grabs for versatile material handling.

Loading equipment options feature straight and banana booms, with lengths ranging from 13.10m to 24.5m.

TELECOMMUNICATION AND FEEDER VARIANTS

Fuchs offers specialized telecommunication and feeder systems for efficient material handling in ports.

Telecommunication systems provide up to 270° of radial movement and a working angle of up to 22°.

Feeder variants include high-level and low-level options, with production capacities of up to 1,500 tonnes per hour.

ELECTRIC-DRIVEN MATERIAL HANDLER

Electric drives are today's forward- looking trend. This is particularly the case with indoor applications, stationary machines and machines with rail undercarriage, in which powerful zero-emission electric drives have very tangible advantages. They include low operating and servicing costs



Keeping stockyards moving: how industrial vibrators drive efficiency in

dry bulk handling

A properly run stockyard, equipped with modern and efficient technology, is integral to the success of any dry bulk handling facility. Each year, many millions of tonnes of dry bulk material — minerals, cement, grains, fertilizers, wood pellets, and more are stored, reclaimed, and shipped from these operations. The challenge is simple to describe but complex to solve: how do you keep that material flowing reliably?

Blocked hoppers, rat-holing in silos, and stubborn material hang-ups along stockyard walls are daily realities for operators. When material flow stops, everything downstream stops — trucks sit idle, ships wait at port, and lost hours quickly become lost revenue. A stockyard designed for efficiency can't afford this kind of downtime.



On paper, a hopper or bin should allow gravity to do the work. Material is loaded at the top and, when needed, discharged cleanly from the bottom. But bulk materials rarely co-operate.

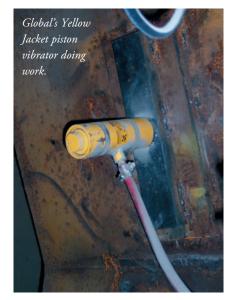
Moisture can cause clumping. powders can compact under their own weight. Fibrous materials like wood chips bridge across outlets. Even perfectly designed bins and hoppers develop buildup on walls and corners, gradually reducing flow until production grinds to a halt.

For a stockyard moving millions of tonnes a year, these interruptions add up fast. Clearing hang-ups manually is not only time-consuming but also dangerous. Workers entering bins or striking vessels with sledgehammers face serious risks.

That's why dry bulk operators turn to vibration and air power: proven tools that keep material moving safely and efficiently.



Global Manufacturing's blue air cannons fixed to a bulk unloading hopper.



THE SOLUTION: VIBRATORS AND AIR

Industrial vibrators are one of the simplest, most cost-effective ways to restore and maintain material flow. Mounted to hoppers, chutes, or railcars, vibrators transmit energy into the vessel walls, breaking friction bonds and loosening material. When installed correctly, the vibrator itself appears nearly motionless what moves is the bulk solid, shifting, settling, and finally discharging as designed.

Different brackets accommodate different applications. Wedge brackets lock male and female parts together at matching angles, forming a rigid mount that allows vibration to pass directly through the structure. Clamp-on brackets, often built into the vibrator housing, let users quickly attach units to angle iron or railcar structures. The key is rigidity: the tighter the mount, the more efficiently vibration energy travels into the material.

Still, not all materials respond equally well to vibration alone. Lightweight or fibrous products such as wood chips often require an extra push. That's where air blasters step in. Positioned strategically on bin and silo walls, air blasters release powerful bursts of compressed air that dislodges stubborn build-up, sweep clean surfaces, and restore free flow. Together, vibrators and air blasters form a complementary system: vibrators provide constant agitation, while air blasters deliver targeted force when and where it's needed

MAKING THE SYSTEM WORK: GLOBAL MANUFACTURING'S ROLE

At the centre of these solutions is Global Manufacturing, Inc., an American expert in industrial vibrators and air blasters. Global partners with distributors, OEMs, and endusers across the dry bulk industry, ensuring that stockyards, hoppers, and ship unloaders run smoothly year after year.

Global's products stand out for both performance and usability:

❖ The Yellow lacket™ (YI) Piston revolutionizes unloading and stockyard use. Weighing 55-68% less than traditional models, the YJ delivers equal or greater force - sometimes double. Its single-bolt





mounting design means operators can install it quickly and safely, without heavy equipment or risking back injuries from oversized units.

- Design Series Vibrators give customers choice. Pneumatic, hydraulic, and DC electric models are available, with adjustable weights and variable flow control that let operators fine-tune force and frequency for each unique material.
- Air Blaster Systems target stubborn materials that resist vibration alone. Global's blasters are engineered to handle high-demand environments, from shipboard salt environments to cement kilns, with options like coated aluminum pistons, stainless steel valve seats for extra protection, and epoxy coating for added exterior protection.
- Process efficiency and longevity remain a focus. Easy-to-install repair kits, minimal wear parts, and ready access to replacement components keep long-term ownership costs low — a crucial factor for stockyards operating on tight margins.

BEYOND EQUIPMENT: EDUCATION AND SUPPORT

Global doesn't stop at manufacturing



hardware. The company invests heavily in education — training distributors, OEMs, and operators on proper vibrator selection, placement, and maintenance. Application engineers work directly with facilities to design systems that maximize throughput while minimizing wear.

Tools like the Rotary Vibrator Calculator (available on Global's website) allow users to enter basic data and receive tailored single vibrator scenario recommendations instantly. For deeper insight, Global provides 'How-To' guides that explain scientific principles, mounting techniques, and maintenance best practices.

And because even the best equipment needs backup, Global offers the industry's

strongest warranty — a lifetime warranty — underscoring its confidence in product durability and commitment to customer satisfaction.

THE BIGGER PICTURE: STOCKYARDS WITHOUT BOTTLENECKS

When you zoom out, the value of industrial vibrators and air blasters becomes clear. A stockyard is only as strong as its weakest flow point.

Whether handling millions of tonnes of minerals for export, transferring aggregates to railcars, or reclaiming wood pellets for energy production, the smooth, uninterrupted flow of material is nonnegotiable.

By ensuring that gravity is always assisted when needed, vibrators and air blasters transform stockyards from bottlenecks into throughput engines. They keep vessels filled, conveyors moving, and ships on schedule. In short, they turn the simple but elusive idea of 'material flow' into everyday reality.

And in this mission, Global Manufacturing, Inc. shows the way — with innovation, reliability, and a clear commitment to helping the dry bulk industry move forward, one tonne at a time.



Telestack launches the TCL 2031: the largest capacity track-mounted conveyor on the market

Telestack has launched the TCL 2031 track-mounted conveyor, a powerful new addition to its tracked conveyor line, and the largest track-mounted mobile conveyor on the market. Designed to meet the demands of high-capacity material handling with unmatched versatility and strength, the TCL 2031 is a heavy duty tracked stacking and link conveyor engineered to transform high throughput material handling on mobile sites.

The TCL 2031 has been devised after the many successful installations on the





Five TCL 2031 conveyors working as a link conveyor with the HF 24T heavy duty hopper feeder in reclaiming / mining applications.



Two TCL 2031 conveyors working as a link conveyor onto a reclaiming line from a Primary Jaw crusher.

existing TCL 1031 track-mounted stacker, which handles applications up to 1,000tph [tonnes per hour] (1,100 tons per hour) and 0–300mm (0–10 inch) Primary Jaw Crusher operations. This NEW TCL 2031 is targeted for higher capacity 1,500tph (1,650 tons per hour) up to 2,500tph (2,750 tons per hour) applications. This unit follows the Telestack long-lasting legacy of highly respected, state-of-the-art products which are continually pushing the boundaries to meet the demands of their extensive dealer network and global

customer base in a variety of industries.

Built to meet the rising demands of modern crushing and screening plants, the TCL 2031 delivers industry leading capacity while retaining the flexibility operators need on short-term projects, contract sites and large stockyards.

The TCL 2031 is designed for throughputs demanded from high-capacity crushers and auxiliary plants. In stacking applications, the unit can stack from 1,500tph (1,650 tons per hour) up to 2,500tph (2,750 tons per hour) with a maximum lump feed size

of up to 40 mm, typical from a high-capacity Primary Jaw crushing application. This tonnes per hour capacity translates to more material on the ground, meaning fewer wheel loader movements and double handling of the material during the operation. The TCL 2031 can achieve over 6,203 tonnes (3,877m³) of material in a single conical stockpile (5,070 yards/6,837 tons) and moved easily from position to position to meet the demands within the stocking area.

These performance figures translate







into a lower cost per tonne, reduced fuel consumption and the ability to keep high-capacity plants running with a proven reliable stacking solution, eliminating the requirement of wheel loaders constantly moving/stacking material.

The unit is fully track mounted, enabling operators to reposition the conveyor quickly around the site for ease of mobility and relocation from 'site to site' when needed. Hydraulic folding head and tail sections collapse the machine for road transport to a folded length of 17.68m (58' 0") and a transport height of 4.38m (14' 5"), or alternatively it can be broken down into shipping containers for long haul moves if required. Typical on site setup is under 30 minutes, letting teams react faster

to changing site layouts and phasing during blasting/ relocating on site.

POWER AND MOBILITY

For site mobility via the track system, the unit uses an integrated diesel hydraulic engine with regional engine options from CAT (100kw — 130hp) or Deutz (86kw — 100hp) — Stage V (Regulated countries) and Stage III — CAT 96.4kw solutions for non-regulated countries, all to meet local emissions regulations.

Once the unit is in position, the unit is then driven via all-electric drive motors via an 'Electric Wrap Drive' in which 3 x phase power is plugged into the IP 66 Rated Control panel of the TCL 2031 during operation, ensuring maximum efficiency

using on site electrical power or auxiliary power from the existing Jaw Crusher. There all also options for a fully — allelectric system — Telestack 'Zero' range (no diesel engine) for certain sites where diesel hydraulic engines are not permitted.

The TCL 2031 brings high capacity with a robust 1,400mm belt, mining grade rollers/scrapers/bearings and tracked mobility together in a single package. This product is targeted to 'fill the gap' for large quarries, mining and aggregate operations using high-capacity crushers (mobile / semimobile and static) that need a mobile stacking solution to effectively handle their large 'crusher-run' type material at a high capacity while improving site flexibility and reducing operating costs.



MDG Handling Solutions high-capacity bucket elevators

Since 2017 MDG has been developing and manufacturing bucket elevators for lifting a wide range of bulk solid materials.

Thanks to its continuous research and development effort — and to the quality of its equipment, which has been fine tuned to ensure maximum reliability — MDG maintains a good position among the leading manufacturers of this sector.

This article discusses one of MDG bucket elevators — the ESPLV. These units are double-chain bucket elevators that form part of the most modern lines of heavy-duty elevators with the highest flow rate: 2,000m³/h and more.

One of the main features of the ESPLV is its the large-sized buckets with a capacity up to 290 litres each on the biggest elevators.

The chains are mechanical with pin and bush, and are also designed for very high breaking loads (up to 4,000kN).

Thanks to the continuous bucket system, this kind of MDG bucket elevator has great flexibility, allowing both slow as well as high speeds. They can be used when low speed is required (less than 0.7m/s), as in the case of lifting granular fertilizer material, or for lifting medium-sized materials (50–100mm). They are also popular when high speed is possible (>1.5m/s) in order to minimize the size — and therefore the cost — of the bucket elevator itself.

❖ When speeds lower than 0.8–0.9m/s are needed, the material unloading process — although external to the trajectory of the buckets — take place due to the combined effect of centrifugal and gravity forces, with the material flowing on the back of the preceding bucket, thanks to the continuous bucket system. Therefore, when the material is being unloaded, the back of each bucket acts as a 'slide' for that part of the material that is forced to follow a less effective expulsion trajectory due to insufficient centrifugal force. This allows for an







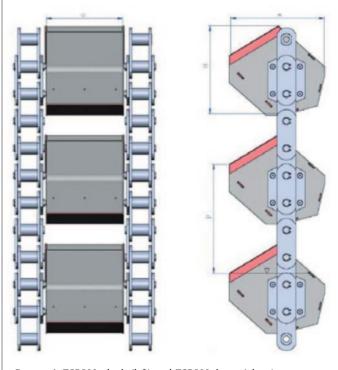
easy unloading process through the outlet chute.

When lifting granular fertilizer, low speed makes it possible to minimize the crushing of the granules and the level of powdering, which is necessary to guarantee a good product quality.

Low speed also allows the buckets to load (partly with dredging) and lift materials

Left: pictures 2 & 3: MDG ESPLV head stations equipped with double drive.





Picture 4: ESPLV wheels (left) and ESPLV chains (above).

with larger grain sizes, up to 80-120mm.

When speeds exceeding Im/s are allowed (the most frequent case) usually up to 1.5–1.6m/s — it is possible to increase the highest material flow rate. In this case the material is usually discharged centrifugally.

A hydraulic tensioning system is frequently used for tensioning the chains, thus allowing high loads (if necessary) as well as easy and

uniform adjustment of the chains.

The larger MDG bucket elevators are equipped with double drive unit (see pictures 2 & 3).

CASE STUDY

In the cement industry, this type of MDG high-capacity bucket elevator is used to lift a wide range of bulk materials such as clinker, raw meal, raw mix, limestone, cement, coal, to name a few.

Recently MDG was awarded an order by DYPNF, South Korea, for the supply of a high-capacity bucket elevator, the length of which is 50.6m.

This MDG elevator conveys petroleum coke (100mm max) at a speed of 1.3m/s and, thanks to its two lateral bushed chains, which have a breaking load of 1,500kN each, represents the best MDG solutions to serve this purpose.

"A man who stops advertising to save money is like a man who stops a clock to save time"





New Cat® MH3295 Material Handler delivers high production in port and large scrapyard applications

- ❖ 17.6m (57.7ft) reach
- Cat® Payload, 2D E-fence and swing assist technologies help deliver optimum production
- Premium Plus cab and fixed cab riser with 360° visibility and floor windows for operator comfort

Built to deliver a long reach required for barge loading/unloading and large scrapyard applications, the new Cat® MH3295 Material Handler will feature a dedicated swing pump for smooth, co-ordinated movement and a wide track undercarriage for optimum stability and performance.

Electrohydraulic controls plus advanced Caterpillar technologies help boost productivity on jobs that demand high performance.

"The new MH3295 Material Handler is based on the rugged and reliable Cat 395 Excavator platform, sharing common service parts, but features a purpose-built design for the demands of large scrapyard and port applications to offer consistent operation," says Vincent Migeotte, senior global product consultant for Caterpillar. "Plus, standard technologies like Swing Assist, Cat Payload and 2D E-fence help operators to work more efficiently and safely. The new design of the MH3295 is about elevating jobsite performance and delivering long-lasting durability and value."

HIGH PERFORMANCE

The new material handler features an 17.6m (57.7ft) reach plus two counterweight configurations to meet jobsite

22,100)
2)
7)



conditions. Its wide, 4.8m (15.7ft) track gauge retracts to a 4.1m (13.5ft) width to simplify transport.

The wide operating track gauge combines with the undercarriage's 7.2m (23.6ft) track length to deliver smooth, stable operation at extended reach.

Its powerful, 405kW (543hp) Cat C18 engine meets US EPA Tier 4 Final and EU Stage V emission standards and offers reliable operation up to 3,000m (9,840ft) above sea level without derating. Operators can match machine performance to the job at hand using three power modes — Power, Smart and Eco — to help save fuel.

Giving operators control when needed, an advanced electrohydraulic system helps provide the optimum balance of power and efficiency.

SmartBoom™ technology allows the boom to freely travel up and down without using pump flow, enabling operators to focus on stick and attachment movements. A variety of Cat work tool attachments are available to meet a range of material and density types. Valve priority helps operators direct hydraulic pressure and flow where it is needed.

INTEGRATED TECHNOLOGIES

Boosting operating efficiency, Cat Payload for the new MH3295 assists operators with achieving precise load targets, helping to eliminate overloading of over-the-road



trucks and enabling more accurate production tracking. Real-time weight estimates are displayed in-cab when picking up a material load without swinging.

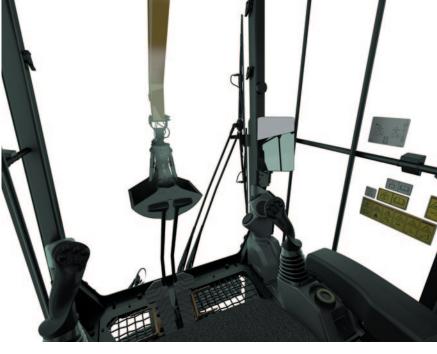
Standard Swing Assist technology automatically stops upper machine rotation at preset points to help operators hit more repetitive swing targets, reduce fuel consumption and improve cycle times. Quickly established, the operator simply swings to a desired stopping point and sets the target using the in-cab monitor or a preset joystick button. When approaching the predefined limit, the machine automatically decelerates and does not allow the stick to travel beyond the set point.

Leveraging data wirelessly, VisionLink™ provides actionable insights for the new MH3295 Material Handler. It allows fleet managers to review equipment data from a desktop or mobile device to help maximize uptime and optimize assets. Dashboards provide machine operating details like hours, location, idle time and fuel utilization, so informed fleet decisions can be made to help lower costs.

Standard remote services technologies help the new material handler operate with maximum uptime and efficiency. Remote Troubleshoot allows the Cat Dealer to diagnose issues remotely without impacting machine performance, so they are resolved quickly with less machine downtime. Updating onboard software without requiring a technician to be present, Remote Flash enables the company to initiate software updates at a time convenient to the production schedule, increasing overall efficiency.

PREMIUM CAB

The material handler's fixed cab riser



provides 360° visibility and includes floor windows to help improve visibility when loading material. The new Premium Plus cab design includes small pillars and large windows, plus rearview, left-side, and right-side-view cameras to enhance safety while operating. The rear cab door entry design features enclosed stairways and integrated lights to safely access the cab. Wide walkways provide quick, easy and safe access to upper service platform maintenance areas.

Inside the cab, a wide seat adjusts to accommodate operators of all sizes, while easy-to-reach controls are positioned in front of the operator for comfortable machine control. Accommodating operators of all skill levels, the easy-to-use high-resolution, 254mm (10-inch) touch-screen monitor presents the jobsite dashboard in an intuitive format.

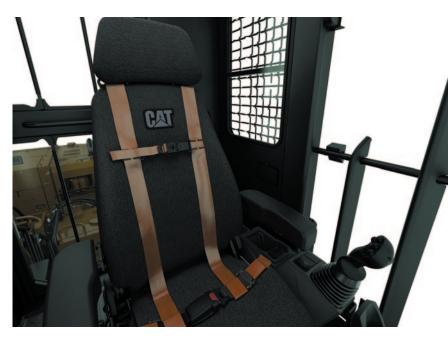
Productivity applications are displayed on the monitor in grid view to easily read on the go, and touchscreen functionality is programmed to ensure continued job performance without any interruptions.

Standard cab avoidance assists with evading contact between the work tool attachment and cab, enhancing safety while operating and improving machine longevity. Automatic climate control provides comfortable operating temperatures throughout the shift, and storage compartments are located beneath and behind the seat, plus overhead and in the consoles to stow plenty of gear. Operators can connect personal devices using the standard radio's USB ports and Bluetooth® technology.

ABOUT CATERPILLAR

With 2024 sales and revenues of \$64.8 billion, Caterpillar Inc. is the world's leading manufacturer of construction and mining equipment, off-highway diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. For 100 years, Caterpillar has been helping customers build a better, more sustainable world and are committed and contributing to a reduced-carbon future. The company's innovative products and services, backed by its global dealer network, provide exceptional value that helps customers succeed.

Caterpillar does business on every continent, principally operating through three primary segments — Construction Industries, Resource Industries and Energy & Transportation — and providing financing and related services through its Financial Products segment.



GBS Group International: a global ecosystem of solutions for bulk handling in ports



In the port sector, where every minute of operation has a direct impact on competitiveness, bulk handling systems are the invisible backbone sustaining the efficiency of the entire logistics chain. From discharging a vessel to stockyard storage, and from there to production plants or outbound trucks, millions of tonnes of coal, clinker, fertilizers and grains depend on conveyors and their components performing with absolute reliability.

Yet the port environment is uniquely challenging: corrosive atmospheres, heavy loads, the pressure to minimize dust emissions, and an operational tempo that simply cannot stop. This is where GBS Group International makes a difference — not as another equipment supplier, but as a strategic partner that integrates a complete ecosystem of conveyor and bulk handling solutions.

An ecosystem uniting innovation, components and support

Port operators demand more than robust equipment: they require operational continuity, technological reliability and immediate response capability. GBS has built a model that extends far beyond conveyor supply. Its proposition is an integrated ecosystem, anchored in three pillars:

1. CONVEYORS ENGINEERED FOR PORTS

Mobile and fixed conveyor systems

- tailored for yards, quaysides and shiploaders.
- Modular configurations that scale according to cargo flows.
- Designs built to withstand abrasion, saline humidity and high throughput demands.

2. WORLD-CLASS COMPONENTS

- Sealed, heavy-duty rollers, designed to reduce friction and extend service life.
- Premium conveyor belts, resistant to heat, abrasion and chemicals.
- High-performance scrapers, minimizing carry-back and fugitive dust.
- Gearmotors and intelligent drives, delivering maximum energy efficiency.
- Transmission belts and couplings for heavy-duty environments.
- Industrial adhesives and bonding systems for fast, reliable splicing and repairs.

3. INTELLIGENT MONITORING TECHNOLOGY

- loT sensors measuring temperature, vibration, moisture, alignment and load in real time.
- Artificial intelligence algorithms detecting wear patterns and predicting failures.
- Cloud-based dashboards accessible from any device, with early-warning alerts for operators.
- Proven reductions in unplanned downtime and optimized total cost

of ownership.

This ecosystem positions GBS as a global partner providing end-to-end solutions — from a single roller to a complete predictive monitoring platform for a port terminal.

ADDRESSING THE KEY CHALLENGES OF PORTS

From Latin America to other emerging markets, GBS works with port operators reveals a familiar set of challenges:

- Reactive maintenance causing costly downtime
- Premature component wear under harsh environmental conditions.
- High levels of carry-back and dust emissions, undermining safety and sustainability.
- Excessive energy consumption, impacting competitiveness.
- Fragmented supply chains, requiring multiple vendors for critical parts.

The GBS model addresses these issues with an integrated approach. By acting as a single partner delivering complete solutions, GBS simplifies procurement, shortens response times and ensures that every component functions as part of a coherent system.

TECHNOLOGY THAT ANTICIPATES THE

A cornerstone of GBS's ecosystem is the intelligent monitoring system for conveyor

belts, now being rolled out across port terminals.

By installing sensors along the conveyor line, the system captures real-time data on belt and component condition. Using artificial intelligence, that data is translated into clear predictions: when a roller will fail, when a belt will misalign, when humidity risks compromising the material.

The result is a paradigm shift — from reactive maintenance to predictive maintenance — cutting unplanned stoppages and the associated costs. Combined with high-efficiency motors and smart drives, the system also enables significant energy optimization, directly improving port profitability.

COMPETING ON A GLOBAL STAGE

Competition in the port sector is intense, dominated by large multinational manufacturers. Yet GBS Group International differentiates itself with a hybrid model: combining the strength of a world-class component portfolio with the agility of a company that tailors solutions to each terminal's unique conditions.

* Flexibility: adapting designs and

- components to the specific realities of each port.
- Proximity: providing local and remote technical support to reduce downtime.
- Optimized total cost of ownership: fewer stoppages, greater energy efficiency, longer equipment lifespan.
- Sustainability: technologies that reduce dust, emissions and resource consumption.

In an industry where competitiveness hinges on the reliability of every tonne moved, this approach makes GBS a partner of genuine strategic value.

TOWARDS THE INTELLIGENT PORT

GBS's vision goes beyond today's challenges. GBS Group International is building a future where ports operate under augmented intelligence frameworks:

- Digital twins, simulating loads and forecasting wear.
- Augmented reality, enabling remote maintenance support and operator training.
- Big data and advanced analytics, identifying global patterns of energy

use and wear across multiple terminals.

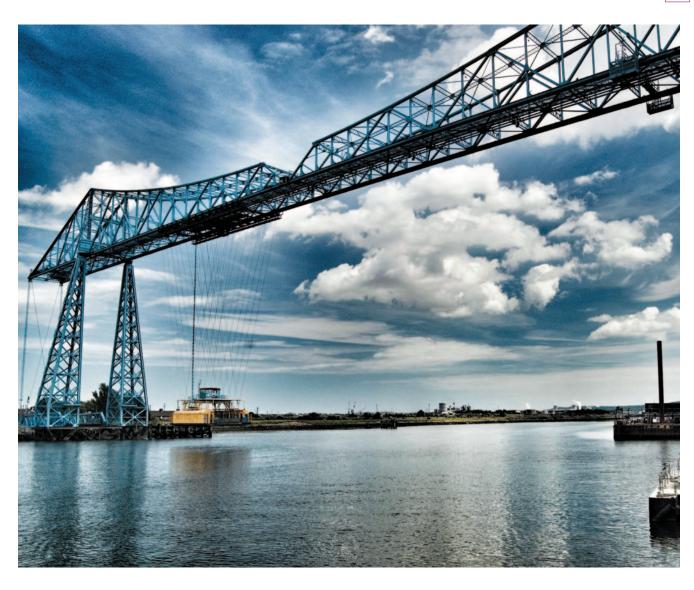
Through these technologies, ports will not only optimize performance, but also become safer, more sustainable and better prepared for the demands of international trade.

CONCLUSION: A STRATEGIC PARTNER FOR THE WORLD'S PORTS

In the port sector, where every minute counts and every tonne must move with precision, GBS Group International delivers a complete ecosystem of solutions that unites the best of three worlds: — technological innovation, world-class components and trusted support.

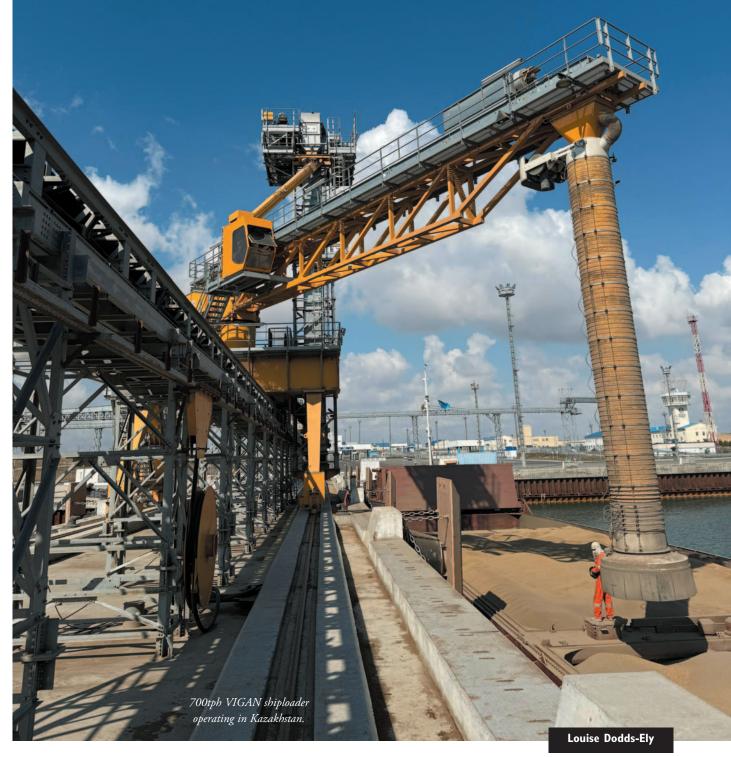
GBS's commitment is clear: to guarantee operational continuity and competitiveness for ports worldwide, reducing costs while maximizing the value of every operation.

In a world where ports are the beating heart of global trade, GBS Group International stands as a strategic global partner, transforming challenges into competitive advantages and leading the evolution towards more efficient, sustainable and intelligent bulk handling. DCL





... modern bulk loading technologies



A new era of opportunity and innovation

Agrobulk markets are evolving at an unprecedented pace. Driven by shifting food consumption patterns in growing populations and changing geopolitical dynamics, both importing and exporting

countries are rethinking their strategies. Brazil has emerged as the leading soybean meal (SBM) exporter in recent years, with production continuing to climb. Russia, too, has reshaped the global wheat trade,

becoming the top exporter in 2023 with nearly 32 million tonnes — surpassing Australia, Canada, and the United States.

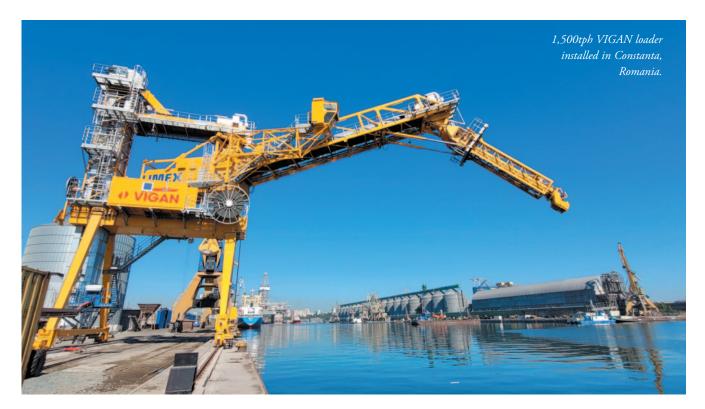
In Latin America, Argentina remains a key player, primarily exporting wheat and



Mobile Harbour Cranes ECO GREEN solution.

4 – 24030 AMBIVERE (BG) - ITALY Tel. +39 035 4932411 - Fax. +39 035 4932409 email: info@italgru.com





However, its export volumes fluctuate significantly due to climatic variability and economic instability. With a landmass of 2.78 million square kilometres, Argentina's crop-growing regions span approximately 380,000 square kilometres - twelve times the size of Belgium. Yet, the country faces a persistent logistical mismatch: the main agricultural zones are not aligned with its strategic export hubs. This disconnect presents a compelling opportunity for innovation in agrobulk logistics.

Smaller-scale loading and unloading systems for barges navigating upstream rivers could be a game-changer. These barges would then transfer cargo to

agrobulk terminals or larger sea-going vessels, streamlining the supply chain. Argentina is not alone in facing these challenges. Brazil, Russia, and Ukraine are also exploring new logistics solutions to bridge the gap between production and export.

The issue is no longer just about placing loaders where they're needed — it's about developing integrated systems that ensure agricultural bulk commodities reach their final destinations efficiently and sustainably.

VIGAN: ENGINEERING SOLUTIONS FOR A CHANGING MARKET

As global agrobulk dynamics shift, companies like VIGAN is stepping up to

meet the moment. With over five decades of experience, VIGAN has built a reputation for delivering high-performance bulk handling equipment tailored to the evolving needs of the industry. Based in Nivelles, Belgium, and part of the VAN DE WIELE Group, VIGAN specializes in designing and manufacturing advanced equipment such as ship-unloaders, loaders, and mobile pneumatic conveyors.

VIGAN's systems are engineered for versatility, reliability, and efficiency. They handle a wide range of bulk commodities - from grains, cereals, and oilseeds to fertilizers and chemicals - making them indispensable across agricultural and industrial sectors. With more than 1,500 machines operating worldwide, VIGAN's presence in ports and terminals is a testament to its global reach and trusted performance.

What sets VIGAN apart is its commitment to innovation. The company invests heavily in research and development to enhance the efficiency, safety, and environmental sustainability of its equipment. Recent advancements include the use of high-durability alloys, smart electronics for reduced energy consumption and advanced automation, as well as ergonomic operator cabins that improve visibility and comfort. These innovations ensure that VIGAN remains at the forefront of bulk handling technology.

TAILORED SOLUTIONS FOR COMPLEX **CHALLENGES**

In today's agrobulk landscape, one-size-fitsall solutions are no longer viable. VIGAN





Handle bulk with efficiency and reliability

Pneumatic and mechanical ship (un)loaders
Up to 2500 tph for loaders and up to 1200 tph for unloaders.

Low noise & no dust emission

Turnkey solutions for cereals, soy flour, fertilizer, pellets and more...





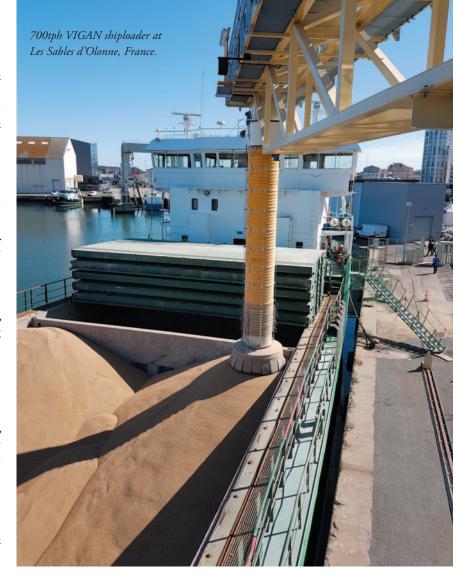
understands this and works closely with clients to develop customized equipment that meets specific operational requirements. Whether it's adapting to unique site configurations, accommodating different vessel sizes, or integrating dust management systems, VIGAN's engineering team delivers solutions that are both practical and forward-thinking.

For example, VIGAN's shiploaders are renowned for their robust construction and advanced automation features. Capable of handling up to 2,000 tonnes per hour, these machines enable fast and cost-effective cargo operations. Features such as adjustable boom lengths and various specialized loading spouts ensure efficient, dust-free loading — critical for maintaining environmental standards and operational safety.

NAVIGATING GLOBAL CHALLENGES

The global grain industry faces numerous challenges, including climate change, geopolitical tensions, and rising energy costs. VIGAN addresses these issues headon by designing equipment that minimizes energy consumption and complies with stringent environmental regulations. Its systems are equipped with advanced filtration technologies to keep dust emissions below industry thresholds, and they are built for easy maintenance and quick serviceability.

The war in Ukraine has had a significant impact on grain logistics, disrupting traditional trade routes and market access. Yet, this disruption has also opened doors in neighbouring countries around the Black Sea. VIGAN has adapted its strategy to support these emerging markets, ensuring continuity in grain handling operations and reinforcing its presence in Eastern Europe.



LOOKING AHEAD

As agrobulk markets continue to evolve, the need for flexible, efficient, and sustainable logistics solutions becomes increasingly urgent. Countries like Argentina, Brazil, Russia, and Ukraine are at the forefront of this transformation, and companies like VIGAN are providing the tools to make it possible.

By focusing on innovation, customi-

zation, and customer collaboration, VIGAN is not just responding to market changes — it's helping to shape the future of agrobulk logistics.

Whether it's through smaller-scale equipment for inland waterways or high-capacity systems for major ports, VIGAN's solutions are designed to meet the challenges of today and the opportunities of tomorrow.







REDUCE MOVES, LOAD SMARTER

Its telescoping reach and 360° mobility minimize feed point adjustments to load in fewer moves while preserving material quality.



TRUCK IN, SHIP OUT

Efficiently and quickly transfer your materials from truck to ship with seamless unloading, reduced handling, and optimized flow.



BUILD BIGGER, BETTER STOCKPILES

Create higher capacity stockpiles with reduced material segregation and optimized storage capacity on tight footprints at the terminal.



UNLOAD, TRANSFER & STACK

Handle ship unloading, material transfers, and stockpiling, maximizing efficiency and reducing equipment needs at the docks.

TAKRAF port facilities: global presence and proven longevity

FRESH ACTIVITY IN CARGO HANDLING SECTOR SPARKS MAJOR PROJECT AWARD FOR TAKRAF GROUP

Following a relatively subdued period in the cargo handling sector, TAKRAF Group (TAKRAF) has this year experienced renewed demand from that industry, particularly for its bulk handling technologies. This momentum is reflected not only in a rise in enquiries but most notably in the recent award of a major contract from PT Freeport Indonesia (PTFI) for the supply of a TAKRAF Shiploader for its copper concentrate export facilities. The machine will form an integral part of PTFI's MOPH-2 project, which involves a substantial upgrade and expansion of existing processing operations.

Through this project, PTFI, a long-standing TAKRAF client, is playing a crucial role in supporting the global energy transition by ensuring future copper supply, a metal vital to worldwide electrification and sustainable infrastructure.

FULLY INTEGRATED PORT FACILITIES

In line with its commitment to holistic solutions, the Group designs and delivers fully integrated port facilities and systems deployed worldwide. These include shore-to-ship handling facilities with advanced ship loaders, continuous material handling, storage and reclaiming systems, and



ship-to-shore solutions utilizing grab-type unloaders.

CUSTOM SHIPLOADING SOLUTIONS

As a specialist in high-capacity and complex bulk loading technologies, TAKRAF develops custom shiploaders tailored to specific applications and operating conditions.

At a South African port, for example, a 3,500tph (tonnes per hour) multipurpose loader incorporates winchoperated luffing, a shuttle and three interchangeable discharge chutes for different commodities. Its enclosed stockyard conveyor automatically opens in alignment with the loader's movements along the quay.

In the CIS region, a 3,500tph shiploader was delivered, fully assembled for a large export terminal. Engineered to withstand extreme temperatures from -42 °C to +39°C, and capable of handling Panamax-class vessels.

Other notable projects include a 6,000tph rail-mounted shiploader at a limestone export facility in Mexico, and a 12,000tph unit installed at Nouadhibou Port in Mauritania for Société Nationale Industrielle et Minière (SNIM), supporting the expansion of its iron ore stockyard and loading terminal.

Many of TAKRAF's operating installations date back decades, testifying to the proven robustness and long service life of its shiploaders and unloaders.





TAKRAF TECHNOLOGIES

TAKRAF is committed to delivering costeffective maritime cargo-handling solutions that prioritize sustainability, energy efficiency and safety. Its equipment is designed to reduce energy consumption, dust emissions and noise, while improving operational efficiency and reliability in line with global demands for environmentally responsible technologies.

At the same time, advances in material handling and growing safety requirements are accelerating the shift toward automation and smart features such as material distribution visualization within vessel holds, collision-avoidance systems and predictive maintenance tools. Recognizing that each client's needs and preferences differ, TAKRAF offers solutions

with varying levels of automation.

For example, TAKRAF's Shiploaders, which are available in fixed or rail-mounted designs, are assisted by a variety of systems, including the automatic shutdown of a specific loading sequence or the automatic tracking of the telescopic slide on the fill level within the vessel's hatch.

TAKRAF can also equip machines with a remote control facility that enables the operator to operate the machine directly from the hatches of the vessel so that they are able to manoeuvre into hatch corners and ensure complete loading of all material.

TAKRAF Shiploaders are particularly suited to applications requiring medium to high flow rates and continuous vessel loading and are tailored to specific site

conditions and materials, with fixed units often employed for environmentally sensitive commodities due to their fully enclosed feed routes.

TAKRAF Grab-Type Ship-Unloaders serve both sea and inland ports, handling a wide range of bulk commodities across different particle sizes and vessel types. When fitted with hooks or spreaders, they can also handle general cargo or containers.

Together, these technologies reflect TAKRAF's long-standing commitment to robust, efficient and sustainable solutions that meet the evolving needs of the maritime cargo-handling industry, today and into the future.

Innovation out of tradition — it pays to talk to a specialist.

The best bulk truck loader in the world



Dino advantages:

- + Saves time and money
- + High capacity, 40 or 80 m³/h
- + Safe and easy to operate
- + Low-dust and hygienic
- + Fasy to clean
- + Mobile and flexible in use
- + Steel or stainless steel version
- + Low maintenance
- + ATEX versions available
- + Modular expandable

The Dino is the world's best bulk truck loader for loading powders efficiently using a screw conveyor. For more info visit www.dino.nl





Telestack TB 58 shiploader delivers high throughput for IHI in Japan



Onahama Higashi Port Bulk Terminal LLC (OHBT) led by IHI Corporation, a prominent Japanese engineering company, has recently commissioned a Telestack TB 58 radial telescopic shiploader to support its port operations for loading thermal coal. Supplied in collaboration with local dealer JCE, the installation provides a high-

capacity, environmentally conscious solution for loading self-discharging vessels.

The Telestack system was selected to replace traditional grab crane methods, offering a more energy-efficient and dust-controlled alternative. With a peak loading rate of up to 2,000tph (tonnes per hour), the TB 58 ensures rapid vessel turnaround

while maintaining strict environmental

The TB 58 has delivered a change in operational efficiency for OHBT and IHI. By eliminating the need for grab cranes, the system has significantly reduced energy consumption and improved environmental performance. The integrated dust containment features have helped to minimize emissions, ensuring compliance with local regulations and improving working conditions on site. The wheeled mobility of the shiploader allows for quick deployment to the ships in-built hopper from a position behind the berthing line, reducing downtime and increasing loading safety and efficiency. The result is a reliable, high-throughput solution that supports IHI's commitment to sustainable and efficient port operations.



RESULTS

- High-capacity loading of thermal coal at up to 2,000tph.
- Reduced energy costs and environmental impact.
- Enhanced dust control through integrated containment systems.
- Flexible, mobile solution for efficient deployment and loading.



Since 1908, taking the best from the past to build a better future.

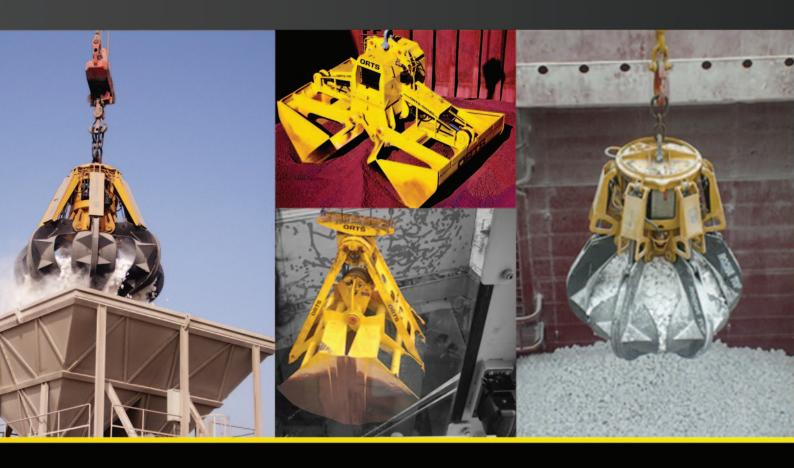
bedeschi.com



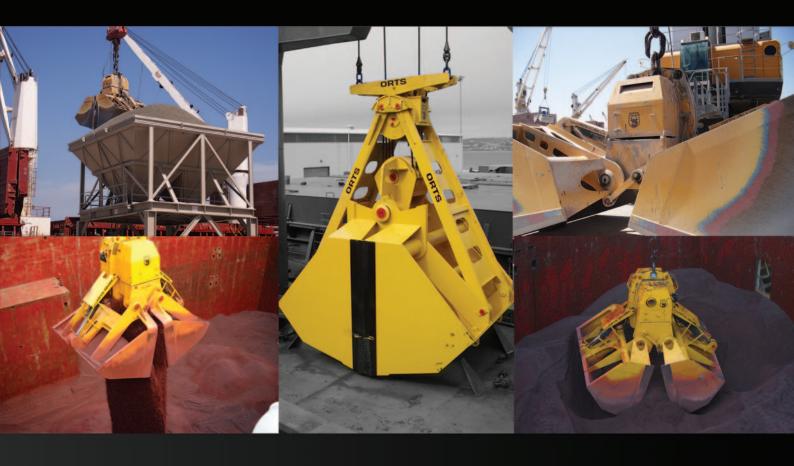




made in Germany since 1972



Tel: +49 451 398 850 **Fax:** +49 451 392 374 **Email:** soj@orts-gmbh.de



the best link between ship and shore



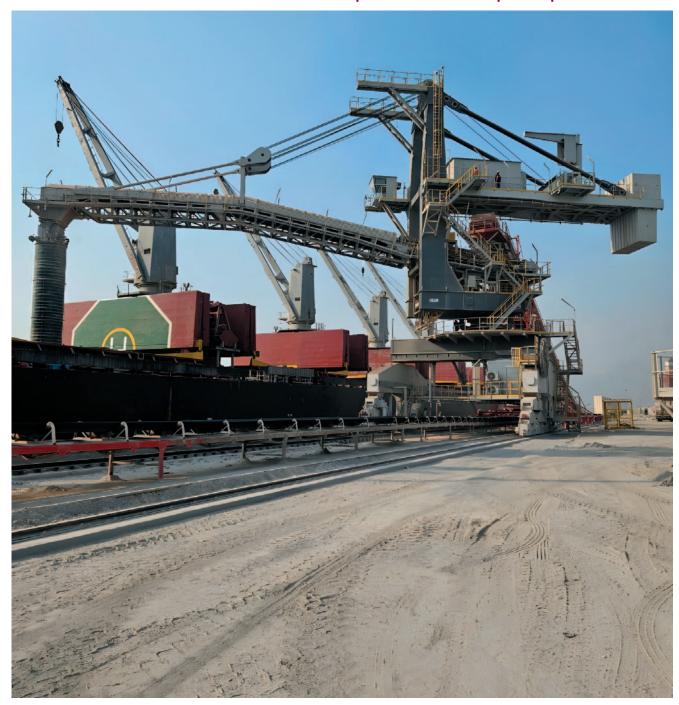
Nearby Lübeck, close to the Baltic Sea, you will find a specialist for grabs and handling equipment.

The grabs of ORTS GmbH Maschinenfabrik are in operation around the world, on all continents and all oceans.





Milestone for QUARRY MINING: development of a 300tph shiploader



QUARRY MINING LLC designs and manufactures bulk handling equipment in the United Arab Emirates, but in compliance with European standards while adhering to the same safety standards and features that are expected from European equipment.

Quarry Mining LLC (QM) is certified for quality management with ISO Certificate 9001:2008 and for environmental management with ISO Certificate 14001:2004 from the German Technical Inspection Association TÜV Rhineland/Germany. These certifications include the continuous integration of all upgrades. Located in the United Arab Emirates, QM can supply high-quality plants and

equipment at very competitive prices.

Being in the business for 50 years and having experience in bulk handling industry for more than 20 years, Quarry Mining has recently reached a new milestone in its history of designing, manufacturing, installing and commissioning of bulk handling equipment by delivering a 3,000tph (tonnes per hour) shiploader for aggregates. Meeting the latest environmental standards, and offering highly efficient operation and the lowest energy consumption, the machine supplied is not only a success for Quarry Mining but also a game changer for the end-user.

With a total own weight of more than 650 tonnes, it's a massive build machine.

The shiploader moves along the berth on rails, pulling the tripper car with the feed conveyor. The loading boom can be lifted up and down and the loader can swivel including the loading equipment to reach every corner of the bulk carrier ship.

At the end of the loading boom a cascade chute is installed, allowing the material to be loaded with nearly no degradation during the filling process. Especially for high quality products, such as steel grades, degradation is a major quality aspect for materials processed with bulk handling systems. The speed and method of transferring the material between various items of equipment and loading steps are key to ensuring the quality of the product

— and ultimately the price which can be achieved. More important are the environmental aspects of reducing dust development to nearly zero by using dedusting system for transfer points, encapsulation and clever implementation of natural physical effects.

The unit is supplied by a massive double cable reel to provide power and communication from the shore to the moving machine. The latest state-of-the-art PLC system will ensure single-person operation and a nearly fully automated loading process. Once the loader is brought into position, the cascade chute is lowered, and the loading process is started. The cascade chute works automatically by moving up based on the actual filling level.

Storing the position of various hatches allows the automated system to position the shiploader with just two tips and continue the loading. CCTV system always shows all important points of the loading process to the operator and loading facility manager.

Enabling the client to handle and load 3,000tph has reduced the berthing time dramatically, compared to grab loading operations. But the shiploader can only deliver what it receives from the feeding system. Therefore, a highly efficient and always-available feeding system is required. As stock capacities are very expensive, the material loaded is brought in just in time. A four dipping point truck-unloading system supplied by Quarry Mining ensures continuous supply of material directly from the truck to the shiploader. Only a small amount of material is stored in so-called buffer silos to compensate for short term material shortage. The system automatically determines the amount of material coming from the truck unloading system and will add material from the silos to the feeding belt via vibration feeders to ensure feed continues to the shiploader, ultimately keeping the loading time as short as possible.

All over, the shiploader supplied by QM successfully demonstrates that the latest technologies are enabling end-users to improve efficiency, environmental aspects and commercial aspects at the same time. Bulk handling is not just moving bulk cargoes from left to right, there is so much more to be considered. Only with thoughtful engineering — from the beginning to the end — combined with experience, constant thinking and rethinking all aspects of such a machine, is it possible to ensure success. Having the end-user always on board adds real value and makes Quarry Mining projects successful.





Loading Systems for Bulk Material Quality since more then 50 years

For over 50 years, our loading systems for bulk materials have been synonymous around the world with long-lasting and reliable technology.

- Bulk loading systems for open and closed loading
- Loading with no segregation e.g. with FLOW-STOP technology
- > Dust-free loading
- High quality loading hoses e.g. made in wear-resistant PU-FLEX
- > Positioning system LIS-POS
- First-class service: Start-up and installation, Revision and repair services, System maintenance, modernisation and upgrading

More details: www.listenow.com





























SUSTAINABLE BULK LOADING. SINCE 1981.

Since 1981, our team has assisted industries worldwide to achieve cleaner, greener, and more efficient loading operations. Our advanced dust control and bulk loading systems—spanning loading spouts, valves, conveyors, dust collectors, and full automation—are engineered to increase throughput while supporting your sustainability goals. Call 231.547.5600 to partner with us and optimize your loadout solutions.



LOADING SPOUTS



LOADING SPOUT POSITIONERS



DUST COLLECTION EQUIPMENT



SHUT-OFF VALVES



AERATION EQUIPMENT



dclinc.com

231-547-5600



New Van Beek Dino bulk truck loader model delivered within eight weeks

With delivery of the new DR300 S-line available within eight weeks, Van Beek now offers a fast solution for loading onto bulk trucks. The standard configuration of this type of bulk truck loader enables delivery within eight weeks. Where other models of the bulk truck loaders have a delivery time of 12 to 20 weeks, the DR300 S-line can be loading the contents of big bags on site within eight weeks.

PART OF THE CONSTRUCTION KIT IN STOCK

Due to the high demand for bulk truck loaders, Van Beek always carries the required standard parts for the DR300 S-line in stock. As a result, this specific model can be delivered at short notice. Sales engineer Roel Kneepkens, also known as Mr Bulk Truck Loader, explains: "The DR300 S-line is equipped with the most commonly used and popular options, viewed from a market perspective. For example, the manual loading bellows, the hydraulic cylinder to raise the machine easily, the compressor (for the air seal, etc.) and the levelling position on the unit so it's stable."



OPTIONS INCLUDED IN THE STANDARD VERSION

The standard version is available with five additional options for the customer to choose from. These options range from an extension rim on the inlet tray (to increase the inlet volume), a lid that fits the big bag chute (to reduce dust) and aeration pads on the inside of the hopper (to improve product flow), to pneumatic hammers on the outside (for easier inflow into the screw) and a modified motor transmission (to apply more power to the screw, so that products with a greater bulk density can be transported).

ADDITIONAL OPTIONS

Due to its modular design, customers can add more options to the bulk truck loader. However, it will then be necessary to take into account an increased lead time of between 16 to 20 weeks. For example, a customer may choose a magnet installed in the outlet, or an integrated dust filter unit for dust extraction. Using a shoveller to load instead of a big bag is also an option. If desired, customers may choose initially to order an S-line, then add additional options at a later time.

LOADING MORE THAN 30 BIG BAGS IN ONE HOUR

In around 60 minutes, the S-line can fill a bulk truck with approximately 30 to 35 big bags. This amounts to processing between 30 and 40 cubes per hour.



Efficient bulk cargo containerization by SmartTEH

SmartTEH designs and builds automated container loading and unloading solutions for businesses across industries such as wood processing, metalworking, construction, manufacturing, and more. Its product range includes horizontal and vertical container loading equipment, as well as mobile conveyor systems.

These machines help companies speed up cargo handling, improve safety, and cut costs by reducing manual labour and eliminating the need for extra equipment.

SMARTTEH EQUIPMENT FOR BULK CARGO HANDLING CONTAINER TILTER

The Container Tilter is a bulk cargo loading and unloading system that tilts containers from -5° to 90° , giving access to 100% of the cargo space. Operated by just one person, it helps free up valuable yard space while making container handling faster, safer, and more cost-efficient.

Built to withstand loads of up to 30,000kg, the tilter also comes with an integrated scale for precise load control. It is compatible with both 20-foot and 40-foot containers.

Here's how it works:

- **I.** A truck with a container backs up to the tilter and the trailer pins are released.
- **2.** The tilter locks onto the container's corner castings and lifts it off the trailer.
- **3.** The container doors are opened, and the container is raised to a vertical position.
- **4.** The operator sets the tilt angle, and the bulk cargo is loaded from the top.
- **5.** Once full, the container is lowered back onto the truck and detached from the tilter.

CONTAINER TILTER UNLOADER

This Container Tilter is made for quick and easy 20-foot and 40-foot container unloading by tilting them from 5° to 45°.

The machine helps empty containers in a matter of minutes and is operated by a single person. It helps transfer bulk cargo straight into storage facilities without any additional equipment or manual labour.

The tilter withstands loads of up to 28,000kg and can complete up to four unloading cycles per hour.

CONTAINER LOADING SYSTEM

Designed for bulk cargo stored in big bags or other packaging, the Container Loading System loads and unloads containers in just five minutes.

Its sliding loading plate moves cargo in and out of containers with ease, cutting down on manual labour and reducing the reliance on forklifts.

The system handles loads of up to 30,000kg and is compatible with 20-foot, 40-foot, and 45-foot containers.

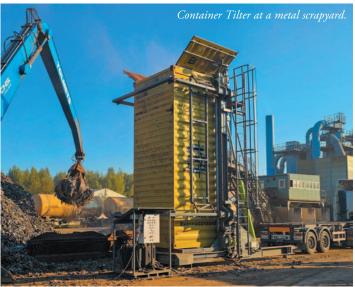
SmartTEH can seamlessly adapt every container loading system to each client's unique needs and infrastructure.

WHAT CAN COMPANIES LOAD WITH SMARTTEH?

SmartTEH's cargo loading solutions are built to handle a wide variety of bulk materials, including:

 minerals (limestone, bentonite, silica sand, and other dry bulk materials);









- renewable fuels and biomass (wood pellets, sawdust, wood chips, and other renewable biofuels);
- recyclables (shredded plastics, scrap metals, paper pulp, etc.);
- grains and cereals (wheat, corn, barley, oats, and other agricultural produce);
- chemicals and pharmaceuticals (powders, granules, and resins); and
- fertilizers (granular and powdered fertilizers that need careful handling).

ADVANTAGES OF MOVING BULK CARGO IN CONTAINERS

- Versatility: containers can transport various dry bulk goods in different volumes and packaging.
- Efficiency: fixed dimensions (20ft and 40ft) make containers easy to handle across ships, trucks, and trains, speeding up logistics.
- Cargo protection: containers protect bulk cargo from contamination, moisture, and damage, while also reducing spillage during loading and unloading.
- Lower logistics costs: fewer transfers and less manual intervention reduce handling and storage expenses.
- Compact storage: stackable containers optimize warehouse and yard space.
- International reach: global container standards ensure smooth cross-border movement and multimodal compatibility.

MAIN ADVANTAGES OF HANDLING BULK CARGO WITH SMARTTEH

- Rapid operations: automated loading and unloading drastically cuts turnaround time and minimizes idle equipment.
- Lower costs: less manual labour and lower reliance on auxiliary machinery cut expenses and deliver a faster return on investment.
- Enhanced workplace safety. automation protects staff and reduces the risk of spillage or container damage.
- Better space utilization: precision systems make sure every container is filled to capacity.
- Sustainable process: efficient use of energy and equipment lowers emissions and environmental impact.







CUSTOMERS

SmartTEH systems are in operation in more than 30 countries worldwide, with a steadily growing customer base.

The company works with clients across various industries that rely on frequent container loading and unloading, including: wood processing; metalworking; construction; manufacturing; recycling; agriculture; and more.

SmartTEH equipment is also widely used in large-scale warehouses and logistics centres.

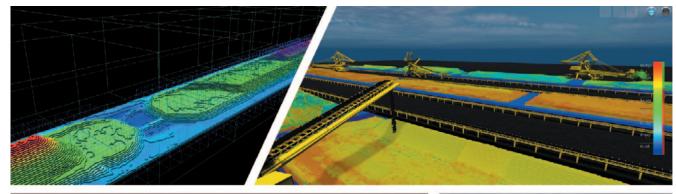
Industry titans such as ABB, Tata Steel, Binderholz, Stora Enso, EuroChem, and Lotte Chemical trust SmartTEH to make their cargo handling faster, safer, and smarter.

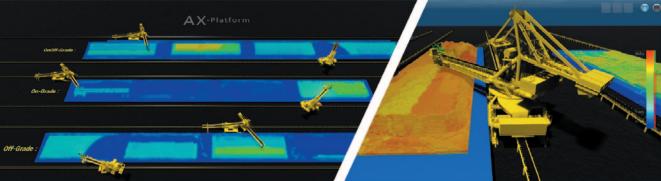
FUTURE OUTLOOK

The future of logistics is automated — and SmartTEH's innovative container loading solutions are helping businesses stay competitive in an increasingly demanding global marketplace.

Container loading and unloading is often one of the most time-consuming and challenging steps in the logistics chain. By automating these processes, SmartTEH helps companies save time, cut costs, and enhance their cargo handling operations.

Precision grade control and port loadout optimization with the iStockyardAX Platform





Introduction

Operational efficiency, safety, and sustainability are critical in bulk-material handling ports. By adopting optimization strategies and off-the-shelf Industry 4.0 technologies, ports can operate more safely, productively, and sustainably.

At the forefront is indurad, a Hexagon company, whose cyber-secure, industrial-grade RADAR technology is transforming real-time measurement, tracking, and management of bulk materials across the value chain.

In busy semi- or fully autonomous ports, precision planning is essential. Eeden Energy's AX Platform revolutionizes loadout operations by integrating digital twins, spatial databases, and advanced analytics for unmatched control over material grades, inventory, and blending.

This editorial explores how combining indurad with Eeden Energy's platform as iStockyardAX, transforms traditional ports into intelligent, autonomous operations that boost efficiency, reduce risk, and ensure product quality.

DIGITAL TWIN AND SPATIAL DATABASE

At the heart of the AX Platform lies a voxel-based spatial database that model stockpiles in 3D (cubes) with timestamped quality and inventory data related to each cube. Unlike traditional moving average systems, AX provides granular control over material flow using real-time RADAR to

provide static and dynamic volumetric data, enabling real-time visualization, planning, and reconciliation. Each voxel (250mm x 250mm x 50mm) stores chemical and physical material attributes, allowing operators to track material origins, age, and quality-distribution, with surgical precision.

STRATEGIC IMPORTANCE OF GRADE

Grade control is the cornerstone of quality assurance in bulk material handling. It ensures that delivered materials meet customer specifications, optimizes resource utilization, and supports sustainable operations. AX's real-time grade control capabilities empower port operators to make proactive decisions, reduce waste like off-spec cargo, and enhance profitability.

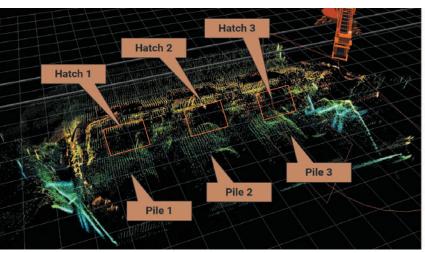
KEY BENEFITS OF ACCURATE GRADE CONTROL

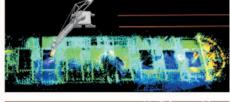
- Penalty avoidance: AX enables precise blending to meet customer specs, avoiding costly penalties and rejected shipments.
- Utilization of over-grade material: high-grade material can be used more strategically to accurately down blend lower-grade stock, maximizing resource value.
- Dilution control: real-time 3D models help avoid reclaiming from contaminated zones, minimizing dilution.
- Improved reconciliation: live

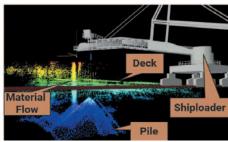
- analytics track quality movement, enabling continuous reconciliation and operational adjustments.
- Optimized blending: simulation tools allow planners to test blend scenarios, reducing trial-and-error and improving consistency.
- Reduced waste and rework: autonomous control instructions ensure accurate execution, minimizing off-spec dispatches.
- Enhanced resource utilization: accurate identification of high-grade zones improves recovery rates and lowers costs.
- Real-time decision support: integration with smart sensors provides near real-time quality data for proactive decision-making.
- Sustainable operations: grade



Real Time Ship Load Grade Management: simulate, plan and execute.







control supports long-term planning and environmental goals by minimizing waste.

PLANNING, SIMULATION, AND AUTONOMOUS EXECUTION

AX's Planning Toolbox includes statistical box plots, solver functions, and simulation GUIs that allow planners to model reclaim scenarios, forecast loadout quality, and generate autonomous work instructions. For ship and train loading and unloading, or continuous plant feeds via overland conveyors, planners can visualize prospective blend outcomes up to 144 hours in advance, adjust reclaim rates, and ensure adherence to quality targets as stipulated in supply contracts.

VISUALIZATION AND REPORTING

AX combines intuitive 2D and 3D visualizations of stockpile inventory, quality distribution, and machine status. MS Power BI dashboards offer real-time and historical insights into inventory movement, quality trends, and plan adherence. These tools enhance transparency, support

retrospective incident investigations, and drive continuous improvement.

AUTONOMOUS CONTROL AND SYSTEM INTEGRATION

Indurad's iStockyardAX integrates seamlessly with most Automation Systems to safely execute stockpile reclaiming, maintain shiploading and unloading schedules, while operating autonomously. Work instructions are sent directly to the machines, ensuring precise execution of loading and reducing human error. The iStockyardAX systems monitors machine status, alarms, and performance metrics, providing a robust framework for operational integrity.

AUTONOMOUS CONTROL AND SAFETY INTEGRATION

Indurad's RADAR based collision avoidance systems are widely used in Mines & Ports, providing protections, while simultaneously providing accurate material levels and pile profiles in the hold during loading and unloading, no matter the atmospheric conditions.

SHIPLOADING OPTIMIZATION

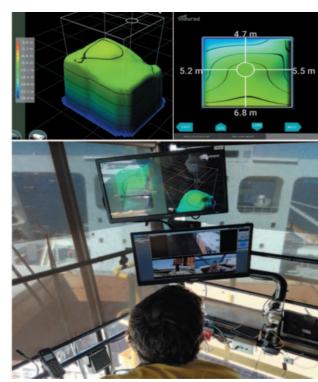
indurad Provides 3D Hatch scanning, helping port operators with loading or unloading duties. indurad's industrial RADAR systems 'penetrate' dust suppression systems while loading or unloading, where eyesight, cameras and laser-based scanning systems fail.

CONCLUSION

Indurad's RADAR technology combined with Eeden Energy's AX platform redefines port loadout operations by delivering real-time grade control, intelligent planning, and a path to autonomous execution. With its voxel-based spatial database, advanced analytics, and seamless integration, iStockyardAX empowers both plant and port operators to optimize material blending, ensure product quality, and drive operational excellence.

Whether avoiding penalties, utilizing over-grade material, or enhancing sustainability, iStockyardAX is the strategic solution suite for modernizing bulk material handling operations.

DCi





Biomass handling technologies

serving a greener future as fossil fuel usage falls



SAMSON Materials Handling (AUMUND Group): advances in biomass handling

Biomass fuels are becoming an increasingly important part of the energy mix, but handling them is not as straightforward as coal or ores. Biomass tends to be lighter, bulkier, and more variable in moisture. It can clog or bridge during feeding, and it produces dust that raises both environmental and fire safety concerns. For ports, terminals, and power plants, these challenges make reliable handling systems essential.

SAMSON Materials Handling Ltd, part of the AUMUND Group, has been focusing on these issues for many years. The company's equipment is designed to give operators flexible solutions that reduce the need for heavy civil works while still delivering continuous, industrial-scale performance.

This balance of mobility and reliability reflects how the industry is adapting to a material that behaves very differently from

traditional bulk commodities.

MOBILITY AND DESIGN SOLUTIONS

At the centre of this approach is the Stormajor®, a mobile loading system developed to handle a wide range of bulk materials, including more cohesive and less flowing types often found in biomass and other organic products. Unlike fixed reception pits that require major excavation, the Stormajor is a surface-mounted system combining a Samson® material feeder with a radial and luffing boom conveyor. It can be configured on wheels or tracks and positioned wherever reception or loading is needed.

The Stormajor is well suited to handling materials that are difficult to flow, such as wet biomass, wood chips, and agricultural residues. Its wide apron-belt feeder and steep-sided entry section encourage smooth material movement while

preventing bridging. The boom conveyor can be fitted with a telescopic chute, allowing accurate loading into ships, barges, rail wagons, or stockpiles while keeping dust to a minimum. This flexibility makes it an effective link between mobile reception and onward transport, especially at sites that need to process variable feedstocks or operate in changing layouts.

INTEGRATED HANDLING AND STORAGE

The AUMUND Group expanded its scope in 2025 with the addition of ESI Eurosilo, a specialist in silo technology. Silo storage is often important for biomass because it provides controlled conditions and reliable reclaim, even for materials with variable density or moisture. By linking mobile surface feeders from SAMSON with large-scale silos from Eurosilo, the group can now supply a complete handling and storage chain. This integrated approach







Negrini company, established in 1967, specializes in engineering and manufacturing a comprehensive range of grabs and buckets for rope machines and crawler mounted cranes; they are employed to do many jobs. Negrini buckets and grabs are very well-known for quality as well as for the very accurate and skilful engineering work; in fact Negrini supports their clients by analyzing the job to be done and, if needed, by adjusting the standard design of grabs and buckets to enhance their performance once in operation.

VIA TORRICELLI 4 - CASTELFRANCO E. (MO) - ITALY











helps reduce the risks and costs that sometimes arise when equipment from multiple suppliers has to be fitted together.

Recent projects highlight how these solutions are used in practice. In Brazil, SAMSON feeders were supplied to ComBio Energia for a biomass power plant. The feeders were designed for continuous operation and were able to handle different types of local biomass. Choosing mobile feeders instead of permanent pit systems gave the client reliable reception, less reliance on civil works, and the ability to adjust operations as the fuel supply changed. Projects like this underline the global relevance of mobile feeders, especially in regions where plants are developed in stages or where remote sites make civil construction difficult and costly.

APPLICATIONS AND LESSONS FOR FUNGINEERS

The range of clients using SAMSON equipment is broad. Biomass-to-energy developers, pulp and paper mills generating power from their own residues, and terminal operators exporting pellets or chips are all common users. What connects them is the need for systems that receive, feed, and discharge difficult

materials without excessive maintenance or downtime. For existing plants, surface feeders provide a way to upgrade handling capacity without digging new pits or building large conveyor tunnels. For new plants, they allow quick installation and the option to expand capacity step by step as demand increases.

Experience from these projects points to several lessons that engineers can apply when planning biomass facilities. It is important to test feedstocks early, because moisture and particle size can have a major impact on how equipment should be designed. Access for maintenance should be a priority, as surface feeders allow easier inspection and servicing than underground systems. Dust and fire protection should be designed in from the start, through enclosed transfers and careful control of drop heights. Finally, flexibility should be seen as an investment: the ability to relocate or reconfigure equipment often saves time and cost in the long term.

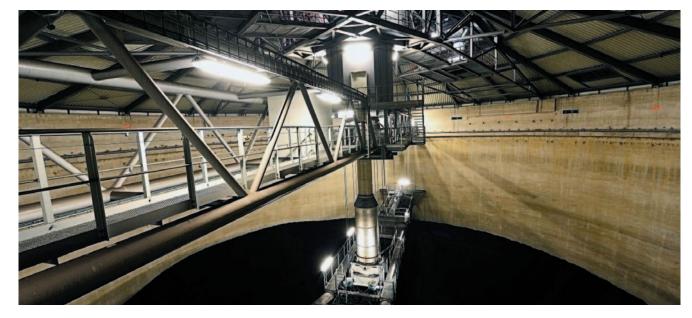
As biomass continues to grow as a fuel for both energy and trade, the systems that handle it will be a key factor in its success. The developments by SAMSON and the wider AUMUND Group show how mobility, reliability, and integrated design

can meet the specific demands of this material. For operators, that means equipment that is not only capable of moving bulk material efficiently, but also flexible enough to keep pace with the changing needs of the biomass sector.

ABOUT SAMSON

SAMSON Materials Handling Ltd, based in Ely, UK, is a key member of the AUMUND Group, specializing in mobile bulk material handling solutions. With over 50 years of experience, SAMSON designs and manufactures flexible, high-performance equipment for ports, terminals, power plants, and industrial applications.

As part of the AUMUND Group, a global leader in conveying and storage technology, SAMSON benefits from an extensive worldwide network. The group includes AUMUND Fördertechnik GmbH, SCHADE Lagertechnik GmbH, TILEMANN GmbH Chains & Components, AUMUND Group Field Service GmbH, and AUMUND Logistic GmbH. Operating across 20 locations in Asia, Europe, North and South America, and supported by five strategic warehouses, the AUMUND Group delivers innovative and reliable solutions for bulk material handling worldwide.



Biomass handling: reliable equipment solutions for a low-carbon future

Biomass has become a driving force in the shift toward renewable energy. From wood pellets and agricultural residues to dedicated energy crops, it offers a sustainable alternative to fossil fuels. Yet these materials — often variable, abrasive, and flammable — pose distinct challenges. Moisture content, particle size, dust generation, and flow behaviour all require precise control to maintain efficiency, safety, and reliability.

For almost 60 years, WAMGROUP has set the standard in bulk solids handling equipment. Drawing on experience across diverse industries, the company provides a complete range of equipment for the specific demands of biomass business. Its integrated approach ensures efficient, cost-effective operations — from receiving and conveying to feeding, storage, and dust management.



Drag chain conveyor for wood waste.





Power. Performance. PEINER SMAG

- Wide Range of Bulk Handling Grabs
- Industry Specific Solutions
- Nonstop Availability
- Worldwide Service Network
- Global After Sales Support



T: +49 5341 302-647

E: sales-grabs@peiner-smag.com

www.peiner-smag.com



EFFICIENT MECHANICAL CONVEYING

Because biomass materials vary in shape and density, robust, versatile conveying systems are essential. WAMGROUP's screw conveyors and feeders handle a wide spectrum of particle sizes and moisture levels, ensuring consistent material flow with minimum energy use. Built in carbon or stainless-steel and suitable for horizontal, inclined, or vertical transport, they adapt easily to plant layouts.

For long distances or complex routes, chain conveyors deliver high capacity within a fully enclosed design that protects material quality and prevents dust emissions — ideal for fine wood chips or pellets. Where a compact, low-maintenance option is needed, tubular screw conveyors provide a reliable enclosed solution.

RELIABLE STORAGE AND CONTROLLED DISCHARGE

Safe, efficient storage is the backbone of biomass processing. WAMGROUP's silos — available in multiple diameters and capacities — handle the wide bulk-density range typical of biomass. Advanced discharge technologies such as bin activators, live bin bottoms and rotary valves help prevent bridging and rat-holing, common issues with fibrous or moist materials.

Processes requiring precise feeding,



including boiler firing or pelletizing, benefit from metering feeders that deliver an accurate, steady flow, boosting process efficiency and protecting downstream equipment.

DUST FILTRATION AND SAFETY

Dust is an unavoidable by-product of biomass handling, creating environmental and safety risks. WAMGROUP offers an extensive dust filtration range, including WAMAIR® Spot Dust Collectors and WAMFLO® Silo Venting Filters, which maintain clean air and meet stringent emissions standards. High-efficiency filter media capture fine particles, while automated pulse-jet cleaning reduces operator intervention. For applications

with combustible dust, ATEX-certified options provide essential explosion protection.

COMPLETE SYSTEM INTEGRATION

WAMGROUP excels at delivering equipment that integrates seamlessly within any plant. A typical installation may combine screw conveyors for reception, chain conveyors for transfer to storage silos, precision feeders for metered discharge, and dust collectors for air quality control.

With manufacturing sites, subsidiaries, and service centres across Europe, the Americas, and Asia, WAMGROUP ensures responsive after-sales support and rapid spare-parts availability — critical for minimizing downtime in continuous operations.

POWERING THE TRANSITION

As global demand for renewable energy grows, efficient handling and storage are key to unlocking biomass's potential. WAMGROUP's proven equipment portfolio — combining mechanical strength, advanced dust management, and precision feeding — offers operators confidence in safe, reliable, and environmentally responsible equipment solutions.

Whether processing wood pellets, agricultural residue, or energy crops, WAMGROUP helps power the low-carbon transition, one biomass particle at a time.

ABOUT WAMGROUP

Headquartered in Ponte Motta, Italy, WAMGROUP is a world expert in the design and manufacture of equipment for bulk solids handling and processing. With a strong commitment to innovation and sustainability, the company serves industries ranging from construction and food to energy and environmental technology.



EFFICIENT OFFSHORE ROCK SHIPLOADING





Telestack was commissioned by DEME Group, a leading marine engineering and offshore energy company, to design, build, and install a material handling system. This included 2 x AP 1500 D3 wheel-mounted apron feeders and 2 x TB 52 (170ft) radial telescopic shiploaders. The system is used to load 10-60 (500mm - 20") offshore rock material onto a Flexible Fall Pipe Vessel (FFPV). Its radial and telescopic design allows precise placement of material, reducing the need for excavator work onboard and increasing overall loading efficiency and tonnage rate.





#MOVINGTOMOBILE

VISIT US @ TOC EUROPE | BOOTH F74

Rethinking biomass and waste handling:Dos Santos International shows the way

As the world shifts towards renewable energy and sustainable waste management, industries face a growing challenge: how to store, handle, and transport biomass and municipal waste efficiently, safely, and with minimal environmental impact. Dos Santos International (DSI) has been at the forefront of solving these challenges with its Sandwich Belt high angle conveyors. An innovation that combines engineering precision with environmental stewardship.

A CONVEYOR SYSTEM THAT ADAPTS TO THE ENVIRONMENT

Sandwich Belt high angle conveyors are more than just conveyors. They're versatile solutions capable of elevating or lowering materials at angles up to 90°. The secret lies in the 'sandwich' principle: sandwiching materials between two belts with a gentle, yet firm hugging pressure, ensuring smooth, continuous flow without spillage, dust, or degradation.

For biomass, such as wood chips, refuse-derived fuel (RDF), or pulp mill residues, this design preserves material integrity while allowing high-capacity transport in compact spaces. But Sandwich Belt high angle conveyors aren't just for biomass. Their design makes them ideal for handling municipal sludge, composting materials, and even household garbage destined for energy recovery.

TURNING WASTE INTO VALUE

Municipal sludge management and composting highlight Sandwich Belt conveyors' unique capabilities. In Cape May County, New Jersey, Sandwich Belt conveyors elevated dewatered sludge and sawdust mixtures into in-vessel composting

reactors. The result was nutrientrich, odorless, pathogen-free compost used by golf courses, nurseries, and for roadside restoration projects.

Similarly, facilities in Guelph, Ontario, and Binghamton, New York, used Sandwich Belt conveyors to efficiently process city sludge in compact, high-capacity systems.

Meanwhile, waste-to-energy initiatives are transforming how we view garbage. At Palm Beach Resources in Florida, Sandwich Belt conveyors replaced cumbersome, maintenance-

intensive pocket belt systems, reliably feeding RDF to boilers for electricity production. The conveyors' smooth surface belts simplify cleaning and reduce downtime, turning what was once a disposal problem into a sustainable power solution.

EFFICIENCY MEETS ENVIRONMENTAL RESPONSIBILITY

DSI Sandwich Belt conveyors don't just move materials, they optimize operations. By conforming to the natural landscape, eliminating unnecessary transfer points, and reducing truck haulage, they minimize emissions, noise, and land disruption. Compact layouts conserve space, while regenerative systems even capture energy from downhill material transport.

From composting municipal sludge to conveying biomass for fuel, and from transporting shredded tires for alternative energy to RDF handling, Sandwich Belt high angle conveyors provide a reliable and

DSI Hybrid Sandwich Belt conveyor transports rejected tyres to fuel a cement plant.

environmentally conscious solution for modern material handling challenges.

THE FUTURE OF BIOMASS AND WASTE HANDLING

As industries seek sustainable methods for biomass and municipal waste management, DSI's Sandwich Belt conveyor technology proves that innovation and environmental responsibility can go hand in hand. By combining high-capacity performance, minimal environmental footprint, and versatility across a range of materials, these conveyors are setting the standard for the future of waste and biomass handling.

Whether you're managing municipal sludge, creating compost, or producing renewable energy from waste, Dos Santos International offers a proven solution that transforms operational challenges into opportunities for sustainability.

ABOUT DOS SANTOS INTERNATIONAL

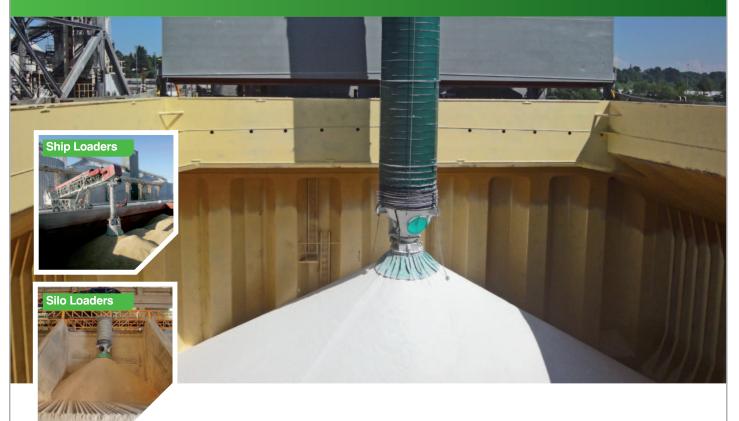
Dos Santos International is a global expert on sandwich belt high angle conveyors. The company was founded and is currently led by the inventor of the system, Joseph Dos Santos. DSI is known for its extensive worldwide experience in sales, engineering, and construction of bulk materials handling systems and equipment. This has included major contributions that have expanded the range of bulk handling and transport Most notably advances in sandwich belt high angle conveyors have led to their worldwide utilization. expertise of DSI spans a wide range of materials handling systems and equipment including high angle conveyors, high powered, high capacity, high lift slope conveyors and long overland conveyors utilizing the very latest technology.



Cleveland Cascades Ltd



Global leader in bespoke dry bulk loading chutes







Cleveland Cascades are Specialists in the design and manufacture of bespoke dry bulk loading chutes.

Our bespoke solutions are designed to meet each customer's specific requirements from a tool kit of proven components, utilising the expertise of a team of specialist in house design engineers.

We lead the loading chute industry & set the standard for dust emissions and environmental pollution control in dry bulk handling.

Our worldwide reputation is built on high quality, well-engineered, robust, high performance chutes, backed up by excellent customer service and global lifetime product support.

Contact Cleveland Cascades Ltd.

Unit 22, Dukesway, Teesside Industrial Estate, Thornaby, Stockton-on-Tees, Cleveland, TS17 9LT, United Kingdom Tel: +44 1642 753260 | Fax: +44 1642 753270

E-mail: enquiries@clevelandcascades.co.uk | Website: www.clevelandcascades.co.uk





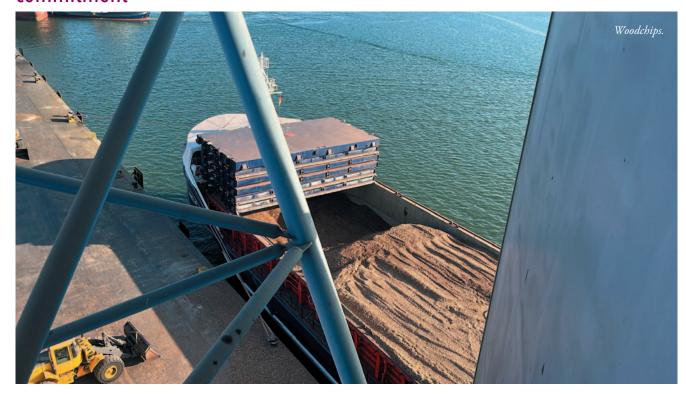








Biomass handling and storage: Ership Grupo's experience and ongoing commitment



Ership Grupo has built a long-standing track record in biomass logistics. The company was among the pioneers in Spain when, during the second half of the 2000s, large-scale exports of biomass began to flow from southern Spain to northern Europe. Wet olive cake quickly became the leading product, with annual volumes reaching up to 300,000 tonnes destined for the United Kingdom, the Netherlands, Germany, and Poland. These trades, carried out mainly on coasters of around 5,000dwt, were complemented by other by-products such as dried olive stones, grape kernels,

olive tree prunings, and almond shells.

From the outset, operators had to preserve the calorific value of these commodities. This meant minimizing moisture increases during storage and handling, while also addressing the inherent risk of spontaneous combustion, which at times created critical incidents. At the same time, what had once been considered an agricultural waste with negative value soon became a commodity. Supported by EU subsidies in its early years, the biomass trade evolved rapidly: within a few seasons producers shifted from being paid to

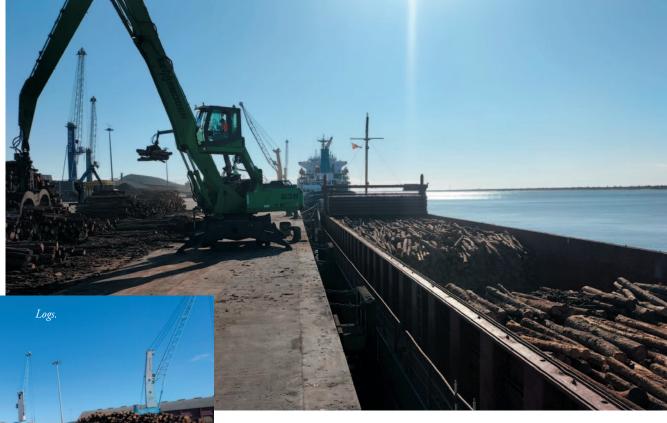
dispose of residues to earning significant returns for them.

As technology for biomass burners improved, Spanish utilities-built power plants close to production areas, such as those in Jaén for olive residues. This development reduced the need for exports, as domestic demand absorbed a significant share of the available supply. By then, the market had been consolidated by companies with long experience in coal trading, which successfully applied their commercial and logistical know-how to biomass, creating stable supply chains and forward contracts.

Today, however, the picture is different. Biomass remains a core part of Ership Grupo's portfolio, with wood-based cargoes dominating current volumes. In recent years the company has moved substantial amounts of biomass through its ports, with the majority consisting of wood chips and logs. These flows clearly demonstrate that, although olive-based products were historically important, wood-derived biomass now forms the backbone of Ership Grupo's activity in this sector.

Each cargo type presents its own operational challenges. Woodchips, due to their low density, must be compacted in the vessel's holds with specialized machinery to achieve efficient stowage and reduce freight costs. Logs, while denser, require material handlers with log clamps instead of





conventional cranes to ensure safe handling. Both chips and logs, like other biomass products, carry a risk of self-combustion, especially when stored for long periods or when delivered too dry or too wet, making fire prevention and monitoring essential.

Ership Grupo also continues to diversify by handling niche biomass streams. Past

operations have included almond shells, while recent trials have explored the pelletization of orange and tomato residues. These by-products are primarily directed toward animal feed, but they also demonstrate innovative ways of closing the green cycle by valorizing agricultural waste.

Across all its activities, Ership Grupo prioritizes efficiency and sustainability. Open-air stockpiles must be carefully monitored, covered warehouses kept impeccably clean and dry, and handling equipment maintained at modern standards to reduce emissions and noise. The company consistently works to minimize the overall carbon footprint of its logistics chains, supporting the environmental goals of its clients.

With nearly two decades of experience in biomass logistics, and more than 140 years as a trusted shipping and logistics company, Ership Grupo combines historical know-how with modern practices. The company has developed a deep understanding of how to balance economic, technical, and environmental requirements in a sector that is rapidly evolving. As global demand for sustainable fuels grows at an unprecedented pace, Ership Grupo is ready to support its clients with safe, efficient, and environmentally responsible logistics solutions. More than just a service provider, Ership Grupo is a partner that brings reliability, innovation, and sustainability to every biomass project it undertakes.

Journey to the Centre of Biomass Storage

THE EXPEDITION BEGINS

In the classic tale, *Journey to the Centre of the Earth* by Jules Verne, explorers embark on a fantastical subterranean journey. Their expedition takes them through hostile and unpredictable environments where they face unknown hazards and new terrain. As you may remember, this is an adventure fraught with challenges. This is much like tackling dust in the biomass industry.

Biomass is considered by many to be the energy treasure marked with an 'X' on the map, but the journey to sustainable fuel resources is not without its share of hidden perils and obstacles to overcome. Handling and storage of biomass is just one of many obstacles, and having the proper gear for this expedition is critical for success.

The necessary expedition gear is a

custom wind fence that helps protect biomass operations from the hazards of dust and wind.

THE TERRAIN OF BIOMASS

The organic nature of biomass means that it behaves differently than other materials such as coal or silica. This presents a unique set of challenges particularly when it comes to dust control during handling, storage and processing.

Biomass particles tend to be low density, irregularly shaped, and have a greater surface area to mass ratio. Having an irregular shape means these particles are more easily lifted by the wind. Having low density means they tend to stay airborne longer. Particle shape, size, and density all matter when it comes to

aerodynamic behaviour.

Think of it like this. You have a round, smooth bowling ball and you have a piece of paper. Which one is more likely to blow away first? You guessed it, the piece of paper. In our case, the 'paper' is biomass particles.

During handling, processing, and storage, significant amounts of biomass dust are generated and lead to combustible dust hazards, public safety issues, and operational disruptions. You'll need a little planning and the proper expedition gear to overcome the hostile dust filled air and unpredictable wind to keep the journey on course.

THE EXPEDITION GEAR

A custom wind fence, such as those

DCi





engineered and designed by the experts at WeatherSolve Structures, are the mainstay of the biomass explorer's expedition gear. By taming turbulent airflow, controlling dust, and shielding stockpiles from wind erosion, these structures transform inhospitable site conditions into manageable ones that support regulatory compliance and smooth operations.

Wind fences are an erected porous structure that create a calmed area (sheltered zone) on the windward side of the fence. Their placement relative to the direction of the prevailing wind influences the location of the sheltered zone while fence height contributes to the size of the calmed area. The porosity of the fence (openness of the material) controls how much air can pass through and equalizes the pressure on either side of the fence to reduce turbulence and unstable airflow.

Since biomass dust is low density and irregularly shaped, it tends to settle more slowly than its mineral counterparts. It therefore makes sense that the main advantage of slowing the wind with a custom wind fence is to stop the lightweight dust from becoming airborne in the first place. Upwind fences are of particular benefit.

Upwind fences are placed relatively perpendicular to incoming prevailing winds and create a calm area, or sheltered zone, behind the fence where wind speeds are typically under 50–70%. The distance the calmed area reached beyond the fence minimizes the pickup of particles which contribute to dust generation and risk of combustible dust events.

Wind isn't the sole contributor to biomass dust challenges. Handling,

processing, and transport also generate substantial amounts of dust. This is where you may also need a catch fence as part of your expedition gear.

A catch fence, also referred to as a downwind fence, physically captures dust particles and prevents them from blowing off site. A well-designed catch fence will capture the majority of dust; around 70% or so. A small portion will pass through the fence and about half of that will settle in the calmed area just past the fence. The rest blows away. This type of fence is perfect for stopping biomass dust that is kicked up not only by wind, but by everyday operations.

Not all expedition gear is created equally. When planning your journey, it is important to select high quality gear from a trusted name with proven experience navigating the toughest environments. In the world of biomass, that name is WeatherSolve.

THE EXPEDITION

This expedition happened a while back. You'll understand why that is important at the end.

As though right out of the Jules Verne story, a group of biomass 'explorers' were faced with a perilous environment. Wood dust generated by processing, haulers, and loading/unloading in the chip-handling area was migrating off site and causing all sorts of mayhem. Operations were located in an area with poor soil composition consisting of underlying sand and silt deposits to a depth of around 3m. The soil type increased the risk of seismic liquefaction (soil losing stability and being fluid-like). A row of trees that had provided some downwind protection to prevent dust transport had been recently removed.

Finding the right gear to help stay on course was a priority.

WeatherSolve was called upon to provide innovative custom gear so the explorers could tackle the challenge and continue on their journey.

The custom gear was in the form of a wind fence engineered and designed with a length of 1,400ft and varying heights up to 48ft. The fence panels were constructed from UV and tear resistant fabric with varying aerodynamic porosities. To enhance dust control, the fence was designed and installed with double catchment system.

Erected in 2006, the fence not only prevented the spread of dust to the surrounding area but significantly decreased the amount of onsite dust as well. The structure was of such quality that panels only required replacing at almost 20 years post installation. To this day, it continues to reduce dust and protect the surrounding area. Quality gear makes all the difference.

PLANNING THE NEXT SUSTAINABLE EXPEDITION

No expedition can succeed without the right equipment. The explorers in *Journey to the Centre of the Earth* relied on preparation and sturdy gear to overcome their subterranean challenges. In the same way, the biomass industry can effectively navigate the hazards of dust and wind with a well-designed custom wind fence. Without a proper dust management strategy in place, you may find yourself as Jules Verne describes in *Journey to the Centre of the Earth*: "I was all adrift amongst a thousand contradictory hypotheses, but I could not lay hold of one."



Hägglunds storms into new territory with a permanent magnet torque motor: Hägglunds Thunder

earless drive solutions from Hägglunds are renowned for their high torque and utter reliability, but also for their flexibility. With the introduction of Hägglunds Thunder, even the route to those advantages is flexible. Based on permanent magnet (PM) synchronous motor technology, Hägglunds Thunder is an electrifying solution from the most trusted supplier of industrial direct drives.

ENABLING A FULLY ELECTRIC HÄGGLUNDS DIRECT DRIVE

A PM synchronous torque motor is a type of multi-pole electric motor, capable of delivering high torque that fits well alongside that of existing Hägglunds motors. By enabling a fully electric, frequency-controlled drive solution from low to megawatt levels of power, the new Hägglunds Thunder creates an additional path to familiar Hägglunds benefits.

"PM synchronous motors are a well-known technology with untapped potential in heavy-duty industrial applications," says Tor Jensen, Vice President Hägglunds

Global Sales. "Our focus on dependable and versatile direct drive solutions hasn't changed, nor will it. But with Hägglunds Thunder as a complement to our electrohydraulic portfolio, we can offer a true Hägglunds solution with somewhat different drive characteristics. That provides new answers to specific customer challenges."

AMPLIFIED POWER WITH FULL PEACE OF MIND

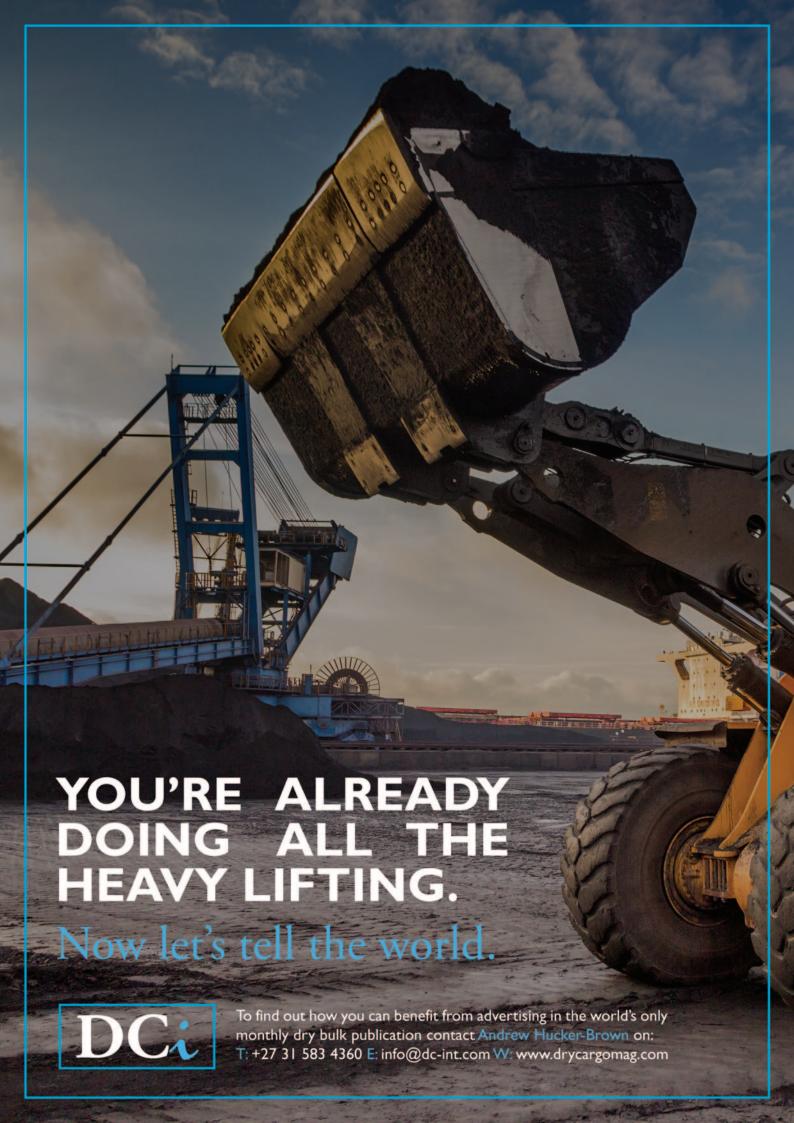
While the specifications for Hägglunds Thunder fit neatly within the Hägglunds portfolio, they create distinct performance envelope. The Hägglunds Thunder motor range has a nominal torque of up to 200kNm, and it provides fully variable speed from standstill. Nominal operating speed begins at 30rpm, which is slightly higher than solutions based on the existing Hägglunds portfolio. Yet the Hägglunds Thunder range opens up to a remarkable 300rpm — and provides constant high efficiency at nearly any speed within its range.

"Customers who require high, or extremely high, torque at speeds close to zero will be better served by Hägglunds electrohydraulic solutions," says Uno Sundelin, Project Manager for Hägglunds Thunder. "But where the requirements for torque and speed are a good fit, we can use Hägglunds Thunder to supply excellent direct drive solutions for up to 4,300kW of power. That's a bold new peak, even for Hägglunds."

Besides such efficient power, Hägglunds Thunder offers solid protection, sustaining a 200% overload for up to 60 seconds. "Reliability in unpredictable applications is what customers have come to expect from Hägglunds," says Sundelin. "They'll find that Hägglunds Thunder sacrifices nothing in that regard."

ABOUT HÄGGLUNDS

Hägglunds is a global expert in direct drive solutions. With power right on the rotating shaft, we provide reliability and flexibility in the most challenging situations — supporting customer efforts to do more, push further and use less. The company's team of over 600 strong offers innovation, service and commitment, extending from its headquarters in Mellansel, Sweden, to wherever its customers need it.





Hägglunds is a brand of Rexroth, a leading global supplier of drive and control technologies. Hägglunds solutions enrich a comprehensive Rexroth portfolio.

ABOUT BOSCH REXROTH

As one of the world's leading suppliers of drive and control technologies, Bosch Rexroth ensures efficient, powerful and safe movement in machines and systems of any size. The company bundles global application experience in the market segments of Mobile and Industrial **Applications** well as Factory Automation. With its intelligent components, customized system solutions, engineering and services, Bosch Rexroth is creating the necessary environment for fully connected applications. Rexroth offers its customers hydraulics, electric drive and control technology, gear technology and linear motion and assembly technology, including software and interfaces to the Internet of Things. With locations in over 80 countries, around 33,800 associates generated sales revenue of €7.6 billion in 2023.

WiCHMANN E GmbH: Wölfer Electric Motors strengthening global bulk and

port applications

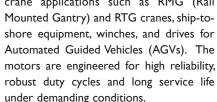
In late 2023, the WiCHMANN E GmbH was founded as a strategic new company under the WiCHMANN group umbrella, taking over the activities and brand rights of the long-established Franz Wölfer Elektromaschinenfabrik Osnabrück GmbH. With this acquisition, WiCHMANN ensured the continuation of one of Germany's most respected electric motor manufacturers and secured a knowledge base built over more than seven decades.

The Wölfer brand has been synonymous with high-quality, customized electric motors since 1945. Today, development and production are located at the longstanding Osnabrück works, where a wide range of drive solutions is manufactured for applications in harbour logistics, container handling, shipbuilding and offshore energy.

Core products include asynchronous motors in both squirrel-cage and slip-ring versions, tailored for heavy-duty operation. Their design is particularly well suited for



crane applications such as RMG (Rail under demanding conditions.



Previous deliveries underline the role OF WÖLFER MOTORS IN CRITICAL **INFRASTRUCTURE:**

- * Hamburg Port, Germany: 32 asynchronous motors were supplied for AGVs in one of Europe's busiest container hubs. These driverless vehicles rely on robust and energyefficient drives to maintain throughput around the clock.
- Offshore wind installation vessels: a major repeat order was secured for motors used in heavy-lift applications aboard purpose-built jack-up vessels supporting the global energy transition.
- Osnabrück Inland Port: Wölfer motors were recently commissioned in the local logistics hub, a symbolic project under the motto 'From Osnabrück - For Osnabrück.'









Osnabrück plant operates extensive in-house testing facilities. Motors up to 2,000kW and 690V can be tested under real-world conditions, covering a broad range of speeds and load cycles. Certification is available in line with all major classification societies including Lloyd's Register, DNV, ABS and Bureau Veritas. Efficiency classes from IEI to IE3 can be achieved, depending on customer requirements.

This strong in-house competence reduces lead times and ensures full compliance with global standards. Typical delivery schedules are around 14 weeks for standardized types and 18 weeks for customized solutions, FCA Osnabrück.

Beyond newbuild WiCHMANN E GmbH also provides rewinding, repair and technical service for existing drives. This service capability ensures maximum lifetime for assets in ports, shipyards and industrial facilities worldwide.

Engineering support is tailored to the individual application, ranging compact crane motors with additional cooling or braking systems, to low-inertia motors designed for test bench applications.

To prepare for growing demand,



WICHMANN E GmbH has announced the construction of a new production hall in Lotte, Germany, scheduled for completion in 2026/2027. This expansion will add capacity for larger series production and modernized manufacturing integrate processes. The investment reflects the company's commitment to long-term growth and its role as a reliable partner for international OEMs and operators.

While WiCHMANN E GmbH focuses on electric motors, it forms part of the wider WiCHMANN group, which also includes the WiCHMANN GmbH — a specialist in industrial and rail shaft lines with top-level welding certifications (DIN EN 15085-2 CLI, DIN 27201-6). Together, both companies offer a complementary portfolio of mechanical and electrical drive technology 'Made in Germany', serving industries ranging from bulk handling and logistics to rail transport and construction equipment.

By safeguarding the Wölfer brand and investing in new capacities, the WiCHMANN E GmbH ensures that German engineering continues to play a decisive role in critical infrastructure worldwide. Whether in bulk terminals, container ports, offshore vessels or industrial plants, WiCHMANN E drive solutions deliver the reliability, efficiency and performance that global logistics demand.













EP/EPC/EPCM "TURNKEY" PLANTS

MDG identifies the best technological solutions for customers specific needs, proposing itself as a "one source solution", and for production systems, development and assistance. MDG Handling Solutions offers engineering, high-quality manufacturing and mechanical handling services.

Via Brennero, 316 - 38121 - TRENTO - ITALY - Ph +39 0461 1637111 - E-mail info@mdghandlings.com

WWW.MDGHANDLINGS.COM



Remote monitoring: theory versus reality

The potential of remote monitoring and machine learning to performance in the bulk handling industry is exciting, with promises of impressive time and cost savings. However, practical implementation of such technology often reveals a more complex picture. While remote monitoring systems can significant challenges for production managers and maintenance teams, they can also introduce new issues. Based on real-world experience, Robert Whetstone of Martin Engineering explores the benefits and the unintended consequences of adopting advanced technologies in bulk materials handling.

As a global expert in bulk material handling solutions, Martin Engineering has been among the pioneers of technology solutions for materials processing for decades. Over the past ten years Martin's engineers have developed remote monitoring solutions that use sensors to provide data on the condition and performance of wear parts without maintenance teams having to physically go to the equipment to inspect it in person.

Traditional inspection regimes not only introduce unnecessary operating costs but also needless exposure to safety risks. That's why remote monitoring is especially effective, particularly in cases when:

- Equipment is so far away that inspection time is a fraction of the time to get there.
- Inspection involves complex procedures and supervision to organize safe access.
- The operation needs to shut down just to inspect one area or piece of equipment.
- Inspecting every conveyor takes days but no maintenance is needed.



Copyright [©] Martin Engineering 2025. Installing remote monitoring for belt cleaners significantly reduces physical visits to each conveyor.



THE CHALLENGE OF PREVENTIVE MAINTENANCE

The drive for production in the short-term makes it more likely that preventive maintenance inspections go to the bottom of the 'to do' list, and maintenance only becomes a priority when there's a problem that needs fixing.

Short-term targets frequently mean that systems 'run to failure' rather than being run to maximize long-term, cost-effective productivity.

Components like belt cleaners, which may not be seen as critical to productivity compared with other parts of the operation, are among the first to be overlooked. Therefore, Martin® Service Technicians (MSTs) are often called upon to react to a problem rather than prevent one. Ignoring maintenance for too long results in higher costs and more downtime in the long-term.

Remote monitoring mechanisms not only reduce labor but curtail unsafe behaviours such as taking shortcuts to access equipment to save time, ignoring inspection schedules and risk assessments,



Copyright [©] Martin Engineering 2025. Martin's Center for Innovation at its headquarters in Neponset, Illinois, USA.

or engaging in quick fixes with inadequate tools rather than planning safe maintenance during designated downtime.

By using cloud-based technology, operators can do real-time, condition-based monitoring and preventive maintenance of components like belt cleaners or air cannons. The data collected from sensors can help to predict when servicing may be required, giving operators enough time to arrange an inspection, order the required parts and book contractors to carry out maintenance during scheduled downtime.

THE DEVELOPMENT OF VIABLE REMOTE MONITORING

Engineering's Martin Center Innovation, located at its headquarters in Neponset, Illinois, USA designed and developed the first N2® Position Indicator (PI) for monitoring polyurethane conveyor belt cleaners (the first of many sensors compatible in the Martin OnSite infrastructure or ecosystem or platform). With the goal of making the device affordable, accessible, reliable and easy to install, the conveyor belt cleaners' performance and condition information is transmitted via a central 'gateway' to the cloud. Data is then clearly presented and easily accessed via a dedicated mobile app or desktop platform.

Martin's N2® PI is the ideal solution for drastically cutting down on inspection time, and the more difficult and time-consuming the belt cleaners are to inspect, the greater the potential for time saving. Essentially, if you know the know the condition of the belt cleaner blade by using the app, there is no need to go and visually inspect it. Live installations show that PI can reduce inspection time by as much as

Thunds Thunder

An electric start to a lasting boom.



That's more than a sound you hear. It's expectations being shaken. One small change that sets the stage for so much more. When the new Hägglunds Thunder resonates with your needs, the result is electrifying. Learn what a difference a single difference can make at www.hagglunds.com.





90%, which also means reduced exposure to the safety risks associated with accessing conveyors. Additionally, remote monitoring eliminates the guesswork around belt cleaner servicing — the condition of the blade is based on data-driven facts rather than human observation and perception. That opens up the prospect of true preventative maintenance and, over time, predictive maintenance.

As a result, since the introduction of the Position Indicator, there are now thousands of N2® PI devices installed at more than 40 mineral processing operations worldwide. While operators monitored the performance of equipment, Martin monitored the performance of the PI and discovered that it might not be the right fit for some operators. And just like the familiar personal tech we all use every day, remote monitoring of wear parts can also be the source of some frustrations. Working closely with customers, Martin engineers identified four key areas to consider with the implementation of a remote monitoring system:

1) Does it address your pain points?

Martin Engineering design engineers think a lot about pain points — the everyday problems that cause hassle, create risk, slow productivity, waste time and cost money. The company's core mission of 'cleaner, safer and more productive' operations drives the design and engineering of its extensive catalogue of products, including the N2® Position Indicator.

During Martin's initial research, it was clear that many technological solutions falter because they do not address real pain points. In other cases, developers fail to clearly explain to operators how their

innovative solution addresses their problems. And perhaps worst of all are those examples where new technology introduces new pain points that have been overlooked during development and testing.

Critical for Martin's designers, therefore, was to ensure that the N2® Pl supported the identification of Key Performance Indicators (KPIs) to ensure the right pain points were being addressed. Unique to each operation, these KPIs focus on production inefficiencies and the operational discrepancies between individual belt conveyors.

For example, the PI system is designed to show if there's a problem with a belt cleaner blade on each conveyor. For some maintenance managers that's useful for them to take urgent action. For others it's just another notification about another task on an already too-long list of jobs (and frankly one that they're not going to get round to anytime soon!). So remote monitoring is only useful if internal maintenance team has the bandwidth to keep up.

In other examples, such as a site where the production team continually conducts walk-rounds and visual inspections of the whole operation, remote monitoring is not valued to the same extent as sites where a walk-round is done infrequently. Data from the sensors is telling them what they already know so having to consult the app is itself a pain point.

2) Does it deliver useful, actionable data?

In a major bulk handling operation, there's a risk that remote monitoring solutions may lead to data overload. All of us are already inundated with information coming from innumerable sources, and additional



Copyright [©] Martin Engineering 2025. Remote monitoring is only useful if users are provided with useable, actionable data.

data coming from remote monitoring systems competes with emails, messages and endless other notifications. Yet it's easy to fall into the trap of thinking that having access to lots more information is the goal, rather than the decisions and actions we take based on that information.

No matter how impressive any technology may be, or how interesting remote monitoring metrics may be, data collection alone doesn't achieve better productivity. The information therefore needs to be helpful, accurate and presented in a way that helps decision-making. Equally, having the wrong KPIs can switch focus away from the desired outcome and skew decision making in a way that is ultimately detrimental to productivity.

The Martin OnSite mobile app and OnSite dashboard provides a series of clear charts with actionable information that's automatically analysed, interpreted and presented in a way which makes decisions straightforward.

3) Are you willing and able to change?

One of the biggest barriers to advancement is the inability or unwillingness to change. This comes in two main forms — business processes and people. Firstly, long-established business processes can be rigid, engendering ways of working that become ingrained over decades. Secondly, people are generally resistant to change in their daily routines, regardless of inefficiency or safety.

So, in reality, introducing any technology requires change management. The installation and integration of the system must ensure the benefits of the change are well-anticipated and understood by stakeholders, and the new workflows are less onerous than the current regime. For example, workers in bulk handling operations often provide pushback believing that technology could make their jobs redundant. This is not wholly unfounded, after all, on a large-scale operation N2® Position Indicators could replace what a typical worker does for a up to a whole day each week.

F120 MH

THE BEGINNING OF A NEW ERA



F 120 MH · Technical Data Engine Power: 350 kW \$50 kW bybrid) · Operating Weight w/o Attachments: 120 - 150 t · Reach: max. 27 m





Copyright [®] Martin Engineering 2025. Once the central Gateway is installed and powered, each N2[®] PI can be fitted and paired in just a few minutes.

In some cases, conveyor belt maintenance teams who aren't aware that sensors are fitted, or aren't trained how then function, have had negative impacts on monitoring systems because they have failed to reset them correctly. Elsewhere there has been deliberate tampering of monitoring devices, and in one case the workers believed the new tech installations would be used to 'spy' of their behaviour, damaging their morale.

So, like all new systems, those involved must be prepared and trained in the right way, including explaining the rationale for installing remote monitoring systems, as well as reassurance about motives. When people are required to learn something new, without understanding why they are being asked to change, resistance is likely, and failure is probable. Such resistance can also be diminished and overcome by ensuring any new technology is easy-to-use, intuitive and even preferable (and certainly not worse than whatever the current procedures are).

4) Does it integrate with existing systems?

The N2® Position Indicator is designed to be retrofitted to belt cleaners without any other upgrades to the system. And it's also scalable across operations of all sizes, types and ages without incurring additional cost. However, there may be numerous physical obstacles ranging from accessibility and available space to legacy steelwork that needs refabricating.

Once the central Gateway is installed and powered, each N2® PI can be fitted and paired in just a few minutes. More importantly, a single Gateway can handle I,000s of PI sensors so expanding the N2® network doesn't require further investment in the communication infrastructure.

If an operation already has centralized remote monitoring for other components, N2® data can integrate with existing systems although it may require additional work to ensure compatibility. To avoid data overload, it is recommended to begin with simple core actionable KPIs such as status and wear times, then expand from there as required.

'LISTENING TO UNDERSTAND' IS THE KEY TO SUCCESS

After spending around five years developing its N2® PI for conveyor belt cleaners, Martin Engineering formally launched the technology just before the global covid pandemic in 2020. Working hand-in-glove with customers' production and maintenance teams, Martin® Service Technicians listened, resolved teething challenges and reported issues. As a result, Martin has gone on to develop two further N2 conveyor products sensors which work with the same Gateway and is expected to launch a game-changing new flow aid sensor in 2025.

As with all things, a balanced perspective is required when embracing technological advancement. Martin is dedicated to helping customers accomplish their safety and efficiency goals, so the consultation and inspection of operations for viability, followed by a proper introduction and phased integration of the OnSite system is recommended.

To achieve the desired productivity improvement, it is imperative to understand the potential pitfalls that accompany change. Most importantly, having the right conversations, listening to understand the true pain points, embracing the challenge and working together are critical to transforming this huge opportunity into action and delivering tangible results.

ABOUT MARTIN ENGINEERING

Martin Engineering has been a global leader in bulk material handling for more than 80 years, continuously developing new solutions to make high-volume conveyors cleaner, safer and more productive. The company's series of Foundations™ books is an internationally-recognized resource for safety, maintenance and operations training - with more than 22,000 print copies in circulation around the world. The 500+ page reference books are available in several languages and have been downloaded thousands of times as free PDFs from the Martin website. Martin Engineering products, sales, service and training are available from 18 factoryowned facilities worldwide, with whollyowned business units in Australia, Brazil, China, Colombia, France, Germany, India, Indonesia, Italy, Kazakhstan, Malaysia, Mexico, Peru, Spain, South Africa, Turkey, the UK and USA. The firm employs more than 1,000 people, approximately 400 of whom hold advanced degrees.



About the Author

Robert Whetstone, Area Vice President, EMEAI Region, Martin Engineering.

Robert Whetstone is responsible for Martin Engineering's Europe, Middle East, Africa & India region (EMEAI). He started his career in the British Army before taking up leadership roles first in retail and then business services. He joined multinational building materials group Lafarge in 1998 where he held a number of senior positions in the UK and USA. In 2013 he took up a role with engineering services firm Babcock International to lead their Mining & Construction Business in North America before setting up his own consultancy supporting business growth. He joined Martin Engineering in 2017. Robert is a Fellow of the Royal Society for Arts, Manufacturing and Commerce (FRSA) and a former Fellow of the Institute of Quarrying (FIQ). His passion is developing and growing businesses by harnessing people's potential and strongly believes that people and organizations must evolve to stay ahead of the game and realize their full potential.

Electric power drives Liebherr's latest crane deliveries to Italy



By combining electric drive technology with high lifting capacities, advanced operator cabins and agile undercarriage systems, Liebherr equips Italian terminals for faster cycles, quieter operation and locally emission-free lifting where shore power is available.

Delivering performance for Italy's diverse port landscape. Liebherr has dispatched four additional mobile harbour cranes to Italy, reaffirming its role in the country's evolving port infrastructure. The shipment includes two LHM 550 for Bari's bulk terminal, each rated at 154 tonnes with a 54-metre outreach and equipped with e-drive for locally emission-free operation when connected to shore power.

La Nuova Meccanica Navale in Naples will receive an LHM 420 to replace an older LHM 1300. This crane, with a 124-tonne lifting capacity and 48-metre outreach, is built for heavy-duty shipyard operations, from removing large hatch covers to handling oversized components and tools with precision and speed. The company selected the LHM 420 for its reliability and manoeuvrability in confined quay spaces.

Interporto Rivers Venezia will also receive an LHM 420, configured with electric drive to support bulk and scrap operations at its multipurpose terminal. This addition complements the terminal's

existing fleet of four Liebherr mobile harbour cranes — an LHM 250, two LHM 320s and an LHM 550 — reinforcing its strategy to modernize handling capacity while reducing local emissions.

EXPANDING CAPABILITIES ACROSS ITALIAN PORTS

Bari's grain gateway relies on dependable high-rate discharge to feed regional milling and pasta production for Divella Pasta, so the terminal's focus on efficiency is supported by the LHM 550's performance. Both cranes also feature the latest operator cabin, designed to reduce fatigue and improve situational awareness during long shifts, while LED floodlighting ensures clear visibility for safe, efficient handling even in low-light conditions. IPM Bari already operates two LHM 550s and is expanding capacity to meet growing throughput demands.

In Naples, a ship repair yard with two production sites and a 230-metre floating dock will deploy the LHM 420 for critical lifting operations, including hatch cover removal and the transfer of heavy machinery, where its reach, lifting power and precise positioning deliver clear advantages in confined quay spaces. The decision to replace an ageing LHM 1300 with a new-generation LHM 420 reflects the customer's confidence in Liebherr's long-term reliability and advanced

operator comfort features, ensuring that critical lifting tasks can be executed with accuracy and minimal downtime.

At Porto Marghera, the multipurpose platform is investing to modernize handling, storage and energy use; the electrically powered LHM complements this direction by enabling locally emission-free lifts during bulk and scrap operations. The choice of Liebherr was driven by the crane's adaptability for multiple cargo types and its ability to integrate seamlessly into a terminal strategy focused on sustainability and operational flexibility, reinforcing the operator's ambition to become a benchmark for efficient, low-impact logistics in Northern Italy.

"Italian ports present a unique mix of requirements, from precision lifting in shipyards to high-volume bulk discharge," said Andreas Ritschel, General Manager Sales Mobile Harbour Cranes at Liebherr-Rostock GmbH. "By pairing electric drive options with proven reliability, we are delivering performance that meets operational targets and reduces local emissions where shore power is in place."

ENGINEERING FOCUS, ELECTRIC PERFORMANCE AND LOCAL PARTNERSHIP

Liebherr's commitment to long-term reliability in Italy is reinforced by its collaboration with Mac Port, the company's exclusive sales and service partner since 2009. Mac Port operates a nationwide network for spare parts, training and field service, ensuring rapid response and predictable availability. Its certified processes and decades of experience in port mechanization make it a cornerstone of Liebherr's customer support strategy in the region.

A forward-looking approach highlights these deliveries: electric drives and advanced crane systems are enabling Italian operators to balance throughput targets with quieter, cleaner quays. Beyond this delivery, existing diesel-powered cranes can be retrofitted with electric drives thanks to retrofit kits provided by Liebherr, ensuring operation through electrical power for cranes already in service. As the country's ports invest in infrastructure and digital tools, the cranes shipped from Rostock will serve as adaptable assets equally at home discharging grain, manoeuvring heavy yard components, or switching between bulk, scrap and containers — supporting the next phase of efficient, reliable maritime logistics.

Powering the future of bulk material transport



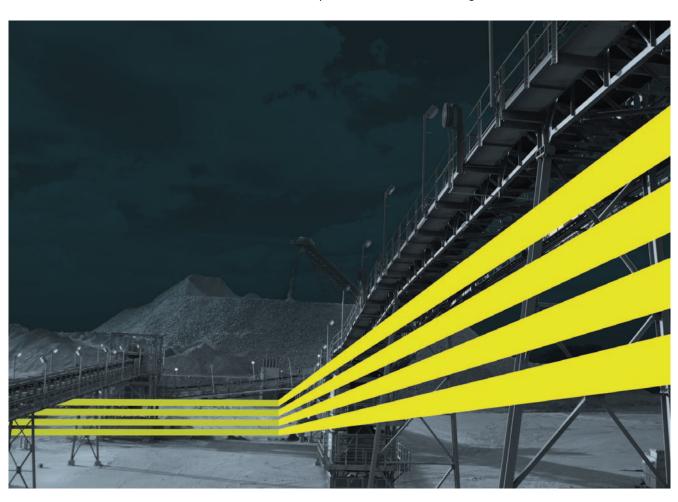
In bulk material handling, efficiency and sustainability are critical.

As global demand for minerals and other bulk resources continues to rise, the pressure is increasing for operators to find smarter, greener ways to move millions of tonnes of material from

extraction to processing.

Innomotics, a leading provider of drive technologies and solutions for heavy industry, is helping some of the world's leading mining companies not only to raise productivity but also reshape their environmental impact.

Building on a 150-year legacy of innovative engineering, the company has a history of firsts in the transport and processing of bulk materials, from the world's first mine winder and the world's first gearless conveyor to the world's first digital mine.



Innomotics' advantage is that it offers a comprehensive range of products, services and solutions to meet their customer needs.

It can combine various electric motor types and smart converters finely-tuned to meet specific customer needs with solutions in electrification, such as preassembled electrical houses, as well as digitalization tools that ensure efficient operation and avoid unplanned downtime. From Asia to South America, operators are discovering the advantages of innovation in motion.

FROM THE DEPTHS OF THE GOBI

In early 2025, workers at the massive Oyu Tolgoi copper mine in southern Mongolia's Gobi Desert marked a major milestone with the commissioning of a state-of-theart underground conveyor system. Developed over a period of seven years, this engineering marvel can transport more than 7,000 tonnes of ore per hour from depths of 1,400 metres to the surface — a critical link in one of the world's most ambitious mining projects.

Nine interconnected conveyors twist and climb through the underground network to deliver copper ore to the surface processing facilities. The project relied heavily on Innomotics for the design, engineering, and production of the complete conveyor drive system.

Innomotics provided a wide array of advanced electrical and automation equipment, including medium-voltage switchgear, high-performance transformers, low-voltage energy distribution systems, robust low-speed synchronous motors designed for high torque applications and pre-assembled electrical houses (E-Houses) to house and protect sensitive electrical infrastructure in harsh mining environments.

This integrated approach ensured a reliable, scalable solution tailored to the challenging demands of underground mining. The result is not just a more efficient operation, but also a significant reduction in ventilation power.

HIGH IN THE ANDES: LOS PELAMBRES SETS THE STANDARD

On the other side of the globe, in the rugged terrain of the Chilean Andes, Innomotics has helped set a new benchmark in bulk material transport.

At the Los Pelambres copper mine, Innomotics designed and delivered what is now considered one of the longest and most energy-efficient conveyor systems in the world

Spanning 13 kilometres, the 1.8-metrewide conveyor belt winds its way from the high-altitude open-pit mine down to the valley-floor processing plant, moving nearly 9,000 tons of ore every hour.

However, it is not the only scale which made this is a pioneering project.

Thanks to an innovative design, the system actually generates electricity as it operates. The weight of the descending copper ore turns turbines, feeding power back into the mine's grid.

This clever use of gravity recovery supplies approximately 15% of the mine's total power consumption, displacing around 50,000 tonnes of $\rm CO_2$ emissions annually.

This feature earned the project the National Prize for Power Efficiency awarded by Chile's Ministry of Economy.

A PARTNER FOR THE LONG HAUL

In industries like mining, cement, ports, and other bulk cargo handling operations, uptime is everything. Innomotics' deep experience across multiple sectors gives it a unique advantage in designing reliable, high-throughput systems that are also future-proof. Whether it's delivering ore from deep underground in Mongolia or descending mountains in Chile, Innomotics is demonstrating how it can help heavy industries transition toward a more sustainable and efficient future.

As bulk material demands grow, so too does the need for smarter infrastructure. With proven success in some of the most challenging environments on earth, Innomotics is well-positioned to support operators looking to scale up — without compromising on sustainability or reliability.

FROM PIT TO PORT, SOLVING PROBLEMS AND SAVING BUDGETS WITH HIGH VALUE USED AND SURPLUS EQUIPMENT

See video New, never commissioned Self-propelled on rail with integrated tripper 100% Galvanized Structure 2 available 260' span (~ 79 m) 44'-6" discharge height (~ 13.5 m) 40' track gauge (~ 12 m)

Specializing in Crushing, Screening,
Wet Process, Conveying and Storage Solutions
DISMANTLING - MOVING - ERECTING - SALVAGING - PROJECT MANAGEMEN

Contact information:
Mike Bandas, MGB & Company, Caldwell, Texas U.S.A.
Cell or Signal app: +1 512-734-2996
E: mike@mgbandcompany.com W: www.mgbandcompany.com



Hamburg-Le Havre range

major bulk handling region under the spotlight



HAROPA PORT: significant dry bulk hub

About 20% of French dry bulk transit through HAROPA PORT. Cereals, and more broadly the agro-industry, remain the main dry bulk sector of HAROPA PORT which occupies first place in Western Europe for maritime exports of cereals. HAROPA PORT distinguishes itself from other French port areas by its wide range of dry bulks. On the Seine axis, it is more specifically the Rouen operators who operate most of the traffic in the sector. They have know-how and long experience, complemented by a complete range of equipment for the handling and storage of a wide variety of products. Agro-industry with soft and fodder wheat, malting and fodder barley, corn, rapeseed, gluten cake,

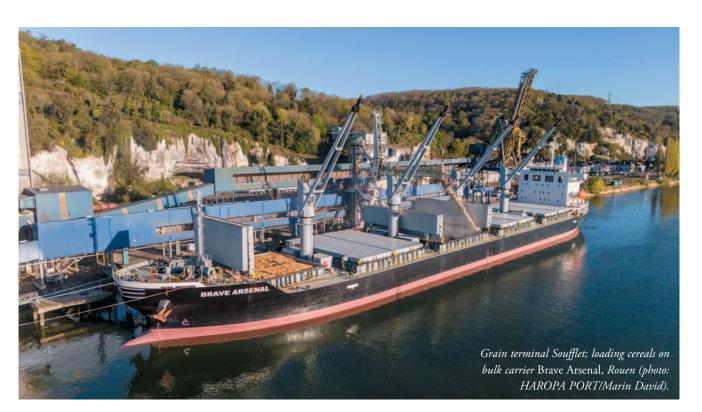
rapeseed, cocoa, field beans, peas, malt, products for animal feed, and so forth.

CONSTRUCTION OF A NEW SILO

The diversity of these trades is also illustrated by the construction and public works sector with aggregates, sands, cements/clinkers, clays, urea, crushed stone, pumice. To these are added wood energy, (pellets), chemical products but also recyclable products such as scrap metal, SRF (solid recovered fuels) or crushed tyres. Other products such as peat, salts, attapulgites, petroleum coke complete the traffic carried out by the ports of the Seine axis.

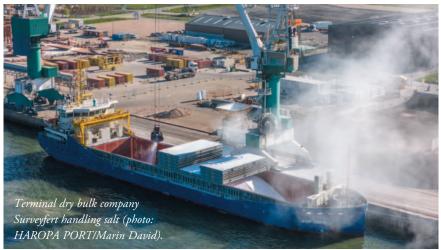
Four cereal operators are present in

Rouen: Sénalia, Soufflet-Socomac, Simarex-NatUp and the BZ Group. The year 2024 was marked by the launch of work on the new silo of Groupe BZ on the Quai de Petit-Couronne (QPC), located about ten kilometres south of Rouen. The future equipment will increase the operator's storage capacity from 75,000 to 130,000 tonnes. The new silo, the company's second at QPC, will be operational in 2026. The BZ Group has also invested in new loading and conveyor gantries for the transport of cereals. For its part, HAROPA PORT has undertaken work to adapt the nautical capacities of the Petit-Couronne Quay and increase the draught by one and a half metres.

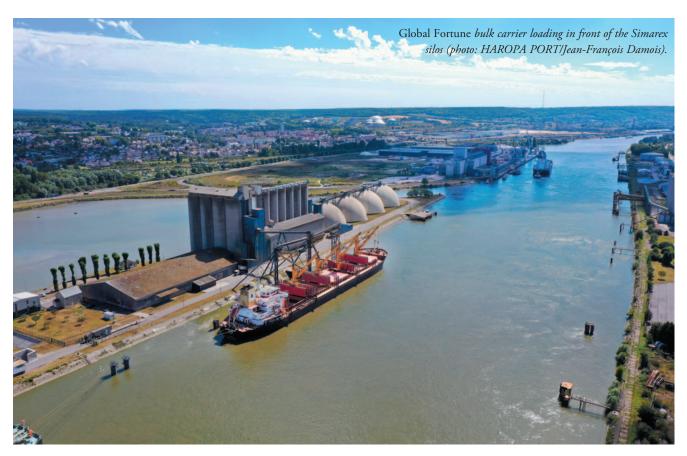


EXPECTED RECOVERY IN THE CONSTRUCTION & PUBLIC WORKS SECTOR

During the first half of 2025, the solid bulk sector recorded a total traffic of 5.8mt (million tonnes), representing a decrease of of –18.4%. HAROPA PORT processed a volume of 881,323 tonnes of aggregates (+58.7%), demonstrating a recovery in the construction and public works sector, which was weakened in 2024. Rouen remains the French leader in solid fertilizers for import but also for export with 398,000 tonnes. The other dry bulks show a total of 1.26mt over the first half of 2025, an increase of +35.4%.





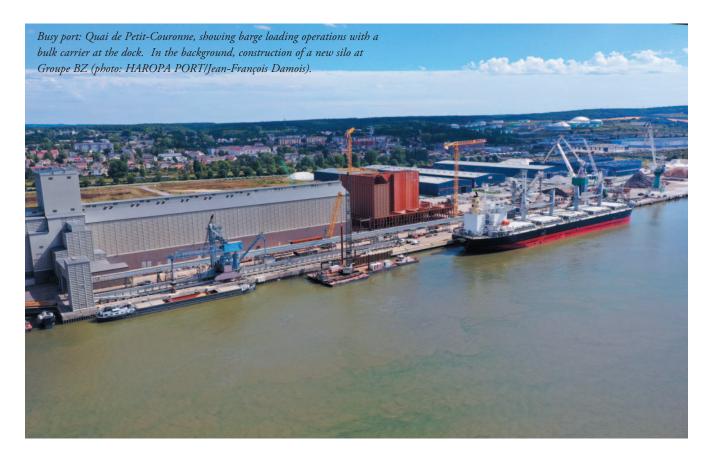


The dry bulk sector is nevertheless marked by cereal exports, which have been in difficulty since July 2024. Indeed, during the 2024–2025 cereal season, which ended on 30 June, the Rouen port area processed a total of 5.21mt of cereals, compared to 8.7mt in the 2023–2024 season, which ranked among the best five ever achieved. These results are explained by a fall in

yields in the summer of 2024, marked by the worst soft wheat harvest recorded in France in four decades, with direct consequences on the volumes of cereals available for export.

Despite the decline in production, HAROPA PORT saw its market share increase slightly to 54% of French cereals exported by sea. After a strong downturn

in the first half (July 2024 to December 2024), the second half (January 2025 to June 2025) showed renewed momentum in Rouen with more than 3mt of cereals exported including 1mt of soft wheat, 840,000 tonnes of feed wheat, 919,000 tonnes of feed barley and 106,500 tonnes of malting barley. The rapeseed traffic represents 485,400 tonnes.



Mixed picture for Port of Antwerp-Bruges in volatile trade climate

CONTAINER TRAFFIC STABILIZES, BULK TRAFFIC UNDER PRESSURE DUE TO INTERNATIONAL UNCERTAINTY

In the first nine months of 2025, Port of Antwerp-Bruges handled 202.6mt (million tonnes) of maritime goods, a decrease of 3.8% compared with the same period last year. The throughput of general cargo, including containers, conventional general cargo and RoRo, increased by 1.3%, while dry and liquid bulk together declined by 12.8%. Following a solid first half of the year, container volumes eased from August onwards, partly as a result of the phase-out of former shipping alliances. Trade with the United States continues to be affected by ongoing uncertainty surrounding US import tariffs.

SLOWDOWN IN CONTAINER TRAFFIC AND DECLINING CONGESTION

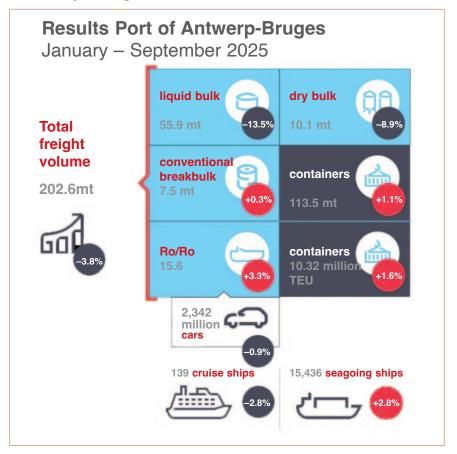
After a solid first half-year, container throughput declined 2.4% in the third quarter year on year. The first nine months saw modest growth, with tonnage rising 1.1% and TEU up 1.6%.

This slowdown is linked to the normalization of container shipping alliances, which brought an end to the temporary overlap between calls in old and new alliances. This led to a clear reduction in congestion, with quicker turnarounds and smoother traffic to the hinterland.

Port of Antwerp-Bruges' market share in the Hamburg–Le Havre range dropped 0.7 percentage points to 29.8% in the first half of 2025, largely because of lack of terminal capacity. The bottleneck will be tackled through the ECA project (Extra Container Capacity Antwerp). Low container shipping schedule reliability and a series of strikes however continue to affect operational reliability.

MIXED TRENDS IN OTHER SEGMENTS

Conventional general cargo remained status quo after nine months, thanks to a recovery in steel imports, although exports remained under pressure from weaker shipments to a.o. the US and Mexico. Meanwhile, the European Commission unveiled stricter rules to curb foreign steel dumping. Liquid bulk declined 13.5%, hit by weaker petroleum derivatives exports to West Africa and persistent weakness in the European chemical sector. Volumes of biofuels and energy gases continued their growth. The decline in LNG traffic, resulting from the European ban on the transshipment of Russian gas, was partially offset by higher imports from



the US. Recent announcements in the European chemicals industry underline the continued pressure on the sector.

Dry bulk (-8.9%) was primarily impacted by weaker fertilizer shipments, partly offset by increased imports from Russia and Morocco, the former ahead of the introduction of new EU duties. The RoRo segment grew by 3.3%, supported by rising imports of new cars from China — despite European import duties introduced at the end of 2024 — as well as higher volumes of trucks and used vehicles. China has now become the leading country of origin for new car imports.

INCREASING IMPACT OF AMERICAN TRADE MEASURES

Shipments to and from the US — Port of Antwerp-Bruges' second-largest trading partner — grew by 15% in the first nine months of 2025. This growth was primarily driven by containers and liquid bulk. However, since the summer, the impact of US import tariffs has become apparent: exports fell in the third quarter, particularly for steel, which declined by more than a third compared to the second quarter.

Imports remained stable for the time being, supported by a sharp increase in liquid bulk and a threefold rise in LNG volumes. This reinforces Port of Antwerp-Bruges' role as a gateway for alternative energy flows replacing Russian gas. Container imports from the US also increased by 8%, although growth has slowed slightly since August.

BALANCE BETWEEN RESILIENCE AND UNCERTAINTY

The results for the first three quarters of 2025 present a balanced yet challenging picture. After a strong start to the year, container flows are stabilizing and pressure on terminals is easing, while traffic with the US remains stable.

At the same time, declining exports and the challenging position of the European chemical sector illustrate the port's sensitivity to geopolitical and economic fluctuations.

Said Jacques Vandermeiren, CEO Port of Antwerp-Bruges: "The slight decline in our market share is largely explained by congestion in the first half of the year. Volumes were sufficient, but available terminal capacity was inadequate. Rearrangements within shipping alliances also had a temporary impact on the distribution of traffic between ports. We anticipate that our market share will recover as soon as additional capacity becomes available. The quarterly figures also highlight the resilience of Port of Antwerp-Bruges in a particularly volatile economic climate."

DCi

Throughput at the Port of Rotterdam falls slightly in the first nine months of 2025

Total throughput in the port of Rotterdam fell slightly by 2.6% in the third quarter of 2025 compared to the same period last year. In the first nine months of this year, throughput was 320.2mt (million tonnes), compared to 328.9mt in the first nine months of 2024. The decline is mainly due to lower throughput of iron ore and mineral oil products. throughput of agribulk, crude oil, LNG, and containers (in TEU) increased.

Boudewijn Siemons, CEO of Port of

Rotterdam Authority: "Although total throughput volumes showed a slight decline in the first nine months of this year, developments in areas such as container throughput and the throughput of renewable fuels confirm the resilience and strategic value of the port of Rotterdam. At the same time, European industry is still under enormous pressure, which underscores the need to continue investing jointly in innovation, sustainability, and logistical efficiency."

DRY BULK

The throughput of dry bulk decreased by 5.6% compared to the same period last year. The main reason for the decline is the sharp drop in the throughput of iron ore and scrap by 12.7% and 2.9mt. The decline in German steel production continued in the third quarter, under pressure from ongoing economic uncertainty and trade barriers. Electrical steel production also declined, albeit to a lesser extent, resulting in slightly higher scrap exports. Coal throughput fell by 5.3% compared to 2024, mainly due to reduced demand for coking coal in the steel industry. In contrast, the use of energy coal in the Netherlands and Germany increased due to higher energy demand that could not be fully met by additional solar and wind energy, particularly in the first quarter of 2025. The growth in imports of agribulk goods continued in the third quarter. As a result, throughput in this segment increased by 16.8% compared to last year. This increase is mainly due to the commissioning of a



new dry bulk terminal in Rotterdam. Due to lagging industrial production in Germany, demand for raw materials is limited. The throughput of other dry bulk therefore shows a decline of 7.2% in the first nine months of 2025.

LIQUID BULK

The throughput of liquid bulk declined by 3.4% to 146.4mt in the third quarter. This decrease of 5mt was mainly caused by a 7.3mt (-17.2%) reduction in throughput of mineral oil products. The lower throughput of mineral oil products is a consequence of backwardation in the market, which makes storage unprofitable. As the chemical industry in Europe is not yet showing signs of recovery, the 'other liquid bulk' segment declined by I.Imt (-4.1%). However, within this segment, the throughput of renewable fuels did increase, due to higher throughput of ethanol and SAF. The throughput of crude oil and LNG increased. Refining margins improved in the third quarter, partly due to attacks on Russian refineries. This reduces the supply of diesel for the global market. Combined with low diesel stock levels in Northwest Europe, this leads to higher margins. LNG throughput increased by 14.9% as gas stocks in Europe continued to be replenished.

CONTAINERS AND BREAKBULK

Throughput in the container segment increased by 3.0% to 10.7 million TEU (the standard unit for containers) in the first nine months. In terms of tonnage,

throughput shows a decrease of 0.6% compared to the same period last year. The slight decrease in tonnage is due to the imbalance between imports and exports, resulting in more empty containers being transshipped. Exports from Europe are still suffering from the pressure on European competitiveness. This is particularly noticeable in the automotive industry and the chemical sector.

Due to strong import demand, particularly from Asia, the last three months of 2025 show an increase in container throughput in TEUs of 3.8% compared to 3.0% for the year to date. Total throughput in the Asia–Europe shipping region increased by 8.8% in the last nine months. Throughput on the transatlantic route increased by 14.6% in the first nine months compared to last year. The new sailing schedules introduced at the beginning of this year include more services from Rotterdam to this shipping region.

Total breakbulk throughput (Roll-on/Roll-off and other breakbulk) increased by 0.2% to 24.0mt. RoRo throughput decreased by 0.1%. Volumes to and from the United Kingdom have not yet recovered. The last six months have shown cautious signs of recovery. Other breakbulk rose 1.1% to 4.6mt. This increase was partly due to the delivery of monopiles (offshore wind foundations), steel pipes for the Porthos project, and an increase in the throughput of steel plates for the offshore industry.

Successful revamp of the train loading station completed at HES Bulk Terminal Rotterdam



This summer, the team at HES Bulk Terminal Rotterdam (HBTR) successfully completed the revamp of the train loading station, a key asset that has been at the heart of operations since it was built in 1976.

The train loading station is handling up to six million tonnes of iron ore annually for HBTR's steel-producing customers in the local hinterland. Knowing the critical role it plays, HBTR decided to give it a second life, replacing the conveyor belts and modernizing the system to ensure its reliability for years to come. According to Peter de Klerk, Technical Manager at HBTR, "this project was a real team effort. By coordinating closely with the HES Group and our customers, we were able to modernize a critical piece of equipment without any disruption to operations and, most importantly, without compromising on safety."

The station now operates as a fully automated system, managed remotely from the control room. A single operator can efficiently supervise several machines at once — a major step forward in both efficiency and safety. This achievement reflects the value of strong collaboration

between the terminal's technical team and the Group. Over the past two years, the teams worked together to plan the renovation during a scheduled slowdown in production, aligning the project with the client's blast furnace maintenance. This careful co-ordination allowed the work to be completed without disrupting customer operations.

The project required approximately 15,000 contracted man-hours. To reinforce its commitment to safety, an external advisor was hired and present daily on-site, supporting supervisors and ensuring strict compliance with all safety protocols. As Jeroen van der Neut, COO of HES Group, explained, "The revamp of the train loading station is a great example of how we approach maintenance as part of our long-term asset strategy. By investing in reliability and efficiency, we ensure that our operations remain competitive while continuing to provide the high level of service our customers expect."

HES BULK TERMINAL ROTTERDAM

EUROPE'S MOST MODERN DRY BULK TERMINALHBTR is one of the largest dry bulk terminals in Europe, strategically located in

the Port of Rotterdam. The biggest seagoing vessels from all over the globe berth along its quays.

Around 80% of the dry bulk products at HBTR are transported to the German hinterland by either the extensive rail network or the waterways. HBTR is a logistical partner for customers in the steel industry, silicon metal industry and the energy sector. Continuous investments over the past years have resulted in a highly automated dry bulk terminal which is unique in its operational flexibility and efficiency. Much of the equipment is electrically powered.

HBTR has chosen to use durable, high quality machines and components with a long lifespan, built according to responsible manufacturing methods. Standards are in place at HBTR regarding an ethical, safe and socially and environmentally responsible performance.

In addition to the loading, unloading, storage and transhipment of various dry bulk products, the HBTR terminal offers added-value services such as the screening, blending and washing of coal (for the silicon metal industry) upon request as well.



DCi

INDEX OF ADVERTISERS

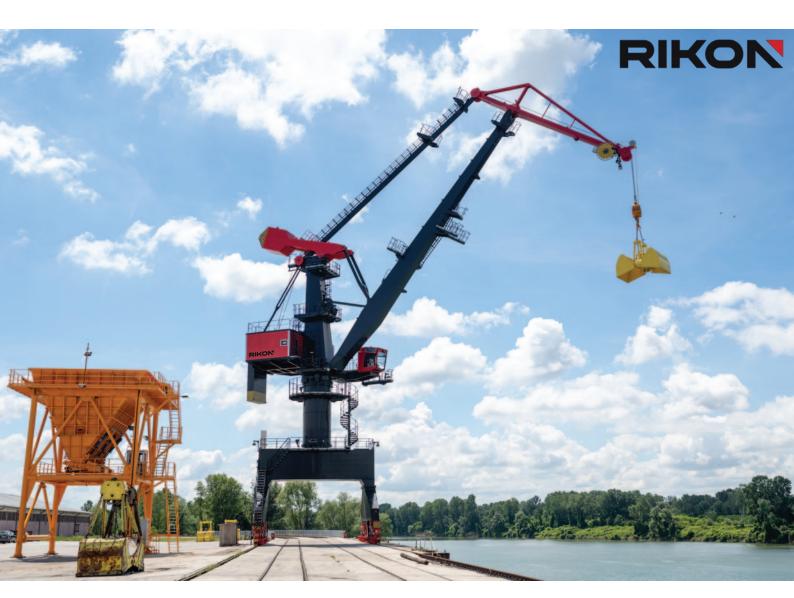
Company	Page	Company	Page
Achenbach GmbH Metalltechnik	43	MGB & Company	117
ASGCO "Complete Conveyor Solutions"	57	Morska Agencja Gdynia Sp. z.o.o.	29
Bedeschi SpA	83	Nantong Rainbow Heavy Machineries Co., Ltd.	67
Buhler AG, Grain Quality and Supply	25	Negrini Srl	95
Cleveland Cascades Ltd	101	ORTS GmbH Maschinenfabrik	84, 85
Conductix-Wampfler GmbH	41	PEINER SMAG Lifting Technologies GmbH	97
CRS - Container Rotation Systems Pty Ltd	3,	Port of Hamburg Marketing e.V.	6
Inside Cover Coal Handling Directory		RIKON A/S Cover Coal Har	ndling Directory
DCL, Incorporated	88	Rocktree Logistics Pte. Ltd.	5
DSM Shipbrokers / Shiptrade	17	RULMECA HOLDING S.P.A.	143
EMS-Tech Inc	27	Scantech International	142
Geometrica Inc	11	SCHADE Lagertechnik GmbH (AUMUND Group)	51
Global Manufacturing, Inc.	65	SENNEBOGEN Maschinenfabrik GmbH Inc	side Back Cover
Hägglunds	111	Shi.E.L.D. Services srl	26
Italgru S.r.l.	75	SIBRE - Siegerland Bremsen GmbH	9
J & B Grijpers b.v.	135	Steelpaint GmbH	Front Cover
Jotun Performance Coatings	18	Superior Industries, Inc.	79
KOCH Solutions GmbH	45	Telestack Limited	99
Konecranes Port Solutions - Konecranes Gmb	H Back Cover	Terex Deutschland GmbH	113
Liebherr-Hydraulikbagger GmbH	7	The CSL Group Inc.	23
Lion Bulk Handling b.v.	21	TMPB (Terminal de Multiusos do Poço do Bispo)	33
Listenow GmbH & Co.	87	Van Beek	81
Martin Engineering	Inside Front Cover	Verstegen Grijpers BV	149
MDG Handling Solutions S.r.l.	109	Vigan	77



www.drycargomag.com

FREE ACCESS to up-to-date news affecting the dry bulk and breakbulk industries
FREE ACCESS to over 200 digital issues of *Dry Cargo International* magazine
FREE ACCESS to the *DCi* online archive search utility
FREE ACCESS to *DCi*'s unrivalled global market coverage

COAL HANDLING Corectory 2021



- **❖** Shiploaders **❖** Grab Loaders **❖** Grab Unloaders **❖** Grabs **❖** Continuous Ship Unloaders
- **❖** Barge Loaders **❖** Barge Unloaders **❖** Self Unloaders **&** Equipment **❖** Belt Conveyors/Loaders
 - **❖** Stackers ❖ Reclaimers ❖ Stacker Reclaimers ❖ Conveyors & Conveyor Accessories
 - ❖ Front-End Loaders ❖ Hoppers ❖ Crushing ❖ Screening ❖ Blending ❖ Weighing
 - **❖ Sampling & Inspection ❖ Dust Control & Suppression ❖ Drives, Controls & Automation**
 - ❖ Enclosed Storage ❖ Stockyard Systems ❖ Railcar Loaders ❖ Unloaders ❖ Containerized Bulk Handling ❖ Engineering Consultants ❖ Coal Handling ❖ Other



The World's Most Recognised Brand in Containerised Bulk Handing

Eurospec MH42-360 with Multilid®-2

WLL 42 Tonnes, 360 Degree, Multi-Directional Mobile Harbour Crane – Ship to Shore – ISO 20ft Electric/Hydraulic – Diesel Hydraulic Fully Integrated or Remote Control



www.Rotainer.com or scan the Q.R. code for further details

RIKON RPS-640 coal handling crane

JSC RIKON — one of the leading suppliers of fully electric double jib level luffing cranes for multipurpose cargo handling, including bulk, general and containers.

E: sales@rikon.lv W: www.rikon.lv





4B BRAIME Components Ltd

Hunslet Road Leeds West Yorkshire LS10 1JZ UK

Contact: Mrs Simone Biock
Job Title: Marketing Manager
T: + 44 113 246 1800
E: 4b-uk@go4b.com
W: www.go4b.com
F: + 44 113 243 5021
A leading manufacturer of material handling components for the agricultural and industrial sectors. We provide components for bucket elevators and conveyors, such as steel and plastic elevator buckets, elevator boths, elevator belting, drop forged chains as well as electronic monitoring equipment, such as level monitors, misalignment switches, bearing temperature monitors etc.

A.E. AUTOMATION PVT

LTD (FACTORY)
DP-307, Sidco Industrial Park
Kattur
Thirumullaivoyal
Chennai
Tamil Nadu State
600 062
India
Contact: Mr Subra

Contact: Mr Subra
Job Title: Managing Director
T: + 91 44 2476 2002
E: info@aeauto.net
W: www.aeengineer.net
We are specialized in Bulk
material handling system and
Belt conveyor system EPC.
Our scope includes design,
supply, fabrication and
installation. We have local
services in South east Asia and
supply worldwide. We serve

installation. We nave local services in South east Asia and supply worldwide. We serve industries such as Port, Power plants, Fertilizer, sugar plants and Automation Industries. We are also specialized in Wood chip mills Basic engineering, consultancy and full plant supply and installation.

A.E. ENGINEERS (S) PTE LTD

No 42 Upper Dickson Road Singapore 207499
Singapore Contact: Mr SM Subra Job Title: Director T: + 65 6908 6791
E: info@aeengineer.net W: www.aeengineer.net F: + 65 6908 6792
Specialized in bulk material handling systems and belt conveyors EPC - Consultancy, Engineering, Procurement, Construction and Commissioning for Plant automation in material handling such as in Port, Cement, Sugar, Fertilizer, Wood chip and Paper mills, Automation and Process industries etc.

AAF INTERNATIONAL Bassington Lane

Cramington
Northumberland
NE23 8AF
UK
Contact: Mr Stuart Blackbum
Job Title: Marketing Leader
T: + 44 1670 713477
E: apo@aafgb.com
W: www.aafintl.com
F: + 44 1670 566312
AAF International is a global

F: + 44 1670 566312 AAF International is a global leader in environmental solutions that provides dust collection equipment to resolve all types of industrial dust control issues.

AB Volvo Penta

W: www.volvopenta.com/

F: + 46 31 661271

Global Marketing Communication
Göteborg
SE-405 08
Sweden
Contact: Ms Anne Bast
Job Title: VP Corporate
Communication
T: + 46 16 5415906
E: anne.bast@volvo.com

ABB AB

Crane Systems Tvarleden 2 Västerås 72159 Sweden
Contact: Ms Anna Westman
Job Title: Marketing
Communicationa Manager
T: +46 21 32 14 11
E: cranes.sales@se.abb.com
W: www.abb.com/cranes
F: +46 21 34 02 90
GPO for fully automatic
unloading. Electrical drive and
control systems for harbour
cranes, including fully digital AC
and DC powered drives.

ABBEY ROLLERS LIMITED

Togher Industrial Estate No. 2 Pouladuff Road Cork Ireland Contact: Mrs Martha Murphy Job Title: Sales and Marketing T: + 353 21 496 2745 E: sales@abbeyrollers.ie W: www.abbeyrollers.ie F: + 353 21 431 4898

ABC Engineering LLC

No.2 Minjiang Rd Tongshan District, Xuzhou Jiangsu Province China Contact: Mr Sunny Wang Job Title: Sales Director T: +86-138 1443 0017 E: chwanghong@gmail.com W: https://abcepc.com/

ABIAC Delta House

Meadows Road

Queensway Meadows Newport NP19 4SS UK Contact: Mr Joe Dudman Job Title: Director T: + 44 117 329 4841 / + 44 1633 293000 E: admin@ashtonbulk.com W: www.ashtonbulk.com / www.iac-ltd.co.uk

ABILITY ENGINEERING

17852 NW Solano CT Portland Oregon 97229 USA

Contact: Mr Ramesh Krishnan Job Title: President T: + 1 503 213 4944 E: info@aeengineer.net W: www.aeengineer.net

ACHENBACH GMBH METALLTECHNIK



Wilnsdorf

D-57234

Germany
Contact: Mr Uwe Achenbach
T: + 49 2737 98 63 0
E: u.achenbach@
achenbach-mt.de
W: www.achenbach-mt.de
F: + 49 2737 98 63 10
Conveyor covers - Achenbach
is manufacturing hoods made
of metal (steel, aluminium,
stainless) for covering standard
or special belts.
Hoods made of hard-PVC and
fixings round up the Achenbach
range.

ADVANCED CONVEYOR TECHNOLOGIES INC (AC TEK)

19415 594th Avenue Mankato Minnesota 56001 USA Contact: Mr David Kruse Job Title: Vice President T: +1507 345 5748 E: info@actek.com W: www.actek.com/ F: +1507 345 4012

AFM INTERNATIONAL

INC.

Summerland House Prospect BB24003
Barbados
Contact: Ms Camille Merritt
T: + 246 426 2084
E: cmerritt@afminternational.com
W: www.afminternational.com
F: + 246 426 2087
World leader in steel cord
belting technologies. Inventor
of high angle Autostable Belt®
and fully enclosed Square
Belt®. Special elastic steel
cords, with rubber covers, offer
unique solutions to bulk

AG GROWTH INTERNATIONAL (AGI)

handling problems, eg impact, ripping, high angle troughing, tracking, flexibility, elongation

1020 East 19th Street
Wichita
KS
67214
USA
Contact: Mr David Wernsing
Job Title: General Manager
T: + 1 316 264 4604
E: david. wernsing@aggrowth.com
W: www.tramcoinc.com
F: + 1 316 264 7965
Manufactures enclosed belt,
drag chain and bucket
elevators for industrial markets.
The JetBelt conveyor is a belt
supported by a cushion of air
between the belt and the pan
and offers an entirely new level

AGILITUS PTY LTD

of operating efficiency for dry bulk handling of coal.

Autilius FIY LIU
Level 10
240 St Georges Terrace
Perth
WA
6000
Australia
Contact: Mr Mark Todd
Job Title: Principal Mechanical
Engineer
T: + 61 8 6375 9216
E: info@agilitus.com
W: www.agilitus.com/
F: + 61 404 356 800

AGRICO SALES, INC.

14900 Intracoastal Drive New Orleans Louisana 70129
USA
Contact: Mr Bob Rieck
Job Title: Vice President - Sales
T: + 1 504 436 9400
E: brieck@agricosales.com
W: www.agricosales.com
Design and build turnkey
projects for handling a wide
range of bulk commodities.
Specializes in the manufacture
of shiploaders, conveyor
systems and storage facilities.

AIR SPECTRUM

Spectrum House Checketts Lane Industrial Estate Checketts Lane Worcester Worcester Worzestershire WR3 7JW UK

Contact: Ms Charlotte Walters Job Title: Marketing Manager T: +44 1905 362100 +44 (0) 1905 362100 E: marketing@airspectrum.com W: airspectrum.com

AJ EDMOND COMPANY

1530 W 16th Street Long Beach CA 90813 USA Contact: Mr Jignesh Panchal

Job Title: Technical Director
T: +1562 437 1802
E: JPanchal@ajedmondco.com
W: www.ajedmondco.com
F: +1562 590 0482

ALEKON CRANES OÜ

Jaama tee 6 Maardu 74114 Estonia Contact: Mr Vitali Kuznetsov Job Title: Sales T: + 372 6 388 954 E: alekon@alekon.ee W: alekon.ee

ALEX STEWART INTERNATIONAL CORPORATION LTD

2b Sefton Business Park Netherton Liverpool Merseyside

o DCi

DCi

L30 1RD Contact: Mr Stephen Russell Job Title: Commercial Executive T: + 44 151 525 2132 E: stephen.russell@ alexstewartinternational.com

W: www.alexstewartinternational.com The Alex Stewart International network of companies provides network of companies provided inspection and delivers fast, reliable and accurate analytical services covering base metals, nonferrous ores and concentrates, minor and precious metals, ferro-alloys, resulted screen metal. recycled scrap metal, complex materials and plastics, solid fuels including cola and coke, agricultural commodities and also for the environment. Alex Stewart International's inspections include trustworthy supervision, weighing, and sampling services.

ALFRED H KNIGHT

Kings Business Park Kings Drive Prescot Merseyside L34 1PJ

Contact: Mrs Helen Dunning Job Title: Head of Marketing and Communications Manager + 44 151 4824 283 E: helen.dunning@ahkgroup.com E: helen.dunning@ahkgroup.co
W: www.ahkgroup.com/
As a leading provider of
inspection and testing services
for the solid fuels sector, Alfred
H Knight provides specialist
services for a wide range of
commodities including auditing,
sampling, chemical and
compositional analysis.

ALPINE BULK MATERIALS HANDLING

Vordernbergerstraße 12 Leoben 8700 Austria Contact: Mr Luc Tellier Job Title: Sales Manager T: + 43 681 8486 8358 E: Luc.Tellier@alpinebulk.com W: www.alpinebulk.com ALPINE is a NEPEAN owned engineering, consulting, and equipment supply company in the field of Bulk Materials Handling, with experience in engineering/supplying 200+ and refurbishing/upgrading 100+ high-capacity continuous mining and bulk handling machines, and many complete systems.

ALPINE CANADA

102 - 19028 27th Ave Surrey V37 5T1 Contact: Mr Trevor Keogh Job Title: General Manager T: + 1 604 657 7283 E: trevor.keogh@alpinebulk.com W: https://alpinebulk.com/

ALS Inspection UK LIMITED

Caddick Road Knowsley Business Park Prescott Merseyside L34 9HP UK

Contact: Ms Stacey Bradley Job Title: Business Development & Marketing Manager T: + 44 151 548 7777 E: ALKNW.Commercial@ alsolobal com

alsglobal.com
W: www.alsglobal.com
F: + 44 151 548 0714
Alex Stewart are suppliers of quality commodity inspection and laboratory analysis offering cargo supervision, quality and quantity inspection, weighing, sampling, assaying, testing, verification and certification services for the facilitation of international trade.

international trade.

ALTRA INDUSTRIAL

300 Granite Street Suite 201 Braintree ΜΔ 02184 USA

Contact: Mr David Brooksbank Job Title: Marketing Director (Head Office) T: + 1 781-917-0600

E: david.brooksbank@ altramotion.com

W: altramotion.com

AMECO GROUP

Am Dreispitz, 6 Binzen 79589 Germany Contact: Mr Alexandre Giess Job Title: Head Of Global Sales E: sales@ameco-group.com W: www.ameco-group.com Founded in 1932, AMECO Group focuses on the advanced and robust quality design of bulk handling equipment including stackers, reclaimers, and shiploaders. Manufacturing in Europe, we have extensive references on every continent in the cement, commodity food, fertilizer, mining, power generation and pulp and paper industry AMECO Group - The Power of

ANINDYA Apartemen Mediterania Palace Residence

Ruko B/OR/C Jalan Landasan Pacu Utara-Selatan Kemayoran Jakarta Special Region Jakarta 10630 Indonesia Contact: Mr Irvan Rahman Job Title: Coal & Mineral Operation Head T: + 62 21 300 43757 E: irvan.rahman@anindya.biz W: www.anindya.biz PT. Anindya Wiraputra Konsult (Anindya) is an Indonesian (Allindya) is all modresian independent surveying company specializing in Coal Commodity with branches in Jambi, Bengkulu, South Sumatra, South Kalimantan (Banjarbaru and Batulicin), East Kalimantan, North Kalimantan, Central Kalimantan and Jakarta. Our Head Office is located in Bandung, West Java. Anindya is supported by experts in Coal Sampling, Lab Analysis, Marine Survey and Geology. We are confident to deliver superb services to our clients.

Anvil Attachments

PO Box 216 261 Highway 19 Slaughter Louisiana 70777 USA Contact: Mr Donnie Fontenot Job Title: President T: + 1 225 654 8223 E: sales@anvil-innovations.com W: www.anvil-innovations.com Manufacturer of grabs, grapples and clamshell buckets for cable, hydraulic and electro-hydraulic operation. Models for ships-gear, gantry, crawler cranes, and hydraulic equilibrium cranes. Brands include Pro-line, Hawco, Anvil. Owen, Yaun, Williams & Drott. New, used, rebuilds, repairs, parts and service since 1905.

Apollo Group

Modem 28 Coevorden Drenthe 7741MJ The Netherlands Contact: Ms Daphne van Aken Job Title: Marketing T: +31 524 515 051 E: da@apollobv.nl

W: www.apolloby.com

Applied Conveyor TECHNOLOGY, INC. **DBA THE ACT GROUP**

CA 92335-6205 USA Contact: Mr Edward Sunseri

T: + 1 909 350 4703 E: esunseri@groupactinc.com E. saunsenggioupaciticom F: + 1 909 350 4982 Bulk material handling: includes supply and design of conveyor, hoppers, screens, crushers. Dust control includes dust collection and dust suppression utilizing air, water and chemicals. Engineering services and complete service and installation capabilities are also offered.

ARAH EDAR (M) SDN. BHD.

2nd Floor, 198 Jalan Tun Sambanthan, Brickfields Kuala Lumpur 50470 Malaysia Contact: Mr Subra Job Title: Director T: + 603 2276 1555 E: info@aeengineer.net W: www.aeengineer.net/ F: + 603 5569 2935 Design, supply, installation and Design, supply, installation and commissioning of conveyor systems for coal handling, port handling, power plants, sugar plants, fertilizer plants and wood chip mills.

ARDELT KRANBAU **GMBH**

Heegermühler Straße 64 Eberswalde 16225 Germany Contact: Mr Uwe Grünhagen Job Title: Managing Director T: + 49 3334 819360 E: uwe.gruenhagen@ardelt kranbau.de W: https://ardelt-kranbau.de/ F: + 49 3334 8193699 Crane manufacturer (designing, fabrication, assembling, commissioning, training, after sales service in one hand for harbour cranes, shipyard cranes, balancer cranes refurbishment, inspection, repair service for own and third party cranes).

ARLONA ENGINEERING

PO Box 41125 Rossburgh Durban K7N 4072 South Africa Contact: Mr Steve Christy Job Title: Managing Director T: + 27 31 205 5991 E: steve@arlona.co.za W: www.arlona.co.za F: + 27 31 205 9835 F: + 27 31 205 9835 Established in 1975, Arlona Engineering is the largest manufacturer and supplier of stevedoring equipment in South Africa. Products are designed and manufactured to suit the arduous conditions experienced on the African continent.

AS LNK Industries

27 Skanstes Street Riga LV-1013 Latvia Contact: Mr Krists Leiskalns Job Title: Marketing & PR Spokesman T: + 37 167 334 012 E: krists.leiskalns@lnk.lv W: www lnk lv

ASGCO "COMPLETE **CONVEYOR SOLUTIONS**"



Nazareth PA 18064 USA Contact: Mr Aaron Gibbs Job Title: President T: + 1 610 821 0216 E: info@asgco.com E: info@asgoo.com/
W: www.asgco.com/
F: +1 610 778 8991
At ASGCO "Complete
Conveyor Solutions" we use
engineered products and
services to provide our
customers with the best solutions to their conveyor material handling applications. Combined with our global network of distributors, we are part of a coordinated team focused on insuring your success

ASHTON BULK LTD

Liberty House South Liberty Lane Bristol BS3 2ST UK

Contact: Mr Joe Dudman Job Title: Director T: + 44 117 329 4841 E: admin@ashtonbulk.com W: www.ashtonbulk.com

ASTEC 1725 Shepherd Road Chattanooga

Tennessee 37421 USA Contact: Mr Ron Earl Job Title: Vice President of Sales and Marketing T· + 1 423 208 5552 E: rearl@astecindustries.com W: www.astecindustries.com Astec Industries has been a leader in the aggregate, mining, industrial, construction and recycling industries for over 90 years. We design and manufacture innovative productive, reliable and safe equipment, coupled with

ASTEC BULK HANDLING **S**OLUTIONS

unparalleled customer service.

86470 Franklin Boulevard Eugene OR 97405 E: info@AstecBulk.com W: www.astecbulk.com

ATLAS-SSI Co. Inc

PO Box 1969 622 East McPherson Drive Monticello Mississippi MS 39654 USA Contact: Mr Ashley Watson Job Title: Sales Manager -Buckets T: + 1 601 587 4511 ext 212 E: ashley@atlas-ssi.com W: www.atlas-ssi.com F: + 1 601 587 5393

Custom designed one, two, three, four rope and hydraulic Clamshells / Grapples and Continuous Unloader Buckets. Best seller Atlas 4-rope clamshell buckets for large stevedoring and mobile harbor cranes. These buckets are built to maximize production and equipment service life.

AUMUND FOERDERTECHNIK GMBH (AUMUND GROUP)



Saalhoffer Strasse 17 Rheinberg D-47495/Germany Contact: Dr-Ing Pietro de Michieli Job Title: CEO T: + 49 2843 720 E: info@aumund.de W: www.aumund.com F: + 49 2843 60270 Engineering, manufacture and supply of bulk materials handling equipment such as Bucket Elevators, Pan and Chain Conveyors, Samson® Material Feeders, silo discharge machines (Rotary Discharge Machine, Silo Discharge CENTREX®). Services also include field assembly, site supervision, commissioning, after sales service, PREMAS®, refurbishment and upgrading of existing equipment.

AURECON

Level 10 55 Grenfell Street Adelaide South Australia 5000 Australia Contact: Mr Stephen Symons Job Title: Development Manager T: + 61 8 8237 9905 E: SymonsS@ ap.aurecongroup.com **W**: www.aurecongroup.com **F**: + 61 8 8237 9778

AURECON

PT Aurecon Indonesia Seguis Tower, 6th Floor, Unit 6 Jalan Jenderal Sudirman Kav. 71, SCBD Lot 11B Jakarta 12190 Indonesia Contact: Mr Jeff Tutticci Job Title: Project Engineering Consultant

T: + 62 21 5099 1060
E: Jeff.Tutticci@aurecongroup.com W: www.aurecongroup.com F: + 62 21 5087 6767 Aurecon provides engineering, management and specialist technical services for support infrastructure solutions for international and local coal and mineral clients in full or partial 'Pit to Port' projects.

AXIOCHOS LTD 7-9 Zinionos Athens 10431 Greece Contact: Mr Tassos Lainas Job Title: Managing Director T: + 30 6983419474 E: axi1@otenet.gr W: www.axiochos.gr

BASIC MACHINERY CO.

PO Box 688 1220 Harold Andrews Road Siler City NC 27344 USA Contact: Mr Hal Milholen
Job Title: Vice President of Sales & Marketing T: + 1 888 522 7420 E: hm@basicmachinery.com
W: www.basicmachinery.com

BATEMAN MANUFACTURING

ON LOL 2LO

Contact: Mr Mark Vandenberg

T: + 1 705 487 5020 E: mail@batemanmanufacturing.com W: http://batemanmanufacturing.

BAUER GEAR MOTOR **GMRH**

Eberhard-Bauer-Stra. 37 Esslingen 73734 Germany
Contact: Mr Philip Crowe T: + 49 711 3518276 E: info@bauergears.com **W**: www.bauergears.com/ **F**: + 49 711 3518381

Bauflex-Engineering LLP

Business center "Nurly Tau", block Floor 4, Office 401 Al-Farabi Ave Almaty Kazakhstan Contact: Mr Baurzhan Orynbayev Job Title: Founder T: + 7 701 378 75 27 E: info@bauflex-engineering.kz

W: https://bauflex-engineering.kz/

BEDESCHI SPA

Limena

Padova



Italy
Contact: Ms Elena Marcato
Job Title: Marketing & Communication Manager T: + 39 049 766 3100 E: marketing@bedeschi.com W: www bedeschi com F: + 39 049 884 8006 Bedeschi is able to develop Bedeschi is able to develop complete handling solutions from train receiving to crushing, stacking, reclaiming (either with scraper or bucket wheel reclaimers), ship-loading or transshipping systems. We can design, engineer, manufacture and deliver turnkey solutions for any plant capacity.

BEIJING HAOSHENG Transmission **TECHNOLOGY Co., LTD.**Room 511, No.3 Building Unit 2, Xingmao Center, Greenland Central Plaza

Xinghua Street Daxing District Beijing Beijing City 102627 China Contact: Ms Selena Bai Job Title: International Sales T: + 86 010 6342 3819 E: sales5@hscdtech.com W: www.hscdtech.com F: + 86 010 6349 7906

Belt Conveyor GUARDING 3478 Penetanguishene Rd

Barrie

Ontario L4M 4Y8 Canada Contact: Ms Christine Allen Job Title: Business Development Specialist T: + 1 866 300 6668 E: safety@conveyorguarding.com W: https://conveyorguarding.com BCG leads the industry in designing and manufacturing safety guarding solutions for conveyors and rotating equipment. Our user-friendly, ergonomic guarding is CSA/OSHA/MSHA compliant. Our products and services deliver the highest level of safety and innovation available on the market today.

126

Belt Tech Industrial

1996 S 300 W Washington IN 47501 USA Contact: Mr Liam Sheeder Job Title: CEO T: + 1 812-258-5959 E: liams@belttech1.com W: www.belttech1.com F: + 1 812-674-4192

Beltscan Systems

PO Box 10457 Southport Queensland 4215 Australia Contact: Mr Robert Janevski Job Title: Director - Beltscan Systems. **T:** +61 0 404 865 466 E: robert.janevski@beltscan.com W: beltscan.com F: +61 7 5532 0100 Beltscan Systems is a global Beltscan Systems is a global leader in conveyor belt condition monitoring, offering cutting-edge solutions for detecting damage, splice integrity, and overall belt performance. Our advanced technology maximizes operational efficiency, minimizes downtime, and reduces maintenance costs for industries worldwide. Ontimize industries worldwide. Optimize your belt's performance with Beltscan.

Bendezu Port **EQUIPMENT GMBH**

C/Camino Padre Cura, 15 Blog, Oasis II City Estepona Málaga 29680 Spain Contact: Mr Andrés Bendezú

Job Title: General Manager T: +34 952 807 144 E: info@bendezu.com W: www.bendezu.com

BENETECH GMBH Karl Liebkrecht Str 27

b. Leipzig Deuben DE-06682 Germany Contact: Mr Frank Lippert Job Title: Managing Director T: + 49 34441 445 0 E: benetech@gmx.de F: + 49 34441 445 20

BENETECH USA 2245 Sequoia Drive Suite 300

Aurora Illinois 60506 Contact: Mr Christopher F Blazek Job Title: Vice President, Marketing T: + 1 630 844 1300 x 214 E: info@benetechusa.com W: www.benetechusa.com

F: + 1 630 844 0064 Benetech provides engineering, equipment, installation, and field services for bulk material handling projects, dust control equipment, advanced transfer chutes, flue gas conditioning chemicals and systems, and slagging/fouling control products. Our Plant Professionals division provides operating and risk management consulting

BEUMER GROUP GMBH & Co KG

Oelder Strasse 40 Beckum North-Rhine Westphalia D-59269 Germany
Contact: Mr Alexander Tigges Job Title: Director Sales Conveying and Loading Systems T: + 49 2521 24 0 E: info@beumer.com

W: www.beumer.com F: + 49 2521 24 280 The BEUMER Group is an international leader in the manufacture of intralogistics systems for overland and pipe conveying and loading systems. With 4,500 employees worldwide, the BEUMER Group has an annual sales of about EUR 950 million.

BILFINGER TEBODIN

Laan van Nieuw Oost-Indië 25 Zuid-Holland The Netherlands Contact: Ms Naomi Seibert Job Title: Manager Group Communications **T:** + 49 0621 459-0 E: Naomi.Seibert@bilfinger.com
W: www.tebodin.bilfinger.com F: + 49 621 459-2366 Tebodin is an independent, multidisciplinary firm of consultants and engineers. We offer clients around the world the experience and expertise of more than 3,500 employees.
Our extensive office network allows us to offer clients the best of both: integrated engineering and consultancy expertise combined with local knowledge. Clients include major international companies. governments and multilateral financing institutes.

BITNER KABEL **G**MBH Raiffeisenstr.3a

Langenfeld 40764 Germany Contact: Mr Michal Bedarczyk

Job Title: Managing Director Sales T: + 49 162 69 52 563 E: michal.bednarczyk@bitner-

kabel.de W: www.bitner-kabel.de/

BLESTE SIA PORT EQUIPMENT

Sloka 7122 (p/b №56) Jurmala LV-2011 Latvia Contact: Mr Dinis Hruscovs Job Title: CEO T: + 371 29 235 197 E: info@bleste.lv W: www.bleste.lv/

Blue Water Misting PO Box 7545

Adelaide South Australia 5021 Australia Contact: Mr James Davenport T: + 65 8668 7967 E: sales@bluewatermisting.com W: www.bluewatermisting.com
Dust suppression systems to
eliminate dust in bulk handling

BLUG CREDEBLUG S.L.

operations

Juan XXIII - 9

Azpeitia

Guipuzcoa 20730 Spain Contact: Mr Oscar Oteiza
Job Title: Marketing Manager T: + 34 943 810 150 E: marketing@blug.es M: www.blug.es
F: + 34 943 815 665
Since 1965, Credeblug has
been a major provider of bulk
handling equipment specializing in designing and manufacturing grabs. Its product offering ranges from 50 litres up to 45m3 capacity. Credeblug is respected worldwide as a grab manufacturer and offers a quality rope-operated, hydraulic

and electro-hydraulic or motor grab catalogue, customized to meet specific customer requirements.

BMH GLOBAL PTY Level 1/11 East Parade

Perth

Western Australia 6004 Australia Contact: Mr Con Kamaras Job Title: Delivery and Technical Specialist T: + 61 411693961 E: ckamaras@bmhglobal.com.au W: www.bmhglobal.com.au

BOGAERT **TRANSMISSION** (GEHA)

Industriepark Neringstraat 5 Londerzeel B-1840 Belgium Contact: Mr Luc Vliminckx T: + 32 52 75 0421 E: info@bogaert-transmission.com W: www.bogaerttransmission.com F: + 32 52 30 01 98 Specialists for over 30 years in supplying, engineering and manufacturing high quality rhaint and sprockets as well as for bucket-elevators en masse conveyors, apron conveyors etc and for cement, coal, fertilizer, steel, ore, minerals and other plants and featuring. factories.

Borghi Assali srl

Via Caduti di Navicello n.1 Di Bomporto (Modena) 41030 Italy Contact: Mr Francesco Thione
Job Title: Senior Sales Manager T: + 39 059 909 412 E: francesco.thione@ E: francesco.thione@ borghiassali.it W: www.borghiassali.it The Borghi Assali company designs and manufactures molds and equipment for cold sheet metal deformation. producing steering idle axles for forkliffs and airport tractors. With its wide range of products With its wide range of products, the company is able to satisfy the different needs of its

customers, both European and International.

BossTek

1607 W. Chanute Rd. Peoria 61615 USA Contact: Mrs Brooke Carlson Job Title: Marketing Manager T: + 1 309 693 8600 E: info@bosstek.com W: https://bosstek.com/ F: + 1 309 693 8605 The DustBoss line of portable dust suppression equipment uses atomized mist technology, a more effective and less wasteful alternative to traditional methods such as hoses and sprinklers.

Bray Process CONTROL

13788 West Rd Suite 200 Houston 77041 USA Contact: Mr John D. Ellis Job Title: Global Marketing Director T: + 1 281 517 5400 E: john.ellis@bray.com W: www.bray.com/

Brelko Conveyor **PRODUCTS**

PO Box 62392

Marshalltown

Johannesburg

Gauteng 2107 South Africa
Contact: Ms Sharon Padayachee Job Title: Sales & Marketing T: + 27 11 013 4000 E: sharon@brelko.com
W: www.brelko.com F: + 27 11 013 4150 BRELKO Design and manufacture a range of products for the bulk materials handling industry that is backed-up by a comprehensive installation and maintains. backet-up by a comprehensive installation and maintenance service. These products assist in the control of spillage, carryback and dust, as well as promoting trouble free flow of material at belt conveyor transfer and load points. Other equipment: Air Cannons, Belt tracking and alignment.

Breston B.V.

Molendijk 167 Nieuwe Tonge 3244 AM The Netherlands Contact: Mr Jaap Abresch Job Title: Managing Director T: + 31 187 651432 E: ioost@breston.nl W: www.breston.com

BRIDON-BEKAERT ROPEFS GROUP GLOBAL HQ

Bekaertstraat 2 Zwevegem BE 8550 Belgium Contact: Mr Ward van Rijckeghem Job Title: Director Group Branding & Communications T: +32 56 766 610 E: Ward.vanrijckeghem@ bekaert.com W: www.bridon-bekaert.com Bekaert's ambition is to be the leading partner for shaping the way we live and move, and to always do this in a way that is safe, smart, and sustainable. As a global market and technology leader in material science of steel wire transformation and coating technologies, Bekaert (bekaert.com) also applies its expertise beyond steel to create new solutions with innovative materials and services for markets including new mobility, low-carbon construction, and green energy. Founded in 1880, with its Founded in 1880, with its headquarters in Belgium, Bekaert (Euronext Brussels, BEKB) is a global company whose 24 000 employees worldwide together generated € 5.3 billion in combined sales in 2023.

Bruks Siwertell AB

Arbrå SE-821 27 Sweden Contact: Mr Bo Ljung Job Title: Sales Manager T: + 46 70 348 41 18 E: bo.ljung@bruks.com W: www.bruks-siwertell.com/

Bruks Siwertell AB

5975 Shiloh Road Suite 109 Alpharetta GA 30005 Contact: Mr Ken Upchurch Job Title: Vice President of Sales & Marketing T: + 1 770 849 0100 x109 E: info@bruks.com W: www.bruks.com
Machines and complete plants for processing, storing and handling bulk materials in Bulk Terminals - including Tubulator conveyors, various storage solutions and ship loaders as core products. BRUKS supplies complete stockyard equipment and systems which range from the smallest semi-automated systems to the largest fully automated systems including

Bruks Siwertell AB

open storage and closed or covered storage configurations.

Ängsvägen 5 Gunnarstorp Bjuv SE-267 90 Sweden Contact: Ms Malin Pekberg Job Title: Marketing Manager T: + 46 428 5880 E: malin.pekberg@brukssiwertell.com W: www.bruks-siwertell.com Bruks Siwertell is a market-leading supplier of dry bulk handling and wood processing systems. With thousands of installations worldwide, our machines handle your raw materials from forests, fields, quarries and mines, quarries and mines, maintaining critical supply lines for manufacturers, mills, power plants and ports. We design, produce and deliver systems for loading, unloading, conveying, storing, and stacking and reclaiming dry bulk materials, alongside equipment for chipping, screening, milling and processing wood for the biofuel, board, saw mill, pulp and paper industries.

BSP ENGINEERING S.R.L

Via Apollo 11, n 39 Frazione Santa Maria di Zevio (VR) . Veróna VR 37050 Italy
Contact: Ms Daniela Viviani T: + 39 045605 1199 E: info@bspengineering.it **W:** www.bspengineering.it **F:** + 39 045605 1196

BTW PLANT SOLUTIONS - A DIVISION OF BT-WOLFGANG BINDER **GMBH**

Wolfgang Binder Str. 4 Eggersdorf bei Graz 8200 Contact: Ing. Johann Buchgraber Job Title: Head of Sales T: + 43 3117 25152 2272 E: office@btw-plantsolutions.com W: www btw-binder com

BULK CARGO HANDLING BVBA Niiverheidskaai 28

Brussels 1080 Belgium Contact: Mr Nicola Samyn Job Title: CEO T: + 32 477 44 98 81 E: bch.belgium@gmail.com

BULK MATERIAL EQUIPMENT 8122 Threadtail

Conroe Texas 77385 USA Contact: Mr Thomas Meade Job Title: President T: + 1 214 601 2577 E: thomas@bulkmaterialequipment W: bulkmaterialequipment.com **BULK STORAGE INC** 28101 S Yates Av Beecher Illinois 60401-3603 USA Contact: Mr Zack Deery

BUREAU **V**ERITAS

E: zack@bulkstorageinc.com

W: www.bulkstorageinc.com/ F: + 1 708 946 7898

T: + 1 708 946 9595

Room 901,9th Floor, Jiayue Building No.38 Zhongshan Road Tianhe District Guangzhou Shanghai 510600 China Contact: Mr Snow Yang
Job Title: Coal Project Manager T: +86 135 0001 9172 E: snow.yang@bureauveritas.com W: bureauveritas.com

BUREAU VERITAS

12000 Aerospace Avenue Suite 200 Houston Texas 77034 USA Contact: Mr Marlon Guillory Job Title: Assistant Manager Metals & Minerals T: + 1 504 418 1362

E: MM_Marketing@ inspectorate.com W: www.inspectorate.com

BUREAU VERITAS FUELS

Willy-Brandt-Str. 55 Hamburg Germany 20457 Germany Contact: Mr Mehmet Günsür Job Title: Global Market Leader - Coal & Coke T: +49 163 2097001 E: mehmet.gunsur@ bureauveritas.com W: commodities.bureauveritas.com Inspectorate offers a full range of inspection, analytical and specialist testing services to the solid fuels and biomass industries and has coalhandling coordination offices and ISO 17025 accredited laboratories in all the major coal producing/consuming countries worldwide.

BUTTIMER Engineering

Cahir Business Park Cahir Co. Tipperary E21 W240 Ireland Contact: Mr Declan McGrath Job Title: Sales Director T: + 353 52 744 1377

DCi

DCi

E: info@buttimer.ie W: www.buttimer.com
Buttimer Engineering is a diversified mechanical diversified mechanical engineering company with over 40 years experience, specialising in bulk materials handling systems and high-quality steel fabrication. In 2014 Buttimer Engineering launched their DOCKSOLID® brand, a range of market leading standard and environmental Ship Unloading Hoppers. Buttimer Engineering operate across a range of industries, providing design, fabrication, procurement, installation, maintenance, project management and engineering

services.
The primary goal of the company is to continuously offer bespoke and sustainable solutions to customers. With combined knowledge and experience of over 45 years, powerful, environmentally friendly solutions and prosperous outcomes for customers can be delivered.

BV Beco

Industrieterrein "De Biezen" De Limiet 18 Utrecht 4131 - NR The Netherlands Contact: Mr Henk van Vuren Job Title: Managing Director T: + 31 347 323 100 E: h.vanvuren@beco-group.com E: h: Nativaterligbeco-group.com
W: www.beco-group.com
F: + 31 347 377 780
For more than 20 years Beco
Grabs has been providing highend, ready-to-run technological
solutions in the field of grabs for the bulk and dredging market. We have a big scale of products: Grabs - Wheel loader, excavator and demolition equipment - Tipping

BVS Cranes

Organize Sanayi Bölgesi Oğuz Cad. No:21 Sincan Ankara 06935 Turkey Contact: Mr Akın Önder Topuz Job Title: Business Development & Marketing Manager T: +90 312 267 29 29 E: info@bvs.com.tr W: www.bvs.com.tr/ F: +90 312 267 02 95

Trailers - Hooklift carriers -Harbour- and Industrial trailers.

C Spencer Ltd

One Humber Quays Wellington Street West Hull HU1 2BN Contact: Mr Ian Atkinson Job Title: Engineering Director T: + 44 1482 766 340 E: marketing@ thespencergroup.co.uk

W: https://thespencergroup.co.uk

Cachapuz -WEIGHING & LOGISTICS SYSTEMS.

Parque Industrial de Sobreposta Apartado 2012 Braga Braga 4701-952 Portugal Contact: Mrs Juliana Silva Job Title: Marketing Assistant T: + 351 253 603 480 E: marketing@cachapuz.com W: www.cachapuz.com F: + 351 253 603 485 Cachapuz is a reference in the implementation of innovative solutions to automate the logistics, dispatching, reception and weighing processes in industrial plants. With a modular platform and extensive

know-how, Cachapuz is able to

meet the needs of several sectors worldwide

Calim Grab Industry

Orta mahalle erk sokak A blok no 5A iç kapı no 4 Tuzla İstanbul 81540 Turkey Contact: Mr Murat Calim T: + 90 533 226 4923 E: info@calimkepce.com.tr W: www.calimkepce.com.tr F: + 90 216 399 79 71 Calim Grab Industry, established in 1970, specializes in manufacturing grabs for international seagoing cargo handling grabs. Over 2.400 grabs have been delivered worldwide to date. High-standard technology and reliable products are the result of our respect for the requirements of the market in combination with incremental improvement and implementation of experience gained throughout decades.
CALIM GRABS will continue to be a reliable name in the machine industry.

Cambelt International LLC 2820 West Directors Row

Salt Lake City

Utah 84104 USA Contact: Mr Justin Barker Job Title: Marketing T: + 1 385 276 3812 +1 801 972 5511 x 202 E: justinbarker@cambelt.com W: www.cambelt.com Cambelt International has been engineering and manufacturing dry bulk materials handling systems for the past fifty (50) years, specializing in steepincline belt conveyors, utilizing its unique one-piece, fully-molded corrugated sidewall, cleated conveyor belting. Typical angles from 25° to 90° (vertical).

CAPOTEX

Colombia 1 Majadahonda 28220 Spain

Contact: Mr Esteban Díaz Ferrer Job Title: Sales Manager T: + 34 91 634 71 92 E: estebandiaz@capotex.com W: www.capotex.com F: + 34 91 636 21 15

CATERPILLAR (UK) LTD.

Peckleton Lane Desford Leicester UK

Contact: Mrs Amy Doughty
Job Title: Trade Press Relations - EMEA T: + 44 1733 584633

E: amy.doughty@cat.com

CATERPILLAR SARL

Route de Frontenex 76 Geneva 1207 Switzerland Contact: Mr Bert Heijligers
Job Title: Marketing & Communication **T:** + 31 73 639 9716 E: Heijligers_Bert@cat.com
W: www.cat.com W: www.cat.com
Caterpillar builds and supports
products that are ideally suited
for dry bulk handling in port
environments. CAT equipment
can be used to load and unload
ships, barges; transfer, load
and store materials; build and manage stockpiles; clean and maintain ships and quays.

CAVOTEC SA

Via G.P Pioda 14 Lugano CH-6900 Switzerland Contact: Mr Dirk Fussel
Job Title: Sales Director Mining & Tunnelling T: + 41 91 911 4010 E: dirk.fussel@cavotec.com W: www.cavotec.com F: + 41 91 922 54 00 Other Equipment: Electrical Equipment. Cavotec is a leading engineering group that designs and manufactures automated connection and electrification systems for ports, airports and industrial applications worldwide. Our innovative technologies ensure safe, efficient and sustainable operations. To know more, visit: Cavotec.com

CCTEGIEC

Floor 7, The Coal Tower Block 13 Hepingjie Chaoyang District Beijing China Contact: Ms Lee Smith Job Title: Manager T: + 86 1 3916483630 E: 13916483630@163.com W: http://en.iec.ccteg.cn/

CDM Systems, Inc 19230 Evans Street NW Suite 202 Elk River MN 55330 USA Contact: Mr Andrew Parker Job Title: Vice President T: + 1 763 428 9700 E: sales@cdmsvs.com W: www.cdmsys.com F: + 1 763 428 9701 Over 30 years experience offering a comprehensive range of bulk conveying systems, components and engineering/design services Provide conveying and bulk handling solutions for materials from Ash through to Zinc, including marine applications as well as those in hostile severe or high-temperature

Changsha Kaiyan Instruments Co. Ltd

172 Kaiyuan Road Changsha Economic & Technological Development Zone Changsha 410100 China Contact: Ms Susan Wang Job Title: Overseas Director T: + 86 731 4012074 / + 86-731-84021617 E: susanky@chs5e.com W: www.ckic.net F: + 86 731 4012074

CHIA ESPIRALES

Polígono Industrial El Sotillo S/N La Puebla de Cazalla Seville 41540 Spain Contact: Mr Álvaro Páez Job Title: Purchasing and Marketing Department T: + 34 695 402 000 E: alvaro@espirales.es W: https://espirales.es/

CHINA HUADIAN **ENGINEERING CO., LTD**Room 711, Building A, Hudian

Plaza No. 6 Auto Museum East Road Fengtai Beijing 100160 China Contact: Ms Chen Qiao Job Title: Market Manager of Materials Handling International T: + 86 10 6391 9524

E: cheng@chec.com.cn

W: www.hhi.com.cn: www.chec.com.cn F: + 86 10 63919548 With the engineering system design and EPC as the principal business and the R&D and manufacturing of core products and relevant high-products and investment operations as the support. HHI is committed to providing the clients with integrated solutions in terms of material handling engineering, thermal power engineering, industrial noise treatment engineering, clean & effective coal utilization engineering and offshore wind power engineering etc.

CICSA GROUP

Via dell'Industria, 2 Beverate di Brivio (LC) Lecco 23883 Italy Contact: Ms Jelena Pavlovic Job Title: Marketing Manager T: + 39 039 53207 39

E: jelena.pavlovic@cicsa.com W: www.cicsa.com F: + 39 039 53200 24 The CICSA Group is one of the world's leading chain manufacturers. It operates internationally and specialises in the production of high-quality chain systems and components for bulk material handling

tor but material nanding solutions. Headquartered in the North of Italy, the CICSA Group of Companies includes an Italian unit manufacturing round steel chains, a Spanish unit manufacturing mechanical chains, and two sales units incorporated in India and in China. The global business is supported additionally by sales offices and agents in more than 60 countries worldwide.

CIMBRIA A/S

Faartoftvei 22 Thisted DK- 7700 Denmark Contact: Mr Thomas Mohr **Job Title:** Sales Director **T:** + 45 9617 9000

cimbria.holding@agcocorp.com W: www.cimbria.com
Cimbria is a global leading company of conveying, drying, processing, sorting and storage solutions for grains, seeds, food and bulk products. Cimbria designs, manufactures and services custom-built installations, from stand-alone machines to turnkey plants. Our experience ensures our clients a targeted advice and solutions, to grow the business together.

CINTASA AMERICAS PO Box 3655 Habersham Road NE

Unit A 206

Atlanta GA 30305 USA Contact: Mr Alex Mosley Job Title: Managing Director T: + 1 404 451 8648 E: a.mosley@cintasa.com W: www.cintasa.com Leader in conveyor systems and material handling equipment designed and manufactured with in-house engineering and technology; adapted to client requirements. With over 45 years of specialization Cintasa offers the best solution to our clients. Worldwide references in all industrial sectors.

CINTASA S.A.U.

Ctra. N-232 - Km. 252a Utebo Zaragoza 50180 Spain Contact: Mr Jaime Simon

Job Title: Sales Manager T: + 34 976 770 656 E: cintasa@cintasa.com W: www.cintasa.com

Specialized in the manufacturing of conveyors systems and all its variants. All it designed with own technology and adapted to the need of each client. More than 50 years of proven experience in installations in diverse sectors and with worldwide

CITA LOGISTICS PTY

C/-William Buck Level 29/66 Goulburn St Sydney NSW 2000 Australia Contact: Ms Julie Forster Job Title: Agency Manager T: + 61 417 285 640 E: cita-aust@citalogistics.com W: www.citalogistics.com CITA Logistics LLC provides a range of bulk materials services in USA and Australia: sourcing, logistics management including laytime calculations, Shipping Agency, sampling and analysis.

CIVETTINI ITALO & C SAS (CFS HANDLING)

Montichiari 25018 Italy Contact: Mr Italo Civettini Job Title: Owner T: + 39 340 135 8822 E: civettini@cfshandling.it W: www.cfshandling.it

W: www.crsnanding.it Civettini Italo & c sas owner of the brand CFS Handling works in design and manufacturing of equipment for handling across a range of sectors including coal, cement, steel mills. demolition, ores, urban solid waste, paper etc. The company's product range

includes mechanical, hydraulic and electro-hydraulic buckets as well as hydraulic and electro-hydraulic grabs to suit the customer's specific needs.

CLAUDIUS PETERS PROJECTS GMBH Schanzenstrasse 40

Buxtehude D-21614 Germany
Contact: Mr Kurt Herrmann Job Title: Managing Director Sales T: + 49 4161 706 227 E: projects@claudiuspeters.com W: www.claudiuspeters.com F: + 49 4161 706 270 Product lines include grinding systems, storage and mixing silos, pneumatic conveying systems, ash removal systems, self-unloading vessels, packing and palletising systems, pulverised coal injection systems for blast furnaces.

CLAUDIUS PETERS

TECHNOLOGIES S.A.S 34 Avenue de Suisse BP 269 Illzach F-68316 France Contact: Mr Jean Christophe Holfert Job Title: Sales Director T: + 33 389 31 33 19 E: technologiessa@ claudiuspeters.com W: www.claudiuspeters.com F: + 33 389 61 95 25 Claudius Peters Technologies SAS is a company of Langley Holdings. Specialised in Stockyards and Belt Conveying systems we develop all kind of projects with stackers, reclaimers, including side stackers, tripper, shuttle type stackers; bridge, portal or side reclaimers; linear or circular, open or covered.

CLEVELAND CASCADES



Unit 22 Dukesway Teesside Industrial Estate Thornaby Stockton on Tees Contact: Ms Sally Buckworth

Job Title: Managing Director T: + 44 1642 753272 E: enquiries@ clevelandcascades.co.uk

W: www.clevelandcascades.co.uk F: + 44 1642 753270 Designs and constructs the Cleveland Cascade bulk loading chute for shiploading, silo filling, truck and railcar loading and for conveyor transfer points. The chute minimises dust emissions and reduces product degradation and segregation.

CNBM International Engineering Co., Ltd.

19th Floor, Building 4 Interwest Business Center NO.9 Shouti South Road Beijing 100048 China Contact: Mr Wang Lin Job Title: Bulk Handling Division Manager T: + 86 10 68796130

COAL CONTROL

E: cbmie@cbmie.com

W: www.cnbmengineering.com/ **F:** + 86 10 68796029

Reisholzstraße 15 Hilden 40721 Germany Contact: Mr Ronald Salzmann **T**: +49 21 03 951 882 E: info@coal-control.de W: www.coal-control.com F: +49 21 03 951 839

COBRA EUROPE SAS

12 rue Henry Guy Luxeuil les Bains Cedex 70300 France Contact: Ms Florence Gachelin

T: + 33 38 4938 930 E: florence@cobra-cs.com W: www.cobra-cs.com
Cobra has an international
sales team and two production
sites (in France and Poland).
With the three brands Depreux, Transco and Indi as well as the corresponding accessories and services, Cobra offers complete solutions for your requirements.
Our decades of experience is

- based on:
 a controlled manufacturing
- process,
 the traceability of raw
- materials, compliance with safety standards, cooperation with universities
- and institutes
- Highly qualified staff. For more information about our range, contact the nearest Cobra offce: - France: +33 84 93 89 30 - Poland: +48 32 284 00 22
- Spain: +34 953 81 76 70 United States: + 1-966-552-

COLES **A**SSOCIATES

PO Box 5096 Western Australia

Australia Contact: Mr Richard Coles Job Title: Manager Business Development T: + 61 8 9389 8484 E: rcoles@colesassociates. com.au

W: www.shiploader.com.au **F**: + 61 8 9386 5700 Specialising in acquisition, divestment and relocation and of pre-owned mining and infrastructure equipment worldwide.

COMATEC PROCESS AND AUTOMATION OY

Voudintie 3 Oulu 90400 Finland Contact: Mr Jukka Seppänen Job Title: Engineering Manager T: + 358 447361501 E: jukka.seppanen@comatec.fi
W: www.comatec.fi/oucons

COMMODITY Inspection Services

PO Box 35112 Rotterdam 3005 DC The Netherlands Contact: Mr Paul Schweitzer Job Title: Co-Founder and Director T: + 31 10 2140589 E: info@cis-inspections.com
W: www.cis-inspections.com

CONDUCTIX -Wampfler Australia

14 England St Dandenong VIC 3175 Australia Contact: Mr Mark Howlett Job Title: Managing Director Asia/Pacific T: + 61 3 9706 8844 E: sales@conductix.com.au W: www.conductix.com.au F: + 61 3 9794 9298 Conductix-Wampfler is a manufacturer and supplier of Power and Data Transfer equipment including conductor bar, festoon, cable and hose reels, Kabelschlepp cable chain and flexible cable, slip ring assemblies, radio controls, Kiepe conveyor belt monitoring equipment, UEE high voltage connectors and buffers.

CONDUCTIX-WAMPFLER **AMERICAS**

10102 F Street Omaha Nebraska NE 68127 USA Contact: Mr Ernesto Heller Job Title: Market Development Manager, Americas **T:** + 1 531 721 0159 E: ernesto.heller@conductix.com W: www.conductix.us F: + 1 402 339 9627 Leading global supplier of motorized cable reels, cable festoon systems, energy chains, conductor bar, and slip rings to the bulk materials handling and mining industries. We specialize in reliable, customized electrification systems for the most demanding applications. ISO9001:2008 certified.

CONDUCTIX-WAMPFLER **G**MBH



Rheinstrasse 27 + 33 Weil am Rhein 79576 Germany T: + 49 7621 662 0 E: info.de@conductix.com W: www.conductix.com F: + 49 7621 662 144 Conductix-Wampfler specializes in providing reliable solutions for moving machinery and equipment in bulk handling applications. With expertise in power and data transmission solutions, we offer cutting-edge equipment like cable reels, festoon systems, slip rings or conductor rails to maximize productivity, efficiency, and

CONTINENTAL

Philipsbornstr. 1, 30165 Hannover Germany Contact: Ms Yelda Cicek Job Title: Marketing Communications EMEA T: + 90 507 5020207 E: yelda.cicek@continental.com W: www.continental-industry.com ContiTech Conveyor Belt Group is a leading development partner, manufacturer and system supplier of steel-cable and textile-ply conveyor belts, service materials and special products. In addition, ContiTech provides a worldwide installation and maintenance service

CONTINENTAL CONSTRUCTION (MEMPHIS) 5646 Shelby Oaks Drive

Memphis

Tennessee 38134 USA Contact: Mr Brian Morphis Job Title: Marketing T: + 1 901 382 4070 E: mail@continentalconst.com W: www.continentalconst.com F: + 1 901 388 2534 Continental Construction Company, Inc. is a general contractor specializing in slip form concrete construction, pile driving, structural steel erection, millwright work, marine construction, heavy concrete foundations, industrial buildings, and material handling systems.

CONTINENTAL **MATADOR** RUBBER, S.R.O. Terezie Vansovej 1054

Puchov

020 01 Slovakia Contact: Mr Dusan Michalko Job Title: Marketing Manager + 421 42 461 3050 E: dusan.michalko@matador.sk W: www.matador.sk F: + 421 42 461 3365 F: + 421 42 461 3365 One of the biggest companies in the chemical and rubber industry in the Slovak Republic. Up to 85 % of its production of tyres and conveyor belts is exported. Producer and supplier of textile and steel cord conveyor belts for the mining and construction industries worldwide.

CONTROL SYSTEMS TECHNOLOGY PTY LTD

47 Fitzpatrick Street Revesby NSW 2212 Australia Contact: Mr Leonard Ian Burrell T: + 612 8708 0200 E: iburrell@controlsystems.com.au
W: www.controlsystems.com.au/ F: + 612 8708 0280 CST design and manufacture high accuracy belt scale riigh accuracy pet scale systems designed to provide the customers specified accuracy "in conveyor". CST say "Different Scales for Different Conveyors to achiev Different Conveyors to achieve the Same Accuracy". Since 1984, CST has remained committed to high integrity, shunning short term

commercial game for long term customer satisfaction.

Conveyor Dynamics,

3633 Alderwood Avenue Bellingham Washington 98225 USA Contact: Mr Andrew Jennings Job Title: President T: + 1 360 671 2200 E: finance@cvdyn.com W: www.cvdyn.com/ CDI designs the longest, strongest, and most advanced belt conveyor systems in the world. Last year we commissioned the world's longest belt conveyor: a 27km conveyor in South Africa. We specialize in detailed mechanical design, software development, and control

CONVIR JSC

E. Ožeškienės g. 10 Kaunas LT-44252 Lithuania Contact: Mr Paulius Virbašius Job Title: Head of Sales T: + 370 651 11 161 E: info@convir.eu
W: www.convir.eu/
CONVIR material handling
equipment offers an efficient
and reliable material handling solution. It produces customized belt, screw and scraper conveyor systems for transporting bulk products and sorted waste. The main sorted waste. The main industries it works in are: ports & terminals, quarries, recycling, agriculture, wood & paper, mining & metallurgy and more.

COPERION

7901 NW 107th Terrace

Kansas City MO 64153 USA Contact: Mr Mike Morgan Job Title: Marketing Manager - Minerals T + 1 440 662 8737 E: Mike.morgan@coperion.com W: www.coperion.com Coperion is an expert in the weighing, conveying and handling of coal. Using a range of equipment including train loading and unloading systems, mechanical conveyors and weighing technologies the movement of the material can

COTECNA INSPECTION SA

recorded.

be accurately monitored and

41 Avenue Peschier Geneva 1206 Switzerland Contact: Ms Julie Engelen Job Title: Head of Global Marketing Communications T: + 41 22 849 78 44 E: Communication@cotecna.com W: www.cotecna.com/

CPS PROJECTS (PTY)

LTD PO Box 47261 Greyville Durban KZN 4023 South Africa Contact: Mr Banzi Majola

Job Title: Managing Director T: + 27 31 466 4396 E: banzi@cpsprojects.co.za W: cpsprojects.co.za W: cpsprojects.co.za F: + 27 31 466 4399 Port related services offered by CPS Projects as ff: -Maintenance Contracts (including labour supply)

-Electrical and automation services
-Structural repairs, equipment overhauls and upgrades

-Ad-hoc repairs (accident damage and component failure)

-Supply of Spare Parts Frection and Commissioning of new equipment

CRANES MACHINERY Co. LTD (CMC) CMI China Office

No.8-20 Shunyuan Road Xinchen Industrial Park Xuejia Changzhou Jiangsu China Contact: Mr Kaison Xu Job Title: Manager E: info@craneschina.cn W: www.craneschina.cn

F: + 86 519 8188 6887

CROMEX MAKINE VE DIS TICARET LTD. STI. Avse Cavus Caddesi No: 17/2

Suadiye Istanbul 34740 Turkey Contact: Mr Ozan Ozkan **Job Title:** General Manager **T:** + 90 216 415 47 00 E: info@cromexgrab.com W: www.cromexgrab.com F: + 90 216 417 47 65

CRS - Container **ROTATION SYSTEMS** PTV LTD



18 Sleigh Place Wetherill Park Sydney 2164 Australia Contact: Mr Murray Bridle Job Title: Managing Director T: + 61 0412469549 E: sales@Rotainer.com W: www.Rotainer.com
CRS, Specialises in the custom design of Container Rotators and Container Tilting Systems.

CSSC HUAHAI Marine Equipment Co.. LTD

3255 Zhou Jia Zui Road Shanghai 200093 China

Contact: Mr Lian Zhou Yang Job Title: Business Development Manager T: + 86 21 6539 8257

E: info@tts-huahai.com F: + 86 21 6539 7400

CST COVERS 498 N Loop 336 E

Conroe

Texas

77301 USA Contact: Mrs Kimberly Mathis Job Title: Global Marketing Director T: + 1 713 351-3769 E: kmathis@cstindustries.com W: www.cstcovers.com F: + 1 936 539 5355

Founded in 1964 the company designs, manufactures and erects architectural and erects architectural and environmental enclosures. These are primarily clear-span domes and related space frames fabricated mostly from aluminium. Structures are used for covering tankage and bulk storage facilities of all types and shapes.

CST STORAGE

903 E 104th Street, Suite 900 Kansas City MO 64131 USA Contact: Mr David Wheat Job Title: Director T: + 1 913 621 3700 E: sales@cst-storage.com W: www.cstindustries.com F: + 1 913 621 2145 F: + 1 913 621 2145 Formerly Columbian TecTank, the world's largest manufacturer of factory-coated bolted and welded tanks for dry bulk storage. Flat-bottomed tanks and hopper bottom silos with capacities up to 13,200 cubic meters. ISO Certified.

CWA Engineers Inc. #380 - 2925 Virtual Way

Vancouver V5M 4X5 Canada
Contact: Mr David Lidder Job Title: Business Development Manager T: + 1 604 637 2275 E: dave.lidder@ cwaengineers.com W: www.cwaengineers.com F: + 1 604 637 2276 CWA is a multidisciplinary EPCM firm that provides professional services including planning, engineering, procurement, construction management, and mainter and operations support to industry-leading clients in the bulk materials handling, mining and mineral processing, and ports and marine terminals sectors.

DALIAN CIMC SPECIAL LOGISTICS EQUIPMENT

Co., LTD
Dalian Free Trade Zone IIIB-2 Dalian 116600 China

Contact: Ms Ping Yang
Job Title: Marketing Manager
E: ping.yang520800@gmail.com
W: www.dcle.cn

DALIAN HUARUI HEAVY INDUSTRY INTERNATIONAL CO.

LTD No 169 Bayi Road Xigang District Dalian Liaoning 116013 China Contact: Mr Wang Cong Job Title: Project Manager T: + 86 411 86852895 E: wangchang@dhidcw.com
W: www.dhhi.com.cn/ F: + 86 411 86852398

DALIAN START ENGINEERING CO LTD No584 Zhongshan Road

Shahekou Dist Dalian l iaoning 116021 China Contact: Mr Wenliang Lan Job Title: Deputy General Manager T: + 86 1355915570 E: lanwenliang@dlstarteng.com **W**: www.dlstarteng.com **F**: + 86 13555915570 More than 20 years of experience in bulk material

handling system. Our expertise,

Dana Industrial Via Luciano Brevini 1/A

vour success.

Reggio Emilia 42124 Contact: Ms Sara Marmiroli Job Title: Global Marketing and

Communication Manager T: + 39 0522 505811 E: sara.marmiroli@dana.com W: www.dana-industrial.com PIV Drives, a company of Dana, has 90 year experience in providing quality power transmission solutions for every industry sector. PIV Drives developed modular concepts for its comprehensive product range, providing the flexibility to deliver high-quality optimised solutions, both standard and bespoke, quickly and at competitive cost

DCL. INCORPORATED

Charlevoix



49720 USA Contact: Mr Kyle Smith T: + 1 231 547 5600 Ext 3124 E: sales@dclinc.com W: www.dclinc.com F: + 1 231 547 3343 Provides full dust control loading systems and partial components to the bulk material handling industry and designs custom equipment. A

complete Research/Development team is located on site. Single source manufacturing from ship loading systems to valves and dust collectors can be provided.

DE REGT CONVEYOR **S**YSTEMS

ljzendijkseweg 5 Biervliet Zeeland 4521 GX The Netherlands Contact: Mr Peter De Regt Job Title: Director T: + 31 115 456 200 E: peter@deregt.com W: www.deregt.com F: + 31 115 481 234 De Regt is a company specialized in developing, building and installing conveyor systems and structures needed to achieve a partial or total project.

DELLNER BUBENZER GERMANY GMBH

Friedrichshüttenstraße 1 Kirchen-Wehbach **RLP** 57548 Germany Contact: Ms Kateryna Prykhodko Job Title: Marketing Manager

E: kateryna.prykhodko@ dellnerbubenzer.com W: www.dellnerbubenzer.com DELLNER BUBENZER is a global leader in innovative. precision-engineered braking systems, offering customized stop-action solutions for industries worldwide. Our product range includes industrial brakes, monitoring systems, couplings, and safety solutions for maximum

Delta Ducon 11 General Warren Blvd

protection and performance.

Malvern Pennsylvania 19355 USA Contact: Mr Matt Delpizzo Job Title: VP
T: + 1 610 695 9700
E: sales@DeltaDucon.com **W**: www.deltaducon.com/ **F**: + 1 610 695 9724 Delta Ducon is a leading manufacturer and supplier of Material Handling Systems & Components. Delta Ducon product lines dates back to the early 1920's and is established

as á leading supplier of

systems and components for dry bulk materials.

DCi

DCi

Demag Cranes & COMPONENTS GMBH

Benefit recipient: Gottwald Port Technology Forststrasse 16 Düsseldorf D-40597 Germany
Contact: Mr Reiner Derhardt Job Title: Project Manager T: + 49 2335 92 7442 E: reiner.derhardt@ demagcranes.com W: www.demagcranes.com F: + 49 2335 92 7676

DeMarco Industrial VACUUM CORPORATION

PO Box 1138 Crystal Lake

60039-1138 LISA

Contact: Mr Thomas DeMarco Job Title: President T: + 1 815 344 2222 E: Sales@DeMarcoVacuums.com W: www.DeMarcoVacuums.com F: + 1 815 344 2223 Manufactures a complete line of heavy duty DEMARCO Industrial Vacuum Systems and for all flowable materials, wet or dry, etc. Units are available in portable, stationary, towable, central turnkey installed systems, canister vacuums, and custom engineered

DEMCOTECH ENGINFERING

Modderhouse Moddercrest Office Park 1 High Street Modderfontein Johannesburg Gauteng 1645 South Africa
Contact: Mr Paul van de Vyver Job Title: General Manager
T: + 27 11 608 4355
E: info@DemcoTECH.com
W: www.DemcoTECH.com W: www.DemcoTECH.com F: +27 11 608 4251 DemcoTECH. a multi disciplinary Engineering and Project management company specialising mainly in Bulk Materials handling, but also small process plants. Based in South Africa, work is performed internationally and varies from internationally and varies from consulting type studies to the execution of Turnkey projects

DEN BAKKER DUSTCRUSTING TECHNOLOGY B.V.

Christiaan Huygensweg 2 Hellevoetsluis Zuid Holland 3225 LD The Netherlands Contact: Mr J.A.A. den Bakker Job Title: CEO T: + 31 181 399 632 E: j.d.bakker@denbakker.nl W: www.dbdglobal.com
Den Bakker Dustcrusting
technology b.v. (dbd global),
is an expert in dust control and
prevention with the
Dustcruster® technology. Dustcruster is far better than continuously spraying and waste pure water. Dustcruster® creates a long-lasting and clearly visible white crust which will last for a long time. Even in

DEUTSCHE Grosswälzlager **GMBH**

tough atmospheric conditions.

Marieneher Strasse 17 Rostock MV18069 Germany Contact: Mr Andreas Wiedenhoeft

Job Title: Head of Sales T: + 49 381 4407 10 31

E: info@dgwl.de W: www.dgwl.de F: + 49 381 4407 10 931

DISAB VACUUM TECHNOLOGY AB

Åkermans väg 24 Box 170 Eslöv 241 23 Sweden
Contact: Mr Etienne de Terrasson

Job Title: Head of Marketing T: + 46 79 349 51 51 E: etienne.deterrasson@disab.com W: www.disab.com
DISAB is on the forefront when it comes to vacuum technology and how to apply it in various industrial settings to keep dust, dirt, and spillages away.

DOME TECHNOLOGY. LLC

4946 North 29th East

Idaho Falls ID 83401 USA Contact: Miss Rebecca Pyper Job Title: Marketing Director T: + 1 208 569 8557 E: rebecca.pyper@ dometechnology.com
W: www.dometechnology.com
Other equipment: Serve the biomass, power, mining, cement, fertilizer, and grain markets. We provide geotechnical analysis, deep foundation solutions, engineered tunnels. Integrate material handling safety material nandling safety protocols with dome design. Concrete domes are designed to contain volatile products as well as cover products.

DON VALLEY **ENGINEERING CO LTD** Sandall Stones Road

Doncaster HK Contact: Mr Roger Allen Job Title: Managing Director T: + 44 1302 881188 E: sales@donvalleyeng.com W: www.donvalleyeng.com F: + 44 1302 881000

DONALDSON EUROPE

Research Park Building No. 1303 Interleuvenlaan 1 Leuven B-3001 Belgium

Contact: Mr Michel Reichert Job Title: Head of Marketing – Industrial Solutions EMFA T: + 32 16 38 38 11

E: iaf-europe@donaldson.com

W: www.donaldson.com/

DONALDSON FILTRATION DEUTSCHLAND GMBH

Industriestraße 11 Dülmen 48249 Germany T: + 49 2594 781 0 E: IAF-de@donaldson.com W: www.DonaldsonToritDCE.com F: + 49 2594 781 21 Donaldson is a leading worldwide provider of filtration systems that improve people's lives, enhance our Customers' equipment performance, and protect our environment. We are committed to satisfying our Customers' needs for filtration solutions through innovative research and development, application expertise, and global presence.

DOPPELMAYR TRANSPORT

TECHNOLOGY GMBH Konrad-Doppelmayr-Str. 1

Wolfurt Vorarlberg 6922 Austria T: + 43 5574 604 1800 I: +43 5074 604 1800
E: dtt@doppelmayr.com
W: www.doppelmayr.mts.com
Doppelmayr Transport
Technology solves all transport
issues in the field of bulk materials and unit loads with a range of sophisticated material transport systems - from wellproven material ropeways to innovative long-distance conveyor systems for challenging terrains.

Dos Santos INTERNATIONAL, LLC

531 Roselane Street NW Suite 810 Marietta GA 30060 USA Contact: Mrs Amy D. Duncan Job Title: Marketing Manager T: + 1 770 423 9895 E: info@dossantosintl.com W: www.dossantosintl.com Other Equipment: DSI ExConTec - conveyor analysis software.

Dos Santos International is the Dos Santos International in world's foremost authority on high-angle conveying technology. We offer the DSI Sandwich belt high angle conveyor, the most reliable high-angle and vertical conveying means for your high tonnage, high lift requirements. DSI also offers engineering consulting and provides in house software for load

DRY-BAG A/S

Odinsvej 21 Hedensted DK 8722 Denmark Contact: Mr Lasse Rude Job Title: Marketing T: + 45 86 19 0500 E: production@dry-bag.com W: www.desiccant.com F: + 45 86 19 0577 Desiccants and cargo security equipment.

DSM Shipbrokers / SHIPTRADE

DSM Shipbrokers

Loberingemaat 5-d Meppel Drenthe 7942 JD The Netherlands Contact: Mr Michael Beyer Job Title: Managing Director/S&P Broker T: + 31 646 222111 E: dsm@shiptrade.nl W: https://shiptrade.nl/ W: mttps://sniptrade.ni/ We sell exclusively new floating bulk handling lemniscate cranes, seagoing, classed by LR for 24/7 offshore bulk transshipment operations.
Besides new floating cranes,
we also trade all other floating crane brands on the secondhand market, eg Liebherr, Gottwald, MacGregor, PLM. Ganz Danubius etc. II you want to buy or sell a floating bulk handling crane, please contact us.

DURO FELGUERA. S.A.

Parque Científico y Tecnológico de Giión c/ Ada Byron, 90 Giión Asturias 33203 Contact: Mr Angel Pelegry

Job Title: Sales Director DF Mining & Handling T: + 34 985 199 202 E: dfmh@durofelguera.com OR angel.pelegry@durofelguera.com W: www.durofelguera.com/en/ F: + 34 985 199 059 DF Mining & Handling is the DF division specialised in turnkey projects for Mineral Processing projects for mineral Processing and Bulk Material Handling Facilities, mainly Concentration Plant and Loading and Unloading Terminals at Ports. The company assists customers and investors in all phases of a project: feasibility studies, design, detailed engineering, procurement, construction, commissioning and operation and maintenance of the facility and it's recognised on a global scale as a reputable EPC contractor.

DUST SOLUTIONS INC 103 Industrial Village Road

SC 29906 USA Contact: Mr Richard Posner Job Title: President T: + 1 843 846 3700 E: sales@nodust.com W: www.nodust.com F: + 1 843 846 3701 F: + 1643 640 3701 Manufacturers Dry Fog Dust Suppression Systems for bulk material handling - conveyors, truck & rail dumps, hoppers, feeders, crushers, ship loaders/unloader. Modular systems produce fog droplets that attach to like size airborne dust particles. Functions in below freezing temperatures. DustTamer Windfence Systems

E-Crane Worldwide Koekoeklaan 53

for stockpiles.

Adegem Oost Vlaanderen B-9991 Belgium Contact: Mr Lieven Bauwens Job Title: CEO T: + 32 93 780 444 E: lieven.bauwens@e-crane.com W: www.e-crane.com E-Crane offers the E-Crane (Equilibrium Crane) in cequinininin Crane) In capacities ranging from 5.5 to 50 tons (metric) tons and outreach ranging from 24.8 to 47.8 metres (82 to 157 feet) for efficient offloading of bulk commodities through its subsidaries in Europe, the Americas and Asia.

EDGE INNOVATE. (NI) LTD 30 Farlough Road

Newmills Dungannon County Tyrone BT71 4DT Northern Ireland Contact: Mr Lee Williamson Job Title: Global Sales Manager T: + 44 2887 740525 E: info@edgeinnovate.com W: https://edgeinnovate.com/ F: + 44 2887 747244 Edge Innovate are a blue sky thinking, imaginative and creative equipment manufacturing company. With our ethos of "Innovation at Work" EDGE persist in pushing the boundaries of design and manufacturing to produce hard working, quality machinery to fit any materials handling requirement from recycling, material handling to quarrying.

EFM Design SERVICES PVT LTD

New No 25, Old No 12, 1st Floor Kamaraj Avenue 2nd Street Adyar Chennai Tamil Nadu 600020 India Contact: Dr Sricharan Srinath **Job Title:** Director **T:** + 91 7358445064

E: sricharansrinath@ efmdesign.co.in

Egis Ports 15 avenue du Centre CS 20538

Yvelines 78286 France Contact: Mr Sylvain Bourgois Job Title: Head of Port Development T: + 33 1 3941 4017 E: sylvain.bourgois@egis.fr E: sylvain.bourgois@egis.rr
W: www.egis-group.com/
Egis Ports' activity covers all
stages of ports and dedicated
terminals, inland waterways,
logistic hubs and coastal development, from feasibility and conceptual studies to works supervision. Major capabilities in masterplanning, Construction planning and Engineering and consulting, environmental studies, project

Guyancourt - Saint Quentin en

EKA CTRM SOLUTIONS PTY LTD 2202, Level 2, 25 Grenfell Street

Adelaide South Australia 5000 Australia Contact: Ms Urs Sujana Job Title: Vice President of Bulk Handling Solutions T: + 1 618 8444 5900 E: info@eka1.com W: https://eka1.com/ A stockyard management solution built specifically for your raw material and bulk your raw material and bulk commodity business. Control your terminal operations with maximum visibility, execute operations autonomously to maximize throughput, and improve site efficiency with unprecedented accuracy for better inventory and quality tracking.

ELECON ENGINEERING COMPANY LTD Post Box # 6 Anand Sojitra Road

Vallabh Vidyanagar

Guiarat 388 120 India Contact: Mr Paresh Vyas Job Title: Corporate Communications T: +91-2692-237016 / 230166 (MHF) E: infogear@elecon.com W: www.elecon.com
Elecon since established in
1951, apart from Power Transmission Products, provides engineered solutions, manufactures and supplies Bulk Material Handling Plants and Equipments for the core sector industries which includes power steel cement fertilizer port mechanisation and open cast mines in India and Abroad.

ELECON SINGAPORE PTE LTD. 10, Anson Road #10-11

International Plaza Singapore 079903 Singapore Contact: Mr Vipul Shah
Job Title: Director T: + 65 68759262 E: vipul@elecon.com W: www.elecon.com

ELETTROTEK KABEL S.P.A.

Via Tondelli n°10 Bagnolo in Piano (RE) 42011 Italy

Contact: Mrs Valentina Magnani Job Title: Marketing T: + 39 0522 956001

E: valentina.magnani@ elettrotekkabel.com

W: www.elettrotekkabel.com/ F: + 39 0522 951851

EMG AUTOMATION GMBH Industriestraße 1

Wenden D-57482 Germany
Contact: Mr Uwe Wurster Job Title: Head of Business Unit Drive Solutions T: + 49 27 62/6 12 322 E: Uwe.wurster@emgautomation.com
W: www.emg-automation.com/en/
F: + 49 27 62/6 12 237

EmiControls Via Copernico 6 A Bolzano 1-39100 Italy Contact: Ms Anja Höller Job Title: Marketing Manager E: Anja.Hoeller@emicontrols.com
W: www.emicontrols.com/

EMS-Tech Inc



699 Dundas Street West Relleville Ontario K8N 4Z2

Contact: Mr Kyle Sorensen Job Title: Director, Business Development, Marine System Sales T: + 1 613 966 6611

E: sales@ems-tech.net W: www.ems-tech.net F: + 1 613 966 6710 A multi-task, multi-discipline A multi-task, multi-ussipline company specialising in design and supply of dry bulk material handling equipment, both mobile and stationary; including custom designed conveyors, belt elevators, receiving hoppers, storage/load-out systems, environmental controls, shiploaders, stackers and reclaimers, transhippers, self-unloading ships.

ENBL (Kunshan) Machinery Co. Ltd. No. 235 Weijing Road

Qiandeng Town Suzhou Kunshan City

Jiangsu 215343 China Contact: Mr Lewis Xu Job Title: Sales Manger T: + 86158 5029 9769 E: sales@enbl-grabs.com W: www.enbl-grabs.com/ ENBL (established in November 2013) is located in the Yangtze River Economic Triendly Frontier - Kunshan along the Shanghai industry. It is the biggest professional grab manufacturer in China. Through resource integration and professionals in the field, the company has a manufacturing advantage and offers services such as design, manufacture, sales and technical support.

ENDURIDE

1880 Provinciale Street, Quebec G1N 4A2 Contact: Mr Roberto Patino Job Title: Chief Executive Officer T: + 1 418 266 7777 E: sales@enduride.com

W: www.enduride.com/ Engicon NV (Geldof)

Broelstraat 20 Harelbeke B-8530

Contact: Mr Pieter Van Acker Job Title: Chief Commercial

T: + 32 56 73 21 21

E: sales@geldof.com W: www.geldof.com Offers complete solutions in bulk handling systems. Product range includes silos with extraction systems, discharge hoppers, pressure vessels and storage tanks, conveyor belts, screw conveyors, chain conveyors, bucket elevators.

ENGINEERING SERVICES HAMBURG

Brünschentwiete 58 c Hamburg 22559 Germany Contact: Mr Mario Rämmele Job Title: CEO T: + 49 172 414 38 36 E: rm@engservhamburg.com W: www.engservhamburg.com

Engineering System SOLUTIONS, ES2 4943 N 29th E

Suite A Idaho Falls ID 83401 USA Contact: Mr Adam Aagard Job Title: Project Manager T: + 1 208 552 9874 E: adam.aagard@es2eng.com

W: www.es2eng.com **EPN SOLUTIONS**

Karl Grankvist 1C Piteå SE-941 52 Sweden Contact: Mr Mattias Öman

Job Title: Managing Director T: + 46 70 371 15 30 E: mattias.oman@epnsolutions.se W: http://epnsolutions.se/

EQUIPO LLC

P.O.Box : 64624 DEIRA Dubai 64624 UAE Contact: Mr Dharmaraiu Sundaram

Job Title: Marketing Manager T: + 971 55 473 6204 E: sales@equipo.ae W: www.equipollc.com/ F: + 971 4 268 2217 F: + 9/1 4 268 22/1/
We are one of the suppliers of grabs in PG & Indian
Subcontinent. All our grabs are radio remote controlled varying from 5 to 12 cbm. Grabs can be supplied on short term and long term rentals.

ERIEZ 2200 Asbury Road Erie

PΑ 16506 USA Contact: Mr Corry Lino Job Title: Global Marketing Manager T: + 1 814 835 6000 E: clino@eriez.com W: www.eriez.com/ Eriez, a world authority in separation technologies is a one-stop solution thanks to its range of magnetic separators, metal detectors, feeders, wet drums and other processing

ESCH GROUP BY

equipment, particularly suited to the mining, aggregate and coal processing sector.

Veerweg 14 Hoorn 5145 NS The Netherlands
Contact: Mr Evert van Esch Job Title: Sales Director T: + 31 416 315656 W: www.eschgroup.nl/nl/home
A manufacturer (production) of
transport rollers, drive and tension drums and import bearings and bearing blocks

ESI Eurosilo BV Newtonstraat 26-28

Purmerend 1446 VR The Netherlands Contact: Mr Richard Spaargaren Job Title: Commercial Director T: + 31 299 630 730 E: sales@eurosilo.com **W**: www.eurosilo.com **F**: + 31 299 630 737 Other Equipment: Mammoth silo systems. Active in the field of design construction and/or turnkey construction and/or turnkey delivery of large scale enclosed storage systems for coal, FGD-gypsum, limestone, minerals, basic chemicals and potato starch. Storage capacity of this flat bottom mammoth silo system (Eurosilo) can range from 1,000 up to 100,000 m3

ESL Power Systems.

NC. 2800 Palisades Drive Corona CA 92878-9427 USA Contact: Mr Michael Hellmers

Job Title: Chief Sales Strategist T: + 1 951 739 7000 E: info@eslpwr.com W: https://eslpwr.com/

EUROMEC S.R.L.

Via Visano 78/80 Isorella 25010 Italy

Contact: Mr Alessandro Gervasio Job Title: Head of Sales and Coowner

T: + 39 3911297003 E: gervasio@euromecsrl.it W: https://euromecsrl.it/

EURO-TRAMCO BV

Spacelab 47 D Amersfoort 3824MR The Netherlands
Contact: Mr Hans Plekkenpol
T: + 31 33 4567033 sales@tramco-europe.com W: www.tramcoinc.com F: + 31 33 4558149 Manufactures chain, screw and bucket conveyors and 'Aerobelt' air-supported belt conveyor systems.

EXCEL MACHINERY P.O. Box 31118

Amarillo 79120 USA Contact: Mr Clay Stallings T: + 1 806 679 9213
E: cstallings@excelmach.com
W: https://excelmach.com/

F. Harley & Co. Pvt.

LTD.

5 Rameswar Shaw Road Kolkata West Bengal 700014 India

Contact: Mr Nirav Shah Job Title: Dy. Managing Director T: + 91 9831014931 E: nirav_shah@harleygrp.com W: www.harleygrp.com F: + 91 22897919 Pioneers in the introduction of Dust Suppression Systems in India, F. Harley specializes in providing customized dust control containment and control solutions for bulk material handling applications and conducting plant assessments backed with the experience of over 35 years.

FABTECH INTERNATIONAL LTD

PO Box 61015 Jebel Ali Freezone Contact: Mr Murali Ganesan Job Title: VP PROJECTS T: + 971 4 883 8833 E: info@fabtech.ae W: www.fabtechint.com/ F: + 971 4 883 5126

FAM MINERALS & MINING GMBH

Sudenburger Wuhne 47 Magdeburg Sachsen-Anhalt D-39112 Germany
Contact: Mr Alexander Tigges Job Title: Director Global Sales T: + 49 391 6380 0 E: fam@BEUMER.com W: www.fam.de FAM successfully plans, FAM successfully plans, designs, constructs and manufactures turnkey equipment for extracting, producing, loading and storing bulk materials. FAM combines know-how of series and customized production processes and offers a complete range of manufacturing services including after-sales services along with engineering.

FAMAK SA

ul. Fabryczna 5 Kluczbork PL 46-200 Poland
Contact: Mr Robert Rulkiewicz Job Title: Chairman of the board T: + 48 77 40 70 100 H: 40 77 40 10 100
W: www.famak.pl
F: + 48 77 418 15 45
Over 60 years experience as manufacturers of transportmanufacturers of transport-hoisting equipment. Highly qualified technical engineering staff have interdisciplinary knowledge and experience and design-development base, implementing the highest technical level of offered products. Products designed according to individual needs and installed on-site. Full and installed on-site. Full service after installation.

FENNER DUNLOP AMERICAS

200 Corporate Center Drive

Suite 220 Coraopolis PA 15108 USA Contact: Mr Chris King Job Title: National Sales Director T: + 1 307 670 3361 E: chris.king@fennerdunlop.com W: www.fennerdunlopamericas.com

FENNER DUNLOP Conveyor Belting

Oliemolenstraat 2 PO Box 14 Drachten 9200 AA The Netherlands
Contact: Mr Andries Smilda Job Title: Sales & Marketing Director T: + 31 512 585 446 E: info@dunlopcb.com W: www.fennerdunlopemea.com F: + 31 512 585 433 Manufactures a full range of textile, aramid and steelcord conveyor belting systems.

FENNER DUNLOP Conveyor Belting EUROPE

Marfleet Yorkshire HU9 5RA Contact: Mr Jim Jones Job Title: Managing Director T: + 44 1482 785450 E: jim.jones@fennerdunlop.com W: www.fennerdunlop.com F: + 44 1482 785438 Fire-resistant, solid-wover

conveyor belting, with rubber or PVC covers, is manufactured to all major national safety standards. Supplied to all major stantards: Supplied to an inajor underground materials handling and extraction industries and to other coal handling operations where safety and economy are major criteria.

FENNER PLC

Hesslewood Country Office Park Ferriby Road Hessle East Yorks HU13 0PW Contact: Mr David Fowler T: + 44 1482 626 500 / 523 E: david.fowler@fennerdunlop.com W: www.fenner.com F: + 44 1482 626522

FLENDER GMBH Alfred Flender Strasse 77

FLF ST&MK

D- 46395

Germany Contact: Mr Hans-Jürgen Job Title: Marketing T: + 49 172 5886250 / + 49 2871 920 juergen.thebert@flender.com

W: www.flender.com

2525 Wisconsin Avenue Downers Grove

60515-4200 USA Contact: Ms Kelly Clancy
Job Title: Public Relations Specialist

T: + 1 630 971 0150 E: kclancy@flexco.com W: www.flexco.com
F: + 1 630 971 1180
Flexco, a manufacturer of products that enhance belt conveyor productivity, serves

customers across the globe with efficient and safe products, services, and solutions. Flexco is able to address almost any challenge - from slippage and spillage, to mistracking and wear and tear, to safety and environmental concerns

FLEXCO EUROPE GMBH

Maybachstraße 9 Rosenfeld D-72348 Germany Contact: Mr Joerg Schairer
Job Title: Managing Director T: + 49 7428 94060 E: europe@flexco.com W: www.flexco.com
F: + 49 7428 9406260
Mechanical conveyor belt fastening systems and accessories; belt cleaning systems; ceramic lagging maintenance tools.

FLEXICON CORPORATION 2400 Emrick Blvd

Bethlehem 18020-8006 USA Contact: Mr Dan Capwell
Job Title: Senior Advertising Specialist T: + 1 610 814 2400 x10611 E: sales@flexicon.com
W: www.flexicon.com/ F: + 1 610 814 0600

FOGCO Systems, Inc. 600 South 56th Street

Chandler A7 85226 USA Contact: Mr Dana Pack Job Title: Vice President Sales T: + 1 800 607 6478 E: danap@fogco.com W: https://fogco.com/

FRIGATE TEKNOLOGIES PRIVATE LIMITED A-1550, 2nd Floor Green Field Colony

Faridabad Haryana 121 003 India
Contact: Mr Ajay Hooda T: + 91 129 2511662 E: marketing@frigate.in **W**: www.frigate.in **F**: + 91 1166173981

FWS GROUP

275 Commerce Winnipeg Manitoba R3P1R3 Canada Contact: Mr Martin Rima Job Title: Engineer T: + 1 204 223 8542 E: mbima@fwsgroup.com W: fwsgroup.com

GAMA ENDUSTRI Tesisleri İmalat Ve Montaj AS

Narcissus Street No: 9, 06 520 Söğütözü Ankara 06540 Turkey Contact: Mr Mehmet Artun **Job Title:** General Manager **T:** + 90 312 248 42 00 E: industry@gama.com.tr W: www.gama.com.tr F: + 90 312 4094360 Other Equipment: Apron feeders, Air slides, Scrapers. One of Turkey's most prestigious leading contracting companies, with experience in constructing industrial and power plants, dams, pipelines, infrastructures and similar. Established in 1959, with clients worldwide, has completed more than 200 significant sized projects internationally

GAMBAROTTA GSCHWENDT SRL

Via del Brennero, 316 Trento Trento 38121 Italy Contact: Mr Davide Gambarotta
Job Title: CEO T: + 39 0461 920 403 E: gambarotta@gambarotta.it W: www.gambarotta.it/
Design and manufacturing of bucket elevators, pan conveyors, drag chain conveyors, extractors and feeders, palletized product loaders, gate valves, cell feeders, flap valves and screw conveyors used in petrochemical, cement, coal, petrocnemical, cement, coal, waste to energy plants and for power generation, steel and heavy industry applications. Other equipment: Sizer, crusher, plow feeder, roller screen, slide gates, spare parts, rotary valves, diverters, expansion joints, transloaders, air slides.

GANZ DANUBIUS HUTI KFT

Vadász utca 47. Tatabánya 2800 Hungary Contact: Mr Attila Sasvari Job Title: Senior Naval Architect T: +36 70 528 8751 E: info@ganzdanubius.eu W: ganzdanubius.eu Suppliers of level luffing harbour grab cranes, floating grab cranes and other bulk handling equipment.

GBS COLOMBIA SAS

MZ 5 CS 129, BOD 1, GUADALCANAL PEREIRA Risaralda

Colombia
Contact: Mr Johny Correa Job Title: CEO T: + 57 301 1144826 I: +5/3011/144620
E: info@gbscolombia.com/
W: https://gbscolombia.com/
We are a company providing solutions for material transport through conveyor belt systems, equipment as telestackers conveyor belts, accessories, and tech about conveyor belt.

GENERAC MOBILE PRODUCTS SRL Via Stazione, 3 Bis Villanova d'Ardenghi

Pavia 27030 Italy
E: gmp.srl@generac.com W: www.towerlight.com/dust-fighters/ Generac Mobile is a Generac Mobile is a manufacturer of mobile lighting towers, dust control units, power generating sets and battery energy storage systems. Founded in 1997, the Italian company is part of the Generac Power Systems group and operates globally.

GENERAL KINEMATICS

5050 Rickert Rd Crystal Lake IL 60014 USA Contact: Mr Gordon Frank Job Title: VP Sales & Marketing T: + 1 815 455 3222 E: info@generalkinematics.com W: www.generalkinematics.com F: + 1 815 455 2285 Geo - Chem

LABORATORIES PRIVATE LIMITED

Geo - Chem House 294 Shahid Bhagat Singh Road, Mumbai Maharastra 400 001 Contact: Mr Subhashis Chakraborty

Job Title: Director Minerals & T: + 91 22 663 83838 / 99 300 68937 68937
E: s.chakraborty@geochem.net.in / Anisa.s@geochem.net.in
W: www.geochem.net.in
F: +91 22 663 83800
Geo Chem Laboratories PVT
Ltd is the leading Commodity
Third party Inspection & Testing
Company. Our core expertise is inspection, testing and certification of commodities like various Coal, Coke, Minerals, Ores, Metals, Ferro Alloys, Non Fermus Fertilizers. Agri Ferrous, Fertilizers, Agri commodities, Petroleum Products, pharmaceutical, Oil&

Gas, etc many more. GEOMETRICA INC.

Geometrica'

12300 Dundee Court Suite 200 Cypress 77429 Contact: Mr Alejandro (Alex) Algara Job Title: Vice President & CCO T: + 1 832 220 1200 E: sales@geometrica.com W: www.geometrica.com Specialists in the design, fabrication and installation of bulk storage domed structures requiring large, column-free interiors, utilizing low maintenance galvanized steel or aluminum. Structures can cover any shaped area, can span over 300m, and can be erected even over operating

stockpiles.

DCi

DCi

GERTECH HANDLING Systems CC PO Box 4014

Durbanville Cape Town Western Cape 7551 South Africa
Contact: Mr Gerrit De Hoog T: + 27 83 458 2415 E: gerrit@gertech.co.za W: www.gertech.co.za
Design and manufacturing of mechanical conveyors (including the industrial Tube & Chain Conveyor), dust extraction and steel silos.

GF MHS SRL

Via Serrati 7 Paderno Dugnano (MI) 20037 Contact: Mr Francesco Tummillo Job Title: Managing Director T: + 39 0 2 91 08 20 02 E: info@gfmhs.it W: www.gfmhs.it F: + 39 0 2 91 84 31 47 Other Equipment: Pipe Conveyors.
Please contact us with any Handling System problems, such as lay-out or pollution of your handled product.

GLOBAL Manufacturing, Inc.

Global Manufacturing, Inc.







1801 East 22nd Street Arkansas USA Contact: Mr Zachary Janosky Job Title: President T: + 501-374-7416 E: zjanosky@ globalmanufacturing.com W: www.globalmanufacturing.com F: + 1 501 3767147 Global Manufacturing Inc. manufactures bulk flow aids: industrial vibrators and air blasters. These products have been used in many areas of material handling (some are marked in the associated table). With our expertise, they can also be applied to many other material handling equipment or industrial

GLOBAL TECHNICS OÜ Narva mnt 5

Tallinn 10117 Estonia Contact: Mr Einar Luha Job Title: CEO E: sales@gltechnics.com W: https://gltechnics.com Global Technics OU designs and supplies advanced railcar unloading accelerators, wagon cleaning systems, and dometype warehouse cleaning solutions. Our equipment delivers reliable performance, reducing downtime and optimizing bulk cargo handling efficiency across rail, port, and industrial operations worldwide.

GOLDEN WEST INDUSTRIES 459 N Highway 91 # 6

Hurricane Utah 84737 Contact: Mr.Jason Pierce Job Title: Vice President - Global Markets T: + 1 435 229 8000 E: jason.pierce@goldenwest-industries.com W: www.goldenwestindustries.com 17 years experience providing dust control and anti-freeze

solutions to the mining and material handling industries.

Grapplers India Pvt LTD (ESSAR INDUSTRIES)

Sweden XIV/261- A, Chembaracky South Vazhakulam Post Aluva Perumbavoor Road Ernakulam Bengaluru Kerala 683105 India Contact: Mr A.M Sherif Job Title: CEO T: + 91 8048764863 E: essarinds@gmail.com W: http://grapplersindia.com

Günter Jung GmbH

Biggestraße 43 Olpe 57462 Germany Contact: Mr Günter Jung Job Title: Owner T: 02761/5285 E: info@steinbruch-jung.de W: www.steinbruch-jung.de

GURTEC GMBH Gurtecstrasse 3

Schöppenstedt Germany Contact: Mr Peter Abromeit Job Title: Sales Manager International T: + 49 151 15446300 E: Peter.Abromeit@Gurtec.com W: https://gurtec.com/

GUTTRIDGE LIMITED

Wardentree Park Pinchbeck Spalding Lincolnshire PE11 3UU Contact: Mr Harry DeCamp Job Title: Senior Marketing Executive T: + 44 1775 765291 E: enquiries@guttridge.co.uk W: www.guttridge.com Guttridge, as part of the Mitchells group of companies, offers a wide range of bulk handling machinery, ideal for moving ores, granules, powders, sand, cement, salt and fertilizers around process plants. All our machines are manufactured to suit customers' individual requirements

GUVEN GRAB MACHINE Inc.

Akse Mahallesi 535. Sk. No: 3/1 Çayırova Kocaeli 41420 Turkey Contact: Mr Engin Demir Job Title: Sales Director T: + 90 262 743 8858 E: quven@quvenkepce.com W: www.guvengrab.com F: + 90 262 743 1141 Established in 1984, with it's own manufacturing facilities, Guven Grab and Machine supplies it's range of grabs all over the world. These include radio remote control grabs, electro hydraulic clamshell/orange peel grabs, mechanical double wired grabs and mechanical clamshell/orange peel touch down grabs.

HACKFORTH HOLDING GMBH & Co. KG

Heerstrasse 66 44653 Germany Contact: Mr Björn Peters Job Title: Head of Marketing T: + 49 2325 9220 E: bjoern.peters@vulkan.com W: www vulkan com/ F: + 49 2325 71110

HÄGGLUNDS

HÄGGLUNDS 🤇

Västerselsvägen 12 Mellansel SE-895 80 Contact: Mr Urban Strömberg Job Title: Manager, Mining & Materials Handling Industry T: +46 660 870 66 M: +46 70 524 53 18 E:urban.stromberg@ boschrexroth.se W: www.hagglunds.com Hägglunds stands for groundbreaking direct hydraulic drive technology and unswerving customer focus. Engineered and manufactured in Mellansel, Sweden, Hägglunds hydraulic motors and compact direct drive systems provide superior torque performance, flexibility and reliability to customers worldwide. Hägglunds is a brand of Bosch Rexroth, a leading global supplier of drive and control technologies.

HAMMELMANN GMBH

Carl-Zeiss-Straße 6-8 Oelde 50302 Germany
Contact: Mr Jascha Kolter
Job Title: Head Of Corporate Communications T: + 49 25 22 76 0 E: jascha.kolter@hammelmann.de W: www.hammelmann.com/

HANGZHOU HUAXIN MECHANICAL & **ELECTRICAL**

Engineering Co., Ltd. No. 315 Jinpeng Road Xihu Science and Technology

Economic Town Sandun Hangzhou 310030

Contact: Mr Min Rui Job Title: Vice General Manager T: + 86 571 28251588 E: huaxin@huaxinhz.com W: www.huaxinhz.com F: + 86 571 28251388

HAPMAN

5944 East N Avenue Kalamazoo М 49048 USA Contact: Mr Matt Richardson Job Title: Vice President T: + 1 269 343 1675 E: sales@hapman.com W: www.hapman.com F: + 1 269 349 2477 You can trust our experience and quality to deliver equipment and systems for the effective movement of all types

HASEL MACHINERY INC

Cumhuriyet Mh. Nr 15 E5 Karayolu Uzeri Yakacik Kartal Istanbul 81100 Turkey Contact: Mr Osman Nuri Mete Job Title: Manager T: + 90 216 452 9787 E: osman.mete@hasel.com W: www.hasel.com F: + 90 216 452 9790

HASKONING INDIA PVT LTD

13th Floor, Maithili's Signet Plot - 39/4, Sector 30A Vashi Navi Mumbai 400 705 India Contact: Mr Hareld van den Brink Job Title: Director of Business -India T: + 91 22 4161 5004

E: hareld.van.den.brink@rhdvhv.com W: www.royalhaskoningdhv.com

Alfredstraße 28 Nordrhein-Westfalen Essen 45130 Germany
Contact: Mr Matthias Goeing
Job Title: Global Director BMH Products T: + 49 1602832662 E: matthias.goeing@hatch.com W: www.hatch.com Hatch is a global multidisciplinary management, engineering and development engineering and development consultancy. Its group companies have more than 10,000 staff in 70+ offices. Its Technologies Business Practice designs and supplies specialized products to all its principal sectors: Metals, Energy and Infrastructure.

HAUK & SASKO INGENIEURGESELLSCHAFT **GMBH**

Eichwiesenring 11 Stuttgart 70567 Germany
Contact: Mr David Sasko Job Title: CEO T: + 49 711 725 89-0 E: david.sasko@hauk-sasko.de W: www.hauk-sasko.de/en/ F: + 49 711 725 89-50

HAULDER S.A.

Pasaje Echevarriarza 3535 Torre A-Oficina 1602 Montevideo 11300 Uruguay
Contact: Mr Paul Idzerda Job Title: Comercial Manager T: + 54 911 70080449 E: paul.idzerda@haulder.com

HAVER & BOECKER Niagara

W. www haulder com

225 Ontario St. St Catharines Ontario L2R 7B6 Canada Contact: Mr Steven Dery Joh Title: VP Sales T: + 1 905 688 2644 E: info@haverniagara.ca W: www.haverniagara.com F: + 1 905 688 4733 Haver & Boecker Niagara is a leading provider in screening, pelletizing and mineral processing plants and systems. The company's mission is to deliver the best of these technologies to customers in the mining, minerals, aggregates, cement, building products, fertilizer and salt and recycling industries. With deep roots and years of experience in these industries, Haver & Boecker Niagara uses its innovative and shared technologies to effectively meet the needs of customers around the world.

HEAVY HANDLING

Steenlandlaan - Haven 1112 Beveren (Kallo) Oost-Vlaanderen 9130 Belgium Contact: Mr Mathias Matton Job Title: Sales Director Port Cranes T: + 32 479190755 E: info@heavyhandling.be W: www.heavyhandling.be Benelux distributor of MANTSINEN hydraulic material

HEKO KETTEN GMBH

handling cranes, Konecranes Lifttrucks and Movella

translifters.

Eisenbahnstrasse 2 Wickede (Ruhr) D-58739 Germany Contact: Mr Gerhard Weber Job Title: Technical Sales Manager T: + 49 7961 568491 E: weber@heko.com

W: www.heko.com **F**: + 49 23 77 1028

HENAN SRON SILO Engineering Co., Ltd.

28th Floor, PICC Building, No. 24, CBD Business Outer Ring Road. Zhengzhou Henan 450000 China

Contact: Ms Xing Fang Job Title: Brand manager T: + 86 371 63253880 E: brand@sron.cn W: www.grainsilo.com

HERJIMAR S.L

Manganeso Street Plot 78 - 86 Industrial Estate Los Camachos Cartagena Murcia 30369 Spain Contact: Mr Víctor Sola Hernandez Job Title: Director Comercial T: + 34 968147528 E: vsola@herjimar.com W: https://heriimar.com/

HEYL & PATTERSON **EQUIPMENT MEMBER** OF THE HALL GROUP

701 Technology Drive Suite 100 Canonsburg 15317 USA Contact: Mr Len Walnoha Job Title: Vice President T: + 1 412 481 1100 E: heylpatterson@ hallindustries.com W: www.heylpatterson.com F: + 1 724 758 1558 Heyl & Patterson Equipment spécializes in custom engineered capital equipment for bulk material handling. We engineer railcar movers, dumpers, stacker reclaimers and barge unloaders, as well as provide replacement parts, upgrades and retrofits for the life of our equipment, which is measured in decades.

HIT S.R.L.

Via Domenico Tosi 6 Reggio Emilia 42124 Italy
Contact: Ing. Paolo Soncini Job Title: Managing Director T: + 39 0522 1756 017 E: info@hitsrl.com W: www.hitsrl.com F: + 39 0522 271 015

HITACHI CONSTRUCTION Machinery (Europe)

Siciliëweg 5 Amsterdam 1045 AT The Netherlands Contact: Ms Biljana Klopchevska Job Title: Public Relations & Communications T: + 31 20 44 76 700 E: info@hitachicm.eu W: www.hitachicm.eu F: + 31 20 33 44 045 Hitachi Construction Machinery (Europe) NV's (HCME) main products are hydraulic crawler and wheeled excavators, wheel loaders, rigid dump trucks and special application machinery. HCME provides a broad product line-up that has earned an excellent reputation for performance, reliability and safety.

HKD BLUE

15 Mercer Road Natick 1760

Contact: Mr Gordon Santry
Job Title: Business Development T: + 1 450 434 3286 E: gsantry@hkdblue.com W: www.hkdblue.com/ HKD Blue designs, manufacturers, and sells water-atomizing dust control water cannons, spray bars, and pump-and-nozzle assemblies for dry bulk handling and loading facilities.

Horizon Conveyor EQUIPMENT Unit 1, Hayseech Road Halesowen

West Midlands

UK Contact: Mr Alan Bowler Job Title: Managing Director T: + 44 121 550 2218 E: rollersales@conveyorunits.co.uk W: www.horizonconvevors.co.uk

F: + 44 121 550 2243 Manufacturers of Steel, Plastic & Aluminium Idler rollers, Conveyor Belt Scrapers and Conveyor Components & Fauinment

HOSCH FÖRDERTECHNIK RECKLINGHAUSEN **GMBH** Am Stadion 36

Recklinghausen D-45659 Germany Contact: Mr Giancarlo Leombruno
Job Title: Sales & Business Development Manager T: + 49 2361 5898 0 E: mail@hosch.de W: www.hosch-international.com F: + 49 2361 5898 40 HOSCH is the specialist for conveyor belt cleaning systems for the bulk material handling industry. Based on our experience and continuous product development, we are able to realize the best solutions for any kind of bulk material and conveyor.

HUEBNER SPEED Monitoring (Pty)

LTD. 20 Park Road Richmond Johannesburg 2109

South Africa Contact: Mr Derek Colyn Job Title: Managing Director T: +27 11 482 0088 E: derek.colyn@huebner.co.za W: www.huebner.co.za F: +27 11 482 8939

HYCONTROL LIMITED Larchwood House Orchard Street

Redditch

Worcestershire B98 7DP UK Contact: Mr Mark Stevenson Job Title: Marketing Administrator T: + 44 1527 406800 E: sales@hycontrol.com
W: www.hycontrol.com F: + 44 1527 406810 Hycontrol is at the forefront of level control, providing precision solutions across a wide range of industries. Hycontrol is the UK's leading silo protection expert with systems that exceed MPA guidance, utilising ground level testing for a safer working environment. Other equipment includes: level measurement, silo protection.

IBAU HAMBURG

Roedingsmarkt 35 Hamburg

20459 Germany Contact: Mr Ingo Urbach Job Title: Senior Sales Manager T: + 49 403 613 09 741

I: + 49 403 013 09 741
E: info@ibauhamburg.de
W: www.ibauhamburg.de
IBAU HAMBURG supplies
installations and components
for the transfer, storage and conveying of dry products, including among others fly ash and coal. Our scope includes the engineering and supply of plant components such as ship loaders and unloaders, as well as storage silos.

ICC COMMONWEALTH 1000 Market Street, BLDG 2

Portsmouth NH 03801 USA Contact: Mr Mike Davis Job Title: nicole.andrews@icccommonwealth.com T: + 1 6034336060 E: Mike.Davis@icccommonwealth.com W: www.icc-commonwealth.com

ICCE D.O.O.

Oblakovska 21 Belgrade 11000 Serbia Contact: Mr Aleksandar Jegdić Job Title: Marketing Manager T: + 381 63 407 296 E: aleksandar.jegdic@icce.com W: www.icce.com
ICCE is a Turnkey Electrical
Engineering Company
providing electrical and
automation solutions for your
processes. We provide electrical and automation design, medium & low voltage, MCC panel building, PLC & SCADA software development, IT solutions, installation, commissioning, training, and technical support.

IEM FÖRDERTECHNIK **G**MBH

IndustieStraße 1 Kastl (Kemnath) Germany Contact: Mr Ralf Zander Job Title: Managing Director T: + 49 96 42 800 E: info@iem.eu W: www.iem.eu F: + 49 9642 80101

Igus GmbH

Postfach 90 61 23 Köln D-51127 Germany Contact: Mr Jens Göbel Job Title: Industry Manager Cranes & Materialhandling T: + 49 2203 9649 0 E: cranes@igus.de W: www.igus.com/ F: + 49 2203 9649 222 Products include E-ChainSystems - in operation on Ship to Shore Cranes, RTGs, RMGs, Goliath Cranes, Spreaders, Reach Stacker etc. More then 3.000 port equipment applications are running world-wide with igus® E-ChainSystems.

IMA ENGINEERING LTD

Sinikalliontie 3 B Fsnoo 02630 Finland Contact: Mr Ville Hakala Job Title: VP, Sales & Marketing T: + 358 407 049 290 E: ville.hakala@ima.fi
W: https://ima.fi/

IMASA

Palacio Valdes 1 Oviedo (Asturias) 33002 Spain **Contact:** Mr Amancio Garcia **T:** + 34 985 22 71 78 E: amancio.garcia@imasa.com W: www.imasa.com F: + 34 985 22 25 98

IMECA CRANES Kruisweg 643

Hoofddorp

2132 NC

The Netherlands Contact: Mr Mattijs Faber Job Title: Business Development Manager T: +31 20 6556385 E: contact.imeca@reel.fr W: www.imeca-reel.com +31 20 6550040 At Imeca we enable our clients to construct the infrastructure for offshore energy production, and do offshore transshipment. We are client driven with a strong technological base.
Rational, Economic, Elegant & Light is part of our DNA. We are at our best as sparring partner for our clients, deeply involved in their operational process where our solutions can make a difference. We provide lifting, handling and integrated systems & services for the offshore energy and

bulk handling markets IMO GERMANY

Imostr. 1

Gremsdorf Bavaria 91350 Germany
Contact: Mrs Christina Straubmeier Job Title: Executive Assistant Sales T: + 49 9193 6395 1481 E: mail@imo.de W: www.imo.de/en/ F: + 49 9193 6395 1140

IMPERIAL CONVEYING Systems

4155 Martindale Rd., NE

Canton

OH 44705 USA Contact: Kelly Jones T: + 1 330 491 3200 E: kjones@ imperialconveyingsystems.com W: www.imperialconveyingsystems. com F: + 1 330 491 3204

Imperial Conveying Systems designs and supplies bulk material equipment including our enclosed "environmentally friendly" conveyors under Multi-Fold and Flexi-Cleat belt designs. We also provide conventional trough conveyors, fixed and radial stackers, sidewall conveyors, tripper conveyors, reversing shuttle conveyors, drag conveyors, related bulk materials handling equipment and our coal "variable speed vertical impact breaker" for dry coal processing called the Accelerator to improve raw coal from the

IMPRO SOLUTIONS INC 34 Parker Road

Edison NJ 08820 USA Contact: Miss Alexis Bledel Job Title: Supply Chain Specialist T: + 1 848 + 1 8484679004 E: alexis@impro-solution.com
W: www.impro-solution.com

Incolab Services BV

PO Box 1561 Oud-Beijerland ВВ 3260 The Netherlands Contact: Mr Leo Van Tour Job Title: Managing Director T: + 31 1866 10355 E: leo@incolab.com W: www.incolab.com + 31 1866 10552 Incolab Services main target is to serve the solid fuel industry

with own office and laboratories . Most of our laboratories are 17025 accredited. Present in Europe, former USSR, North and South America and North and South Africa.

INDURAD - THE INDUSTRIAL RADAR COMPANY

195 Jan Smuts , TBE Rosebank Johannesburg Guateng 2196 South Africa South Affica
Contact: Mr Nicolas Morgan
Job Title: Managing Director
T: + 27 79 515 272
E: nicolas.morgan@indurad.com
W: www.indurad.com
indurad is a German global supplier of radar-based automation technology. Indurad has successfully implemented advanced automation solutions, globally to debottleneck material to debottlerer material handling processes in mining, marine, and bulk material handling industries. Indurad's proprietary sensors form part of multipurpose solutions, comprising realtime inventory control, 3D stockpile visualisation, high-precision machine positioning, conveyor belt volume flow control. shiploading, and more

INDURAD GMBH Belvedereallee 5

Aachen 52070 Germany Contact: Dr Christian Augustin T: + 49 241 538 0700 christian.augustin@indurad.com W: www.indurad.com
Using 2D and 3D radars to
visualized mining and bulk
handing processes, providing
automation solutions along the
flow chain to safe energy and
debattlength.

INENCO SAC

debottleneck.

Calle Germán Schreiber Gulsmanco 276 San Isidro Lima 15021 Peru Contact: Mr Dan Hidalgo Job Title: Ingeniero Eléctrico T: + 51 993532560

Innomotics GmbH

E: dhidalgo@inenco.pe

W: www.inenco.pe

IN SO MN GPA / MET Schuhstarsse 60 Erlangen 91052 Germany Contact: Ms Julia Ebenberger Job Title: Communications T: + 49 911 958 0 julia.ebenberger@innomotics.com

INOCON INDUSTRIAL PLANTS

W: www.innomotics.com/

Industriestraße 18 Attnang-Puchheim A-4600 Austria Contact: Mr Reinhard Eder Job Title: Managing Director T: + 43 7674 / 21800 – 290 E: r.eder@inocon-ip.at W: www.inocon-ip.at/

INSTRAL B.V.

Platinastraat 33 Lelystad 8211AR The Netherlands Contact: Mr Nils Janbroers Job Title: General Manager T: + 31 3 2041 5591 E: contact@instral.com W: www.instral.com/ Instral BV is a specialized and leading company in the world



INTERMODAL SOLUTIONS GROUP

Nuñez de Vela N36-193 y NNUU Edificio Doral 2 Quito FC170135 Ecuador
Contact: Mr Gustavo Delgado Job Title: Brazil, Ecuador & Colombia Country Manager T: + 593 981944957 E: gdelgado@isgpts.com W: www.pittoship.com F: + 61 2 8883 5195 A global company that provides the bulk container handling system; "CBH" that offers a system; CBH that offers a logistics solution for the transfer of cargo using sealed containers at the port of shipment. When the ship arrives, containers are moved to the decided and using a arrives, containers are moved to the dockside and using a gyratory spreader called RAM Revolver, are rotated into the ship's hold using the patented ISG lid lifter and a suppression system that removes dust in the charging process.

INTERMODAL SOLUTIONS PTY LTD Building Unit 210

33 Lexington Drive Bella Vista Sydney NSW 2153 Australia Contact: Mr Garry Pinder Job Title: Managing Director T: + 61 400 035 548 E: gpinder@isgpts.com
W: www.pittoship.com/

International Crane **FACTORY**

8 Patrice Lumumba St. Latin District Alexandria Egypt

Contact: Mr Hassan Mokhless Job Title: Commercial Director T: + 2 03 4953925 E: hmokhless@icfi.com W: https://icfeg.com/

Global YJR Design

max 36.6 lbs

Level 28, 180 George Street, Salesforce Tower Sydney NSW 2000 Australia Contact: Ms Leigh Crocker Job Title: Manager Business T: + 61 2 8239 8300 E: Icrocker@iongroup.com.au W: https://iongroup.com/ QML Services provides outsourced logistics outsourced logistics management services to the mining and resources industries. QML Services is part of the ION Group, utilising QMASTOR Commodity Management software. QMASTOR Metals and Mining solution requires prostrient. solution reduces operationa logistical, marketing and commercial costs by managing the tonnage, quality and value of coal and mineral supply chains.

ISAM AG GESELLSCHAFT FUER **ANGEWANDTE K**ybernetik

Alexanderstrasse 46

Mülheim an der Ruhr 45472 Germany Contact: Mr Christian Hacks Job Title: Chief HR & Operating Officer T: + 49 208 495 85 0 E: info@isam-ag.de W: www.isam-ag.de iSAM delivers the full range of

products and services for advanced automation of bulk material handling and port operations. We handle turn-key operations: We nariote unri-ke solutions for new automation projects as well as the upgrading of existing equipment including project management, electrical engineering and commissioning.

I IK Engineering

Capital Organized Industrial Zone 4th Street No: 3

Malıköy Sincan Ankara 06909 Turkey Contact: Mr Gürel Gencer Job Title: Board Member T: + 90 312 640 14 21 E: info@isikmuh.com.tr W: www.isikmuh.com.tr/ F: + 90 312 640 14 27

Traditional Design

70.6 lbs

ISKAR Mühendislik

LTD

Ilke Sok. 7/6 Bostanci - Kadikoy Istanbul 34744 Turkey Contact: Mr Taner Günev Job Title: General Manager T: + 90 216 3733224 E: iskarltd@iskarltd.com W: www.iskarltd.com
F: + 90 216 3724959
ISKAR, as being an expert on basic and detailed engineering, manufacturing, assembly, startup and after-sales services for more than 40 years on the application of various bulk material handling projects in and out of Turkey provides dedicated solutions for his customers. Our values guide us throughout our business life and outlines our behaviours. W: www.iskarltd.com and outlines our behaviours. We care and work for our customer's success. We encourage our colleagues for applying their knowledge on new ideas and projects.

ISOMONTE SA

Rua Cristiano Franca Teixeira Guimaraes, 265 Bairro Cinco Contagem Minas Gerais CEP 32010-130 Brazil Contact: Mr Jose Rubem Almeida T: + 55 31 2128 2600 / 2641

ISKAR is a trustful partner from Turkey for your needs.

E: info@isomont.com W: www.isomonte.com.bi W: WWW.Isomonie.com.or F: + 55 31 2128 2690 Specialises in the design and construction of turnkey systems for materials handling, including shiploaders/unloaders, grabs, stacker/reclaimers and convevor systems.

DCi



DCi

ITALGRU S.R.L

17ALGRU 4 Via Briantea

Ambivere 24030 Italy Contact: Mr Fabrizio Bonfanti Job Title: C.E.O. T: + 39 035 4932 411 E: info@italgru.com **W**: www.italgru.com **F**: + 39 035 4932 409 Italgru - more than 60 yeaers of crane design and manufacturing experience

J & B GRIJPERS B.V.



Rijksstraatweg 32 Utrecht Utrecht 3545 NA The Netherlands Contact: Mr Edgar Joustra Job Title: Director T: + 31 3066 21616 E: info@ib-griipers.nl W: https://jb-grijpers.nl/
Designs, engineers and
manufactures mechanical and hydraulic grabs for all kinds of bulk material.

JACOBS

32 Cordelia Street Suite 500 South Brisbane Queensland Australia Contact: Mr Christopher Best Job Title: Maritime Global Technology Lead for Dry Bulk T: + 61 412 069 105

E: christopher.best@jacobs.com E. Unistophen Jessella Jacobs.com
Jacobs leads global
professional engineering
services, delivering solutions
for a more connected, resilient,
and sustainable world. Our talent force of more than 45,000 provides broad capability across project delivery, technical, environmental, and scientific

James A. Redding COMPANY 733 S. Center Avenue

areas to our clients

Somerset 15501 USA Contact: Mr Brian Putman T: + 1 814 444 7200 E: salesinfo@jamesaredding.com W: www.jamesaredding.com/

Jansen & Heuning

F: + 1 814 445 1320

Bulk Handling Systems Duinkerkenstraat 11 Groningen 9723 BN The Netherlands
Contact: Mr Bart Klimp Job Title: Marketing & Sales T: + 31 50 312 64 48 E: bk@jh.nl W: www.jh.nl F: + 31 50 313 80 18

Jenike & Johanson INC.

400 Business Park Drive Tyngsboro MA 01879 USA Contact: Ms Carrie Hartford Job Title: Director of Business Development T: + 1 805 541 0901 X304 E: chartford@jenike.com W: www.jenike.com Jenike & Johanson is the world's leading company in powder and bulk solids

handling, processing, and storage technology. Over the past 60 years, we've tested over 19,000 unique powders and bulk solids and worked on more than 9,000 projects, giving our team the broadest real-world and in-denth experience in the industry to address a wide variety of bulk material handling and engineering needs.

JFE Engineering CORPORATION

Marunouchi Trust Tower North 1-8-1 Marunouchi Chivoda-ku Tokyo 100-0005 Japan
Contact: Mr Hayato Nakazono Job Title: Manager T: + 81 3 6212 0800 E: nakazono-hayato@jfeenq.co.jp

JIANGSU QUNSHUO **HEAVY INDUSTRY EOUIPMENT CO**

W: www.jfe-eng.co.jp/en/ **F:** + 81 3 6216 0802

No.95. QianLuo Road QianQiao Street HuiShan District Wuxi City JiangSu China
Contact: Miss Alice Chen

Job Title: Sales Department Manager

T: + 86 510 8321 2288 E: marketing@qshi-china.com W: www.qshi-cn.com/

JIANGSU RAINBOW **HEAVY INDUSTRIES** Co., LTD.

NO.9,Zhenxing West Road Nantong Economic & Technological Development Zone Nantong Jiangsu China

T: + 86 513 85328000 E: rhi@rainbowco.com.cn W: http://en.rainbowco.com.cn/ F: + 86 513 85328261

JIANGSU ZDPM **M**ANUFACTURER Co..LTD

No. 38, Fuchun River Road Changshu City Jiangsu Province 215533 China

Contact: Jin Fumin T: + 86 0512 529 36333 E: jszdgj@163.com W: www.zdpmchina.com/

JIMWAY ENTERPRISE Co.. LTD

Kaohsiung

productivity goals.

81266 Taiwan

No.17 Chang Tai Street Hsiao Kang Dist. Contact: Mr Guillermo Su Job Title: Int'l Sales Section Manager T: + 888 7 8718126 E: su@roller.com.tw W: www.roller.com.tw F: +886 7 8718128

More than 35 years of experience in bulk material handling. Jim Way is an expert belt conveyor accessories manufacturer and meets the 150 00014 wulfur transport West ISO 9001 quality standard. We deal with several issues caused by belt mistracking and improve

JOHANNES HÜBNER FABRIK ELEKTRISCHER Maschinen GmbH Siemensstrasse 7

Giessen

D-35394 Germany
Contact: Mr Torsten Drewes
Job Title: Marketing Manager T: + 49 641 79 69 0 E: torsten.drewes@huebnergiessen.com W: www.huebner-giessen.com Hübner Giessen is considered a market leader in encoder and drive technology with activities arive technology with activities in the following industrial sectors: Steelworks and rolling mills, mining, cranes, railways, marine, oil and gas, traction technology, hydroelectric power plants and energy systems.

JOY GLOBAL INC

100 East Wisconsin Avenue Milwaukee WI 53202 Contact: Ms Caley Clinton Job Title: Director of Corporate Communications T: + 1 414 319 8500 E: caley.clinton@global.komatsu
W: www.joyglobal.com/

KALENBORN KALPROTECT GMBH & Co. KG

Asbacher Str 50 Vettelschoss Germany Contact: Mr Thomas Serr Job Title: Head of Corporate Communication and Marketing T: + 49 26 45 18 201 E: info@kalenborn.com W: www.kalenborn.com **F**: + 49 26 45 18 112 Wear-protection materials and services. Engineering, production, and worldwide installation of highly wearresistant linings and components made of ceramic, metallic and plastic materials for protecting all kinds of bulk handling equipment.

KARDESLER GRAB & MACHINE CO.

Istanbul Mermerciler Sanayi Sitesi Koseler Mah. 21. Cad. No : 39 Dilovası Kocaeli 41455 Turkey Contact: Mr Cevdet Aslan Job Title: Director
E: cevdet@kardeslergrab.com W: www.kardeslergrab.com

KENZFIGEE GROUP B.V.

PO Box 235 Zaandam 1500 EE The Netherlands
Contact: Mr Jan Willem van Job Title: Manager Business Development T: + 31 75 6810 410 Sales@kenzfigee.com W: www.kenz-figee.com Merger of Kenz offshore cranes and Figee harbour cranes. Founded in 1836, Figee designs and manufactures a complete range of bulk handling cranes including the unique and well proven Lemniscate floating grab cranes with capacities from 16-50 tonnes, gantry grab unloaders, single- and double boom cranes, kangaroo cranes.

KIEPE ELECTRIC GMBH - Industry

Kiepe-Platz 1

Düsseldorf 40599 Germany Contact: Mrs Birgit Sacha Job Title: Team Leader Industry/Product Manager T: + 49 211 7497 637 E: contact@kiepe-industry.com W: www.kiepe-industry.com KIEPE Industry is a German manufacturer, based in Duesseldorf at the Rhine, of pull rope switches, belt drift switches and speed monitoring devices for the control of belt conveyor systems, under the trademark KIEPE ELEKTRIK ™ Since the 1960's this Since the 1960's, this trademark has been a worldwide synonym for proven products of the highest quality.

KILIC ENGINEERING PO Box 2035

Regency Park 5010 Australia Contact: Mr Jason Kilic Job Title: Managing Director T: + 61 8 8268 5333 E: iasonkilic@kiliceng.com.au W: www.kiliceng.com.au F: + 61 8 8268 2944

KINDER AUSTRALIA PTY LTD PO Box 1026

Braeside Victoria 3195 Australia Contact: Mr Sam Veal Job Title: Marketing Manager T: + 61 3 8587 9111 E: conveyorsolutions@kinder.com.au W: www.kinder.com.au F: + 61 3 8587 9101 Kinder Australia delivers innovative solutions to improve and maintain the efficiency of conveyor and bulk materials handling equipment for a variety of products. Imaginative design capabilities, lateral thinking, rigid benchmarking and ability to overcome problems makes Kinder an industry leader.

KINGFISHER INDUSTRIAL

Cradley Business Park Overend Road Cradley Heath West Midlands B64 7DW

Contact: Mr John Connolly Job Title: Managing Director T: + 44 1384 410777 E: jconnolly@kingfisherindustrial.com

W: www.kingfisher-industrial.co.uk

F: + 44 1384 410877 Kingfisher specialise in protecting process plant and equipment against wear and abrasion. Offering a complete range of systems to cater for the harshest of operational environments, priding ourselves on offering industry an unbiased solution to the problems encountered when handling or processing bulk solid materials.

KINSHOFER GMBH

Raiffeisenstrasse 12 Holzkirchen **Bavaria** D-83607 Germany Job Title: Sales T: + 49 8021 8899 0 E: info@kinshofer.com W: www.kinshofer.com/ W: www.kinsnofer.com/ F: + 49 8021 8899 37 The Kinshofer Group is the one-stop shop for attachments for cranes, excavators, skidsteers and telehandlers worldwide, offering tools for general construction, material handling, demolition, recycling, forestry, landscaping, rail construction/maintenance and

KIRUNA WAGON AB

Truckverkstaden Kiruna Sweden Contact: Mr Daniel Kangas T: + 46 70 226 26 56 E: daniel.kangas@heedmark.com W: http://kirunawagon.com/

KLEEMANN GMBH

Hildenbrandstr.18 Goppingen-Faurndau D-73035 Germany
Contact: Mr Mario Linnemann Job Title: PR T: + 49 7161 206 0 E: mario.linnemann@wirtgengroup.com

W: www.kleemann.info **F**: + 49 7161 206 100

KMK CONSULTING **ENGINEERS LTD**

130 Aztec West Almondsbury **Bristol** Avon BS32 4UB HK Contact: Mr Adrian Martin Job Title: Engineering Director T: + 44 7957801445 1: + 44 795/601445
E: adrian@kmkengineers.com
W: www.kmkengineers.com
Specialists in Bulk Materials
Handling around Wagon
unloading systems & Stockyard
Equipment

KNIGHT INDUSTRIAL **E**OUIPMENT

3701 Airfield Drive West Lakeland 33811-1244 USA Contact: Mr Jason Rainboth Job Title: Director of Operations T: + 1 (863)646-2997 E: sales@knightindustrial.net W: www.knightindustrial.net **F**: + 1 (863)647-2745

KOCH SOLUTIONS GMBH



Karl-Koch-Str. 1 Wadgassen Saarland 66787 Germany Contact: Mr Thomas Lesch
Job Title: Head of Marketing and Communications **T:** + 49 6834 470 0 E: info@koch-solutions.com E: info@koch-solutions.com W: www.koch-solutions.com KOCH Solutions delivers advanced Mining & material handling technologies. Our portfolio covers the complete value chain – from efficient conveying and stockyard systems to fully integrated lifecycle services – ensuring reliable performance and sustainable productivity acros sustainable productivity acros sustainable productivity across all operations. With more than 10,000 references worldwide,

KOMATSU MINING

KOCH Solutions stands for

proven expertise and long-term reliability.

CORP. GROUP Unit R2 Bridgewater Avenue Rolton Greater Manchester BL5 1EE IJK Contact: Mr Matthew Forrest

Job Title: Key Account Manager T: + 44 7866 197533 E: Matthew.forrest@mining.komatsu
W: https://mining.komatsu/ Komatsu Mining Corp offers a wide range of solutions, to surface and underground mining, quarrying, and many other material handling applications. With the Komatsu focus on quality and safety, the crushing and conveying offering ensures customers maintain uptime, while decreasing costs.

KONECRANES (FRANCE) 2 Boulevard de l'Industrie

Vernouillet 28500

France

T: + 33 825 855 865 E: equipement.france@ konecranes.com

W: www.konecranes.fr w: www.konecranes.ii Konecranes is a world-leading group of Lifting Businesses, serving a broad range of customers including manufacturing and process industries, shipyards, ports and terminals. Konecranes provides productivity enhancing lifting solutions as well as services for lifting equipment of all makes.

KONECRANES FINLAND CORPORATION

PO Box 662 (Koneenkatu 8) Hyvinkää FIN-05801 Finland Contact: Ms Sari Leinonen T: + 358 503646346 E: sari.leinonen@ konecranes.com W: www.konecranes.com

Konecranes is a world-leading group of Lifting Businesses™, serving a broad range of customers, including manufacturing and process industries, shipyards, ports and terminals. Regardless of your lifting needs, Konecranes is committed to providing you with lifting equipment and services that increase the value and effectiveness of your business. See more information on www.konecranes.com

KONECRANES PORT SOLUTIONS -KONECRANES GMBH

KONECRANES

Forststrasse 16

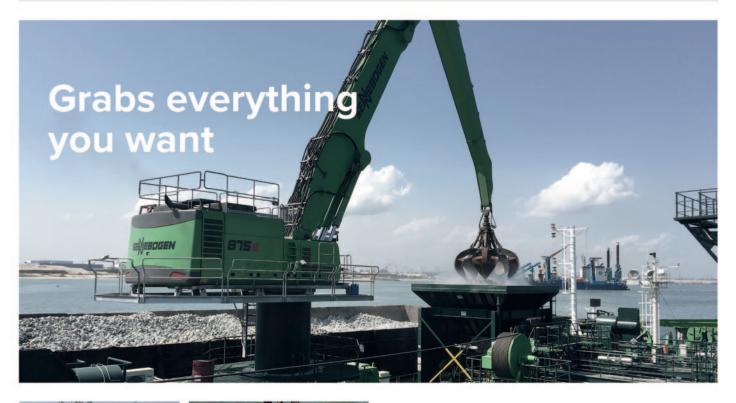
Düsseldorf D-40597 Germany Contact: Dr Jörg Müller Job Title: VP Business Line Mobile Harbor Cranes T: + 49 211 7102 3771 E: mhc.sales@konecranes.com W: www.konecranes.com F: + 49 211 7102 3651 FOR GREATER BULK HANDLING PRODUCTIVITY Reach out and grab it with eco-efficient Konecranes Gottwald Mobile Harbor Crane technology. Depending on site and operating conditions, our four-rope grab cranes, also available as rail-mounted portal and floating cranes, achieve handling capacities of up to 2,200 tph in continuous-duty bulk handling. Our broad range of products with their smart crane features is supported by dedicated planning and consultancy services and backed by a global service

KOTTA CONTAINER COMPANY LTD

Room 77, office 18H, bld 86, letter A, Sredny Pr. Vasilievsky Island Saint Petersburg Contact: Ms Olga Cherednikova Job Title: Executive Director T: +78123311230

E: office@kotta-container.com W: www kotta-container com F: +78123311331















Our products

For all kinds of bulk handling

- Cactus Rope Grabs
- Clamshell Rope Grabs
- Hydraulic Cactus Grabs
- Hydraulic Clamshell Grabs
- Hydraulic Log Grabs
- Hydraulic Demolition & Sorting Grabs
- Quick Change System
- Multipurpose Spreader

All our grabs are custom made, designed and produced to our customers requirements.

J&B Grabs are highly efficient for large volume and low deadweight handling.

We grab everything you want!

J&B Grabs The Netherlands



DC

KRECH OJARD & ASSOCIATES 227 W 1st St

Suite 500
Duluth
Minnesota
55802
USA
Contact: Mr Kevin Ehrenreich
Job Title: Director Infrastructure
Services
T: +1 218 727 3282
E: Kevin.ehrenreich@
krechojard.com
W: www.krechojard.com

KRÖGER Greifertechnik GmbH & Co. KG

F: +1 218 727 1216

Steinheide 1-9
Sonsbeck
D-47665
Germany
Contact: Mr Daniel Boos
Job Title: Senior Engineer
Gripper Technology
T: + 49 2838 37 0
E: daniel boos@metzen.org
daniel.boos@metzen.org
daniel.boos@metzen.org
W: www.kroeger-greifertechnik.de
F: + 49 2838 37 39
Manufacturer of grabs of all
types since the year 1962.
Main products - two and four
rope grabs, hydraulic grabs,
electro hydraulic grabs from
0.5-25m3.

KUMERA CORPORATION

Kumerankatu 2 Riihimäki FI-11100 Fiinland Contact: Mr Hannu Mäki Job Title: Chief Engineer T: + 35 820 755 4200 E: hannu.maki@kumera.com W: www.kumera.com

Kumera Getriebe GmbH

Bonner Strasse 38

Troisdorf 53842 Germany Contact: Dr Heinz-Peter Ehren Job Title: Managing Director T: + 49 2241 988 0 E: kumera-getriebe@kumera.com W: www.kumera-getriebe.de F: + 49 2241 988 200

Kumera Getriebe GmbH

Bonner Strasse 38 Troisdorf D-53842 Germany Contact: Mr Mario Grelha Job Title: Head of Sales T: + 49 2241 988 0 E: mario.grelha@kumera.com W: https://kumera.com/factory/kumera-getriebe-gmbh/

LA STEPHANOISE Zone Molina La Chazotte

76 D rue de la Talaudière Saint Etienne 42000 France Contact: Mr Thomas Giarrana Job Title: New Equipment T: + 33 4 77 32 67 20

Job Title: New Equipment
T: + 33 4 77 32 67 20
E: t.giarrana@stephanoise.com
W: https://la-stephanoise.com/
F: + 33 4 77 89 30 27

LAIDIG SYSTEMS INC

14535 Dragoon Trail
Mishawaka
Indiana
IN 46544
USA
Contact: Mr Mike Schuster
Job Title: Vice President - Sales
T: + 1 574 256 0204
E: sales@laidig.com
W: www.laidig.com
The coal industry presents
many challenges for the
storage and reclaim of hard to

handle materials. Laidig designs and manufactures fully automated reclaim systems to effectively handle the rugged and abrasive materials associated with these types of heavy-duty applications.

LAING O'ROURKE Level 21, 100 Mount Street

North Sydney 2060 Australia Contact: Ms Victoria Kougias Job Title: Marketing I Communications T: + 61 9903 0777 E: media@laingorourke.com.au
W: www.laingorourke.com.au One of the world's most dynamic and innovative privately owned development construction and specialist companies. Acquired Barclay Mowlem in 2006, thereby providing additional scale resources and capability. Offers a Total Solution Partner -bringing finance, development, design construction and maintenance solutions to clients throughout Australia and the Asia Pacific region.

LARSEN & TOUBRO LIMITED

2nd Floor, TC 1 Building
Mount Poonamallee Road
Manapakkam
Chennai
600 089
India
T: + 91 44 2252 6000
E: info@Intecc.com
W: www.larsentoubro.com
F: + 91 44 2249 3317

LASSING DIBBEN CONSULTING ENGINEERS LTD

PO Box 472

Trenton

Ontario
K8V 5R6
Canada
Contact: Mr David J. Jesse
Job Title: Director - Projects &
Business Development
T: +1 613 398 0007
E: info@lassingdibben.com
W: www.lassingdibben.com
F: +1 613 394 4173
Award winning consulting
engineers, specialising in bulk
material handling. Extensive
experience around the world
means the company can
handle all aspects of system
design. Projects include
shiploading and unloading
equipment a myriad of
materials, stackers, conveyor
systems and storage facilities.

LAWRENCE INDUSTRIES,

NC.

108 Industrial Drive
Suite A & B
Saint Marys
Georgia
31558
USA
Contact: Mrs Alissa Gazze
Job Title: Sales Engineer
T: + 1 260 432 9693

T: +1 260 432 9693
E: sales@
lawrenceindustriesnow.com
W: www.lawrenceindustriesnow.com
Lawrence Industries, Inc. is a
fabricator and distributor of
TIVAR 88 polymer liners.
TIVAR 88 is a low coefficient of
friction liner that is used to
eliminate sticking, pluggage,
ratholing material build-up,
TIVAR 88 has excellent wear

LD PORTS & LOGISTICS

LDPL Ltd Pte 133 Cecil Street #06-01 Keck Seng Tower Singapore 069535
Singapore
Contact: Mr Mathieu Muzeau
Job Title: Managing Director
T: + 33 6 73 99 85 06
E: Mathieu.muzeau@ldpl.com
W: www.ldpl.com
LD Ports & Logistics has more
than 160 years of experience
performing maritime commodity
logistics for companies and
commodity users worldwide.
LDPL offers a full range of
reliable and efficient bulk
materials logistics solutions in
partnership with our clients.

LDPL MIDDLE EAST SHIPPING LLC

IBN Battuta Gate Office Dubai UAE Contact: Mr Mathieu Muzeau Job Title: Managing Director T: + 33 6 73 99 85 06 E: Mathieu.muzeau@dpl.com

LEITNER S.P.A (AGUDIO) RUT 00123790214 Via Brennero 34

W: www.ldpl.com

Via Brennero 34
Vipiteno
Sterzing BZ IT
39049
Italy
Contact: Mr Stefano Cattaneo
Job Title: Sales Manager
T: + 39 011 997 33 55
E: Info@agudio.com
W: www.agudio.com
MGUDIO, with more than 150
years of creativity, innovation
and reliability, is the brand
dedicated to the engineering
and construction of nonstandard rope-haul systems for
material transportation such as
FlyingBelts (conveyor belt
suspended on ropes),
Ropeways, Cable Cranes and
Special Installations. It is part
of the High Technology
Industries (HTI) group of
companies, which unites the
companies Leitner and Poma.

LEON OVERSEAS PTE. LTD

LIU
51 Science Park Road
#04-25 The Aries
Singapore Science Park II
Singapore
117586
Singapore
Contact: Ms Nivedita Ghosh
Job Title: Global Business
Development Head
E: nivedita.ghosh@
leonoverseas.com/
W: www.leonoverseas.com/

LIEBHERR-Hydraulikbagger GmbH

Liebherrstraße 12

Kirchdorf/Iller 88457 Germany Contact: Mr Andreas Scheuerl Job Title: Head of Key Acc Management-Material Handling Tech. E: iAndreas.scheuerl@liebherr.com

E: iAndreas.scheuerl@liebher W: www.liebherr.com A member of the Liebherr Group and manufacturer of hydraulic material handlers.

LIEBHERR-MCCTEC ROSTOCK GMBH

Liebherrstr. 1
Rostock
18147
Germany
Contact: Mr Leopold Berthold
Job Title: Sales Director
T: + 43 50809 41725
E: maritime.cranes@liebherr.com
W: www.liebherr.com
F: + 43 50809 41447
With 7 models available (42 - 208 tonnes capacity), Liebherr

offers a wide range of cranes for dedicated coal handling. Due to optimized opening/closing and hoisting speeds, simultaneous functions, increased filling degrees, electronically controlled winch synchronisation etc., outstanding handling figures are being achieved.

LION BULK HANDLING B.V.



Global Headquarters
Cypresbaan 14
Capelle aan den ljssel
Zuid-Holland
2908 LT
The Netherlands
Contact: Mr Thijs Luijsterburg
Job Title: Commercial Manager
T: + 31 180 440 720
E: info@lionbulkhandling.com
W: www.lionbulkhandling.com
We design, manufacture and
commission bulk handling
systems for the marine, offshore and onshore
industries. If you are building a
new ship or a drilling rig,
converting an existing ship,
equipping an offshore vessel,
or simply need spare parts or a
feasibility study, Lion Bulk
Handling is your partner for
Bulk Material Solutions.

LISTENOW GMBH & Co.



Dieselstrasse 21 Rutesheim 71277 Germany Contact: Mr Carsten Lohr T: + 49 7152 50900 E: clohr@listenow.com W: www.listenow.com F: + 49 7152 509050 Other equipment: loading equipment; filters.

LOIBL FÖRDERANLAGEN GMBH Arberstr. 40

Straubing 94315

Germany Contact: Mr Arnd Benninghoff Job Title: Managing Director CSO T: + 49 9421 9256 0 E: info@loibl-group.com W: www.loibl-group.com F: + 49 9421 9256 25 Loibl is a leading global supplier and manufacturer of customized conveying solutions for bulk materials, from individual components to complex systems. Decades of experience and comprehensive knowledge about the physical requirements of all types of bulk materials make Loibl an essential partner in the development of customized solutions for a wide range of industries and applications.

LORBRAND

No 6 Hennopsrivier St. Sunderland Ridge Centurion 0157 South Africa Contact: Mr Martin Granig Job Title: Sales & Marketing T: + 27 12 666 6000 E: info@lorbrand.com W: www.lorbrand.com/F: + 27 16 666 9187

LSL Consulting Pty

LTD

Meadowbrook Lane
Epsom Downs
Sandton
Johannesburg
Gauteng
2021
South Africa
Contact: Mr Brian Cotter
Job Title: Consulting Engineer
T: + 27 845054495
E: info@lsitek.co.za
W: https://lsitek.co.za/

Lybover

Oude Kassei 16 Waregem B-8791 Belgium Contact: Ms Katrien Verfaillie Job Title: Marketing & Communication Manager T: + 32 56 67 10 10 E: katrien.verfaillie@lybover.be W: www.lybover.be/ BULK.ID is strong in turn-key solutions for the handling and recycling industries. We collaborate with leading German manufacturers who deliver innovative products. A stable German partner and our own engineering, construction, assembly and service departments leads to an ideal collaboration for the customer. Other Equipment - Wind Sifters

M.A.T. MALMEDIE Antriebstechnik Gmbh

Dycker Feld 28 Solingen 42653 Germany Contact: Mr Christian Tiggs Job Title: Sales Manager T: + 49 212 25811 ext 53 E: sales@malmedie.com W: www.malmedie.com

MACAWBER

ENGINEERING, INC
1829 Clydesdale Street
Maryville
TN
37801-3796
USA
Contact: Mr Dean Wicks
Job Title: VP Business
Development
T: + 1 800 433 2213
E: webinquiny@macawber.com
W: www.macawber.com
F: + 1 865 984 5286

MacGregor Sweden AB

Bijörnavägen 41a
Örnsköldsvik
SE-891 41
Sweden
Contact: Mr Mikael Hägglund
Job Title: Manager, Transloading
and Self unloading systems
T: + 46 660 294 096
E: Mikael Hagglund@
macgregor.com
W: www.macgregor-group.com
F: + 46 660 12455
MacGregor is a market leader
in sustainable Cargo handling
solutions.

Mack Manufacturing Inc

WANUFACTURING INU
PO Box 1559
7205 Bellingrath Road
Theodore
Alabama
36582
USA
Contact: Mr Matthew A. Davidson
Job Title: Vice President Marketing
T: + 1 251 653 9999
E: sales@MackMfg.com
W: www.mackmfg.com
W: www.mackmfg.com
F: + 1 251 653 1365
Manufactures all types of grabs
and grapples, both wire rope
and hydraulically operated, as
well as radio-controlled and
diesel operated systems.

Magaldi Power S.p.A.

Via Imo, 219
Salerno
84135
Italy
Contact: Ms Patrizia Gavarretti
Job Title: Marketing Dept
E: patrizia.gavarretti@magaldi.com
W: www.magaldi.com/

MAJOR 225 North Montcalm Blvd Candiac

Quebec

JSR 3L6
Canada
Cantact: Mr Ian Edwards
Job Title: Vice President of Sales
T: +1 450 659 7681
E: iedwards@majorflexmat.com
W: www.majorflexmat.com
W: www.majorflexmat.com
F: +1 450 659 570
MAJOR is an innovative global manufacturer of wire screens for the aggregate, mining and recycling industries .FLEX-MAT®, the company's renowned line of distinctive lime-green high vibration screens made with OPTIMUMWIRE® "The longest-lasting wire" sets the standard in lowering cost of production per ton by dramatically increasing throughput and wear life while eliminating blinding and pegging. MAJOR masters wire quality, screen manufacturing and the screening process, and provides on-site screening performance assessment and training seminars on screen maintenance and screening performance and producers increase their screening performance and profitability. MAJOR is a Haver & Boecker company.

MANTSINEN GROUP LTD OY Välikankaantie 3

Ylämylly FIN-80400

Finland
Contact: Ms Mari Riissanen
Job Title: Communications &
Marketing Manager
T: + 358 20 755 1230
E: mari.riissanen@mantsinen.com
W: www.mantsinen.com
Mantsinen Group manufactures
highly efficient and precise
hydraulic harbour cranes for
bulk and general cargo
operations.
Mantsinen cranes can be
tailored to best suit each
application. Mantsinen
HybriLift® energy saving
system and wide range of
attachments makes the cranes
economical, efficient and
universal tools for stevedoring
companies and harbour
operators.
Other equipment/expertise:
Wood handling,

Marco - A Terex Brand

Subcontracting

561 State Drive

Mt. Vernon

65712
USA
Contact: Mr Trevor Park
Job Title: General Manager
T: + 1 636 680 2031
E: marco@terex.com
W: www.terex.com/marco
F: + 1 636 680 2037
Marco provides the complete
design, manufacture and
installation of bulk material
handling systems across
multiple industries including
mineral processing,
transportation and other
specialized areas. For over 80
years, Marco has been
providing reliable and durable
solutions for its customers.

Marine Inspection

621 North Carrollton Avenue New Orleans LA 70119 USA Contact: Mr Robert Drew Job Title: Managing Partner T: + 1 504 866 0014 E: rdrew@marineinspection.com

MARTIN ENGINEERING

W: www.marineinspection.com/ F: + 1 504 866 0016



1 Martin Place Neponset Illinois IL 61345 USA Contact: Mrs Chelsea Blake Job Title: Marketing T: + 1 309 852 2384 E: chelseab@martin-eng.com W: www.martin-eng.com F: + 1 800 814 1533 Martin Engineering makes bulk material handling cleaner, safer and more productive, improving belt conveyors by suppressing dust, reducing spillage, removing carryback and tracking belts. Specialists in belt cleaners, air cannons, vibration, transfer point technologies, dust management, railcar unloading, silo cleaning.

Martin Engineering **GMBH**

In der Rehbach 14 Walluf Hessen D-65396 Germany Contact: Mr Oliver Kämpfer Job Title: Sales Manager DACH T: + 49 6123 9782 - 19 E: info@martin-eng.de W: www.martin-eng.de F: + 49 6123 75533 Since 1944 Martin Engineering has been a worldwide leader in making Bulk Material Handling cleaner, safer and more productive. Other equipment: Field Services, Safety Products, Flow Aids, Screen Vibrators

MASCHINEN UND Mühlenbau Erhard Muhr GmbH

Grafenstraße 27 Brannenburg D-83098 Germany Contact: Mr Roland Muhr Job Title: Managing Director T: + 49 8034 90720 roland.muhr@muhr.com W: www.muhr.com F: + 49 8034 9072 526 MUHR offers a wide range of high quality Bulk Loading Systems (for open and closed, dust-free loading), Loading Spout Positioners, Pneumatical Docking Devices and even Railcar Dumping Systems for economical unloading of trains with open railcars.

Maschinen-und Industriebau Feld

GMBH Winkelfeld 3-7 Oer-Erkenschwick

D-45739 Germany Contact: Mr Andreas Renner Job Title: Executive Director T: + 49 2368 98 89 0

E: info@maschinenbau-feld.de E: Info@maschinenbau-feld.de W: www.maschinenbau-feld.de F: + 49 2368 98 8927 High standards, qualified and creative employees, the right technology to meet customers' demands High-Tech for preservation of

MATRIX PDM Engineering

5100 E Skelly Drive Suite 100

Tulsa

our resources.

74135 USA Contact: Ms Lesley Windler Job Title: Marketing Manager T: + 1 918 838 8822 E: lwindler@ matrixservicecompany.com
W: www.matrixpdm.com
Matrix PDM Engineering, a
subsidiary of Matrix Service
Company (Nasdaq: MTRX) provides multi-disciplinary engineering, procurement and construction management services to the energy, power and industrial markets in North America and around the world.

Maze MH Ltd

80 High Street Graveley St Neots Cambridgeshire PE19 6PL UK Contact: Mr Guy Martin Job Title: Director T: + 44 1480 264266 E: guy@Maze-MH.co.uk W: www.maze-MH.co.uk www.port-consultants.com www.port-consultants.com Independent Bulk materials handling Engineering consultancy with wide experience in Ports & Terminals internationally. Impartial advice so you get what you want not what your suppliers thi Group.

McCreath LABORATORIES 1649 Bobali Drive

Harrisburg 17104 Contact: Mr Robert Kozicki Job Title: President T: + 1 717 364 1440 service@mccreathlabs.com W: www mccreathlabs com/ F: + 1 717 364 1640

MCI GROUP Petersgasse 128a

Grax 8010 Austria Contact: Mr Alfred Topf Job Title: CEO T: + 43 3142908080 E: alfred.topf@mci-austria.com W: www.mci-austria.com/

MDG HANDLING SOLUTIONS S.R.L.



Trento 38121 Italy Contact: Mr Davide Gambarotta Job Title: CEO T: + 39 0461 1637111 E: info@mdghandlings.com E: into@mdgnandlings.com
W: www.mdghandlings.com/
MDG Handling Solutions was
founded in 2017 and operates
in the field of customized
design and production of EP /
EPC / EPCM 'turnkey' plants.
MDG identifies the best
technological solutions for
customers specific needs by

customers specific needs, by proposing itself as 'one source

solution', and for production systems, development and assistance. MDG Handling Solutions offers engineering, high-quality manufacturing and mechanical handling services.

MegaDome® **BUILDINGS BY HARNOIS**

1044 Prinicipale St-Thomas Saint-Thomas Quebec J0K 3L0 Canada Contact: Mr Vincent Douville Job Title: Executive Director -Markeing & Customer Experience T: + 1 888 427 6647 E: v.douville@harnois.com W: www.megadomebuildings.com Megadome designs and manufactures durable, versatile fabric-covered buildings for storage, agriculture, and industrial applications. Known for reliability and strength, Megadome structures deliver cost-effective, long-lasting solutions that adapt to diverse needs and environments worldwide.

MEGAROLLER AFRICA

38 Theuns Mulder Street Industrial Area Brits North West 0250 South Africa Contact: Mr Retief Kruger Job Title: Operations Manager T: + 27 12 111 7241 E: info@megaroller.africa
W: www.megarollerafrica.com With a history of innovation, research and development spanning over 30 years, Megaroller is entrenched as innovative leaders in manufacturing of long lasting

and environmentally sound conveyor idlers for the mining and bulk material handling industries. industries.

Our ranges of products which incorporate patented technologies have been proven time and time again to outperform competitive products in durability, quality and total cost of ownership It is a feather in our cap when a mining house specifies

Megaroller as a product description instead of a brand. "Engineered to last longer than the market standard"

MENTOR DYNAMICS

170 Penrod Court Glen Burnie Maryland 21061 USA Contact: Mr Don Watts Job Title: President T: + 1 410 760 6349 E: info@mentordynamics.com W: www.mentordynamics.com F: + 1 410 760 8284 F: +1 410 760 8284 Leading supplier of cargo hold liners for self unloaders, barges, and other bulk material storage & handling equipment. Products include Dyna-Flo high performance plastic liners and ceramic wear liners.

MERIT TECHNOLOGIES INDIA PVT LTD

E1, 1stFloor TVK Industrial Estate Guindy Chennai Tamil Nadu 600032 Contact: Mr Rajesh Kumar Job Title: Marketing T: + 91 044 22501864 E: rajesh@merittech.co.in W: www.meritbulkhandling.com/ F: + 91 044 22501865
MERIT Group, established in 1997, is India's market leader for batch load outs, reption solding autotope in reption page. loading systems, in-motion rail cars and truck loading systems.

Merrick Industries 10 Arthur Drive

Lynn Haven

32444 USA Contact: Mr Erik Nolte Job Title: General Manager T: + 1 850 265 3611 E: info@merrick-inc.com W: www.merrick-inc.com F: + 1 850 265 9768 Merrick Industries is a leader in Merrick Industries is a leader in continuous weighing and feeding solutions, since 1908. Merrick designs, manufactures, and supports all of our products at our Lynn Haven, Florida plant for the Coal, Cement, Mining, Chemicals, Lime, Cursum, Steel and Accregates. Gypsum, Steel and Aggregates industries.

METALKARMA **ENGINEERING**

Bangalore

TECHNOLOGIES PVT LTD 14, Attibele Industrial Area

Karnataka 562107 Contact: Mr Ritesh Gupta Job Title: Director T: + 91 9632219455 E: ritesh@metalkarma.in
W: www.metalkarma.in

METSO Rauhalanpuisto 9

Espoo 02230 Finland Contact: Ms Anne Rantanen Job Title: Business Communications, Minerals and

Metals T: + 358 40 7159646 E: anne.rantanen@mogroup.com
W: www.metso.com

METSO MINERALS INDUSTRIES, INC. 2715 Pleasant Valley Road York

Pennsylvania

PA 17402 LISA Contact: Mr Dave Cantalupo Job Title: Director, TSS/FS/REP, USA Mining Services T: + 1 412 352 5811 E: dave.cantalupo@metso.com W: www.metso.com Products include stacker/reclaimers; railcar dumpers/wagon tipplers; grab, continuous and balance unloaders; barge/ship loaders; barge and train positioning systems; mechanical ash handling systems; coal preparation equipment; apron feeders and overland conveyor systems.

METSO USA. INC. Bulk Materials Handling 2715 Pleasant Valley Road

York

PA

17402 USA Contact: Mr Sushanta Dutta Job Title: Vice President, Bulk Material Handling T: + 1 717 843 8671 E: sushanta.dutta@metso.com W: www metso com Products include stacker/reclaimers; railcal dumpers/wagon tipplers; grab, continuous and balance unloaders; barge/ship loaders; barge and train positioning systems; mechanical ash handling systems; coal

preparation equipment; apron feeders and overland conveyor systems.

MEYLAND NV

Vaartkant 3 Adeaem 9991 Belgium Contact: Mr Tim van Parys T: + 32 9 376 76 00

E: tim.vanparys@meyland.be W: https://roel-co.be/Meylandalobal/

MGB & COMPANY



Caldwell Texas 77836 USA Contact: Mr Michael Bandas Job Title: President-Manager T: + 1 512 734 2996 E: mike_bandas@icloud.com W: www.mgbandcompany.com F: + 1 512 556 0343 MGB & Company buys, sells and brokers equipment for and brokers equipment for processing, conveying, storing and loading materials in the mining, aggregates, frac sand, dry bulk and marine markets. We are driven to build value into every deal for both buyers and sellers.

MHM Mobile Heavy **M**ACHINERY

Zemaites str. 21 Vilnius LT-03118 Lithuania Contact: Mr Raimondas Jasuitis Job Title: Sales Manager T: + 370 610 38717 E: raimondas.iasuitis@mhm.lt W: www.mhm.lt/

MIDECO JIA PTY LTD

Factory 2/63-71 Bayfield Rd East Bayswater North Victoria 3153 Australia Contact: Mr Melton White

Job Title: Director T: + 61 3 8873 0200 E: sales@midecohse.com W: https://midecohse.com/ Mideco has delivered dust control solutions worldwide since 1950. From mines and quarries to commercial sites we design dust collection, suppression, and personnel de-dusting systems, including the Bat Booth® and Bat Vent®— protecting workers, workplaces and the environment from fugitive dust.

Midwest Industrial SUPPLY INC. 1101 3rd St. SE

Canton Ohio OH 44707 USA Contact: Ms Morgan Murphy Job Title: Marketing Manager T: + 1 330 456 3121 E: Morgan Murphy@ midwestind.com
W: www.midwestind.com F: + 1 330 456 3247 Provide a complete line of dust control, erosion control, soil stabilization lubricants, anti-icing and de-icing products that are developed by the company staff of chemists and backed by a complete range of services, equipment, expertise and technical support since 1975.

MIDWEST INTERNATIONAL STANDARD PRODUCTS. INC.

105 Stover Road/ PO Box 438 Charlevoix 49720-0438 USA Contact: Mr Walter Pair Job Title: President and CEO T: + 1 231 547 4000 E: sales@midwestinternational.com W: www.midwestmagic.com F: + 1 231 547 9453 Founded in 1967, the company

focuses on dust free loading and stockpiling of dry bulk with products including The Paragon Series and the Heavy Paragon Series and the neavy Duty Mining Series. The Chokefeeder® dust free shiploading systems are used by governments and industries in over 50 countries.

MINERAL PROCESSING SOLUTIONS

40 Miguel Road Bibra Lake Western Australia 6163 Australia Contact: Mr Sean Burke Job Title: Area Manager

T: + 61 8 9359 0333 E: sean.burke@mpsaus.com.au E: sean.burke@mpsaus.com.au W: www.mpsaus.com.au F: + 61 8 9359 0444
The OPS Group is a privately owned, 100% Australian owned and operated group of companies, established in 1989 with a core focus on providing professional equipment supply and after-market service to the prining querying screening. mining, quarrying, screening, crushing, blockmaking, construction and earthmoving industries.

MIST-AIR DUST Suppression Limited

Hillcrest Penybont Shropshire SY10 9JF UK

Contact: Mr Andrew Carter Job Title: Managing Director T: + 44 1691 828487 E: info@mist-air.co.uk W: www.mist-air.co.uk/

MITSUBISHI CHEMICAL ADVANCED MATERIALS INC.

201 Industrial Drive Delmont PA 15626 USA Contact: Mr Edward Zibert

Job Title: Sales Engineer T: + 1 724 468 7031 E: edward.zibert@mcgc.com W: www.mcam.com/na-en/ F: + 1 724 468 4044 Polymer liners for selfunloading ships, hoppers, chutes, bins, railcars, silos. SystemTIVAR Engineering designs, fabricates and installs lining systems worldwide to promote bulk material flow, featuring industry-leading low coefficient of friction and abrasion-resistant TIVAR® family of products.

MITSUI MIIKE Machinery Co., Ltd. Nihonbashi-Muromachi 2-1-1

Chuo-ku Tokyo 103-0022 Japan Contact: Mr Hachiro Naito Job Title: General Manager, Material Handling Machinery

T: + 81 3 3270 2001 E: soumu@mitsuimiike.co.jp W: www.mitsuimiike.co.jp F: + 81 3 3245 0203

Mobile Conveying Services Pty Ltd

631 Uhlmann Rd Burpengary QLD 4505 Australia Contact: Mr Steve Valpreda Job Title: Business Development Manager T: + 61 1300 665 409 E: steve.v@mobileconvevors.com.au

W: www.mobileconveyors.com.au/

DCi

137

DC

MOFFATT & NICHOL

2nd Floor 93 Southwark Street London SE1 0HX

Contact: Ms Karen Levy Job Title: Business Development Management T: + 44 1252 516 398

E: klevy@moffattnichol.com
W: www.moffattnichol.com

MOLE MASTER SERVICES $\mathbf{Corporation}^{\mathsf{TM}}$

27815 State Route 7 Marietta USA

Contact: Mr Michael Bailey Job Title: General Manager T: + 1 740 374 6726 E: mbailey@molemaster.com
W: www.molemaster.com

F: + 1 740 374 5908 In addition: Silo cleaning services and equipment. Silo, bin, bunker, transport and process vessel cleaning, clearing and unclogging services and equipment

Monolithic CONSTRUCTORS. INC.

177 Dome Park Place 76651 Contact: Mr Michael South Job Title: President T: + 1 972 483 7423 E: sales@monolithic.com W: www.monolithic.com

Motridal SpA

Via Pietro Bubba 17 Piacenza Piacenza 29122 Italy Contact: Mr Giampietro Calvi Job Title: Sales Director T: + 39 0523 59 66 11 E: motridal@motridal.com W: www.motridal.com F: + 39 0523 59 01 28 Specialist, with over 65 years experience, in engineering and supply of complete bulk material handling systems in all industrial sectors.
In house products line includes screw, chain, belt and pipe conveyors, bucket elevators, stackers and reclaimers. Worldwide operation.

MRS Greifer GmbH

Talweg 15-17 Helmstadt-Bargen D-74921 Germany
Contact: Mr Peter Koerting T: + 49 7263 9129 20 E: export@mrs-greifer.de W: www.mrs-greifer.de F: + 49 7263 9129 12 F: + 49 7203 9129 12 Approaching more than 40 years experience in producing all types of grabs. The company's product range includes mechanical grabs, radio-controlled, hydraulic and electro-hydraulic grabs. MRS has an excellent after-sales and repair service, provides spare parts from stock and supplies parts for a long period after delivery.

MTECK

Delta-Industrieweg 15 Stellendam LX 3251 The Netherlands Contact: Mr Martijn van Eck Job Title: Owner T: + 31 187 64 53 74 E: info@mteck.nl W: https://mteck.nl/

N.M. HEILIG B.V.

Newtonstraat 17 Heerhugowaard 1704 SŘ The Netherlands Contact: Ms Silvia Veldboer Job Title: Marketing & Communication T: + 31 88 1704 200

E: marketing@heilig-group.com
W: www.heiligbv.com
N.M. Heilig B.V. (part of Heilig
Group) is a European based
company specialized in company specialized in manufacturing bulk handling-and recycling systems. We provide: - Custom design & engineering

High quality production facilities
 Experienced assembly &

service staff
We are a family business, with
more than 43 years of market
experience and more than 250

employees.
Other equipment: Mobile (tracked) stackers, conveyors

NANJING PORT-Machinery & Heavy-MANUFACTURE CO., LTD (NPHMC) No. 8 Tianzihao Road

Longtan Street Nanjing Qixia District China Contact: Mr Xing Wangyin Job Title: Sales Manager T: +86 25 58582591/2592 E: njpmpsales@nphmc.com W: njpmp.com

NANTONG RAINBOW **HEAVY MACHINERIES** Co..LTD.

GENMA (3)

NO.88,Rongsheng

Road(chenqiao), Nantong Marine Equipment Industrial Zone Nantong Jiangsu China Contact: Mr Julien Zhu Job Title: Brand Promotion T: +86 513 80108718 E: genma@rainbowcoglobal.com W: www.genmasolution.com
The proprietary brand GENMA
of RHM is established to

or Krim is established to provide heavy machineries equipment's applied in Industrial Cranes, Metallurgy Cranes, Port Cranes, Offshore Cranes & Bulk Material Handling Equipment's.
GENMA is specialized in
material handling, which mainly
includes 3 parts:
1.Intelligent Port Material Handling Equipment 2.Offshore Engineering Equipment 3.Factory and Mines Material Handling Equipment Besides the standard equipment, GENMA can also provide the tailor-made equipment and solution with the customers. Till now, we have exported the products over 20 exported the products over 20 countries. Our specialty, your strength- GENMA's methodology, to help multi-industry clients benefiting from our product and service.

NANTONG UP **M**ACHINERY

ENGINEERING CO., LTD No.6 Shuanggong Road Qutang Town Hai'an County Nantong City Jiangsu Province China

Contact: Xu Fuping Job Title: Marketing Manager T: + 86 182 5289 699 E: jsntup@163.com

W: www.upmachinery.com.cn **F:** +86 513 8879 0811

NATURAL GRABS

Toros Caddesi Fethi bey sokak no Natural Business Center Maltepe Istanbul Turkey Contact: Cpt Hayrettin Yakut T: + 90 216 380 60 03 E: sales@naturalgrab.com W: www.naturalgrab.com/

NAVCO (NATIONAL AIR VIBRATOR CO) PO Box 40563

F: + 90 216 380 65 59

Houston TX 77240-0563 USA Contact: Mr.Justin Gill Job Title: B2B Marketing T: + 1 832 467 3636

E: ben@navco.us W: www.navco.us **F**: + 1 832 467 3800

Navonus NV

Voorhavenlaan 14B Ghent Belaium Contact: Mr Josie Peiffer Job Title: Head of Supervision T: + 32 9 345 89 77 E: supervision@navonus.be
W: https://navonus.be/

NEGRINI SRL

NEGRINI

via E. Torricelli n.4 Castelfranco Emilia Modena 41013 Italy Contact: Mr Massimo Negrini Job Title: Managing Director T: + 39 059 923110 E: info@negrini.org **W:** www.negrini.org **F:** + 39 059 920378 Engineers and producers of state-of-the-art grabs, clamshells and buckets.

NEMAG BV

Deltastraat 15 Zierikzee 4301 RC The Netherlands
Contact: Mr Rudy Bovée Job Title: Account Manager T: + 31 6 51 426 882 E: rudy.bovee@nemag.com
W: www.nemag.com
Specialized in the sales, engineering and construction of rope operated grabs for large scale dry bulk handling. The company has a vast record of worldwide deliveries and is recognized as one of the leading grab manufacturers worldwide. Other equipment: NEMAG Quick Release Links and Rope Pear Sockets.

NEUERO Industrietechnik

GMBH Neuerostrasse 1 Melle D-49324 Germany Contact: Eng. Andreas Haeuser Job Title: Sales & Project Manager T: + 49 5422 9503 26 E: a.haeuser@neuero.de **W**: www.neuero.com **F**: + 49 5422 9503 50 NEUERO designs and manufactures a wide range of pneumatic and mechanical ship/barge unloaders. ship/barge loaders and pneumatic conveyors, with high

capacities and gentle handling

of materials.

NILOS GMBH & Co

Reisholzstrasse 15

Hilden 40709 Germany
Contact: Ms Simone Ickert Job Title: Marketing Manager T: + 49 21 039 51141 E: lea.delius@nilos.de W: www.nilos.com
F: + 49 21 039 51209
Conveyor belt equipment ranges from simple small tools to vulcanising presses up to the planning, construction and commissioning of complete conveyor belt repair workshops. Range of products include hot and cold repair material, along with basic overhauling, reconditioning, maintenance and assemblies.

NK TEHNOLOGIJA SIA 120Z Dzelzavas Street

Riga LV-1021 Latvia Contact: Mr Aleksejs Busils Job Title: Sales Manager T: + 371 67271092 E: nkteh@nkteh.com W: www.nkteh.com F: + 371 67271038 Custom engineering and integrated solutions for dry bulk handling: shiploaders manufacturing, dry bulk terminals efficiency analysis & development. Assembling, disassembling, service & maintenance of crane equipment.

NKM NOELL SPECIAL **CRANES**

Kruisweg 643 Hoofddorp 2132 NC The Netherlands Contact: Mr Jaap Dijkman Job Title: BL Director BU LARGE SYSTEMS & CRANES T: + 31 20 655 0042 E: jaap.dijkman@nkmnoell.com W: www.nkmnoell.com/ NKM Noell Special Cranes is a global leader in delivering complex and robust lifting and handling equipment to sectors where safety and reliability are major concerns.

NMH s.r.o

Priemyselná 4608/10 Sered 926 01 Slovakia Contact: Ms Veronika Kreml **Job Title:** Marketing Manager **T:** + 42 131 230 4441 E: v.kreml@nmh-sro.com W: www.nmh-sro.com

NOELL CRANE Systems (China) Ltd

China Merchants Zhangzhou Development Zone China T: + 86 596 6851 888

E: xia.info@terexnoell.com W: www.noellchina.com F: + 86 596 6851 889

NORDA STELO

1015, av. Wilfrid-Pelletier, Office 200 Quebec QC G1W 0C4 Canada Contact: Ms Christine Christine Christine Sauvageau Job Title: Director of Marketing T: + 1 418 654 9600 E: christine.sauvageau@ norda com W: https://norda.com/

Northern Heavy INDUSTRIES GROUP

Co., LTD.

No.16 Kaifa Road Shenyang Economic & Technological Dvpt Zone Shenyang 110141 China

Contact: Mr John Lee Job Title: Marketing Director E: project@nhisales.com W: https://nhisales.com/

NSL Engineering Pte

41 Tillock Street Haberfield

Sydney NSW 2045 Australia Contact: Mr Cameron Hay
Job Title: Sales & Marketing Manager T: + 61 297 972054 E: cameron@ramspreaders.com W: www.ramspreaders.com/ F: + 65 626 11300

o.z. HENNLICH **ENGINEERING** HENNLICH s.r.o.

Ceskolipská 9 Litoměřice 412 01 Czech Republic Contact: Mr Jan Petruzalek
Job Title: Head of the Sales Department Sales Director T: + 420 416 711 357 E: engineering@hennlich.cz W: www.hennlich.cz/engineering F: + 420 416 711 999

OPS Crushing &

Screening 40 Miguel Road Bibra Lake Western Australia 6163 Australia Contact: Mr Gerry McGuigan Job Title: Sales Manager Sales Manager T: +61405819035 E: gerry@opsaust.com.au W: https://opsaust.com.au/

ORTHOS PROJECTS LTD. Fernie Road

Market Harborough Leicestershire LE16 7PH UK Contact: Mr Nick Hall Job Title: Director T: + 44 1858 462806 E: Nick.Hall@orthosprojects.com E: Nick.Hall@orthosprojects.cor W: www.orthosprojects.com F: +44 1858 464403 Since 1977 Orthos Projects have designed, manufactured and installed bulk solids raw materials handling plant to the highest specification. Best qualified to serve the Port, Bulk Handling Quarry. Bulk Handling, Quarry, Foundry, Recycling and related industries, Special purpose machine design, conveyor systems to ISO 9001 (2008).

ORTS GMBH Maschineneabrik

ORTS Grabs

Schwartauer Strasse 99 Sereetz D-23611 Germany Contact: Herr Sigvard Orts T: + 49 451 3988515 E: info@orts-gmbh.de W: www.orts-grabs.de F: + 49 451 392374 Made in Germany: Electro-hydraulic grabs, independent

diesel-hydraulic grabs,

mechanical rope grabs. For bulk, scrap, dredging, salvage.
Repairs (also grabs from other repairs (also grabs from other makers) and spare parts. Crane-equipment for electro-hydraulic grabs. Lifting beams (max. load 150t) and flat- frames.

Overland Conveyor COMPANY

6400 S. Fiddler's Green Circle Suite 550 Greenwood Village 80111 USA Contact: Ms Chelsea Toppin T: +1 303 973 7357 E: info@overlandconveyor.com

P.T. MITRA S.K. Analisa testama

W: www.overlandconveyor.com/

Pulogadung Trade Centre, Block Jl. Raya Bekasi Km 21 Kawasan Industri Jakarta 13930 Indonesia Contact: Ms Mina Hermina

Job Title: Marketing Manager T: + 62 21 4680 1210 E: mina@mitrask.com W: www.mitrask.com/ F: + 62 21 4680 0716

PAGE MACRAE **ENGINEERING** PO Box 4050 Mount Maunganui

Bay of Plenty 3149

New Zealand Job Title: Business Development Manager T: + 64 7 575 5079 I: + 04 / 3/3 50/9
E: enquiries@page-macrae.co.nz
W: www.page-macrae.com
With over 65 years of
engineering experience, Page
Macrae Engineering is regarded as a leading manufacturer of ship cargo handling equipment. The company's bulk handling expertise covers the complete concept, design, build and commission process.
The company has a reputation for delivering high quality equipment that is robust, low maintenance and highly productive, regardless of conditions and loads.

PAKIET

Sheffield

South Yorkshire

82-103 Stegna Rybina 43 Gdansk Poland Contact: Mr Piotr Rzeszutek Job Title: Director T: + 48 55 247 17 70 ext.32 E: e.rybicka@pakiet.com W: https://pakiet.com Parker Hannifin

MANUFACTURING LTD. President Park President Way

S4 7UR Contact: Ms Olga Krasilnikova Job Title: Piping Product Marketing Manager T: + 31 615118582 W: www.parker.com
Parker equipment is important
as poor-quality coal with high
ash content could be rejected, at huge cost. Our products are accurate compared to laboratory analysis enabling real time decision making. Coal Quality Monitoring Systems, Conflow Dust Suppression.

PARKER PLANT LTD

Viaduct Works Leicester Leicestershire LE4 6GH

Contact: Mr Brett Dalby Job Title: Marketing & Sales Director T: + 44 116 266 5999

E: sales@parkerplant.com **W**: www.parkerplant.com **F**: + 44 116 261 0812 Manufactures a complete range of conveyor systems and components.

PEBCO® Inc

225 N 4th Street Paducah Kentucky 42001 USA

Contact: Mr David Finke Job Title: President and COO T: + 1 270 442 1996 E: sales@pebco.com E: sales@peoco.com
W: www.pebco.com
F: + 1 270 442 5214
PEBCO® designs and
engineers a wide variety of
products; slide gates, diverters, air slides, dustless loading spouts, dust suppression systems, telescopic chutes, and more for the dry bulk solids industry. From mining to processing plants or loading

and unloading transport vessels; anywhere the flow of dry bulk solids needs to be controlled

Peinemann Cranes Nieuwe Langeweg 40 Hoogvliet DB 3194 The Netherlands
Contact: Mr Andrew Pauw Job Title: Managing Director T: + 31 10 295 50 00 E: andrew.pauw@peinemann.nl W: www.peinemann.nl F: + 31 10 295 50 49

PEINER SMAG LIFTING TECHNOLOGIES

PEINER SMAG Lifting Technologies Windmühlenbergstraße 20-22

Salzgitter D-38259 Contact: Mr Günther Ribeiro-Vinzenz

Job Title: Sales Director

T: + 49 5341 302 647 E: sales-grabs@peiner-smag.com W: www.peiner-smag.com F: + 49 5341 302 424

Other equipment: slewing units for rotating and positioning loads. Manufacturer and supplier of a

Manufacturer and supplier of a wide range of grabs and other lifting equipment, e.g. motor grabs, single-, two- and four-rope grabs, scissor grabs, hydraulic grabs as well as rotators and special grabs for all kinds of bulk materials in a variety of industries, such as ports, ships, steel mills, waste-to-energy plants and recycling businesses.

PENKERT GMBH

Xantener Str.12 Mülheim an der Ruhr 45479 Germany

Contact: Mrs Marina Brunner Job Title: Marketing Manager E: marina.brunner@penkert-

gmbh.de

W: www.penkert-ambh.de W: www.penkert-gmbn.de Since 1967, the company Penkert GmbH has been one of the leading manufacturers of high-quality occupational safety products. In addition to the manufacture of body protection articles with a focus on EN standard-compliant protective gloves, the company offers

protective sheathing for moving machine parts with a focus on bellows and loading hoses.

PETERSON CONTROL Union

Boompjes 270 Rotterdam 3011 X7 The Netherlands
Contact: Mr Arno Maehlmann T: + 31 10 282 3333 E: bulkoperations@ onepeterson.com

W: www.controlunion.com/ F: + 31 10 282 3282

PFISTER WAAGEN BILANCIAI GMBH

Linker Kreuthweg 9 Affing-Mühlhausen D-86444 Contact: Ms Susanne Geller-Dürr Job Title: Marketing and Sales Manager

T: + 49 82 07 9 58 99 28 E: marketing@pfisterwaagen.de W: www.pfisterwaagen.de F: + 49 82 07 9 58 99 29 Founded in 1894 as a manufacturer of mechanical weighbridges. Suppliers of innovative, high quality, fully electronic weighing systems, incorporated in data networks, capturing and processing weighing data in cost-efficient control systems. Specialized in truck weighbridges, railway scales, weighing software.

PHB WESERHÜTTE.

Parque Científico y Tecnológico de Gijón C/Ada Byron, 220 Gijón Asturias 33203 Snain

Contact: Dr Jose Ramón Prado Job Title: Technical & Commercial Director T: + 34 984 495 640 / + 34 984 49 55 00 E: jrprado@pwh.es

E: Jpriado@pwin.es
W: www.grupotsk.com/
F: + 34 985 134 222
Efficient port systems, handling all types of bulk solids such as coal, iron ore, bauxite, fertilizers, clinker, cement and general cargo, with different solutions for maritime or river

norts ports.
Design of circular or
longitudinal stockyards
combining a wide range of
reclaimers and different types
of stackers.

PHOENIX Conveyor BELT SYSTEMS GMBH

Hannoversche Strasse 100 Hamburg 21079 Germany T: + 49 40 7667 03 E: info@phoenix-cbs.com W: www.phoenixconveyorbelts.com
F: + 49 40 7667 2413
With more than 110 years of experience, the world leader for high performance heavy-duty conveyor belts, serving the worldwide bulk handling industry.

The programme includes textile and steel cord conveyor belts for underground and surface applications.

PLM Cranes B.V.

Sluisweg 21-25 Heijningen 4794 SW The Netherlands Contact: Mr Pieter Pulleman
Job Title: Managing Director T: + 31 167 528 510 E: info@plmcranes.com W: www.plmcranes.com F: + 31 167 524444 We build hydraulic and electric

cranes from 50 to 2000 tm with

a transhipment capacity up to approx. 2000 ton/hour. We are specialized in shipboard cranes, mobile cranes and harbour cranes for dredging, transhipping, hoisting and piledriving.

PNEUMAT SYSTEMS INC

110 Mohr Dr Mankato

MN

56001 USA Contact: Mr Sam Cebula Job Title: Sales and Marketing Manager T: + 1 507 345 4553 E: info@pneumat.com W: http://pneumat.com/ F: + 1 507 345 3639 Pneumat's equipment is designed to keep bulk flowing in your facility...safer, faster and easier. Our unique solutions are used worldwide to solve a wide array of flow problems.

POLYMER INDUSTRIES - Ultrapoly Division

2404 Center Street Tacoma WA 98409-7638 LISA Contact: Mr Bryan Olin T: + 1 253 272 1217 E: bryan.olin@

polymerindustries.com

W: www.polymerindustries.

com F: + 1 253 272 1457 F: + 1 253 272 1457 Tough, self-lubricating Ultra Poly Ultra High Molecular Weight polyethylene provides durable protection for metal surfaces and eliminates noise associated with metal-on-metal contact. And its slick, nonstick properties assure unimpeded flow of materials, even under wet, sticky or freezing

PORT & TERMINAL **SOLUTIONS LLC**

Pittsburgh Pennsylvania Contact: Mr Brian Steffan Job Title: Owner T: + 1 412 944 9554 E: bsteffan@ portandterminalsolutions.com
W: www.portandterminalsolutions com

PORT-TRADE AS

Karetmagervei 9 Fredericia DK 7000 Denmark
Contact: Mr Peter J Muller Job Title: Managing Director T: + 45 7628 0102 E: peter.muller@port-trade.com W: www.port-trade.com F: + 45 7628 0103 Port-Trade is a Danish ron-irage is a Danish company with more than thirty years of experience with cargo handling systems, including mobile harbour cranes, container spreaders, bulk handling grabs, and loading eauipment. Port-Trade provides analyses of customer requirements and proposes and delivers complete equipment solutions.

Powerscreen

200 Coalisland Road Dungannon County Tyrone BT71 4DR Northern Ireland Contact: Mrs Dearbhaile Mulholland Job Title: Marketing T: + 44 288 77 18500 E: sales@powerscreen.com W: www.powerscreen.com F: + 44 288 77 47231 Powerscreen manufactures a complete range of mobile crushing, screening and

conveying equipment. Over 50 machines meet the needs of customers operating in a wide range of applications: from aggregate and sand production to processing compost, construction and demolition waste and other recycled waste

PRDW CONSULTING PORT AND COASTAL **ENGINEERS**

Alonso de Córdova 5900 10th Floor Santiago Chile Contact: Mr César Guzmán Job Title: Business Manager

Team Leader T: + 56 2 26942000 E: business.cl@prdw.com W: www.prdw.com A world class port and coastal engineering consultancy dedicated to the delivery of enhanced client value in the design of marine infrastructure.

Precia-Molen NEDERLAND BV

Breda 4824 AL The Netherlands Contact: Mrs Monique Kuijer-Job Title: Communication & Marketing T: + 31 76 524 2513 E: sales.nl@preciamolen.com
W: www.preciamolen.nl Y. www.preculminering F: + 31 76 522 8039 At the forefront of the industry, has provided weighing solutions for more than 147 years and established a worldwide reputation for quality and reliability. The large product range consists of weighbridges; bulk, belt, bagging, platform and aircraft weighing check-in scales; load cells, indicators, controllers and truck dumpers.

PREMIER TECH CHRONOS B.V.

Meerheide 40 Eersel Noord Brabant 5521 DZ The Netherlands
Contact: Ms Marie-Pier Vallée Job Title: Communications Coordinator T: + 31 497 514 988

E: valm2@premiertech.com W: www.ptchronos.com

Procon Engineering LIMITED

Vestry Estate

Otford Road Sevenoaks Kent TN14 5EL UK Contact: Mr Ian Hall T: + 44 1732 781 300 E: joe.naylor@proconeng.com E: Joe. naylor@proconeng.com
W: www.proconeng.com
F: + 44 1732 781 311
Continuous digital belt weighing and weigh feeding systems - capacities - 12,000 max tph, 9
m/s speed, 400-2400 belt
widths widths.
Batch weighing, Loss in weight, and Level weighing.

PROSTACK
Terex Materials Processing 20 Keans Hill Road Campsie Industrial Estate Campsie, Co. Derry Ulster BT47 3YT Northern Ireland Contact: Mr Declan McErlain
Job Title: Marketing Manager T: + 44 7826 956955 E: declan.mcerlain@terex.com W: www.terex.com/prostack

PSB Inspection

George Stephensonweg 1 Vlaardingen South-Holland 3133KJ The Netherlands Contact: Mrs Peter Bagchus Job Title: Managing Director T: + 31 10 313 89 08 E: info@psbinspection.com W: http://psbinspection.com/nl Inspection, sampling, sample preparation, weight assessment and gas/toxid measurement are part of our service portfolio which we render globally (www.psbinspection.com).

PT Armada Rock Kariinia

TRANSSHIPMENT AIA Central Building 33rd Floor Jl. Jend. Sudirman Kav. 48 A

Jakarta South Jakarta 12930 Indonesia Contact: Mr Frans Martin Hasiholan Job Title: Manager T: + 62 817 609 8883 E: enquiry@arktransshipment.com
W: www.ark-transshipment.com

PT ASIAN BULK Logistics

F: + 62 21 2525 928

Menara Karya 20th floor Unit D JL HR Rasuna Said Block X-5 Kav 1-2 .lakarta 12950 Indonesia Contact: Mr Anant Bahl

Job Title: General Manager **T:** + 62 21 5785 1960 E: Anant.Bahl@abl.co.id W: https://abl.co.id/ F: + 62 21 5785 1959

PT BOMA BISMA Indra

JL. KHM Mansyur No. 229 Surabaya East java 60162 Indonesia Contact: Mr Sandy Gitu Loh Job Title: Engineer T: + 62 89637776242 E: sandygituloh22@gmail.com W: www.ptbbi.co.id

PT BUKAKA TEKNIK

Jl. Raya Bekasi Narogong Km 19,5 Cileungsi Bogor Jakarta 16820 Indonesia Contact: Mr Achmad Kalla Job Title: Director T: + 62 21 823 1146 E: bdv@bukaka.com W: www bukaka com F: + 62 21 823 2323

PT CARSURIN Neo Soho Capital Lt. 28 Jl. Letjen S. Parman Kav. 28 Grogol Petamburan West Jakarta DKI Jakarta 11470 Indonesia
Contact: Mr Hal Loevy Job Title: Director Corporate Strategy & Business Development T: + 62 21 5022 6868
E: headoffice@carsurin.com W: www.carsurin.com F: + 62 21 5022 6868 Established in 1968, PT CARSURIN is the largest CARSORINI IS tire largest privately owned Inspection, Testing and Verification company in Indonesia, with a growing international presence. We provide independent third party services to mitigate risk for our clients across a broad range of inclustries including range of industries including Coal. We are the only

independent Indonesian member of the International Federation of Inspection
Agencies and are the sole
Lloyd's Agent in Indonesia.

PT GEOSERVICES

Jl. Setiabudi 79-81 Bandung West Java Indonesia Contact: Mr Peter Pramana Job Title: + 62 22 203 1316 T: + 62 22 203 5433 E: jktbranch@geoservices.co.id
W: www.geoservices.co.id

PT JAKARTA PRIMA CRANES Wisma JPC

Jl. Mampang Prapatan Raya No. 20 Jakarta 12760 Indonesia
Contact: Mr Tony Haryono

Job Title: Branch Manager T: + 62 21 8794 4010 E: tonydio@jpc.co.id W: www.jpc.co.id

PT MBSS

Gedung Menara Karya JI HR Rasuna Said Jakarta South Jakarta 12950 Indonesia
Contact: Mr Immanuel Sinulingga Job Title: GM Commercial T: + 62 811800685 E: corporate.communication@ mbss.co.id W: www.mbss.co.id

PT Mitra Bahtera Segarasejati

Menara Karya 12th Floor JI H R Rasuna Said Block X-5 Kav 1-2 Kuningan Jakarta 12950 Indonesia
Contact: Mr Yogi Saputra Job Title: Corporate Communications T: + 62 21 5794 4755 E: corporate.communication@ mbss.co.id W: www.mbss.co.id F: + 62 21 5794 4767

PT PAMAPERSADA NUSANTARA

Jln. Rawagelam I No. 9 Jakarta Industrial Estate Pulo Gadung Jakarta 13930 Indonesia Contact: Mr Hafizh Fauzan Job Title: Business Development T: + 62 21 460 2015 E: hafizh.fauzan@pamapersada.com W: www.pamapersada.com F: + 62 21 460 1916

PT SPANSET INDONESIA

Jl. Marunda Center Blok F No.20 Segara Makmur Tarumaiava Bekasi Jawa Barat 14350 Indonesia Contact: Mr Yudhi Nugroho Job Title: Commercial Manager T: + 62 21 28510077 E: sales@spanset.co.id W: www.spanset.co.id PT SpanSet Indonesia as one of the authorized distributor for Bridon, Kiswire , Usha Martin and Verope is the member of Association of Wire Rope Fabricators (AWRF). We always provide the highest quality product and services in

wire rope applications.

DCi

PT THIESS CONTRACTORS Indonesia

Ratu Prabu 2 Ratu Prabu 2 JI. TB. Simatupang Kav. 18 Jakarta 12560 Indonesia Contact: Mr Matahara Job Title: Business Development

Manager T: + 62 21 2754 9999 E: thiess@thiess.co.id
W: www.thiess.co.id F: + 62 21 2754 9800

PT. Bando Indonesia Wisma Hayam Wuruk, 6th floor, Suite 600

Jln. Hayam Wuruk No. 8 Jakarta 10120 Indonesia Contact: Mr Budi Widjaya Job Title: Mining Division T: + 62 21 3517590 E: vbelt.div@bandoindonesia.com W: www.bandoindonesia.com **F**: + 62 21 3517591 PT. Bando, established in 1987, is one of the leading automotive and industrial power transmission belt manufacturers in Indonesia. It has one main plant located in Tangerang and its marketing office located in Central Jakarta.

PT. HARDJADINATA PRATAMA INTERNASIONAL

Ruko Mega Grosir Cempaka Mas Blok J No. 48 . Jl. L Jakarta Pusat Jakarta 10640 Indonesia Contact: Mr David Hardjadinata Job Title: Director T: + 62 214243568 E: david.hardjadinata@pt-hpi.com

PT. LELANGON

Panglima Sudirman 86 Kletek Sidoarjo East Java 6135 Indonesia Contact: Mr Mochamad Robby **Job Title:** Engineer **T:** + 62 3 7882732 E: lelangon.engineering@gmail.com W: www.lelangon.com F: + 62 31 7882912

PT. THERMIALINDO SARANA LABORTORIA Jl. Daan Mogot II No. 100J

Jakarta 11510 Indonesia Contact: Mr Eduard Sasmita Job Title: Branch Manager T: + 62 21 566 3057 E: edo@thermalindo.com W: www.thermalindo.com/ F: + 62 21 566 2795

QCA Systems Ltd. 101-6951 72 St

Delta

V4G 0A2 Canada Contact: Mr Craig Pearce Job Title: Director, Sales & Marketing T: + 1 604 908 5835 E: cpearce@qcasystems.com W: https://qcasystems.com/ QCA Systems Ltd is one of the largest private turn-key electrical engineering and integration firms in British Columbia. Operating for almost 30 years, and a recognized Rockwell Automation Solution Partner, we provide Industrial Electrical, Automation, IT and data analytics services to clients in various industries. Our engineers, designers, drafters, technicians and other staff deliver cost-effective, efficient solutions, supporting a wide variety of technology

QINGDAO HAIXI HEAVY-DUTY MACHINERY Co.LTD

No. 1597, Jiulongshan Road Huangdao District Qingdao China T: + 86 53255711351 E: ibd@adhhmc.com **F**: + 86 53255711352

QINGDAO HUAXIA RUBBER INDUSTRY Co.

No.146, Chengma Road Tongji District Jimo Qingdao Shandong 266228

China Contact: Mrs Molly Shi Job Title: Sales Manager T: + 86 137 8985 9616 E: conveyorbelt@huaxiarubber.cn, molly.shi"huaxiarubber.cn W: www.huaxiarubber.cn

F: + 86 532 8251 9238 Qingdao Huaxia Rubber Industry Co., Ltd. supplied first-class quality rubber conveyor belts with competitive price to iron ores/copper/diamond mining, tunneling, metallurgy, steel works, ports. In ISO 15236, DIN 22102/DIN 22131, EN14973, AS, SANS, BS, JIS standard

QUALITY HANDLING Systems Pty Ltd (Part of Consep Pty LTD)

46 Newton Road Wetherill Park Sydney NSW 2164 Australia Contact: Mr Peter Skoljarev Job Title: Project Engineer T: +61 2 9756 5299 E: pskoljarev@consep.com.au W: www.consep.com.au W. www.consep.com.au
Design and supply of
mechanical sampling systems
for the coal industry. Can also
review existing systems to
improve their reliability and accuracy.
Design and supply robust screening solutions tailored for precision sorting, sizing and

dewatering. QUANERGY

433 Lakeside Drive Sunnyvale CA 94085 USA Contact: Ms Andy Steen Job Title: Marketing Executive T: + 1 408 245 9500 E: info@quanergy.com W: https://quanergy.com/ F: + 1 408 245 9503

QUARRY MINING LLC

PO Box 9593 Ras Al Khaimah Ras al-Khaimah 11111

Contact: Mr Michael Schmidt Job Title: Senior Director Engineering Department **T**: + 971 7268 9799 ext13

michael.schmidt@quarrymining.net W: www.quarrymining.net With full in-house capability for structural steel manufacture to structural steel manufacture de design, manufacture, supply and install quality products, such as standard conveyors of any width and load capacity, conveyor systems, including downbill species with proving the propular control of the province of the pro downhill version with powe

generation, but also truck loading & unloading stations and ship loading and unloading systems.

QUBE PORTS & BULK Level 22

44 Market Street

Sydney NSW 2000 Australia Contact: Mr Todd Emmert Job Title: Director - Bulk T: + 61 2 9005 1100 E: bulk@gube.com.au W: www.qube.com.au/ports-andhulk F: + 61 2 9005 1101

R & S Srl / Roncuzzi - WAM GROUP

Via del Cmapo Sportiuo 40

Mezzana 48123 Italy
Contact: Mr. Silvio Banzi Job Title: Communications Manager T: + 39 0535 61 81 11 E: info@wamgroup.com W: www.roncuzzi.com Designs and builds green hoppers, belt conveyors and transhipment plant for coal, cereals, mineral.

RAM LIFTING **Technologies**

6 Selby Place Skelmersdale Lancashire WN8 8EF UK

Contact: Mr Patrick Draper **Job Title:** PR & Communication **T:** + 44 1695 556355 E: p.draper@ramspreaders.com

W: www.ramspreaders.com/ F: + 44 1695 556356 RAM Spreaders, one of the leading manufacturers and suppliers of container handling equipment for over 40 years equipment for over 40 years have developed their environmental friendly RAM Revolver® for dust free containerized bulk handling solutions in association with specialist container suppliers.

RAPAT CORPORATION

919 O'Donnell Street Hawley MN 56549-4310

Contact: Mr Justin Koenig Job Title: Industrial Sales

Manager T: + 1 218 483 3344 E: info@rapat.com W: www.rapat.com/

RBL REI

15 rue du Moulin des Landes CS 50159 – Saint Sylvain d'Anjou Cedex Verrieres en Anjou 40481 France Contact: Mr David Nirefois Job Title: Ports Terminals Sector Manager T: + 33 2 41 21 19 40

F: + 33 2 41 21 19 59 **RBL-REI France** 140 bis rue de Rennes

E: d.nirefois@rblrei-france.com W: www.rblrei-france.com

Paris Cedex 14 75006 France Contact: Mr David Nirefois Job Title: Handling Process Manager T: + 33 2 41 21 13 82 (dct) / + 33 1. + 33 2 41 21 13 82 (uct) / + 3 2 41 21 19 40 E: d.nirefois@rblrei-france.com W: www.rblrei-france.com F: + 33 2 41 21 19 59 Designs, builds and supplies continuous bulk handling belt conveyor systems and associated equipment, stackers up to 10,000 tph, reclaimers up to 15,000 tph and shiploaders up to 3,000 tph.

RC Inspection B.V

Gustoweg 66 Rotterdam NI 3029 The Netherlands Contact: Ms Birgit Bender
Job Title: Sales and Marketing Manager T: + 31 610 742 140 / + 31 10 425 0237 E: Birgit.Bender@rcinspection.com/
W: www.rc-inspection.com/
RC inspection is an

independent inspection company for quality and quantity control in the market of Solid Fuels, Metals-Minerals, Scrap and Marine Surveys with offices all over the globe.

REAL TIME INSTRUMENTS

Lot J Mackay Marina Village Mackay QLD 4740 Australia Contact: Mr Nathan Kennedy Job Title: Marketing Specialist T: + 617 4955 5944 E: sales@rtiaustralia.com

https://realtimeinstruments.com/ nttps://reattimeinstruments.com RTI manufacture specialist equipment that provide real-time reporting of key quality measures of bulk materials as they are transported on a conveyor belt and by other means. RTI distributes high performance belt weighers and tramp metal detection and removal systems.

REEL MÖLLER GMBH

Haderslebener Straße 7 Pinneberg 25421 Germany
Contact: Mrs Martina Kauder

Job Title: Business Support T: + 49 4101 788 312 E: martina.kauder@reelmoeller.com

W: www.reel-moeller.com REEL, with its MÖLLER® technology, is a world leader in the field of engineering and the manufacture of complete pneumatic systems, with several thousand references around the world. Our complete range of advanced systems, machines and components for conveying and storing fine-grained, mineral bulk materials.

REEL S.A.S. 69 rue de la Chaux

Saint-Cyr au-Mont d'Or

69450 France
Job Title: Corporate Communication T: + 33 4 72 29 76 00 E: communication@reel.fr
W: www.reelinternational.com With 75 years of unique knowhow in the design, manufacture and maintenance of complex handling and lifting systems, REEL is an industrial group with a presence in varius markets: nuclear, aerospace. aluminum, marine and offshore.

REEL S.A.S.

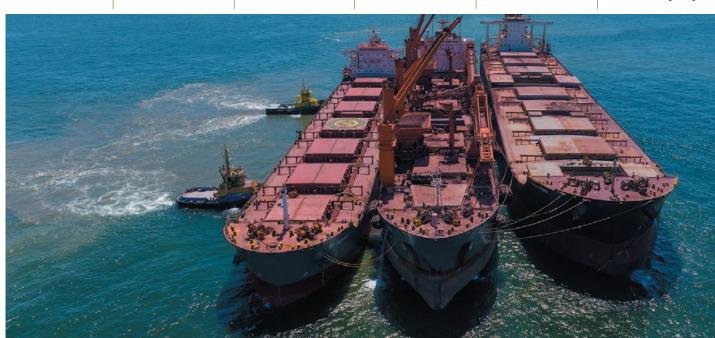
Gruberstraße 65

69 rue de la Chaux Saint-Cyr au-Mont d'Or 69450 France Job Title: Corporate Communication T: + 33 4 72 29 76 00

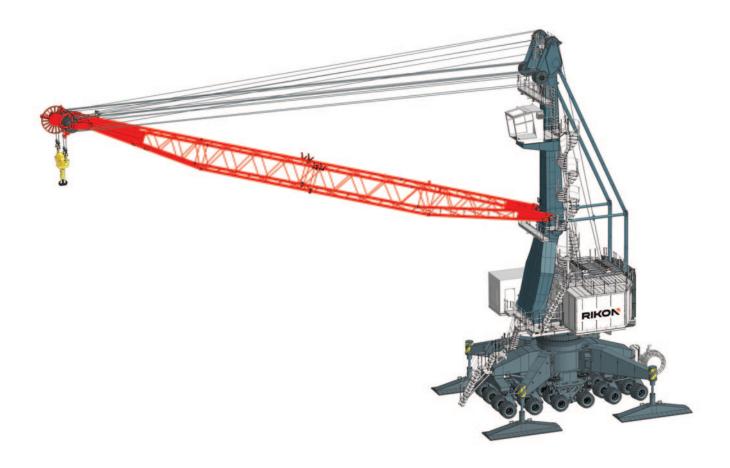
W: www reelinternational com **REMA TIP TOP AG**

E: communication@reel.fr

Poing Ravaria D-85586 Germany Contact: Ms Claudia Pietsch Job Title: Marketing Manager







T: + 49 8121 707 10133 E: Claudia.Pietsch@tiptop.de W: www.rema-tiptop.com REMA TIP TOP is a global solution provider for tire repairs & maintenance, conveyor and processing facilities. With our decades of expertise, a decades of experise, a worldwide network of service technicians, state-of-the-art digital technology, and suitable materials, we keep your assets safely in motion.

RENK AKTIENGESELLSCHAFT WERK AUGSBURG

Gögginger Straße 73 Augsburg 86159 Germany Contact: Mr Michael Beck Job Title: Marketing and Advertising T: + 49 821 57 000 info@renk.biz W: www.renk.com/de F: + 49 821 5700 460

REPA Conveyor EQUIPMENT B.V.

Fluorietweg 28 Alkmaar Noord Holland The Netherlands Contact: Mr Richard van der I aan Job Title: Managing Director T: + 31 251 70 02 52 E: sales@repa-ce.com W: www.repa-ce.com/ REPA - your single source supplier.

RHC DEUTSCHLAND **GMBH**

Am Taennele 6 Senden-Aufheim Bayern D-89250 Germany Contact: Mr Rolf Hofmann Job Title: CEO T: + 49 174 2050 164

E: rolf.hofmann@rhcdeutschland.de W: www.rhc-deutschland.com/ F: + 49 7307 9258065 RHC can provide a competitive package of different kinds of Material Handling Systems.

RICHMOND **Engineering Works** 1601 Parkway View Drive

Pittsburgh

15205 USA T: + 1 412 787 9640 E: info@richmondengineering.com
W: www.richmondengineering.com F: + 1 412 787 9645 Richmond Engineering provides design, supply and installation oversight of material handling systems, including rotary railcar dumpers. positioners stacker/reclaimers grab and continuous barge unloaders, and shiploaders. We provide structural/mechanical and electrical equipment inspections and upgrades along with 24/7 field service and replacement parts.

RICHWOOD INDUSTRIES. INC.

PO Box 1298 Huntington West Virginia 25714-1298 USA

Contact: Ms Lorrie Spence Job Title: Chief Marketing Officer T: + 1 304 525 5436 E: info@richwood.com W: www.richwood.com F: + 1 304 525 8018 For over 30 years, Richwood has designed and manufactured reliable, innovative solutions for the worldwide bulk material handling industry.

RIEGL LASER **M**EASUREMENT Systems GmbH

Riedenburgstraße 48 Horn A-3580 Austria Contact: Ms Carina Huber Job Title: Marketing Manager T: + 43 2982 4211 E: chuber@riegl.com W: www.riegl.com F: + 43 2982 4210

RIKON A/S RIKON

Riga LV-1034 I atvia Contact: Mr Inal Akhba Job Title: Council Chairman T: + 371 29 29 9992 E: rikon@rikon.lv W: www.rikon.lv F: + 371 67393828 AS RIKON is one of the leading manufacturers of port handling equipment with more than 60 years experience. The company manufactures high quality portal and mobile harbour cranes and grabs for multiple purposes, loads and material types, for example: Level luffing cranes; Rubber tyred gantry cranes; Rail ryrea garitry cranes; Kall mounted gantry cranes; mobile harbour cranes; Crane-manipulators; Ship cranes; Offshore cranes; Overhead cranes

RINA CONSULTING S.P.A.

Via Corsica, 12 Italy
Contact: Ms Cynthia Pica
Job Title: Marketing
T: + 39 010 538 5511 E: cinzia.pica@rina.org
W: www.rina.org
Our scope of business is to provide an integrated, comprehensive and tailor-made advisory service for marine terminals and associated handling infrastructures, both off-shore and on-shore. The company's individuals and

associates have pioneered dry-bulk shipping logistics offshore, devising and designing innovative floating terminals, self unloading vessels and floating cranes, as well as on-shore terminals.

RINGSPANN GMBH Schaberweg 30-38 Bad Homburg

61348 Germany Contact: Ms Pia Katzenmeier Job Title: Marketing T: + 49 6172 275 0 E: info@ringspann.de **W:** www.ringspann.com **F:** + 49 172 73 54 755

ROCKTREE LOGISTICS



Clearwater House

Stamford

06902

Connecticut LISA Contact: Mr Daniel Miller Job Title: General Manager E: dmiller@rocktree.com; projdev@rocktree.com W: www.rocktree.com Rocktree is a leading provide of marine dry bulk cargo handling and delivery solutions, serving international traders, miners and end users in Asia, Africa and South America, with a strong focus on providing innovative solutions.

RONIN SYSTEM SOLUTIONS

No 1 Nobel Avenue Modderfontein Johannesburg Gauteng South Africa Contact: Mr Ferdinand Meyer Job Title: Sales and Marketing Executive, Ronin Group T: + 27 11 608 3666

E: ferdi@thisisronin.com W: www.thisisronin.com F: + 27 11 608 4679 Ronin GMS provide bulk Ronin GMS provide bulk inventory management systems and moment in time audits for balancing real-time stock positions to stock positions on book. Our systems can be used in Silo's, warehouses and open air stock yards. Enrolling business partners worldwide.

Rossi S.p.A.

Via Emilia Ovest 915/A 41123 Contact: Ms Fulvia Rinaldini Job Title: Marketing Dept. T: + 39 059 330288 E: marketing@rossi.com W: www.rossi.com/ F: + 39 059 827774 ROSSI designs manufacture and distribute a comprehensive range of gear reducers, gearmotors, and electric motors, for all industry segments, worldwide. In the global marketplace, our customers and partners value our products and services for two reasons: excellence and reliability.

ROTOBEC

200 Rue Industrielle Sainte-Justine G0R 1Y0 Canada Contact: Mr Francois Lafreniere Job Title: Sales Director -International Markets **T:** + 1 418 383 3002 E: francois.lafreniere@rotobec.net
W: https://rotobec.com/

Roxon Oy

Keskikankaantie 19 Hollola 15860 Finland Contact: Mr Ryan Silvester Job Title: Marketing Manager Nepean T: + 61 8 9347 8507 E: ryan.silvester@nepean.com W: www.roxon.com ROXON offers maximum productivity through total material handling solutions. ROXON is an expert in belt conveyors, link conveyors, apron feeders, belt feeders, stackers, reclaimers, loading hoppers, shiploaders, convevor components, service and modernization. Please visit www.roxon.com for more information

RUBB BUILDINGS LTD

Dukesway Team Valley Trading Estate Gateshead Tyne & Wear NE11 0QE UK Contact: Mr Ross Purcell Job Title: Marketing Manager T: + 44 191 482 2211 E: info@rubbuk.com W: www.rubbuk.com/ F: + 44 191 482 2516 Designs, manufactures and installs relocatable flat storage buildings. Structures are made from a frame consisting of hot dip galvanised steel and PVC impregnated polyester outer membrane. Structures can be

supplied worldwide complete

turnkey solutions to any bulk storage problem can be

RUD CHAINS

12 Commerce Place Larapinta Brisbane QLD 4110 Australia Contact: Mr John Burroughs Job Title: Mechanical Engineer T: + 61 419721115

E: john.burroughs@rud.com.au W: www.rud.com.au

DCi

RULMECA Holding S.P.A.



Via A Toscanini 1 Almè Bergamo 24011

Contact: Mr Enrico Aledi
Job Title: Marketing & Corporate
Communications Manager
T: + 39 035 430 0111
E: marketing@rulmeca.com
W: www.rulmeca.com
Specialises in the production of
idlers/rollers, frames, motorized
pulleys, fabricated pulleys and
components for material

components for material handling. Rulmeca Group means: wide distribution networks; close relationships with customers and complete service; manufacturing flexibility; continuously expanding and evolving product range; constant improvement in technical, design and sales service, global market reach and a network of skilled agents.

SABS Mining & Minerals

1 Dr Lategan Road Groenkloof Pretoria Gauteng 0001 South Africa Contact: Mr Richard Sadiki Job Title: Sales Lead (Mining and Minerals) T: + 27 861 27 7227 E: richard.sadiki@sabs.co.za W: www.sabs.co.za W: www.sabs.co.za XABS has a global history of excellence in sampling and analysis of coal and minerals and is a key third-party service provider to the domestic and international mining industry including being a local content service provider throughout Southern Africa.

SAMMI S.r.l. (AN Integra Holding S.r.l. company)

Via Tuderte, 38 Narni Scalo Terni 05035

Italy
Contact: Mr Gian Luca Tedesco
Job Title: Marketing Manager
T: + 39 0744 733832
E: marketing@sammi.it

W: www.sammi.t
F: + 39 335 5313331
In addition: Bucket elevator
Offering complete support, from
engineering to implementation,
through to commissioning, of
turnkey industrial installations.
With 60 years of experience in
multiple industrial applications,
we specialize in the
development of tailor-made
solutions (both for the
development of new plants or
revamping existing ones).

SAMPLING ASSOCIATES International

22 Enterprise Parkway

Suite 220
Hampton
Virginia
23666
USA
Contact: Mr Ken Joyner
Job Title: President
T: + 1 757 928 0484 ext 100
E: preagan@
samplingassociates.com
W: www.samplingassociates.com
F: + 1 757 928 0482
SAI is a specialist in the operation and maintenance of mechanical sampling systems

for coal, coke and petroleum coke in the Americas.

SAMSON MATERIALS HANDLING LTD (AUMUND GROUP) SAMSON

Gemini House Cambridgeshire Business Park 1 Bartholomew's Walk Ely, Cambridgeshire CB7 4EA UK

Contact: Mr Matthew Jones
Job Title: Managing Director
T: + 44 1353 665001
E: sales@samson-mh.com
W: www.samson-mh.com
Experts in mobile bulk
materials handling equipment
for surface installation: from
truck unloaders, to ship
loaders, rail and barge loaders,
ecological import hoppers and
mobile stockpiling equipment
designed for rapid set-up and
continuous high performance.
Services also include field
assembly, site supervision,
commissioning, after sales
service, PREMAS®,
refurbishment and upgrading of
existing equipment.

Sandvik Mining and Rock Solutions Petritschgasse 12 Wien

AT-1210
Austria
Contact: Mr Eric Gourley
Job Title: Corporate
Communications Manager
T: + 46 8 456 1368
E: eric.gourley@sandvik.com
W: www.sandvik.com

SANY EUROPE GMBH

Sany Allee 1 Bedburg 50181

Germany Contact: Ms Tanja Altjohann Job Title: Marketing Specialist T: + 49 2272 90531148

E: tanja.alighonan@sanyeurope.com
W: www.sanyeurope.com/
F: + 49 173 6558991
SANY Europe is a company of
SANY Heavy Industry, from
Changsha. This is one of the
three largest manufacturers of
construction machinery
worldwide. The company,
founded in 1989, offers a wide
range of products, with more
than 26 product families and
over 300 machine models.
These are developed,
produced and sold by just
under 40,000 employees
around the world. SANY's
European site has been in
Bedburg, near Cologne, since

SAS GLOBAL CORP

21601 Mullin Ave Warren MI 48089

USA Contact: Mr Gary Stiltner Job Title: Product Manager T: + 1 704 5170797

E: gstiltner@bellsouth.net W: www.sasglobalcorp.com/

SBEC (PTV) LTD Cubenco Park Unit 11A

Cubenco Park Unit 11A Industria St 4 Vredenburg 7380 South Africa Contact: Mr Dirk van der Merwe

Contact: Mr Dirk van der Mer Job Title: Managing Director T: + 27 76 020 9071 E: dirk@sbec.co.za W: http://sbec.co.za/

SCANTECH International



PO Box 1485 Springwood Queensland 4127

Australia
Contact: Mr Andrew Brodie
Job Title: General Manager Marketing

Marketing
T: + 61 418 848 851
E: a brodie@scantech.com.au
W: www.scantech.com.au
World leader in process control
solutions for conveyed bulk
materials. On-belt analysers
with proven technologies.
Reliable, accurate and
dependable ash, moisture,
PSD, volume and elemental
measurement minute by
minute. Control quality through
blending or monitor
specification compliance. Over
1,400 installations.

SCHADE LAGERTECHNIK GMBH (AUMUND GROUP)

SCHADE

AUMUND GROUP
Bruchstraße 1
Gelsenkirchen
D-45883
Germany
Contact: Dr Jan Weckes
Job Title: Managing Director
T: + 49 209 50 31 60
E: sales@schadelagertechnik.com
W: www.schade-lagertechnik.com
Engineering, manufacture and
supply of Stockyards and
Blending Beds of circular and
longitudinal shape with
Stackers and Tripper cars,

Bridge-type Scraper Reclaimers, Portal and Semiportal Scraper Reclaimers, Cantilever Scraper Reclaimers as well as Wagon Unloading Systems and Rail-Mounted Shiploaders.

Shiploaders.
Services also include field
assembly, site supervision,
commissioning, after sales
service, PREMAS®,
refurbishment and upgrading of
existing equipment.

SCHRAGE Rohrkettensystem GmbH Conveying Systems

Im Gewerbepark 26-30 Friedeburg 26446 Germany Contact: Ms Ayleen von Bronk Job Title: Marketing T: + 49 4465 9469 18 E: a.vonbronk@schrage.de W: www.schrage.de/ F: + 49 4465 9469 33

SCHULTE STRATHAUS GMBH & Co. KG

Werl
D-59457
Germany
Contact: Mr Florian Lammert
Job Title: Marketing
T: + 49 2922 9775 0
E: flammert@schulte-strathaus.de
W: www.schulte-strathaus.de
F: + 49 2922 9775 75
Accessories for Conveyors:
STARCLEAN® Conveyor Belt
Scrapers, Belt Trackers, Spillex
transfer point seals, impact
tables and bars, STARCLEAN®
Smart Scraper with belt

damage detection.

9500X

ON-BELT ELEMENTAL ANALYSER FOR ASH, MOISTURE AND SULPHUR MEASUREMENT AND CV IN COAL

On-line Real Time Analysis for the Coal Industry

Contact us for advice and assistance:

Web site: www.scantech.com.au
Email: sales@scantech.com.au





COALSCAN 9500X Advantages

- Ultra-compact design. Installs between standard idlers;
- High Performance Multi-Detector Configuration;
- Conveyed flows for belts up to 2800mm wide and 1200mm deep;
- Source auto storage for safety;
- No contact with material or conveyor belt, no wear parts;
- No sampling necessary during normal operation;
- Optional customised SUPERSCAN console;
- Interface to most process control systems;
- No access restrictions around analyser;
- 2 Years Warranty;
- Remote and local technical support.



PREMIUM COMPONENTS FOR MATERIAL HANDLING



Rulmeca offers a wide range of quality Rollers/Idlers, Motorized Pulleys, Pulleys and components used in the most demanding applications in belt conveyors material handling. We are close to you, whenever you need us, with a global network of sales and service centers.









DCi

SCORPIO ENGINEERING BMH PVT. LTD

Scorpio House 132 Wheeler Road Cox Town Bangalore 560 005 India

Contact: Mr Balan Velan
Job Title: Managing Director
T: + 91 8217643165
E: marketing@scorpiobmh.com
W: www.scorpiobmh.com

www.drybulklogistics.in www.optimumbulkhandling.com In addition: fly ash conveying, liner container filling & discharging equipment. The company is a 35-year-old engineering and manufacturing organisation in the areas listed and the capacities of the equipment are custom specified and built. The average range is from 100 tph to 1000 tph.

SCRAPETEC International GMBH Altfelder Straße 190

Altfelder Straße Kamp-Lintfort D-47475 Germany

Germany
Contact: Mr Thorsten Koth
Job Title: Managing Partner
T: + 49 2842 9 32 92 93
E: thkoth@scrapetec-trading.com/
Our unique products, based on over three decades of know-how in materials handling technology, such as the
AirScrape, DustScrape and SpeedScrape are economic and easy to assemble but allow a significant prevention of dust formation and spill plus more careful and efficient beit cleaning at critical sections along the conveyor route and transfer points.

SEABULK INC

10331 Mortfield Road Richmond British Columbia V7A 2W1 Canada

Contact: Mr Sidney Sridhar Job Title: President T: +1 604 273 1378 Ext 103 E: sbs@seabulk.com W: www.seabulk.com Involved in 'design and build' projects in the marine bulk transportation industry. Ports, self unloaders and transhipper developed by Seabulk have improved bulk transportation logistics significantly.

SEMPERTRANS CONVEYOR BELT SOLUTIONS GMBH

Vienna
1100
Austria
Contact: Mr Anas Esmat
Job Title: Marketing Manager
E: office@semperitgroup.com
W: www.semperitgroup.com/
SEMPERTRANS has been
developing, manufacturing and
installing conveyor belts for
more than 50 years. Its
knowhow, its experience and
the quality of its products make
SEMPERTRANS one of the
world's leading companies in
its field.

SENNEBOGEN Maschinenfabrik GmbH

SEN EBOGEN

Hebbelstrasse 30 Straubing D-94315 Germany Contact: Mr Robert Aumüller Job Title: Head of Business Unit Port Application T: + 49 9421 540155 E: marketing@sennebogen.de W: www.sennebogen.com F: + 49 9421 43882 Sennebogen offers a wide range of all kinds of materials handling machines, HD rope excavators/cranes, crawler cranes, telescopic cranes and base carriers.

SENSOR TECHNOLOGY

Apollo Park

Ironstone Lane

Wroxton
Banbury
Oxon
OX15 6AY
UK
Contact: Mr Mark Ingham
Job Title: Sales Manager
T: + 44 1869 238 400
E: info@sensors.co.uk
W: www.sensors.co.uk
F: + 44 1869 238 401
Manufacturers of TORQSEN

T: + 44 1869 238 400
E: info@sensors.co.uk
W: www.sensors.co.uk
F: + 44 1869 238 401
Manufacturers of TORQSENSE
and LOADSENSE Sensors and
Transducers. The TorqSense
and LoadSense range of
sensors offer accurate,
affordable, market leading
products across the whole
range of industrial applications.

SERAM SA

Polygone Nord
817 boulevard Marius Berliet
Perpignan
66000
France
Contact: Mr Joaquin Semis
Job Title: CEO
T: + 33 4 68 61 02 28
E: semis.j@seram.net
W: www.seram.net
F: + 33 4 68 61 57 00
Company has specialized in
cargo handling since 1973. Its
premium product is the
hydraulic equilibrium crane, for
which we had the exclusive
patent.

SESCOTRANS FOR Developed Logistics (SAE)

1, Elshahied Sayed Zakarya St. (Behind Sheraton Airport) Cairo 11361 Egypt

Egypt
Contact: Mr Kareem Abd El Latif
Job Title: Assistant General
Manager
T: +2 057 229 00 95

T: +2 057 229 00 95
E: kareem.abdelati@sescotrans.net
W: www.sescotrans.com
F: +2 057 229 08 49
SESCOTRANS has 50 years of
experience in integrated
logistics solutions for your
business - serving main
Egyptian main ports including
transportation, customs
clearance, warehousing,
loading and discharging of
different cargo and vessel sizes
supported with full setup of
facilities and fully-employed

SEW-EURODRIVE GMBH & Co KG

Emst-Blickle-Str. 42
Bruchsal
D-76646
Germany
Job Title: Central Sales
T: + 49 7251 75 0
E: sew@sew-eurodrive.de
W: www.sew-eurodrive.com
F: + 49 7251 75 1970
Complete drive packages:
Helical gear units, motors, couplings, swing bases, brakes, geared motors. Planetary gear units, frequency inverters Torque range: 100 ... 1 Mio Nm.

SGS (NEDERLAND) BV

Malledijk 18 Spijkenisse AE 3200 The Netherlands
Contact: Mr Richard van de
Wetering
Job Title: Global Energy Minerals
Trade Inspection Manager
T: + 31 181 69 3260

Lichard.vandeWetering@sgs.com
W: www.sgs.nl
SGS is the world's leading
testing, inspection and
certification company. We are
recognized as the global
benchmark for quality and
integrity, Our 93,000 employees
operate a network of 2,600
offices and laboratories,
working together to enable a
better, safer and more
interconnected world.

SGS CANADA INC

185 Concession Street
PO Box 4300
Lakefield
ON
KOL 2HO
Canada
Contact: Mr Stephen Mackie
Job Title: Director Business
Development
T: + 1 705 652 2058
E: steve.mackie@sgs.com
W: www.sgs.com/coal
F: + 1 705 652 6365
Knowing your coal quality and representatively sampling are essential to eliminate penalties and maximize profits. SGS' technical experience and value throughout the coal value chain to eliminate operation risk.

SGS MINERALS Services

1 Place Des Alpes
PO Box 2152
Geneva
CH 1211
Switzerland
Contact: Mr Richard Lihou
Job Title: General Manager
T: +41 22 739 9111
E: daniel.rufenacht@sgs.com
W: www.sgs.com
F: +41 22 739 9886
The SGS Group is the global
leader and innovator in
verification, inspection, testing
and certification services.
Founded in 1878, SGS is
recognised as the global
benchmark for the highest
standards of expertise and
integrity. With over 30,000
employees, the Company
operates a network of offices
and laboratories in over 140
counties around the world.

SHANDONG KAIYUAN HEAVY MACHINERY Co., Ltd.

Yangliu Industrial Park Xintal City Tai'anCity Shangdong 271208 China Contact: Mr Klaus Job Title: Sales Manager T: + 86 538 6276276 E: klaus@kyzzix.com W: www.http://en.kycranes.com/

SHANGHAI GLOBAL Machinery Co Ltd

WACHINERY GO LT
RM 1001. BLDG 2
Meichuan Road 1295
Putuo District
Shanghai
201711
China
Contact: Mr Luo Tao
T: + 86 21 398 21129
E: luo@sgmc.com.cn
W: www.sgmcgrab.com
F: + 86 21 398 21130

SHANGHAI GUANBO Machinery Enilipment Co...Lti

EQUIPMENT CO.,LTD 3736-5 Hunan Road Pudong Shanghai China Contact: Ms Alica Fang Job Title: Marketing T: + 86 21 5088 0140 E: sales@gbm-china.com W: www.gbm-grab.com

SHANGHAI JANUS GRAB CO., LTD.

Room 518-519
VMO 37#
2049 Pujin Road
Shanghai
Shanghai 201114
China
Contact: Mr Fred Hu
Job Title: Deputy General
Manager
T: + 86 21 6885 5558
E: janus@janusgrab.com
W: www.janusgrab.com/
F: + 86 21 6885 5559

II: + 00 21 0060 3000 MW: www.janusgrab.com/
W: www.janusgrab.com/
FI: + 86 21 6885 5559
A leading and innovative grab specialist in China and Asia market, design and manufacture various kinds of grabs for more than 20 years. We are the best link between ship and shore!

SHANGHAI YO-PI PORT MACHINERY CO. LTD

Room 603, No 3 Lane 298 East Wenshui Road Shanghai PR

China
Contact: Miss Avril
T: + 86 21 552 28716
E: grab@shyp-pm.com
W: www.shyp-pm.com/
F: + 86 21 5522 8739

SHANTHI International

21, Center Point Indira Gandhi Road Jamnagar Gujarat 361008 India

Contact: Mr Sanjay Masuria Job Title: Director - Marketing -International T: + 91 288 255 6671 / + 91 288

1. 19 200 233 0011/19 200 2555 867
E: info@servoday.com
W: www.servodaygrabs.com
F: +91 288 255 4254
Our manufacturing range of
Four Rope Mechanical Grabs,
Orange Peel Grabs, Radio
Remote Control Grabs includes
the capacity from 6.0CBM to
52.0CBM and is suitable to
handle many types of bulk
materials. Please visit our

website www.servodaygrabs.com for further information about our company and products.

SHI.E.L.D. SERVICES SRL



Via Rovereto, 10
Milano
20127
Italy
Contact: Mr Luca Condini
Job Title: Technical Director
T: + 39 02 8362 3450
E: Icondini@shieldservices.it/
We provide a complete range
of services for the logistics and
transshipment of dry bulk
materials and for the shipping
and industry markets, including
ship management and
operation of ships and
transshippers, feasibility
studies, definition and
development of the most
suitable logistic solution, vessel
design, supervision of newbuilding construction and
vessel conversion.

SIA GRAVITI

Elijas iela 17 – 3
Riga
LV-1050
Latvia
Contact: Mr Dinis Hruscovs
Job Title: Co-founder and
Tector
T: + 371 29506140
E: dh@graviti.lv

Technical Director
T: + 371 29506140
E: dh@graviti.lv
W: https://graviti.lv/
Company's bestsellers are all types of grabs. Other cargo handling equipment: roll trailers, turnover spreaders, Graviti containers. BLESTE is managing own engineering bureau and can customise.

SIBRE - SIEGERLAND Bremsen GmbH



Auf der Stücke 1-5 Haiger Hessen D-35708 Germany

Contact: Ms Ilenia Maeting Job Title: Secretary - Managing Director

Diffector

T: +49 2774 91134 11
E: Ilenia.Maeting@sibre.de
W: www.sibre.de
SIBRE-Siegerland Bremsen
manufactures industrial brakes
(drum-, disc-, caliper- and
storm brakes) and drive
components (e.g. drum
couplings) and offer an
optimum combination of
innovative high quality
products, easy usage and
minimized life-cycle costs, by
employing latest manufacturing
and quality assurance
technologies.

SIEBTECHNIK GMBH

Platanenallee 46
Mülheim an der Ruhr
D-45478
Germany
Contact: Mr G Liefke
T: + 49 208 580 100
E: sales@slebtechnik.com
W: www.siebtechnik.com
W: www.siebtechnik.com
F: + 49 208 580 1300
Wormscreen, pusher-type and vibratory centrifuges, centrifuges for granular products; decanters for continuous separation of solids from liquids; laboratory centrifugal, size-reduction machines, especially vibratory mills for grinding to ultimate fineness, machines and plants for taking and preparing samples.
Horizontal, elliptical and circular motion screening machines, igs.

SIEBTECHNIK TEMA

7806 Redsky Drive
Cincinnati
Ohio
45249
USA
Contact: Mr Mike Mullins
T: + 1 513 489 7811
E: sales@tema.net
W: www.siebtechnik-tema.com
F: + 1 513 489 4817
Other equipment:
Centrifuges/dryers.
Manufacture and supply crossbelt sampling systems (up to
3M wide primary cutter) in
accordance with ISO
standards, screening machines
and centrifuges for the coal and
other mineral industries. Please
visit our web page for
additional information.

SIEBTECHNIK TEMA BV

PO Box 3220 Rijswijk GE 2280 The Netherlands Contact: Mr M P van Delden T: + 31 70 390 6555 E: m.vandelden@siebtechniktema.nl W: www.siebtechnik-tema.nl F: + 31 70 399 3390 SIEBTECHNIK TEMA Centrifuges Coal centrifuges for coarse and fine coal; Sample taking, sample preparation, complete sampling plants and laboratory equipment; Linear- and circularmotion screening machines.

SIEMENS AG

Olicinitzer Str. 555
Nuremberg
90475
Germany
Contact: Mr Stefan Rauscher
Job Title: Press
T: + 49 911 8957952
E: stefan.rauscher@siemens.com

SIEMENS AG

Schuhstrasse 60 Erlangen 91052 Germany Contact: Ms Jazmin Parra Ancares

Job Title: Strategy & Marketing
T: + 49 1733 697 767
E: jazmin.parra_ancares@
siemens.com

W: www.siemens.com Advanced Automation, Digitalisation Solutions and Electrification for the Minerals Industry, such as MES, Stockyard Management, CMS and more.

SIEMENS NEDERLAND NV PO Box 16068

The Hague 2500 BB The Netherlands Contact: Mr Hans Hertogh T: + 31 70 33 33 333 E: hans.hertogh@siemens.com W: www.siemens.com F: + 31 70 33 33 534

SIETHOM GROUP Poschacherstr. 35,

Linz
4020
Austria
Contact: Ms Bettina Bakos
Job Title: Marketing
T: + 43 7229 69079
E: office@siethomgroup.com/

SIG - SOCIETÀ

SIG - SOCIETA ITALIANA GOMMA SPA Via A. Colombo 144 Gorla Minore

Varese 21055

Italy
Contact: Mr Luca De Stefano
Job Title: Sales Director
T: + 39 0331 365135
E: sig@sig.it
W: www.sig.it
SIG is one of the European
most important producers of
elevator as well as rubber
conveyor belts.
With an experience of more
than 80 years manufacturing
SIG can easily supply high
quality made in Italy fabric and
steel cord rubber belts
worldwide.

SIMPLICITY PROJECTS PVT LTD

G1/1275, RIICO Industrial Area Rampur Mundana Bhiwadi Rajasthan 301019 India Contact: Mr Anoop Shanker Madan

Job Title: Director
T: +918130308006
E: sppl@simplicityprojects.com
W: www.simplicityprojects.com
Providing customised solutions
from concept to commissioning
of material conveying systems
for the last 40 years.

SLY LLC 8300 Dow Circle Suite 600

Strongsville 44136

Contact: Mr Mick Ruggiero
Job Title: Director, Sales and Engineering Operations **T**: + 1 440 239 5643 E: sales@slyinc.com W: www.slyinc.com F: + 1 440 891 3210 PE: +1 440 891 3210
Designs and manufactures industrial air pollution control equipment, including baghouse dust collectors, cartridge collectors, wet scrubbers (plate, venturi and eductor) and retractable loading spouts. The company manufacturing facility fabricates in carbon steel, stainless and duplex steels.
Production also includes cages.

SMAG PEINER GRABS (INDIA) PVT.

Office no. 504 The Affaires Premises Plot no. 9, Sector 17,Near Moraj Circle Palm Beach Sanpada Navi Mumbai

400705 India

Contact: Mr Vaibhav Pisal Job Title: Sales Engineer T. + 91 9004665338 E: smagmumbai@shipcare.in W: www.peiner-smag.in/

SMB International **GMBH**

Friedrich List Str 3-7 Quickborn 25451 Germany
Contact: Mr Andreas Heckel Job Title: CEO T: + 49 4106 12388 0 E: heckel@mba-instruments.de W: www.smb-group.de/ SMB meets the demanding SMB meets the demanding material-related requirements of conveying bulk and bagged goods. The company designs and manufactures high-performance conveying solutions designed for trouble-free long-term operation. Projects all over the world convince facilities regriduers. convince fertilizer producers, port operators and industrial specialists of the quality of German engineering.

SMILEY MONROE LTD 23 Ferguson Drive

Knockmore Hill Industrial Park Lisburn, Co. Antrim Northern Ireland BT28 2EX Contact: Mr Tim Monroe Job Title: Marketing Manager T: + 44 28 9267 3777 E: sales@smileymonroe.com W: www.smileymonroe.com F: + 44 28 9266 3666 Exporting worldwide - experts in the design, manufacture and service of conveyor belts, screening media and conveyor spillage control & dust encapsulation systems for bulk materials handling. Industries served range from quarrying, mining and cement plants to ports, steelworks and power stations.

Sobemai Crane Services by

39e Linielaan 2 Maldegem Oost-Vlaanderen B-9990 Belgium Contact: Mrs Kathleen Breusegem
Job Title: Managing Director T: + 32 50 711801 E: info@sobemai.com W: www.sobemai.com

F: + 32 50 710402 Manufacturer of equilibrated cranes, selling to the international market

Solited Engineering LTD

Unit 8 Gilchrist Thomas Industrial Estate

Blaenavon Gwent NP4 QRI UK Contact: Mr David Woodland Job Title: General Manager T: + 44 1495 790623 E: sales@solitec.co.uk W: www.solitec.co.uk **F**: + 44 1495 790666 Design and manufacture bulk materials handling equipment to food, pharmaceutical, cement petrochemical and other industries. Product range typically, consists of screw convevors, bucket elevators. mixers (various), IBC systems and silo discharge aids. Part of the ROTOLOK Group of companies.

SOTECMA

245. boul. Yvon - L'Heureux Nord Beloeil Quebec J3G 5R8 Canada Contact: Mr Florin Corcoz Job Title: President T: + 1 450 464 4426 E: fcorcoz@sotecma.com
W: www.sotecma.com F: + 1 450 464 4534 Canadian company offering turnkey engineering and construction services in bulk handling and flat storage solutions at low cost. The type of structure used is a highly versatile alternative to conventional constructions. The storage shed can be dismantled and he relocated For more details visit www.sotecma.com

SPOHN + BURKHARDT **SICHERHEITSTECHNIK GMBH**

Fichsfelder Straße 17 Düsseldorf 40595 Germany Contact: Ms Vanessa Henze + 49 211 88933001

E: info@sitec-components.com
W: www.sitec-components.com/
We are a German manufacturer of safety switches for conveyor belts. Our switches are designed for especially rough and demanding environment with many options to customize.

SPRAYSTREAM

Evolis 17 Kortriik 8500 Belgium Contact: Mr Mirko Savic Job Title: CEO T: + 32 56 44 33 00 E: mirko@spraystream.com W: www.spraystream.com/

STAG AG

Industriestrasse 11 Maienfeld Switzerland Contact: Mr Martin Adam Job Title: Sales/Marketing T: + 41 81 3035841 / 5800 E: office@stag.net E: United Stage 18 to 18 conveying technology as well as ensilage technology . We are also the ideal partner as a general company for complex assignments for nearly all bulk materials in plant construction.

STANDARD INDUSTRIE 139 - 141 Rue du Luxembourg

CS 50207

Roubaix Cedex 1 59054 France Contact: Ms Linda Granato Job Title: Marketing Manager T: + 33 320 283 232 E: market@standard-industrie.com
W: www.standard-industrie.com F: + 33 320 685 109 STANDARD INDUSTRIE International is a specialist in the design and manufacture of equipment to facilitate the handling of powdery bulk products safely. With our methods, you can optimise the performance of production tools while reducing the operating and maintenance costs.

STANTEC

375 Boulevard Roland-Therrien Longueuil Quebec J4H 4A6 Canada Contact: Mr Bernard Burke Job Title: Principal, Ports and Marine Terminals T: + 1 438 686 9125 E: bernard.burke@stantec.com
W: www.stantec.com/en F: + 1 450 668 8232 Customized solutions for complex projects. Our team meets even the most difficult technical challenges in a creative yet practical manner. We take pride in providing innovative solutions that balance production goals with good stewardship, environmental sustainability, and regulatory requirements. Most importantly, we consistently maintain our focus on safety and quality while delivering projects on-time and on-budget.

STEMM EQUIPOS INDUSTRIALES, S.L. Polígono Ibarluze

Pabellón B-9

Hernani Gipuzkoa 20120 Spain Contact: Mr Martín Amesti Job Title: General Manager T: + 34 943 335 033 E: info@stemm.com W: www.stemm.com F: + 34 943 333 506 With extensive experience in the bulk handling sector, STEMM manufactures a wide range of grabs for harbour and industrial cranes, especially electrohydraulic clamshell and orange peel grabs and single-rope radio-controlled clamshell grabs with state-of-the-art construction and service concepts. STEMM is your partner for

consulting, manufacturing and servicing around the grab

For further information, kindly check our website www.stemm.com.

STM Industriale APA

Zona Industriale snc Tito Scalo Potenza 85050 Contact: Mr Anselmo Zirpoli Job Title: Sales Manager T: + 39 0971 485073 ext 601 E: anselmo.zirpoli@stm.group; sales@stm.group W: www.stm.group
F: + 39 0971 485086
STM is specialized in the engineering and supply of BELT CONVEYOR SYSTEMS for bulk materials handling facilities. Since 1975 we provide worldwide innovative integrated solutions in order to increase efficiency, reliability and cost savings for the

customers' production

processes. STM Portfolio includes Belt Conveyor, Pipe Conveyors, Mobile Conveyors, Vertical Conveyors, Stackers, Trippers, Shiploaders,

STM SPA

Via del Maccabreccia, 39 Lippo di Calderara di Reno (BO) 40012 Contact: Mr Manuel Landa Job Title: Planetary Drives

Manager T: + 39 051 3765711

E: marketing@stmspa.com
W: www.stmspa.com Power transmission manufacturer (gearboxes & electric motors).

STOKMAN BV Brasem 18

Raamsdonksveer AB 4941 SE The Netherlands
Contact: Mr Mark Hoekstra Job Title: Account Manager T: + 31 162 516040 E: mhoekstra@stokmanbv W: www.stokmanbv.com F: + 31 162 517590

Strudes Inc

1980 Sherbrooke W. Suite 720 Montreal Quebec H3H 1ES Canada Contact: Mr Henry Nowodworski Job Title: President T: + 1 514 731 6951 x 123 E: h.nowodworski@strudes.ca W: www.strudes.ca F: + 1 514 737 4146 F: +1 514 737 4146 Strudes Inc. is an engineering consulting company, founded in Montreal in 1984. We specialize in design for heavy industry. We provide full range of engineering services including preliminary and final design, contract evaluation and administration, evironmental studies, schedule development,

STUDIO TECNICO **MALNATI SAS**

Via Giovanni Treccani degli Alfieri Milano Lombardia 20141 Italy Contact: Dr Andrea Malnati **Job Title:** Product Manager **T:** + 39 02 895 017 30 E: andrea.malnati@stmalnati.com W: www.stmalnati.com

Our company represents several industrial manufacturers. We develop basic engineering for solid material handling systems.

Our team is focused on selecting machineries and designing plants for: - crushing - screening - handling systems

- rollers and rubber belt - e-motors and inverters - process automation Other Equipment: Telescopic Cascade Chutes

Sucofindo

Laboratory Strategic Business Graha Sucofindo 6th Floor Jalan Raya Pasar Minggu Kav.34 Jakarta 12780 Indonesia Contact: Mr Diding Sudira Job Title: Senior Manager T: + 62 21 798 3666 E: diding@sucofindo.co.id W: www.sucofindo.co.id F: + 62 21 798 6878

SUMITOMO HEAVY INDUSTRIES MATERIAL HANDLING SYSTEMS Co., LTD.

Osaki Garden Tower 1-1-1, Nishi-shinagawa Shinagawa-ku Tokyo 141-0033

Japan Contact: Mr Yasushi Maeda Job Title: General Manager, International Sales + 81 3 6629 0175 E: shimh international sales@shi g.com **W:** www.shi.co.jp/shi-mh/

F: + 81 3 6628 5671 Sumitomo has produced a very wide range of material handling equipment for over 90 years and perseveres in its efforts to improve the efficiency of their leading continuous ship unloading range of machines.

Superior Industries

NW Business Complex Skeoge Ind Estate Derry Londonderry BT48 8SE Northern Ireland
Contact: Mr Michael Dunne Job Title: International Business Development EMEA T: + 44 28 71879589 E: michael.dunne@superiorind.com W: www.superior-ind.com

Superior Industries, INC.

SUPERIOR

315 East State Highway 28 PO Box 684 Morris Minnesota 56267 Contact: Mr Corey Poppe Job Title: Communicat Manager T: + 1 320 589 2406 E: info@superior-ind.com W: www.superior-ind.com F: + 1 320 585 5644

Superior Industries is the only North American based company to manufacture a complete line of conveying equipment like telescoping radial stackers, mobile shiploaders, truck unloaders and fixed conveyor systems; plus conveyor related components like idlers, pulleys, scrapers and other accessories.

Supreme Manufacturing, Inc. 327 Billy Boyd Road

Stoneboro PA 16153 USA Contact: Mr Elliot Archibald Job Title: Vice President Sales and Marketing
T: + 1 724 376 4110
E: earchibald@suprememfg.net W: https://suprememfg.net/

SYNERGY ENGINEERING

Ltd 135 Glacier Street Coquitlam BC V3K 571 Canada Contact: Ms Nicole Neuman Job Title: President & CEO T: + 1 604 464 3663 E: nicole.neuman@synergyeng.com
W: www.synergy-eng.com Synergy Engineering is internationally renowned for our electrical engineering & automation Design & Supply for materials handling industry. For mining, we deliver turnkey IPCC systems for expansion and debottlenecking projects unique expertise in SRC drive technology.

Tadano **INFRASTRUCTURE** SOLUTIONS LTD. 8-1 St Luke Towe Akashi Cho

Chuo-Ku Tokyo 104-0044 Japan Contact: Ms Kyoko Tomita Job Title: Overseas Sales Department **T**: + 81 3 5550 5375

E: kyoko.tomita.b8t@tadano.com W: www.tadano-infra.com F: + 81 3 5550 5366

In addition: Multi-purpose gantry cranes
IUK has supplied a lot of coal
handling equipment and
systems with cutting edge technology for world-wide customers and has had a world leading delivery record of the continuous ship unloaders.

TAMTRON GROUP
PO Box 15 (Vestonkatu 11) Tampere FI-33561 Finland Contact: Mr Mikko Kähkönen Job Title: Vice President of Sales & Marketing T: + 358 40 195 2527

E: mikko.kahkonen@tamtron.com W: https://tamtrongroup.com/

Tank Connection 3609 North 16th Street

Parsons Kansas KS 67357 USA Contact: Mr Gino Gebelin Job Title: Marketing Supervisor T: + 1 620 423 3010 ext. 109 E: sales@tankconnection.com W: www.tankconnection.com/ F: + 1 620 423 3999

TAPC - TOTAL AIR POLLUTION CONTROL

Suite 2.01 Level 2 315 Ferntree Gully Rd Mount Waverley Melbourne VIC 3149 Australia Contact: Mr Paul Gaskett Job Title: Sales & Marketing Manager T: + 61 3 9541 8699 E: paul.gaskett@ environmental.com.au

W: https://environmental.com.au/ TBA GROUP

4 Railway Court Ten Pound Walk Doncaster South Yorkshire DN4 5FB Contact: Mr James Watson Job Title: Marketing Specialist T: + 44 1302 330 837

E: james.watson@tba.group W: www.tba.group
Plan, track and manage all cargo types, manned/automated assets and people right across your terminal or terminal network. TBA Group are a global software & consultancy business offering integrated solutions to simplify the operations of ports, terminals and warehouses.

TBK GROUP BV

Groot Overeem 7 Renswoude Utrecht NL-3927 GH The Netherlands Contact: Mr Micha Bermentloo



Job Title: Manager Sales Support & Product Marketing T: + 31 318 745 740 E: mbermentloo@tbkgroup.com
W: www.tbkgroup.com The TBK Group delivers practical, innovative, and sustainable solutions which minimize waste, pollution and dust emissions around your conveyor belt.

TD MICRONIC 201-14770 64 Avenue

Surrey British Columbia V3S 1X7 Canada Contact: Mr Alastair Boyd Job Title: General Manager T: + 1 604 594 9191 E: admin@tdmicronic.com W: www.tdmicronic.com W: www.tdmicronic.com F: +1 604 594 9193 TD Micronic is a long time industry leader in Belt Weighing World. We have 0.1% accuracy with Measurement Canada, NTEP. We recently joined with Control Systems Technology in Australia to further provide accurate bulk weighing world wide.

TECHNAERO APS

Blaabaervej 3 Haslev DK-4690 Denmark Contact: Mr Anders Larsen Job Title: CEO T: + 45 56314925 E: sales@techNaero.dk W: www.techNaero.dk F: + 45 56314555 Other equipment: Silo systems

Tecpro Australia

Unit 5 16 Rob Place Vinevard NSW 2765 Australia Contact: Mr Patrick Cooper **Job Title:** Director **T:** + 61 2 9634 3370 E: patrick@tecpro.com.au W: www.tecpro.com.au/ Since 1982, Tecpro Australia has specialized in providing reliable technical solutions to the mining industry, in Australia and overseas. Our range varies from spray nozzles, ergonomic guns and stainless steel hose reels to evaporative cooling, dust and odour suppression systems

TEHNOROS

6/A, Bolshoi Smolenskiy ave. Saint-Petersburg 192029 Russia Contact: Mr Oleg Kasinov Job Title: Chief Marketing Officer T: + 7 (911) 975 48 91 E: info@tehnoros.ru W: www.tehnoros.ru TEHNOROS, established in 1991, designs and manufactures complicated materials handling equipment. Over the years company carried out hundreds unique and complicated projects for the backbone enterprises of metallurgical, mining, chemical and nuclear power industries, ports and terminals, shipbuilding industry.

TELE RADIO

International Brand Marketing Jadestraat 9 Bleiswijk 2665 NS The Netherlands
Contact: Mr Ron van Gent Job Title: Marketing Manager T: See our global website E: info@tele-radio.com W: www tele-radio com Tele Radio are experts on safe wireless and radio remote control. Our main business areas are within industry, industrial-, lift, mobile-, doors, gates and barriers applications. We also offer remote controls for hydraulic machinery.

August Barks gata 30A Västra Frölunda

Tele Radio i Lysekil AB

Gothenburg SE-421 32 Sweden
Contact: Ms Shietel Bhaggan Job Title: Marketing T: + 31 70 419 41 27 E: marketing@tele-radio.com
W: www.tele-radio.com/ Tele Radio are experts on safe wireless and radio remote control. Our main business areas are within industry, industrial-, lift, mobile-, doors, gates and barriers applications. We also offer remote controls for hydraulic machinery

TELESTACK LIMITED



Bankmore Way East Omagh County Tyrone BT79 0NZ Northern Ireland T: + 44 28 82 25 11 00 E: marketing@telestack.com W: www.telestack.com F: + 44 28 82 25 22 11 Specialist manufacturers of mobile bulk material handling systems for the Ports/Inland terminals, Mines, Quarries, Steel Mills, Cement Plants and Steel mills, Cement Plants and Powerstation industries globally. The mobile range of equipment offers unrivalled flexibility for the operator, reducing costs in Cap-Ex Investment compared to fixed installations, fuel and labour. Equipment includes; mobile shiploaders/unloaders, mobile stackers, mobile truck unloaders, mobile reclaim hoppers, mobile rail wagon loaders/unloaders and mobile link conveyors. We have supplied and support some of the world largest blue chip companies.

TENOVA S.P.A.

Via Gerenzano, 58 Castellanza (VA) 21053 Italy

Contact: Ms Marina Carrea Job Title: Marketing Manager T: + 39 0331444526 tenova@tenova.com W: www.tenovagroup.com Provides a full range of high capacity bulk materials handling equipment for coal and other minerals and ores. Its range of CSUs and shiploaders are amongst the largest capacity machines operating worldwide.

TEREX

200 Coalisland Road Dungannon Co.Tyrone BT714DR Northern Ireland
Contact: Ms Michelle Murphy Job Title: Group Marketing Manager T: + 44 7961710331 E: michelle.murphy@terex.com W: www.terex.com

TEREX DEUTSCHLAND GMBH

TEREX. FUCHS

Industriestr. 3 Bad Schönborn 76669 Germany
Contact: Mr Jens Körting
Job Title: Sales & Marketing Director E: jens.koerting@terex.com W: www.terex.com/fuchs Fuchs a Terex brand offers: Loading machines from 19 to 150to operating weight and up to 28m reach Complete solutions designed for your specific purpose

TEUFELBERGER SEIL GES.M.B.H

Vogelweiderstr. 50 Wels 4600 Austria Contact: Ms Tabitha Leibetseder Job Title: Market Communication T: + 43 7242 413 123 E: tabitha.leibetseder@ E: talorra.leloelseder@ teufelberger.com W: www.teufelberger.com F: +43 7242 413 91123 TEUFELBERGER is a globally successful enterprise specialized in manufacturing high performance wire ropes for various crane applications such as bulk handling for more than 225 years. TEUFELBERGER operates six manufacturing sites worldwide and possess a close-knit network of distribution partners

THE GRAB SPECIALIST

worldwide

B.V. Draaibrugweg 1 Almere 1332AA The Netherlands
Contact: Mr Emiel Bleyenberg Job Title: Director T: + 31 365 32 88 22 E: info@tgs-grabs.nl W: www.tgs-grabs.nl F: + 31 365 49 99 22 We supply all types of bulk handling grabs like clamshells in single line/remote control/electro-hydraulic/2-line and 4-line . Grabs can be supplied in standard design or to clients specification. We stand for good advice, quality, short delivery times and good service.

THE HILLIARD CORPORATION

100 West Fourth Street Elmira 14901 USA Contact: Ms Colleen Donahoe Job Title: Senior Marketing & Communications Manager T: + 1 607 733 0928 E: cdonahoe@hilliardcorp.com
W: www.hilliardcorp.com/ F: + 1 607 733 7121

THE RARING CORPORATION

1101 NE 144th St. Ste #107 Vancouver WA 98682-1475 LISA Contact: Mr Gonzalo Campos Canessa Job Title: President T: + 1 360 892 1659 E: gcampos@raringcorp.com E. grainposignation with www.mww.ratingcorp.com
F: + 1 360 892 1624
We design and manufacture
ADSTM Dust Suppression
Systems. Our systems are able to work under the most demanding weather conditions. ADSTM DSS helps to take care of the environment, reduce the losses of processed material, maintain safely working environments and free of accumulation of material and most importantly to reduce the risks of workers getting

THIELE GMBH & CO KG

Werkstrasse 3 Iserlohn Nordrhein-Westfalen D- 58640

Contact: Mr Maik Koerner Job Title: Sales Manager -Conveyor Chains T: + 49 2371 947 319 E: bulkmaterial@thiele.de W: www.thiele.de F: + 49 2371 947 241 More than 80 years experience in the engineering and manufacturing of conveyor chain systems such as round steel chains, bushed conveyor chains, forged conveyor chains and cardan chains, including all attachments.

THOR GLOBAL ENTERPRISES LTD. 839 Westport Crescent

Mississauga

ON

L5T 1F7

Canada Contact: Mr Aby Schneider Job Title: Managing Director Sales T: + 1 905 564 0440 EXT:238 E: abys@thorglobal.ca
W: www.thorglobal.ca F: + 1 905 564 9602 Thor Global Enterprises Ltd. is a leading manufacturer of bulk material handling equipment for applications ranging from mining, recycling and aggregate to agriculture, coal, mineral and port terminals. Founded in 1969, Thor Global has grown significantly over the years in order to provide innovative solutions with

unparalleled service and technology worldwide. THORWESTEN VENT

Daimlerring 39 Beckum 59269 Germany Contact: Mr Berthold Bussieweke Job Title: Head of Sales T: + 49 2521 93 91 0

thorwesten.vent@thorwesten.com
W: www.thorwesten.com F: + 49 2521 93 91 33

TIDFORE HEAVY INDUSTRY MANUFACTURING CO.,

LTD No. 6 Benhen Road

Jiuhua Economic and Technological Development Zone Xiangtan City Hunan Province China Contact: Mr Daniel Fu Job Title: Marketing Manager T: + 86 731 52837213 E: sales@tidfore.com W: www.tidfore.com

TINAMU LABS AG

Staffelstrasse 10 Zürich 8045 Switzerland
Contact: Mr Thomas Götschmann Job Title: CEO T: + 41 79 740 88 80 E: thomas@tinamu.com W: https://tinamu-labs.com/ TINAMU is a spin-off from the Swiss Federal Institute of Technology Zürich (ETH Zurich). We provide a turnkey solution for drone-based inspection automation, consisting of a dashboard that visualizes relevant information, analytics software running on a secured cloud, and the drone system connected to a communication network. Realtime insights are directly delivered to the asset owners, allowing supply chain and inventory managers to get trust, visibility and control over their inventory, in the cloud, at the push of a button.

TMEIC

2060 Cook Dr. Salem Virginia 24153 USA Contact: Ms Tricia Downie Job Title: Marketing Manager T: + 1 540 283 2000 E: tricia.downie@tmeic.com
W: www.tmeic.com F: + 1 540 283 2001

TMSA TECNOLOGIA EM MOVIMENTAÇÃO

Avenida Bernardino Silveira Pastoriza, 710 Bairro Santa Rosa de Lima Porto Alegre 91160-310 Brazil
Contact: Mr Rodrigo Pereira Job Title: Marketing T: + 55 51 2131 3238 E: rodrigo.pereira@tmsa.ind.br W: www.tmsa.ind.br Headquartered in Brazil with offices in Latin America, TMSA, is one of the largest suppliers for bulk material handling equipment to Port Terminals, Grain or Oilseed Processing Industries. Portfolio includes high capacity grain cleaners, enclosed belt conveyors, shiploaders among others.

Tobu Jukogyo Co. LTD.

4-12-20, Kitazakae Uravasu Chiba 279-0002 Japan Contact: Mr Shinichi Suwa

Job Title: Sales Department T: + 81 47 352 5318 E: info@tobugrab.com W: www.tobugrab.com/en/ W. www.tobugrab.compens
F: + 81 47 352 5316
We have played a role in
maritime logistics with a
cumulative 10,000 units of grab
buckets that connect ships and land. We will continue to add new value to dry bulk transportation.

TOPCON TECHNOLOGY LTD

Cirencester Road Minchinhampton Stroud Gloucestershire GL6 9BH UK

Contact: Mr N Wood Job Title: Business Development Manager T: + 44 1453 733300

E: nwood@topcon.com W: www.rdstec.com F: + 44 1453 733322 RDS Technology (Topcon Positioning Group) was formed in 1969 and specialises in the design and manufacture of on-board weighing scales for loaders (LOADMASTER a 100, LOADMASTER α50), excavators (LOADEX 100) and regal dump trucks (WEIGHLOG α 10).

TPI ENGINEERED

Systems 4045 Orchard Road SE

Suite 520 Smyrna Georgia 30080 USA Contact: Mr Bob Berry Job Title: CEO T: +1 678 498 6351 E: rberry@tpies.com
W: www.tpies.com/index.html

Trans-Global SOLUTIONS, INC

11811 East Freeway Suite 630

Houston Texas TX 77029 USA Contact: Mr Dan Orsini T: + 1 713 453 0341 E: dorsini@tgsgroup.com W: www.tgsgroup.com F: + 1 713 453 2756

TRANS-GLOBAL SOLUTIONS, INC. 5255 N Twin City Hwy Nederland

TX 77627 USA Contact: Mr William Scott Job Title: Vice President T: + 1 409 727 4801 E: wscott@tgsgroup.com W: www.tgsgroup.com F: + 1 409 729 1132

Transship LTD Marazlievskaya Str, 8 Odessa 65014 Ukraine Contact: Mr Eugene Mashtakov T: + 380 482 33 33 32 E: e.mashtakov@transship.ua W: http://transship.ua F: + 38 482 34 74 07

TRF Limited (TATA) 11 Station Road

Burma Mines Jamshedpur Jharkhand 831 007 India Contact: Mr Kaushik Dutta Job Title: Head, Corporate Services & Communication T: + 91 657 2345309 E: info@trf.co.in W: www.trf.co.in / www.tata.com/company/profile/TRF Other equipment: Plough feeders, Trippers, Side discharge loaders, Barrel reclaimer, Port crane, Special duty crane, Steep inclined only daile, sleep inclined conveyor.
A TATA Group company providing service to all sectors in bulk material handling & processing system on EPC basis or EP basis.

TRIODETIC 10 Didak Drive Arnprior

Ontario K7S 0C3 Canada
Contact: Mr Luis Gattorno Job Title: V.P. Global Dome Operations T: + 1 613 623 3434 ext. 2272 E: lgattorno@triodetic.com W: www.triodetic.com F: + 1 613 622 4003 Geodesic Domes and longitudinal covers for dust control and to protect against material loss New or existing stockpiles where dust issues are a problem. Triodetic Domes can be installed over operation Stockpile without downtime.

Tru-Trac Rollers (PTY) LTD 590 Barolong St

Icon Industrial Park Sunderland Ridge Centurion Gauteng 0154 South Africa
Contact: Mr Shaun Blumberg Job Title: COO and Director T: + 27 12 661 9531 E: shaun@tru-trac.com W: www.tru-trac.com/

TSP KOREA

301 Yeonghwa B/D 149 Seongdeokjung-gil Engineering dept. Seoul 04777 South Korea

DCi

147

Contact: Mr Baiksoo Han Job Title: President T: + 82 1037142274 E: bshan@han-corp.com F: + 82 24618084

TSUBAKI CONVEYOR Systems India Pvt. LTD

Gat No. 316-319 Ambadvet Pune-Paud Road Near Pirangut Pune Maharashtra 412 108 Contact: Mr Ravindra Vaidya T: + 91 20 67928400 E: VAIDYA.RAVINDRA@tsubakiconveyor.in

W: https://tsubaki-conveyor.in/ F: + 91 20 67928401

TSUBAKI KABELSCHLEPP GMBH

Daimlerstr. 2 Wenden-Gerlingen D-57482 Germany
Contact: Mrs Lena Sondermann Job Title: Assistant to VP Sales & Marketing T: + 49 2762 4003 0 E: info@kabelschlepp.de W: www.kabelschlepp.de Founded in 1954, KABELSCHLEPP is known today as one of the world leaders where cable carriers, quideway protection and conveyor systems are concerned. Products are today being used by numerous well-known machine builders in Germany and abroad.

Tsubakimoto Bulk Systems Corp.

Ryokuchieki Building 7F, 2-4-1, Terauchi, Toyonaka Osaka 561-0872 Japan Contact: Mr Shigetoh Nakajima Job Title: Overseas Business Dept. **T:** + 81 6 6862 2329 E: tbs-sales@gr.tsubakimoto.co.jp W: https://tsubakimoto.com/tbs/ F: + 81 6 6862 8516 Produces bulk handling systems equipment, bucket, flow and pan conveyors.

ULMA Conveyor COMPONENTS

Barrio Zelaieta s/n Otxandio 48210

Contact: Mr Egoitz Jiménez Ocio Job Title: Managing Director T: + 34 945 450 075 E: ejimenez@ulmaconveyor.com

W: www.ulmaconveyor.com/en/ F: + 34 945 450 257

VEENSTRA Machinefabriek B.V.

De Holwert 10 KC Coevorden 7741KC The Netherlands

Contact: Mr Paul Kuiper Job Title: Investor T: + 31 524 599 333 E: mach@veenstra-coevorden.nl **W:** www.veenstragroup.nl **F:** + 31 524 599 330

Verstegen Grijpers BV



Marconibaan 20 Nieuwegein 3439 MS The Netherlands
Contact: Mr Eric Visser Job Title: Managing Director T: + 31 3060 62222 E: info@verstegen.net W: www.verstegen.net F: + 31 3060 60657 A leading manufacturer, specialising in developing, designing and constructing all kinds and types of grab units. Its product range includes single/two/four rope grabs and hydraulic grabs.

VIBCO INC

75 Stilson Road Wyoming 02898 USA Contact: Mr Karl Wadensten Job Title: President T: + 1 401 539 2392 E: vibrators@vibco.com
W: www.vibco.com F: + 1 401 539 2584 VIBCO industrial and concrete vibrators are saving real people time and money!
We manufacture all our
vibration equipment in the USA. Our factory, our engineers, and our customer service agents are ready to help you. Contact VIBCO Vibrators today 1-800-633-0032.

Vibrafloor

Za 27 Rue de la Tuilerie Dracy-le-Fort 71640 France Contact: Mr Jean-Claude Poncet Job Title: President T: + 33 3 85 44 06 78 E: vibrafloor@vibrafloor.com W: www.vibrafloor.com F: + 33 3 85 44 06 79 Vibrafloor supplies the automatic reclaimer VIBRAFLOOR. Independent vibrating modules laid on slight inclines, typically 8 to 12°, remove efficiently most bulk remove emiciently most bulk products, free flowing or cohesive, out of ship holds, silos, storage platforms, railway cars etc... No personnel, maintenance free, totally safe, negligible operating cost are major advantages

Virta Inc.

5909 Sea Lion Place Suite B Carlsbad California 92010 USA Contact: Ms Vannessa Hamilton

Job Title: Marketing Analyst T: + 56 990 742958 E: vannessa.hamilton@virtainc.com W: www.virtainc.com/ An original equipment manufacturer (OEM) specialized in design/supply of bulk material handling systems to mining, mineral processing, ports and terminals, power, and chemical projects worldwide. founded on principles of safety, quality, technical depth, lean operations, fast delivery, custom solutions, and responsiveness.

VIVO consult s.r.o.

Kaprova 42/14 Praha 1 110 00 Czech Republic Contact: Mr Vita Vortruba Job Title: CEO

T: + 420 602 443 914 E: demands@vivoconsult.com W: www.vivoconsult.com

VOLLERT ANLAGENBAU **GMBH**

Stadtseestr. 12 Weinsberg 74189 Germany Contact: Mr Jurgen Schiemer Job Title: Vice President T: + 49 7134 52 232 E: juergen.schiemer@vollert.de W: www.vollert.de F: + 49 7134 52 222 Other equipment: Shunting Other equipment: Shunting Systems. Vollert shunting systems are the ideal solution for rail-bound in-plant loading and shunting operations handling all kinds of materials (bulk cargo, liquids etc) - ranging from stationary shunting systems to free-moving shunting robots with diesel or electric drive.

VORTEX GLOBAL

LIMITED 13 Halegrove Court Stockton on Tees TS18 3DB UK Contact: Mr Laurence Millington Job Title: Managing Director T: + 44 132 572 8577 E: global@vortexglobal.com
W: www.vortexglobal.com
Vortex manufactures quality slide gates, diverters, iris valves, loading spouts, and aerated equipment for handling dry bulk solids. Our products can be specifically designed for individual applications in the agriculture, bakery, cement, chemical, coal, food, milling, mineral, pharmaceutical, plastics, and rubber industries.

VSR Industrietechnik

GMBH Am Alten Schacht 6 Duisburg D-47198 Germany Contact: Mr Julius Körling
Job Title: CEO
T: + 49 20 66 99 66 30
E: info@vsr-industrietechnik.de W: www.vsr-industrietechnik.de F: + 49 20 66 99 66 62 F: +4 20 to 99 00 02 VSR is a privately owned German engineering company, manufacturing machinery and equipment. Our national and international clients are mainly in the heavy and bulk goods industry (eg energy, chemical, coal, cement, feed and recycling industries). For more than 45 years the name VSR Industrietechnik GmbH has stood for experience, expertise, quality and sustainability. Our six established product groups are: VSR BLASTER® air cannons: VSR DUSTEX® dust suppression system / fog blower; VIBREX® Conveyor-belt scrapers; LINEX® conveyor-belt centralizing idler; CAREX® sealing system for transfer chutes; VSR VIBMATIC® VSR stress

Wajax

reduction procedure

3280 Wharton Way Mississauga Ontario L4X 2C5 Canada
Contact: Mr Joel Paikin Job Title: Product Manager T: + 1 647 268 6195 E: jpaikin@wajax.com

WAMGROUP S.P.A.

Via Cavour 338 Ponte Motta/Cavezzo (MO) 41032 Italy Contact: Mr Matteo Reggiani Job Title: Corporate Marketing

Communications Manager

T: + 39 0535 618 111 E: matteo.reggiani@wamgroup.com
W: https://wamgroup.com/

WEATHERSOLVE **STRUCTURES** #102, 6350 204 St

Langley British Columbia V2Y 2V1 Canada Contact: Mrs Barbara Robinson **Job Title:** Marketing Manager **T:** + 1 604 607 7781 E: Barbara@WeatherSolve.com W: www.weathersolve.com W. www.weathersolve.com F: + 1 604 909 1914 WeatherSolve Structures has over 40 years of experience. Over 1000 acres of fencing and found on every continent, including Antarctica. We understand that dust can be an issue we are happy to help you come up with the best solution. Designs are customized to your needs. The fences are put in place and with very minimal upkeep they use no daily consumables, to have an easy solution for you. Call us today!

WEBA CHUTES

99 Nagington Road Wadeville Germiston South Africa

Contact: Ms Karina Trollip Job Title: Marketing Manager T: + 27 11 827 9372 E: karina@webachutes.com W: https://webachutes.com/ Weba Chutes specializes in innovative bulk materials handling solutions, providing customized chutes and flow control systems to optimize operations in mining and industrial sectors. Committed to quality and efficiency, Weba Chutes enhances productivity and reduces operational costs for clients worldwide.

WEG

Av. Pref. Waldemar Grubba 3300 Vila Lalau - 89256-900 Jaraguá do Sul - SC Contact: Mr Rodrigo Pascon Job Title: Head of International Marketing **T:** + 55 47 3276-4000

E: rpascon@weg.net W: www.weg.net

Weightron Bilanciai LTD

Titan Works Bridge Way Chesterfield Trading Estate Chesterfield S41 9QJ

Contact: Mr Nick Burley
Job Title: UK Sales & Marketing Director

T: + 44 1246 260062 E: sales@weightroncb.co.uk
W: www.weightron.com

Weir-Motion

METRICS 8162 Ontario St Vancouver British Columbia

V5X 3E3 Canada Contact: Mr Camilo Sanchez Job Title: Marketing T: +1 604 822.5842 x36 E: info@motionmetrics.com W: www.motionmetrics.com F: +1 604 677 5191

Westmar Advisors

Suite 700 - 1901 Rosser Avenue Burnaby V5C 6R6 Canada
Contact: Mr Stanley Cowdell Job Title: President

T: + 1 604 770 4787 E: info@westmaradvisors.com W: https://westmaradvisors.com/

WIRTECH AG

Zelgstrasse 86 Uetendorf CH-3661 Switzerland Contact: Mr K Buehler Job Title: Marketing T: + 41 33 346 5050 E: info@wirtech.ch W: www.wirtech.ch F: + 41 33 346 5059

WOLF MATERIAL HANDLING SYSTEMS 231 Main St NW. Suite 6

Elk River LISA Contact: Mr Howard Brockhouse Job Title: Sales & Marketing Manager **T:** +1 763 576 9040 E: sales@wolfmhs.com W: www.wolfmhs.com/ F: +1 763 576 9070 Wolf Material Handling Wolf Material Handling Systems is a premier provider of engineering, design and manufacturing of bulk material handling systems. Wolf has supplied some of the largest material handling systems in North America North America.

WOLF POINT **ENGINEERS & C**ONTRACTORS

One North LaSalle Street Suite 4000 Chicago 60602 USA Contact: Mr Robert Williams Job Title: Vice President of Sales and Marketing T: + 1 312 508 5550 T: + 1 312 508 5550
E: bwilliams@wpengrs.com
W: www.wolfpointengineers.com/
Wolf Point Engineers &
Contractors (a Division of North
Alabama Fabricating Company,
Inc.) is a leading EPC Firm
specializing in the
implementation of Bulk Material
Handling. Systems for. Handling Systems for numerous industries including but not limited to the Power

Wölfer by WICHMANN E **GMBH**

Mining, Pulp and Paper Industries.

Industriestraße 14 Osnabrück 49082 Germany Contact: Mr Oliver Hinnah T: + 49 5404 91779 921 E: Oliver.Hinnah@wichmann-os.de
W: www.woelfer-motoren.com

Wood

15 Justice Mill Lane Aberdeen Scotland AB11 6FQ Contact: Mr Ken Gilmartin Job Title: CEO E: ken.gilmartin@woodplc.com W: www.woodplc.com

World Domes

4355 N Haroldsen Drive Idaho Falls Idaho 83401 Contact: Mr Ted Parkinson T: + 1 208 522 5520 E: ted@domes.com W: www.domes.com World class, high quality concrete dome builder for storage of a multitude of dry bulk materials, including coal. DOMTEC has broad experience with reclaim systems. Projects are delivered around the world on time and

Wuvio International

Honderdland 150

Maasdijk Zuid-Holland 2676 LT The Netherlands Contact: Mr Michel Gadron Job Title: CEO T: + 31 1745 200 01 E: michel.gadron@wuvio.com
W: www.wuvio.com Wuvio supplies innovative and wuvio supplies innovative and proprietary products to combat dust during handling and storage of dry bulk. Our aim is to suppress dust in an effective and sustainable way. Our solutions are tailor-made for vour specific situation.

Yernaux-Pasage

Zone Industriele Beraaugard PB Brive Cedex 19107 France Contact: Mr Willy Banc Job Title: Marketing Department T: + 33 475 66 4600 E: willy.banc@preciamolen.fr F: + 33 555 860 563

ZAO SMM (CJSC SMM)

Grivtsov Lane, 1/64 Saint-Petersburg 190000 Russia Contact: Mr Anton Rishnyak Job Title: Executive director CJSC "SMM"
T: + 7 812 325 87 82 E: anton@zaosmm.ru W: www.zaosmm.ru/ **F**: + 7 812 325 87 83

ZPMC - Shanghai ZHENHUA HEAVY Industries Company LIMITED

3261 DongFang Rd

Shanghai PR 200125 China Contact: Mr Jinsheng Lei Job Title: Marketing & Senior Engineer E: leijinsheng@zpmc.com W: www.zpmc.com World-famous manufacturer of cranes and large steel structures. Products include quayside container cranes, gantry cranes, shiploader/unloaders. bucketwheel stackers and reclaimers, portal and floating cranes, engineering vessels and big steel bridge structures



DC



Professional companies in more than 110 countries worldwide work with Verstegen grabs, because our grabs offer them the highest reliability and best productivity. Combining our extensive knowledge and experience with the feedback from our loyal customers results in optimized grabs for all bulk materials and unloading situations. We call this 'Grab Intelligence'.

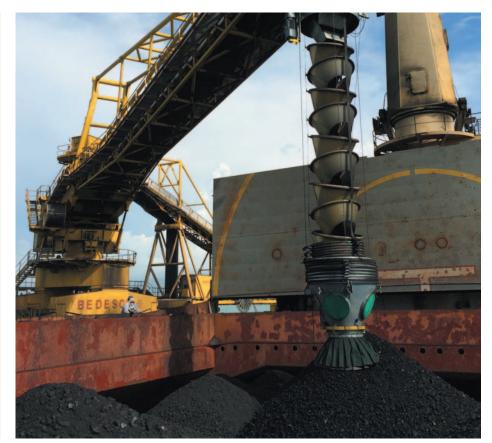
Looking for increased reliability and productivity, lower maintenance costs and an extended lifespan? Let us know, because together we can move mountains.

LET'S MOVE MOUNTAINS

WWW.VERSTEGEN.NET

COAL HANDLING EQUIPMENT SUPPLIED

KEY		
SL	=	shiploaders
SUL	=	ship-unloaders
GL	=	grab loaders
GUL	=	grab unloaders
G	=	grabs
CSU	=	continuous ship-unloaders
BL	=	barge loaders
BU	=	barge unloaders
SU	=	self-unloaders & equipment
BE/L	=	belt conveyors/loaders
5	=	stackers
R	=	reclaimers
S/R	=	stacker/reclaimers
С	=	conveyors & accessories
F-EL	=	front-end loaders
Н	=	hoppers
MHE	=	mobile bulk handling equipment
Cr	=	crushing
Sc	=	screening
Bln	=	blending
Wg	=	weighing
S&I	=	sampling & inspection
DC	=	dust control & suppression
DC&A	=	drives, controls & automation
ES	=	enclosed storage
SS	=	stockyard systems
RL/U	=	railcar loaders/unloaders
СВН	=	containerized bulk handling
EC	=	engineering consultants
0	=	other



	SL	SUL	GL	GUL	G	CSU	BL	BU	SU	BE/L	S	R	S/R	C	F-EL	Н	MHE	Cr	Sc	Bin	Wg	S&I	DC	DC&A	ES	SS	RL/U	СВН	EC	0
4B BRAIME Components Ltd														V										V					V	V
A.E. Automation Pvt Ltd																														
(Factory)	~	V	~	1		V	V	V	V	~	V	~	V	1		1	V	V	V	1			1	1	V	V	V		1	
A.E. Engineers (S) PTE Ltd	V	V	V	V		V	V	V		V	V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V		V	V
AAF International																							V							
AB Volvo Penta																	V													
ABB AB	V		V	V							V		V											V					V	
Abbey Rollers Limited																														
ABC Engineering LLC																									V					
ABIAC																														
Ability Engineering LLC																														
Achenbach GmbH																														
Metalltechnik														V																
Advanced Conveyor																														
Technologies Inc (AC Tek)										V	1	~	~	V															~	
AFM International Inc.	V										V															V				V
Ag Growth International (AGI)														V																V
Agilitus Pty Ltd																														
Agrico Sales, Inc.	V						V			V	V			V		V									V		V			
Air Spectrum																							V							
AJ Edmond Company																														
Alekon Cranes OÜ																														
Alex Stewart International																														
Corporation Ltd																						V								
Alfred H Knight																					V	V								
Alpine Bulk Materials Handling																														
GmbH	~	V		~			V			V	~	~	V	V		~	V	V	~	1						~			~	
Alpine Canada																														
ALS Inspection UK Limited																					V	V								
Altra Industrial Motion														V										V						
AMECO Group	V	V					V	V			V	V	V							V					V	V	V		V	V
Anindya																						V								V
Anvil Attachments					V																									
Apollo Group																														
Applied Conveyor Technology,																														
Inc. DBA The ACT Group										V	~			V		~		V	~				~	~			V		~	V
ARAH EDAR (M) SDN. BHD.	V	V		V	V	V	V	V	V	V	V	V	V	V		V	V	V	V	V	V		V	V	V	V	V		V	
Ardelt Kranbau GmbH		V	V	V			V	V								V											V		V	V
Arlona Engineering					V					V	V			V		V											V			
AS LNK Industries														V																
ASGCO "Complete Conveyor																														
Solutions"														V									V						V	

	SL	SUL	GL	GUL	G	CSU	BL	BU	SU	BE/L	S	R	S/R	C	F-EL	Н	MHE	Cr	Sc	Bin	Wg	S&I	DC	DC&A	ES	SS	RL/U	СВН	EC	0
Ashton Bulk Ltd																														
Astec Astec Bulk Handling Solutions	~	~					~	~	~	~	V		~	~		~	~	V	~					~		~	~			V
ATLAS-SSI Co. Inc					V																									V
AUMUND Foerdertechnik																														
GmbH (AUMUND Group) Aurecon										~				~		~														
Aurecon																													V	
Axiochos Ltd																														
Basic Machinery Co. Inc. Bateman Manufacturing																														
Bauer Gear Motor GmbH																								V						
Bauflex-Engineering LLP																														
Bedeschi SpA	V	~	~	~	~	~	~	V	V	~	V	V	V	~		~	V	V	V	~	V	V	~	V	~	V	V	~	V	~
Beijing HaoSheng Transmission Technology Co.																														
Belt Conveyor Guarding	V	V	V	V		V	V	V	V	V	V	V	V	V			V	V	V	V	V			V		V	V			
Belt Tech Industrial																														
Beltscan Systems Bendezu Port Equipment										~				~								~		~						V
GmbH																														
Benetech GmbH																														
Benetech USA BEUMER Group GmbH &										~				~						~			~						~	
Co KG	V						V			V	V	V	V	V		V	V							V		V	V			V
Bilfinger Tebodin																													V	V
BITNER Kabel GmbH	~	~	V	V	~	V	~	~	~	~	V	V	V	V	~	~	~									V		~		
Bleste SIA Port Equipment Blue Water Misting																							V							
BLUG Credeblug S.L.	V	V	V	V	V	V	V	V	V														V	V		V				
BMH Global Pty Ltd										~	V			V		~	V	V	V		~	V	~	~		~	~	V	V	
Bogaert Transmission (GEHA) Borghi Assali srl														V										V						V
BossTek																							V							V
Bray Process Control																														
Brelko Conveyor Products Breston B.V.														~									~							~
Bridon-Bekaert Ropefs																														
Group Global HQ														V																V
Bruks Siwertell AB Bruks Siwertell AB	V										7	V	V V	V				~	V						V V	V				
Bruks Siwertell AB	V	V				V	V	V		V	~	V	V	V		V	V		Ť				V	V	V				V	
BSP ENGINEERING S.R.L																														
BTW Plant Solutions - a division of BT-Wolfgang Binder																														
Bulk Cargo Handling BVBA																														
Bulk Material Equipment																														
Bulk Storage Inc Bureau Veritas																						V								
Bureau Veritas																														
Bureau Veritas Fuels																						V								
Buttimer Engineering BV Beco	~	~			V				~	~				~		~	~						~	~					~	
BVS Cranes																														
C Spencer Ltd																														
Cachapuz – Weighing & Logistics Systems, Lda										_											~			V					V	,
Calim Grab Industry			V	V	V											V	V													
Cambelt International LLC										V		V		V			V								V		V			
Capotex Caterpillar (UK) Ltd.																														
Caterpillar SARL	V	V					V	V							V															V
Cavotec SA																	V													V
CCTEGIEC CDM Systems, Inc	V	~					_	_						V													_			,
Changsha Kaiyan																														
Instruments Co. Ltd																														
CHIA Espirales														~		~							~						~	
China Huadian Engineering Co., Ltd																													V	1
CICSA Group	V	V										V	V	V																
Cimbria A/S	V						V			V				V		~	V	V	V			V	~	~		ļ	~		V	
Cintasa Americas CINTASA S.A.U.										V	V V			V		V	V				V					~				~
Cita Logistics Pty Ltd																						V								
Civettini Italo & c sas (CFS Ha	ndlin	J)				V																								
Claudius Peters Projects GmbH	,					,	,	V	,	,	V	V	V	V			,	,		,				V	V	V	,		V	,
Claudius Peters Technologies										-																				
S.A.S										V	V	V	V	V		V										V				
Cleveland Cascades Ltd		.,									.,	.,	V										~							
CNBM International Eng Co. Coal Control		V								V	V	V																		
			l		l	l									l		l				l									1

	SL	SUL	GL	GUL	G	CSU	BL	BU	SU	BE/L	S	R	S/R	C	F-EL	Н	MHE	Cr	Sc	Bln	Wg	S&I	DC	DC&A	ES	SS	RL/U	CBH	EC	0
COBRA Europe SAS														V																
Coles Associates	~	V		V		~				~	V	~	V	V													~			
Comatec Process and																														
Automation Oy Commodity Inspection Service	c																					V							V	
Conductix -Wampfler Australia																														V
Conductix-Wampfler Americas		V				V	V	V			V	V	V	V		V								V		V	V		V	V
Conductix-Wampfler GmbH																								~						V
Continental Construction														V																
(Memphis)																														1
CONTINENTAL MATADOR																														
RUBBER, s.r.o.														~																
Control Systems Tech Pty Ltd																					V									
Conveyor Dynamics, Inc.														V																
CONVIR JSC Coperion	V									7	V			V		~	~		~		V						~		V	~
Cotecna Inspection SA																						V								
CPS Projects (Pty) Ltd	V	V		V												V								V					V	
Cranes Machinery Co. Ltd																														V
Cromex Makine ve Dis																														
Ticaret Ltd. Sti. CRS - Container Rotation					~																									
Systems Pty Ltd																														1
CSSC Huahai Marine Equip																														V
CST Covers																									V					
CST Storage												V				V									V					V
CWA Engineers Inc.	V	~	~	V	V	~	V	~	~	V	V	V	V	~	~	V	V	V	V	V	V	V	~	V	V	~	V		V	V
Dalian CIMC Special Logistics Equipment Co., Ltd																														
Dalian Huarui Heavy Industry																														
International CO. , LTD																		V	V	V						V				
Dalian Start Engineering Co Li	d 🗸	~	~	V		~	V	V			V	V	V				~	~	V	V						V	~	V	~	V
Dana Industrial	V	V				V				~	V	~	V	V				~						~		V	~			
DCL, Incorporated	~						~				V			V		V							~			>	~			V
De Regt Conveyor Systems DELLNER BUBENZER														V																
Germany GmbH	V	V				~			~	V	V	V	V	V			~	V						V			~	V	/	
Delta Ducon														V													V			V
Demag Cranes &																														
Components GmbH																														
DeMarco Industrial Vacuum DemcoTECH Engineering	V	~		~			~	~		~	~	7		_	~	V	~			~	V	~	V	~	V	~	7		V	V
Den Bakker Dustcrusting	•			V			•			V	V			•		V	-			V	V	•	•		V	V			•	
Technology b.v.																							V							
Deutsche Großwälzlager																														
Disab Vacuum Technology AB																	V						V							~
Dome Technology, LLC																									V				~	~
Don Valley Engineering Co Donaldson Europe b.v.																							V							
Donaldson Filtration																							•							
Deutschland GmbH																							V							
Doppelmayr Transport Tech										V				V																V
Dos Santos International, LLC	V					V	V	V	V	~	V			V			V												V	~
Dry-Bag A/S																														V
DSM Shipbrokers / Shiptrade DURO FELGUERA, S.A.	V	~	~	~		~		_		~	~	~	~	_		V		~	V	~	V	V	V	V	V	~	~		~	~
Dust Solutions Inc																							V							
E-Crane Worldwide	V	V	V	V	V		V	V								V	V										V	V	~	
EDGE INNOVATE. (NI) LTD	V						V			V	V			V		V		V	~								V			
EFM Design Services Pvt Ltd																														
Egis Ports Eka CTRM Solutions Pty Ltd												_	~							~	~	~		~		~			V V	
Elecon Engineering																													•	
Company Ltd	V						V			V	V	V	V	V		V		V	V	V	V			V	V	V	V			
Elecon Singapore PTE Ltd.	V						V			V	V	V	V	V		V		V	V					V			V		V	V
ELETTROTEK KABEL S.p.A.																														
EMG Automation GmbH																														
EmiControls EMS-Tech Inc	~	~				~	_	~	~	~	V	_	~	_		~	~						V	~	~	~			V	_
ENBL (Kunshan) Machinery		-				-	-	-	-	-	-	-		-		-	-						-	-	-					
Co. Ltd					V											V	V													
Enduride																														
Engicon nv (Geldof)	V									~	~	V	~	V		V		~			~		V		V					
Engineering Services Hambur	9																													
Engineering System Solutions, ES2																														
EPN Solutions																														
EQUIPO LLC			V	V	V																									
Eriez														V					V			V								V
Esch Group by																								V						

	SL	SUL	GL	GUL	G	CSU	BL	BU	SU	BE/L	S	R	S/R	C	F-EL	Н	MHE	Cr	Sc	Bin	Wg	S&I	DC	DC&A	ES	SS	RL/U	СВН	EC	0
ESI Eurosilo BV											V	V	V							V					V	V			V	
ESL Power Systems, Inc.											Ť	•								Ť						Ť				
Euromec S.r.l.					V																									
Euro-Tramco BV						V								~																
Excel Machinery F. Harley & Co. Pvt. Ltd.																							V							
Fabtech International Ltd																														
FAM Minerals & Mining	V	~	~	V			V	V		V	V	~	~	V		~	V	V	V	~				~	V	~	V			~
FAMAK SA Fenner Dunlop Americas	V			V	~						V	~	~	~											~					
Fenner Dunlop Conveyor																														
Belting										V				V																
Fenner Dunlop Conveyor																														
Belting Europe										V	V	~	V	V																
Fenner plc Flender GmbH														~										~						
Flexco														V																
Flexco Europe GmbH										V				V																
Flexicon Corporation																														
Fogco Systems, Inc.																							V							
Frigate Teknologies Private Lir FWS Group	nited																													
Gama Endustri Tesisleri																														
Imalat Ve Montaj AS	V	V	V			V				V	V	V	V	V		V		V	V	V					V	V				V
Gambarotta Gschwendt Srl	V	V				V			V	~	V	V	V	V	V	V	V	V	V	V	V	V	V	V		V	V		~	V
Ganz Danubius HUTI Kft					V											V														~
GBS Colombia SAS Generac Mobile Products Srl	~									~	V			V		~	~						V							
General Kinematics																							•							
Geo - Chem Laboratories																														
Private Limited																					V	V				V				
Geometrica Inc																							V		V					
Gertech Handling Systems cc														V									V		V					
GF MHS Srl Global Manufacturing, Inc.	~	V				V	~		V	~	~	~	~	~		V	V	V	~	~	~		V		~	~	V		~	~
Global Technics OÜ						•			•							•	•						•				V	V	V	V
Golden West Industries																							V				Ť			Ť
Grapplers India Pvt Ltd																														
(Essar Industries)																														
Günter Jung GmbH Gurtec GmbH																														
Guttridge Limited		V				V				V				V		V			V		V									
Guven Grab Machine Inc.		•			V					Ť				•		•			•											
Hackforth Holding GmbH																														
Hägglunds																								~						
Hammelmann GmbH																														
Hangzhou Huaxin Mechanical & Electrical Engineering Co																														l
Hapman														V			V													
Hasel Machinery Inc																								V						
Haskoning India Pvt Ltd																														
Hatch HAUK & SASKO	~	~	~	~		~	~	~		~	\	~	~	~		~	~	~	~	~		~	~	~	~	~	~	~	>	
Ingenieurgesellschaft GmbH																														
Haulder S.A.																														
Haver & Boecker Niagara																			V											V
Heavy Handling	~	~	~	V	~		~	V									~													~
HEKO Ketten GmbH Henan SRON Silo Engineer'g																														
Herjimar S.L																														
Heyl & Patterson Equipment																														
Member of The HALL Group	~		~	V	~		~	V		V	V	~	V	V		V	V						V	V			V	V	V	V
HIT S.r.l.																														
Hitachi Construction Machinery (Europe) NV																														V
HKD Blue																							V	V						
Horizon Conveyor Equipment										~	V	V	V	V							~									
HOSCH Fördertechnik																														
Recklinghausen GmbH														V																~
Huebner Speed Monitoring																														V
Hycontrol Limited IBAU HAMBURG	~	V				~	~	V						V		~						V			V		V		V	~
ICC Commonwealth																														
ICCE d.o.o.	V	V	V	V		V				V	V	V	V	V		V	V	V	V	V	V			V		V	V		V	V
IEM FörderTechnik GmbH																														
Igus GmbH																								~						~
Ima Engineering Ltd IMASA																														
Imeca Cranes	V	V	V	V			V	V																					V	V
IMO Germany																														
•																												.		

Impro Salder Portugation Recognished Services (1988) Related Company Related C		SL	SUL	GL	GUL	G	CSU	BL	BU	SU	BE/L	S	R	S/R	C	F-EL	Н	MHE	Cr	Sc	Bln	Wg	S&I	DC	DC&A	ES	SS	RL/U	СВН	EC	0
Important Programme Technology Relation Company Imperial Conveying Systems	V						V	V	V	V	V	V		V		V		V			V					V	V		V		
Richard Company Richard Company Richard Company Richard Company Richard Company Richard Company Richard Richard Richard Richard ROCOM Indicated Richard Richard ROCOM Indicated Richard Richard ROCOM Indicated Rich	Impro Solutions Inc																														
Refer Carry Mary Control Statistics Cong. See Carry Mary Control Statistics Cong. Mary Cong. Mary Control Statistics Cong. Mary Control Statistics Cong. Mary Control Statistics Cong. Mary Control Statistics Cong. Mary Control Statistics Cong. Mary Control Statistics Cong. Mary Control Statistics Cong. Mary Control Statistics Cong. Mary Control Statistics Cong. Mary Cong.																						~	~								
Internoce Self		1	1				/	/	/		7	/	V	7	/		/	/	7	/				_		V	/	1			
International Parish Name 12 May 10 M	indurad GmbH													-							V	V			V	Ť					
NOCOM Industrial Plays Note The Control Control Note The Control Control Note The	Inenco SAC																														
Testing EV, Market Mark															,																
Temporal Solidores Group Temporal Solidores (Sop.) Temporal Solidores (So	Instral B.V.																							V							
International Conference Products School Consolidation from School Co	Intermodal Solutions Group																												V		~
CR. SAMA Graedischeft fluor argenes for Aprendix A. V.																															
SAM AND CREATER CHARGE COMPANY SAM AND CREATER CHARGE CHA																															1
Six Engrenering Six Multimediated and v v v v v v v v v v v v v v v v v v v	iSAM AG Gesellschaft fuer																														
SOAR MARPORISE IS V V V V V V V V V V V V V V V V V V	angewandte Kybernetik	V	~	V	V	V	~	V	V			V	V	V							V	V			~		V	~		V	
Second State Seco		.,		.,													,														
Table 19 19 19 19 19 19 19 19 19 19 19 19 19				V	-	V					V	-			V		V	V												V	
30,000	Italgru S.r.I	•	•			•						Ť																			
James A. Rodring Company James A. Rodring Jame	J & B Grijpers b.v.			L,	,			, .		L,			Ι,				L,							L,				ļ.,		L,	
James A Manuron inc. ## E Engrening Corporation Surges Analysis they ind Surges Analysis they Surges Analysi		~	~	V	~	~	~	V	~	~	~	~	V	~	~	V	~	~						~	~	~	~	~		~	
Jamis & Jahanson Inc. ### Expression Corporation Jamps Danisho Reny Ind Jamps Danisho Reny																															
Jamps Constitute Plans Indicated the state of the state o	Jenike & Johanson Inc.	V									V	V	V	V	V		V	V	V	V	V			V		V		V	V	V	V
Jargus Rahrow Heavy Co. List Jargus Laby Manufacturer Thomps Printing Co. List Jargus Laby Manufacturer Thomps Printing Co. List Jargus Laby Manufacturer Thomps Printing Co. List Jargus Laby Manufacturer Thomps Printing Co. List Jargus Laby Manufacturer Thomps Printing Co. List Jargus Laby Manufacturer Thomps Printing Co. List Jargus Laby Manufacturer Thomps Printing Co. List Jargus Laby Manufacturer Thomps Printing Co. List Jargus Laby Manufacturer Thomps Printing Co. List Jargus Laby Manufacturer Thomps Printing Co. List Jargus Laby Manufacturer Jargus Laby Ma	JFE Engineering Corporation																														
Industries Co. LLB January ZDPM Manufacturer January ZDPM Manufacturer January Chapter Co. LLB January ZDPM Manufacturer J	Jiangsu QunShuo Heavy Ind																														
Jamps Langue CDM Manufacturer Immys Enterprise CD, List																															
Johannes Nationer Fatrix John J	Jiangsu ZDPM Manufacturer																														
July Gobb Inc Kardesier Carbie A Machine Cot Kardesier Carbie A Machine Cot Kardesier Carbie A Machine Cot Kardesier Carbie A Machine Cot Kape Electric Crieff - Industry Kinge Control Crieff Kinger Control Cri	Jimway Enterprise Co., Ltd																														
Kalenborn Kalpometer Grabel Kardes Grabe B. Mechanic C. Karafigee Group B.V. Karafigee Group		~	~	V	~	~	~	V	V	V	~	V	V	~	V	V	V	V	~	V	V	~	~	V	~	V	V	~		V	
Kanteser Grab A Machine Co. Kanteser Grab A Machine Co. Kape Elektric Grab H Industry Krope Elektric Grab H Industry Krope Selektric Grap H Industry Krope Selektric Grab H Industry Krope Selek		V	~				~			V	V	V		V	V		V		V	V							V	V		V	~
Kope Electric CmDH- Industry Kinder Astrolae Py Ltd Kindsher Industry Kinder Astrolae Py Ltd Kindsher Industry Kinder Astrolae Py Ltd Kindsher Industry Kindsher Kind			•				Ť			•		Ť					Ť										•	•			
Kike Engineering Kinder Australa Ltd Kingel Shart Robusthal Ltd Kingel Shart Robusthal Ltd Kingel Shart Robusthal Ltd Kingel Mayon AB Keemann GmbH Kingen Wagon AB Keemann GmbH Kinder Australa Ltd Kinder Aus	KenzFigee Group B.V.		V	V	V			V	V								V							V				V			
Kinder Australia Pty Ltd Kinder Installation Kinder Australia My Ltd Kinder House Manage Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia My Ltd Kinder State Roman Kinder Australia Kinder State Roman Kinder Australia Kinder State Roman Kinder Australia Kinder State Roman Kinder Australia Kinder State Roman Kinder Australia Kinder State Roman Kinder Australia Kinder State Roman Kinder Australia Kinder State Roman Kinder State Ro															~										~						~
Kingfisher Industrial Lid KKNSHOFER ROMH KKNBO CREATIONH KKNBO															~									~						~	_
Kinner Wagon AB Keen and noth KMK consulting Engineers KMK Consulting Engineers KOCH Saudiurins Christ KOCH Saudiu	Kingfisher Industrial Ltd	V	V				V			V					V		V		V	V							V				
Kleeman GribH MKK Consulting Engineers Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Equipment Knight Industrial Knight Indust	KINSHOFER GmbH					~												V							V			V			~
MMK consulting Engineers KOCH Solutions GmbH KOCH Solutions GmbH KOCH Solutions GmbH KOCH Solutions GmbH KOCH Solutions GmbH Konesanes France) Konesanes France) Konesanes France) Konesanes France) Konesanes France) Konesanes GmbH Konesanes France) Konesanes GmbH Konesanes France) Konesanes GmbH Konesanes France) Konesanes GmbH Konesanes GmbH Konesanes GmbH Konesanes GmbH Konesanes GmbH Konesanes GmbH Konesanes GmbH Konesanes GmbH Konesanes GmbH Konesanes GmbH Konesanes GmbH Konesanes GmbH Labrens Mollotions Konesanes GmbH Labrens Mollotions Konesanes GmbH Labrens Mollotions Lasnes Abouto Limited Lasnes Abouto Limited Lasnes Abouto Limited Lasnes Abouto Limited Lasnes Abouto Limited Lasnes Mollotions Lorens Residence Konesanes Mollotions Lorens Residence Lorens																															
Knight Industrial Equipment Kong Haustrian Kong Hau		V						V		V	V	V	V	V			V	V								V	V			V	
Kometanes (France) Kometanes (France) Kometanes Finand Corp Kometanes Profisoulions- V V V V V V V V V V V V V V V V V V V	Knight Industrial Equipment																														
Konezanas Finand Corp Konezanas Finand Corp		~	~		~		~	V	V											V	V	V		V	~	V	V	~			
Konecranes Finland Corp Konecranes Port Solutions Konecranes Port Solutions Konecranes Port Solutions Konecranes Combit Kotha Container Company Ltd Kreen Ojard & Associates Kröger Greifertechnik GmbH Kumera Cotporation Kumera Cetriche CmbH Kumera Cetriche CmbH LA STEPHANOISE Laidig Systems Inc Lariang O'Rourke		1	1	V	1			V	1		V	-	-	-	~		~	1	~											1	1
Konezanse GmbH Kota Container Company Ltd Krech Ojard & Associates Kröger Greifertechnik GmbH Kumera Gerinebe GmbH Kumera Gerinebe GmbH LA STEPHANOISE Laidig Systems Inc Laing O'Rourke Larsen & Toutro Limited Lassen B Tout	Konecranes Finland Corp			1																					~						
Kota Container Company Ltd Krisch Ojard & Associates Kröger Greiferfechnik GmbH Kumera Geribede Kumera Geribede GmbH Kumera Geribede Kumer	Konecranes Port Solutions -																														
Krech Ojard & Associates Krich Cyare Geriertechnik GmbH Kumera Corporation Kumera Geribe GmbH LasterPhANOISE Laidig Systems inc Large A Roubro Limited Larsen & Toubro Limited Lassing Dibbor Consuling Engineers Ltd Lawrence Industries, inc. LIDP And East Shipping ELETHER Sp. A (ACIDIO) Leon Overseas Pte. Ltd Liebher-Hydraulikhagger GmbH Lion Bulk Handling b. Listenow GmbH & Co. Loubren-MCCiec Rostock GmbH Lion Bulk Handling b. Listenow GmbH & Co. Loto Ford Caroling Pty Ltd Lybover MACTMAIL MEDIE ANTRIEBS TRAIL		~	V	~			V	V									V				V									~	
Kröger Greifertechnik GmbH Kumera Gerirebe GmbH Kumera Gerirebe GmbH Kumera Gerirebe GmbH Kumera Gerirebe GmbH LastrephAnOISE Laing ORourke Laing ORourke Laing ORourke Lassen & Toubro Limited Lassens & Toubro Limited Lassens & Toubro Limited Lassens Blüber Consulting Engineers Ltd Lawrence Industries, Inc. LD Ports & Logistics LDP Middle East Shipping LEITNER S. p.A (AGUDIO) Leon Overseas Pte. Ltd Liebberr-MyCater Rostock GmbH Liebberr-MyCater Rostock GmbH Lion Bulk Handling b.v. Listenow GmbH & Co. Lobi Forderanlagen GmbH Loftrand Listenow GmbH & Co. Lobi Forderanlagen GmbH Loftrand Loftrand LSL. Consulting Pty Ltd Lybover MA.T. MALMEDIE ANTRIEBS TEACHMAN GROUP AND AND AND AND AND AND AND AND AND AND																															
Kumera Corporation Kumera Gerirebe GmbH Kumera Gerirebe GmbH Kumera Gerirebe GmbH La STEPHANOISE Laing O'Rourke Larsen & Toubro Limited Lassing Dibben Consulting Engineers Ltd Lawrence Industries, Inc. LDP Ports & Logistics LDPL Middle East Shipping EIEITHER S.P. A (AGUDIO) Lean Overseas Pte. Ltd Liebherr-Hydraulikbagger GmbH Liebherr-MCClec Rostock GmbH Liebnerr-MCClec Rostock GmbH Liebnerr-MCClec Rostock GmbH Lion Bulk Handling b.v. Listenow GmbH & Co. Lolb Forderanlagen GmbH Lofrand LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc Macawber Engineering, Inc Macawber Engineering, Inc Magadid Power S.p.A. MAJOR						V																									
Kumera Getriebe GmbH LA STEPHANOISE Laing O'Rourke Larsen & Toubro Limited Lassing Dibben Consulting Engineers Ltd Lawrence Industries, Inc. LDP Ports & Logistics LDPL Middle East Shipping LEITNER S, p. A (AGUDIO) Leon Overseas Pte. Ltd Liebherr-Hydraulikbagger GmbH Liebherr-Hydraulikbagger GmbH Liebherr-MCCtec Rostock GmbH Liebherr-MCCtec Rostock GmbH Liebherr-MCTele Rostock GmbH Liebher-MCTele	Kumera Corporation																														
LA STEPHANOISE Laidig Systems inc Laing O'Rourke Larsen & Toubro Limited Lassing Dibben Consulting Engineers Ltd Lawrence Industries, Inc. LDP Ports & Logistics LDPL Middle East Shipping LEITNER S.p.A (AGUDIO) Leibner-McCitec Rostock GmbH Lion Bulk Handling b.v. Lisebner-McCitec Rostock GmbH Lion Bulk Handling b.v. Lisebner-McDie ArtrileBS TECHNIK GmbH Macawber Engineering, Inc Macawber Engineering, Inc Macawber Engineering, Inc Macawber Engineering, Inc Macawber Engineering, Inc Macawber Engineering, Inc Magadid Power S.p.A. MalyOR																															
Larigi Systems Inc Lang ORourke Lang ORourke Larsen & Toubro Limited Lassing Dibben Consulting Engineers Ltd Lassen Broubro Limited Lassing Dibben Consulting Engineers Ltd Lawrence Inclustries, Inc. LDP Ports & Logistics LDPL Middle East Shipping LEITHER S. P. A. (AGUDIO) Leon Overseas Pte. Ltd Liebherr-Hydraulikbagger GmbH Liebherr-Hydraulikbagger GmbH Liebherr-MCCtec Rostock GmbH Uibberr-MCCtec Rostock GmbH Uibberr-MCTec Rostock Uib																															
Larsen & Toubro Limited Lassing Dibben Consulting Engineers Ltd Lawrence Industries, Inc. LDP Dry & Logistics LDP Middle East Shipping LEITNER S.p.A (AGUDIO) Leon Overseas Pte. Ltd Liebherr-Hydraulikbagger GmbH Liebherr-Hydraulikbagger GmbH Liebherr-Hydraulikbagger GmbH Lion Bulk Handling b.v. Listenow GmbH & Co. Lotorbrand LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc MacCregor Sweden AB MacK Manufacturing Inc Magaldi Power S.p.A. MAJOR	Laidig Systems Inc												V				V													V	V
Lassing Dibben Consulting Engineers Ltd Lawrence Industries, Inc. LD Ports & Logistics LDPL Middle East Shipping LEITNER S.p.A (AGUDIO) Leon Overseas Pte. Ltd Liebherr-Hydraulikbagger GmbH Lion Bulk Handling b.v. Listenow GmbH & Co. Loibl Förderallagen GmbH Lorbrand LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc MacGregor Sweden AB Mack Manufacturing Inc Magadid Power S.p.A. MAJOR	Laing O'Rourke	V	~												V																V
Engineers Ltd Lawrence Industries, Inc. LD Ports & Logistics LDPL Middle East Shipping LEITNER S.p.A (AGUDIO) Leon Overseas Pte. Ltd Liebherr-Hydraulikbagger GmbH Liebherr-MCCtec Rostock GmbH V V V V V V V V V V V V V V V V V V V																															
Lawrence Industries, Inc. LD Ports & Logistics LDPL Middle East Shipping LEITNER S.p.A (AGUDIO) Leon Overseas Pte. Ltd Liebherr-Hydraulikbagger GmbH Liebherr-MCCtec Rostock GmbH Liebherr-MCCtec Rostock GmbH Lisenow GmbH & Co. Loibl Förderanlagen GmbH Lorbrand LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawher Engineering, Inc Macawher Engineering, Inc Macarger Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR	Engineers I th	1						/	/	1		V	1		V		1		1	/				~		/	~	1		~	
LD Ports & Logistics LDPL Middle East Shipping LEITNER S.p.A (AGUDIO) Leon Overseas Pie. Ltd Liebherr-Hydraulikbagger GmbH Lion Bulk Handling b.v. Listenow GmbH & Co. Loibl Förderanlagen GmbH Lorbrand LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc MacGregor Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR	Lawrence Industries, Inc.																														
LEITNER S.p.A (AGUDIO) Leon Overseas Pte. Ltd Liebherr-Hydraulikbagger GmbH Liebherr-MCCtec Rostock GmbH Lion Bulk Handling b.v. Listenow GmbH & V V V V V V V V V V V V V V V V V V	LD Ports & Logistics																														~
Leon Overseas Pte. Ltd Liebherr-Hydraulikbagger GmbH Lion Bulk Handling b.v. Listenow GmbH & Co. Loibl Förderanlagen GmbH Lorbrand LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc MacGregor Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR																															
Liebherr-Hydraulikbagger GmbH Liebherr-MCCtec Rostock GmbH Lion Bulk Handling b.v. Listenow GmbH & Co. Loibl Förderanlagen GmbH Lorbrand LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc MacGregor Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR															V															V	
GmbH Liebherr-MCCtec Rostock GmbH Lion Bulk Handling b.v. Listenow GmbH & Co. Loibl Förderanlagen GmbH Lorbrand LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc Macay Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR	Liebherr-Hydraulikbagger																														
GmbH Lion Bulk Handling b.v. Listenow GmbH & Co. Loibl Förderanlagen GmbH V V V V V V V V V V V V V V V V V V V	GmbH			V	V	V		V	~							V		V										V			V
Lion Bulk Handling b.v. Listenow GmbH & Co. Loibl Förderanlagen GmbH Lorbrand LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc MacGregor Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR			.,	.,	.,			.,																							
Listenow GmbH & Co. Loibl Förderanlagen GmbH Lorbrand LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc MacGregor Sweden AB MacK Manufacturing Inc Magaldi Power S.p.A. MAJOR		~	~	V	~			V	V																						
Loibl Förderanlagen GmbH Lorbrand LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc Macay Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR	Listenow GmbH & Co.	V	V					V	V															V							V
LSL Consulting Pty Ltd Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc MacGregor Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR	Loibl Förderanlagen GmbH											V	V	V			V	V	V	~	V	V	V	V	V	~			V	V	V
Lybover M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc MacGregor Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR	Lorbrand																														
M.A.T. MALMEDIE ANTRIEBS TECHNIK GmbH Macawber Engineering, Inc MacGregor Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR		1	1			~	7	7	/			~	~	~	/		7		~	/				~						~	7
TECHNIK GmbH Macawber Engineering, Inc MacGregor Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR																															
MacGregor Sweden AB VVV MACGREGOR Sweden AB Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR	TECHNIK GmbH																														
Mack Manufacturing Inc Magaldi Power S.p.A. MAJOR	Macawber Engineering, Inc																														
Magaldi Power S.p.A. MAJOR				V	V					V	V				V		V												V		
MAJOR V																															
Mantsinen Group Ltd Oy VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV	MAJOR																			V											
	Mantsinen Group Ltd Oy	V	V	V	V	~		V	~																						V

Name in gravering (Chert Marker Engineering Chert Marker Engineering Ch		SL	SUL	GL	GUL	6	CSU	BL	BU	SU	BE/L	S	R	S/R	C	F-EL	Н	МНЕ	Cr	Sc	Bln	Wg	S&I	DC	DC&A	ES	SS	RL/U	СВН	EC	0
Name Trapproprieg Name Trappro	Marco – A Terex Brand	V	V					V	V		V	V			V		V	V										V			
Machine and Wildering State Mark Congressor	Marine Inspection LLC																														
Seacher of Michael Seacher of Mi											~				1													~			V
Entree Chemistry Fell Cristin															~								~	V						V	-
Machines and Househald Page 19		1						1	1		1				1						/							/			
ABOVE PARTIES OF V V V V V V V V V V V V V V V V V V	Maschinen-und Industriebau								Ť		Ť				•						Ť										
Mac Alfitt High Work of Section 1. Section 1	Feld GmbH	V				V		~			V				V		V														
Microam Lacescore (Microam) Microam Color Subsets St. 1 Microam Color Su																														1	
AND Group of Solutions S.1. Heaps North Surface Sol		V	~		~	V					V	V	V	V	V	~	V	V		~		~	1				V		V	V	
### A PROPERTY OF THE PROPERTY	MCI Group																						•								
Filtrons Filtro	MDG Handling Solutions S.r.l.																														
Magametria African Materia Principales	MegaDome® Buildings by																														
Matter M																										V					~
Meter Technologies India Petal Marinds Andrahas Marinds A									,						~		,	,												V	
Pretty Chronic Industries Hearins (Industries Hearins (Industries Hearins (Industries Hearins (Industries)																															
Metalestone Espreering Technologies profit Metalesto Metalesto Microsol, line Metalesto Metalestone Microsol, line Metalesto Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Metalestone Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Microsol Microsol, line Micr	Pvt Ltd							V			V				V		V	V				V	V	V	V			V			
Technologies private (Marco LSA, Inc. Marco LS	Merrick Industries														V						V	~									
National DisAssis Industries, Inc. National DisAssis Industries, Inc. National DisAssis Industries, Inc. National DisAssis Industries, Inc. National DisAssis Industries, Inc. National DisAssis Industries, Inc. National Processing Solutions National Products Inc.																															
National Services (Services) New York of Company (Services) National Services (Services) Nati	• •														.,				.,												
Marie March May 1		V		V	V	V	V	V	V			V	V													V		V			V
MAGE A Company Middle College My Machinery Middle Machinery	Metso USA, Inc.	1										1														- 7		1			V
Michael Michael Responsibility	Meyland NV																														
Middlesch and Phyl List Midwest Industrial Supply in Midwest Industrial Su	MGB & Company													V	V		V		~	~						V					
Midwest Industrial Supply Inc Midwest Industrial Mi																															
Midwest Infernational Standard Products, Inc. Minarel Processing Solutions Miss Author Data Suppression Ltd Miss Author Data Suppression Ltd Miss Author Chemical Advanced Materials Inc. Miss Author Data Suppression Ltd Miss Author Data Suppression Ltd Miss Author Data Suppression Ltd Miss Contributions Miss Contribu																	V														
Miller and Processing Solutions Miller and Processing Solutions Miller and Processing Solutions Miller and Mil	Midwest International																														
Misik-Ari Dast Suppression Ltd Misibath Chemical Advanced Makerials Inc.	Standard Products, Inc.	V	V																					V				V			V
Misua Milita Machinery Co. Milita Militia Machinery Co. Milita Militia Machinery Co. Milita Militia Machinery Co. Milita Militia Machinery Co. Militia Militia Machinery Co. Militia Militia Machinery Co. Militia Mil	Mineral Processing Solutions			V	~	~		~			~	V		~	~		V	V	~	~	~							~			
Advanced Materials Inc. Midel Conveying Services More It																															
Missu Mikins Machinery Co. Molitic Conveying Sarvices Molitic Received Mole Machinery Co. Molitic Individual Spa. Molitic Machinery Co. Molitic Machinery Molitic Machinery Co. Molitic Machinery Molitic Machinery Company Molitic Machinery Molitic Machinery Company Molitic Machinery Molitic Machinery Company Molitic Machinery Molitic Machinery Company Molitic Machinery Molitic		.,	.,				.,	.,	.,	.,	.,				.,		.,													.,	.,
Mobile Conveying Services Moffeld & Skinder Moff																	•														
Modellate Revises Corp [™] Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Constructors, Inc. Monolithic Monolithic Monolithic Monolithic Constructors, Inc. Monolithic Monolithi																															
Monolithic Constructors, inc. Mortial SpA MIRS Greifer Gmbth MTECK WIL Heilig B.V. V.	Moffatt & Nichol																													V	
Morted SpA MRS Greifer GmbH MTECK NM. Heilig B V. Stanling Port-Nachriery & Heavy-Industry Manufacture Nathorinery Ca, Ltd. Nanthory D Machinery Earl Nanthory D Machinery Ear																	V									- 1					~
MRS Greier GmbH MTECK N.M. Heilig B V. N.M. Heilig B V. N.M. Heilig B V. N.M. Heilig B V. N.M. Heilig B V. N.M. Heilig B V. N.M. Heilig B V. N.M. Heilig B V. N.M. Heilig B V. N.M. Heilig B V. N.M. Heilig B V. N.M. Machinery & Manufacture Co., Ltt (NPHMC) Nathornery & Machinery Eng Naturus Grabs									.,																	- 7					
MTECK NM. Helig B.V. Naming Port-Machinery 8 Heavy Inclusity Manufacture Oc., Ltd (NPHMC) Naming Port-Machinery 8. Naming Port-Machinery 8. Naming Rainbow Heavy Machineris Poc. Ltd. Naming Rainbow Heavy Machineris Poc. Ltd. Naming Port-Machinery Eng Naming Rainbow Heavy Machineris Poc. Ltd. Naming ID Machinery Eng Naming Rainbow Heavy Naming R		V	V	V	V	V	V	•	V		V	V	V		V		V		V	•	V	•		•		V				V	
Naming Port-Machinery & Helayy Houstyn Manufacture Co., Ltd (NPHMC) Wartong Rainbow Heavy Machiners Co., Ltd. (NPHMC) Wartong Rainbow Heavy Machiners Co., Ltd. (NPHMC) Wartong Rainbow Heavy Machiners Co., Ltd. (NPHMC) Wartong Rainbow Heavy Machiners Co., Ltd. (NPHMC) Wartong Co	MTECK					•																									
Heavy-Industry Manufacture Co., Lid (NPHMC) Wantong Rainbow Heavy Machineries Co., Lid. Wantong Wachinery Eng Natural Grabs NAMINACIO (National Air Vibrator Co) Wavonus NV Neepind Srd Nemag BV Nemag BV Nemag BV NiLOS GmbH & Co KG NK Tehnologia StA NK Tehnologia StA NK Tehnologia StA NK Tehnologia StA NK Tehnologia StA NK Semeng Commany NMH St.O Norda Stelo Norda Stelo Nordren Heavy Industries NSL Engineering Pte Ltd Oz. HENNILCH ENGINING OZR Screening Orthos Projects Ltd. ORTS GmbH Maschinerlabrik ORTS GmbH Maschinerlabrik ORTS GmbH Maschinerlabrik Orthora Ptelest Ring Pt. Mitra St. Analisa testama PAGE MACARE Ring Pt. Mitra St. Analisa testama Paraker Hannifin Manufacturing Ltd. V Paraker Plant Ltd Peleneman Cranes Peleneman C	N.M. Heilig B.V.	V	V					V			V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V		V	V
Co., Ltd (NPHMC) Nantong Rainbow Heavy Machineries Co. Ltd. Nantong DP Machinery Eng Natural Grabs NAVCO (National Air Vibrator Co) Navonus NV Negrini Srl Nemag BV Neuero Industrietechnik GmbH VILOS GmbH & Co KG VV VV VV VV VV VV VV VV VV VV VV VV VV	Nanjing Port-Machinery &																														
Nantong Parkow Heavy Machineris Co., Ltd. V V V V V V V V V V V V V V V V V V V	Heavy-Industry Manufacture																														
Machineries Co, Ltd. Nantong UP Machineries Cristory Navorus NV Navorus NV Negrin Srl Newmag BV Neurel Industrietechnik GmbH NILOS GmbH & Co KG NK Tehnologia SIA NKM Noell Special Cranes NNLE Angineering Ple Ltd OPS Crushing & Screening OPRIS GmbH Maschinenfabrik V V V V V V V V V V V V V V V V V V V																															
Nantory Erg Naturel Grabs VAVCO (National Air Vibrator Co) Nanconus NV Vegrini Srl Nemag BV Nemag BV Nelicos GmbH & Co KG NK Fehnologia SIA		1	1	1	1		1				V						1	1													
Natural Grabs NAVCO (National Air Vibrator Co) Navorus NV Negrin Srt Nemag BV Neuero Industrietechnik GmbH				Ť	•		•				•						Ť														
Vibrator Co) Navorus NV Negrini Gri Nemag BV Neuero Industrietechnik GmbH	Natural Grabs					V																									
Navorus NV Negrini Sri Nemag BV Neureri Industrietechnik GmbH NILOS GmbH & Co KG NKT Fannologia SIA NKT Fannologia SIA NKT Rannologia SiA NKT Rann	NAVCO (National Air																														
Negrini Srl Nemag BV Nemag BV Neuro Industrietechnik GmbH V NILOS GmbH & Co KG NK Tehnologija SIA NKM Noell Special Cranes NMH s.r.o Noell Crane Systems (China) Nordra Stelo																															
Nemag BV Neuero Industrietechnik CmbH NILOS GmbH & Co KG NK Tehnologia SIA VKM Noell Special Cranes NMH s.r.o Noell Crane Systems (China) Norda Stelo Northern Heavy Industries NSL Engineering Pite Ltd O.z. HENNLICH ENGINING OPS Crushing & Screening Orthos Projects Ltd. ORTS GmbH Maschinenfabrik Overland Conveyor Company P.T. Mitra S.K. Analisa testama PAGE MACRAE ENG'G Pakiet Parker Plant Ltd V Parker Plant Ltd V PEBCO® Inc Pelinemann Cranes Pelinemann Crane						7																									
Neuero Industrietechnik GmbH NILOS GmbH & Co KG NKI Tehnologija SIA V KTehnologija SIA V KTehnologija SIA NKI Tehnologija SIA V V V V V V V V V V V V V V V V V V V				V	V			V	V									V													V
NKT Ehnologija SIA VKM Noell Special Cranes NMH s.r.o Noell Crane Systems (China) Norda Stelo Northern Heavy Industries NSL Engineering Pte Ltd OZ. HENNLICH ENGIN'ING OPS Crushing & Screening Orthos Projects Ltd. ORTS GmbH Maschinenfabrik ORTS GmbH Ma		V					V																								
NKM Noell Cranes NMH s.r.o Noell Crane Systems (China) Norda Stelo Northern Heavy Industries NSL Engineering Pte Ltd Oz.z. HENNLICH ENGIN'ING OPS Crushing & Screening Orthos Projects Ltd. ORTS GmbH Maschinenfabrik Overland Conveyor Company P.T. Mitra Sk. Analisa testama PAGE MACRAE ENG'G Pakiet Parker Hannifin Manufacturing Ltd. V Parker Plant Ltd V PEBCO® Inc PEBCO® Inc PEINER SMAG Lifting Technologies GmbH	NILOS GmbH & Co KG						~			V		V	V	V						V					~		V	~			
NMH s.r.o Noell Crane Systems (China) Norda Stelo Norda Stelo Northern Heavy Industries NSL Engineering Pte Ltd D.z. HENNLICH ENGIN'ING OPS Crushing & Screening OPthos Projects Ltd. ORTS GmbH Maschinenfabrik Overland Conveyor Company P.T. Mitra S.K. Analisa testama PAGE MACRAE ENG'G Parker Hannifin Manufacturing Ltd. V Parker Plant Ltd V PEBCO® Inc Peinemann Cranes PEINER SMAG Lifting Technologies GmbH V V V V V V V V V V V V V V V V V V		~						~			~				~		V	~						V						~	
Noell Crane Systems (China) Norda Stelo Northern Heavy Industries NSL Engineering Pte Ltd Oz. HENNLICH ENGIN'ING OPS Crushing & Screening Orthos Projects Ltd. ORTS GmbH Maschinenfabrik Overland Conveyor Company PT. Mitra S.K. Analisa testama PAGE MACRAE ENG'G Parker Hannifin Manufacturing Ltd. V V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·																														V
Norther Heavy Industries NSL Engineering Pte Ltd OPS Crushing & Screening Orthos Projects Ltd. ORTS GmbH Maschinenfabrik Overland Conveyor Company P.T. Mitra S.K. Analisa testama Parker Hannifin Manufacturing Ltd. Verarker Plant Ltd Verarker Plant Ltd Vereing V																															V
NSL Engineering Pte Ltd o.z. HENNLICH ENGIN'ING OPS Crushing & Screening Orthos Projects Ltd. Overland Conveyor Company P.T. Mitra S.K. Analisa testama PAGE MACRAE ENG'G Pakiet Parker Hannifin Manufacturing Ltd. V Parker Plant Ltd V Perker Plant Ltd V Perker Plant Ltd V Perker Manufacturing Ltd. V Perker Manufacturing Ltd. V V V V V V V V V V V V V V V V V V V	Norda Stelo																														
o.z. HENNLICH ENGIN'ING OPS Crushing & Screening Orthos Projects Ltd. ORTS GmbH Maschinenfabrik Overland Conveyor Company P.T. Mitra S.K. Analisa testama PAGE MACRAE ENG'G Pakiet Parker Hannifin Manufacturing Ltd. V V V V V V V V V V V V V V V V V V	Northern Heavy Industries																														
OPS Crushing & Screening Orthos Projects Ltd. ORTS GmbH Maschinenfabrik Overland Conveyor Company P.T. Mitra S.K. Analisa testama PAGE MACRAE ENG'G Pakiet Parker Hannifin Manufacturing Ltd. Parker Plant Ltd Penemann Cranes PEINER SMAG Lifting Technologies GmbH Technologies GmbH Technologies GmbH Technologies GmbH Technologies Maschinenfabrik Technologies Maschinenfabrik Technologies M																															
Orthos Projects Ltd. ORTS GmbH Maschinenfabrik Overland Conveyor Company P.T. Mitra S.K. Analisa testama PAGE MACRAE ENG'G Pakiet Parker Hannifin Manufacturing Ltd. Parker Plant Ltd Penemann Cranes Pelinemann Cranes PEINER SMAG Lifting Technologies GmbH	o.z. HENNLICH ENGIN'ING	~						~																V							
ORTS GmbH Maschinenfabrik Overland Conveyor Company P.T. Mitra S.K. Analisa testama PAGE MACRAE ENG'G Pakiet Parker Hannifin Manufacturing Ltd. V Parker Plant Ltd V Perbeco® Inc Peinemann Cranes PEINER SMAG Lifting Technologies GmbH V V V V V V V V V V V V V V V V V V V					./										1		1		./	1	1	./		1	./					1	
Overland Conveyor Company P.T. Mitra S.K. Analisa testama PAGE MACRAE ENG'G Pakiet Parker Hannifin Manufacturing Ltd. V Parker Plant Ltd V Perbeco Inc Peinemann Cranes PEINER SMAG Lifting Technologies GmbH						_																		•							7
P.T. Mitra S.K. Analisa testama PAGE MACRAE ENG'G Pakiet Parker Plant Ltd PEBCO® Inc Peinemann Cranes PEINER SMAG Lifting Technologies GmbH	Overland Conveyor Company																														
Pakiet Parker Hannifin Manufacturing Ltd. V Parker Plant Ltd V PEBCO® Inc Peinemann Cranes PEINER SMAG Lifting Technologies GmbH V V V V V V V V V V V V V V V V V V	P.T. Mitra S.K. Analisa testama																						V								
Parker Hannifin Manufacturing Ltd. Parker Plant Ltd PEBCO® Inc Peinemann Cranes PEINER SMAG Lifting Technologies GmbH	PAGE MACRAE ENG'G					V											V	V						V							
Parker Plant Ltd PEBCO® Inc Peinemann Cranes PEINER SMAG Lifting Technologies GmbH	Pakiet	144																													~
Parker Plant Ltd PEBCO® Inc Peinemann Cranes PEINER SMAG Lifting Technologies GmbH	Parker Hannifin Manufacturing	Ltd.														V								-	~	V					
PEBCO® Inc Peinemann Cranes PEINER SMAG Lifting Technologies GmbH	Parker Plant Ltd	1									V				V				V	V				V							
Peinemann Cranes PEINER SMAG Lifting Technologies GmbH	PEBCO® Inc		V				V	V	V	V			V	V		V	V	V		·					V			V			V
Technologies GmbH V	Peinemann Cranes																														
	PEINER SMAG Lifting																														
		.,				1																									~
	LEUWEIT GIIIDU																							•							

	SL	SUL	GL	GUL	G	CSU	BL	BU	SU	BE/L	S	R	S/R	C	F-EL	Н	MHE	Cr	Sc	Bin	Wg	S&I	DC	DC&A	ES	SS	RL/U	СВН	EC	0
Pfister Waagen Bilanciai																														
GmbH PHB Weserhütte, S.A.	V	V	V	V	V		V	V	V	V	V	V	V	V		V				V	V			V	V	V	~		V	
PHOENIX Conveyor Belt Systems GmbH										V				,																
PLM Cranes B.V.			V	V			V	V	V	Ů				Ť																
Pneumat Systems Inc Polymer Industries - Ultrapoly																V											V			~
Division Port & Terminal Solutions LLC	<u>.</u>																													V
Port-Trade AS	V	V	V	V	V					V						V	V													
Powerscreen PRDW Consulting Port														V				V	V											~
and Coastal Engineers Precia-Molen Nederland BV														V		V					V								V	
Premier Tech Chronos b.v.																														
Procon Engineering Limited ProStack																				~	V					V				
PSB Inspection PT Armada Rock Karunia																		V	~	V	V	~								
Transshipment																	V													~
PT Asian Bulk Logistics PT Boma Bisma Indra																														
PT Bukaka Teknik Utama																														V
PT Carsurin PT Geoservices																						V							~	
PT Jakarta Prima Cranes PT MBSS																														V
PT Mitra Bahtera Segarasejat	i																													
PT Pamapersada Nusantara PT SpanSet Indonesia																														V
PT Thiess Contractors Indon. PT. Bando Indonesia														,																
PT. Hardjadinata Pratama																														
Internasional PT. Lelangon																														
PT. Thermialindo Sarana Lab	ļ,																					V	ļ							
QCA Systems Ltd. Qingdao Haixi Heavy-Duty	V	V	V	V		V	V	V		~	V	V	V	V		V						V	V	\	V	V	\	V	V	
Machinery Co.Ltd Qingdao Huaxia Rubber																														
Industry Co. Ltd.	V	V				~				V	V	V	V	V			V	V	V							V				
Quality Handling Systems Pty Ltd (Part of Consep Pty)																			V			V								
Quanergy Quarry Mining LLC	V						V	V			V			V		V		V	V				V			V				
Qube Ports & Bulk																			•											
R & S Srl / Roncuzzi - WAM Group	V	V	V	V			V	V	V	V	V	V	V	V	V	1					V	V	V	V		V	/		V	1
RAM Lifting Technologies Rapat Corporation	V	V	V	V	V		~										V						V		~		~			
RBL REI																														
RBL-REI France RC Inspection B.V										V	V	V		V		V				V	V	V				V				
Real Time Instruments REEL Möller GmbH	~													,			V			V	V	~	V		V		V		V	V
Reel S.A.S.	V	V												V															•	
Reel S.A.S. REMA TIP TOP AG	V	V				V	V	V	V	V	V	V	V	V		V	V	V	V	V		V	V			V	V	V	V	
RENK Aktiengesellschaft																														
Werk Augsburg REPA Conveyor Equipment	V	V	V	V		V	V			V	V	V	V	V	V		V				V									V
RHC Deutschland GmbH Richmond Engineering Works	V	V	V	V	V	V	V	V	~	V	V V	V	V	V		V	V				V		V	V		V	V		V	
Richwood Industries, Inc. RIEGL Laser Measurement														V																~
Systems GmbH																														
RIKON A/S RINA Consulting S.p.A.	V	V	V	V	V	V	V	V	V	V				V		V	V							V					V	~
Ringspann GmbH			·	Ť																				V						
Rocktree Logistics Pte. Ltd. Ronin System Solutions	~	~			V	V	V	~	~	~			V	~	V	V			V	~	V	V	~	V	V	V			V	V
Rossi S.p.A. Rotobec	V	V	V	V	V	V	V	V	V	V	V	V	V	V		V	V	V	V	V						V	V	V		
Roxon Oy	V						V			V	V	V		V		V	V									V				~
Rubb Buildings Ltd Rud Chains																							V		~					
RULMECA HOLDING S.P.A. SABS Mining & Minerals																						V							V	~
SAMMI S.r.I.																														
(an Integra Holding S.r.l. company)	~	~				~	,			~	V	,	V	,		~		V			V	~	V	/	V	V	~		V	_
• •,	I	l	l		l	l	I	l	I	I		l	l	I	I	I		I	I	l								I		1 1

Section Representation of the control of the contro		SL	SUL	GL	GUL	G	CSU	BL	BU	SU	BE/L	S	R	S/R	C	F-EL	Н	MHE	Cr	Sc	Bln	Wg	S&I	DC	DC&A	ES	SS	RL/U	СВН	EC	0
SMOSTOM Register (1997) SMOSTOM Register (199																							./								
Saldone Grebt SMC Earlier (Grebt SMC Earlier	SAMSON Materials Handling Ltd (AUMUND Group)	v	v					v			V	V					V	v						v				V			
SMY Cargo Groot SSC Cardo Crop SSC Cardo Crop SSC Cardo Crop SSC Cardo Crop SSC Cardo Crop SSC Cardo Crop SSC Cardo Crop SSC Cardo Crop SSC Crop SSC Cardo Crop SSC Crop SSC Cardo Crop SSC Crop																															
SSEC Phys. La Somewhat Republic Control (Shape) Shape Shap	SANY Europe GmbH			V	V	V		V	V			V				V		V											~		
Sameth International Control C																															
SCHAPEL Experiency Corbin Multiplication of the control of the con																					./		./	./							./
MAMBRIDG Glocy																															
Service Shared colored Scorpic Figure and Conveyor Field Scorpic Conjugate (Service State Shared Scorpic Conveyor Field Fi	(AUMUND Group)											V	V	V							V					V	~	V			
Schule Standard Schribt Schapel Extensioned Circle Schapel Extensioned Circ																															
Sample international Children Sample															7																
Scrape for the matural of matural Scripe for the matural conveyor Bet Schick (inc. Schick) (inc. Sch		V	V	V	V		V	V	V	V	V						V	V			V	V		V		V			V	V	
Simportan Conveyor Ded Solutions Control SERNA ESOCIAL Mischines Heriofic Coneth Service Technology Ltd Service Te															V									V							
Solutions Comet Isters Comet		~								~																				~	~
SENNERGORF Machines From Technology LIS SENSOT TRANSFOR Developed Logistic SACI) SENSOT TRANSFOR SENSOT TRANSFOR SENSOT TRANSFOR SENSOT TRANSFOR SENSOT TRANSFOR Developed Logistic SACI) SENSOT TRANSFOR SEN															1																
Sensor Inchrology Ltd SERGNA SA SENSOR SASA SENSOR SAS																															
SERMAS N		V	V	V	V			V	V									V													
SESCOTIAGNS FOR Developed Logistics (SAE) SETVELINCORNEY GRONE S SERVELINCORNEY GRONE SEX MATERIAL ST SEX MATERIAL ST SEX MATERIAL S SEX		V		V	V			V	V								V					V			V					V	
SEM-CHARGE Combril				Ť	•			•	Ť																						
\$\times \text{Co KG}\$ Sign Mediatrial by Sign Sign Agriculture by Sign Companies by Sign Sign Companies by Sign Sign Companies by Sign Sign Companies by Sign Sign Companies by Sign Sign Companies by Sign Sign Companies by Sign Sign Sign Companies by Sign Sign Companies by Sign Sign Companies by Sign Sign Companies by Sign Sign Sign Companies by Sign Sign Companies by Sign Sign Sign Companies by Sign Sign Sign Companies by Sign Sign Sign Sign Companies by Sign Sign Sign Sign Sign Sign Sign Sign		~	V	V	V	V	V	~	V	V	V	V	V	~	V	V	~	V	~	V	~	V			V	V	~			V	~
SSS Necherland BY SSS Canadas Inc SSG Standards Services SSG Standards Standards SSG Standards ST																															
SGS Clandra Inc SGS Minarda Services Shandrong Kalyuan Heavy Machiney Co. Ltd. Shangha Global Machiney Equipment Co. Ltd. Shangha Global Machiney Equipmen																							_		V						
Silandoricy (Asylvan Heavy Machinery C. Ltd. Shanghala (Global Machinery Co. Ltd. Shanghala (Global Machinery Co. Ltd. Shanghala (Global Machinery Co. Ltd. Shanghala (Shanghala Machinery Co. Ltd. Shanghala (Shanghala Machinery Co. Ltd. Shanghala (Shanghala Machinery Co. Ltd. Shanghala (Shanghala Machinery Co. Ltd. Shanghala (Shanghala Machinery Co. Ltd. Shanghala (Shanghala Machinery Co. Ltd. Shanghala (Shanghala Machinery Co. Ltd.) Shanghala	SGS Canada Inc																				V	V				V				V	
Machinery Co., Ltd. Shanghia Guando Machinery Equipment Co., Ltd. Shanghia Guando Machinery Equipment Co., Ltd. Shanghia Joseph Guando Machinery Equipment Co., Ltd. Shanghia Joseph Grant Co.																							V								
Sinangha (Oabe) Machinery Co. LTD Sinangha (Superbo Machinery Co. LTD) Sinangha (Superbo Machinery Co. LTD Sinangha (Superbo Machinery Co.																															
Co Ltd Sinangha Guanto Machinery Equipment Co. Ltd Sinangha For Pierr Machinery Co. L	Shanghai Global Machinery																														
Equipment (O., Ltd. Sharphai Janus Grab Co., Ltd. Sharphai Janus G	Co Ltd																														
Sharphal Janus Grab Co, Ltd. Sharphal Yo-Pierson Machinery Co, LTD Machinery Co, LTD Machinery Co, LTD Sharphal Yo-Pierson Machinery Co, LTD Sharphal Yo-Pierson Machinery Co, LTD Sharphal Yo-Pierson Sharpha																															
Shanghal Yo-P Fort Machinery Co. ITD Sharthin International Sharthin				,		1											,														
Machinery Co. LTD Sharbh International Shi ELD. Services and Shi ELD. Services and Shi ELD. Services and Shi ELD. Services and Shi ELD. Services and Shi ELD. Services and Shi Eld. Services and Shi E	Shanghai Yo-Pi Port																														
SINELED, Services and SAC Around SIRRE - Stegerland Bremsen GribH Sibert-inki Tema BV Siemens AG Stebet-chnik Tema BV Siemens AG Siemens Moderland NV Siehom Croup Signor Supplied Fine Siemens AG Siemens Moderland NV Siehom Croup Signor Supplied Fine Siemens AG Siemens AG Siemens AG Siemens Moderland NV Siehom Croup Signor Supplied Fine Siemens AG Siemens Moderland NV Siehom Croup Signor Supplied Fine Siemens AG Siemens Moderland NV Siehom Croup Signor Supplied Fine Siemens AG Siemens Moderland NV Siehom Croup Siemens AG Siemens Moderland NV Siehom Croup Siemens AG Siemens Supplied Fine Siemens Supplied Fine Siemens Siemens Moderland NV Siehom Croup Siemens Siemens Siemens Moderland NV Siehom Croup Siemens Sie	Machinery Co. LTD																														
SIA Cravili SIRRE - Siegeland Bremsen GmbH Seetechnik GmbH Seetechnik GmbH Seetechnik GmbH Seetechnik Tema Siebtechnik Tema S			V				V		~																						
SIBRE - Sigereand Bernesse GmbH Sebtechnik GmbH Sebtechnik GmbH Sebtechnik Gma BV Semens AG Semens AG Semens Maderiand NV Siemens Mader		•		1		1		•		•	•				<i>V</i>	V		V			V		<i>V</i>	<i>V</i>					~	V	
Sebtechnik Tema BV Siemens AG Semens AG Siemens Nederland NV Siemens Nederland NV Siemens Nederland NV Siemens Rough Italiana Gomma Spa Simplicht Projects Pvt Ltd Sly LLC SMAG PKINER Grabs (India) PkINER Grabs (India) P																													Ť		
Sieblechnik Tema BV Sieblechnik Tema BV Sieblechnik Tema BV Sieblechnik Tema BV Sieblechnik Tema BV Sieblechnik Tema BV Sieblechnik Tema BV Sieblechnik Tema BV Siemens AG Siemens AG Siemens AG Siemens AG Siemens Melerand NV Siehnon Group SIG - Società Italiana Gomma Spa Simplichy Projects Pvt Ltd Syl LC SIMAG PEINER Grabs (India) Pvt. Ltd. SMAG PEINER Grabs (India) Pvt. Ltd. SMAG PEINER Grabs (India) Pvt. Ltd. SMBI International GmbH Smiley Monroe Ltd Sobemai Crane Services bv Soblema Crane Services bv Soblema Spoth - Burkhardt Sicherheitstechnik GmbH Spraysteem STAG AG Slandard Industrie Stantec Stenm Equipos Industriale SpA STOK Man STM Industriale ApA STM Industriale ApA STM Industriale ApA STM Industriale ApA STM Industriale ApA STRUID TECNICO MALNATI SAS Sucotingo Sumitione Heavy Industries Malterial Handling Systems															~										V						1
Selbechix Toma BV Siemens AG Siemens AG Siemens Mederland NV Siemens Mederland NV Siemens Mederal Namional NV Sieme																			~												
Siemens AG Siemens Nederland NV Siemens NV Siemens Nederland NV Siemens NV Siemens NV Siemens NV Siemens NV Siemens NV Siemens NV Sieme																			V				1								V
Semens Nederland NV Siethon Group Siethon Siethon Group Simplicity Projects Pvit Ltd Simplicity Projects Pvit Pvit Pvit Pvit Pvit Pvit Pvit Pvit																															
SiethonGroup SiG - Società Italiana Gomma Spa Simplicity Projects Pvt Ltd Siy LLC Siy LLC Six LG Simplicity Projects Pvt Ltd Siy LLC Six LG Simplicity Projects Pvt Ltd Siy LC Six LG Si																									-						~
SIG - Società Italiana Gomma Spa Simplicity Projects Pvt Ltd Siy LLC SIMAG PEINER Grabs (India) Pvt Ltd. SMB International GmbH Sobema Cras Services by Solema Solema Solema Solema Solema Cras Services by Solema Cras Services by Solema Solema Solema Solema Solema Solema Cras Services by Solema Cras Services by Solema Sole																									V						
Simplicity Projects Pvt Ltd Sly LLC Sl																															
Sly LLC SMAG PEINER Grabs (India) Pt Ltd. SMB International GmbH Smiley Monroe Ltd SmB genice and Crane Services by Solema Crane Services by Solema Crane Services by Solema Crane Services by Solema Crane Services by Solema Crane Services by Solema Grabe Services by Solema Grabe Services by Solema Standard Industrie		V	1																								1				
SMAG PEINER Grabs (India) Pvt. Ltd. V			~				V	~			~	V	~	~	V		~	~	~	V			~			V	V		~		
(India) Pvt. Ltd. SMB International GmbH Smiley Monroe Ltd Sobemai Crane Services by Solitac Engineering Ltd Sotecma Spoph + Burkhardt Sichemieitstechnik GmbH Spraysteam STAG AG STAGAG STAGAGG STAGAGG STAGAGG STAGAGG STAGAGG STAGAGG STAGAGG STAGAGG STAGAGG S																															
Smiley Monroe Ltd Sobemai Crane Services by Solitec Engineering Ltd Solotema V V V V V V V V V V V V V V V V V V V	(India) Pvt. Ltd.																														
Sobemai Crane Services by Solitec Engineering Ltd Soletcma Soletcma V V V V V V V V V V V V V V V V V V V		V	~					V	V		V	V	~	V										ļ.,							
Solitec Engineering Ltd Sotecma V V V V V V V V V V V V V V V V V V V		1				1		1	1						~				~	V				~				1		~	
Sotecma															V		V														
Sicherheitstechnik GmbH Spraystream STAG AG Standard Industrie V V Stantec Stemm Equipos Industriales, S.L. STM Industriale ApA Stokman BV Strudes Inc STUDIO TECNICO MALNATI SAS Succifindo Sumitomo Heavy Industries Material Handling Systems	Sotecma	V	V							V	V	V	~	V	V			V	V	V	V	V		V		V	V	V		V	
Spraystream Image: Control of the control	•																														
STAG AG Standard Industrie V V V V V V V V V V V V V V V V V V V															V									V	-						
Standard Industrie V V V V V V V V V V V V V V V V V V V											V				V											V		V		V	
Stemm Equipos Industriales, S.L. STM Industriale ApA STM SpA Stokman BV Strudes Inc STUDIO TECNICO MALNATI SAS Sucofindo Sumitomo Heavy Industries Material Handling Systems	Standard Industrie																							1				V			1
Industriales, S.L. STM Industriale ApA STM SpA Stokman BV Strudes Inc STUDIO TECNICO MALNATI SAS Sucofindo Sumitomo Heavy Industries Material Handling Systems		~	V				V				V	V	~	~	V		~	~	~	V	~	~	V	V	V	V	~	V	~	~	
STM Industriale ApA STM SpA Stokman BV Strudes Inc STUDIO TECNICO MALNATI SAS Sucofindo Sumitomo Heavy Industries Material Handling Systems				V	1	V		V	V									V												V	
Stokman BV Strudes Inc Strudes	STM Industriale ApA	V									V	V			V		V		V	V							V				
Strudes Inc STUDIO TECNICO MALNATI SAS Sucofindo Sumitomo Heavy Industries Material Handling Systems									Ļ						Á										V						~
STUDIO TECNICO MALNATI SAS Sucofindo Sumitomo Heavy Industries Material Handling Systems		./				./	./		~		4	./	./		~		./			./	./	./	./	./		./	-	./		./	
MALNATI SAS Sucofindo Sumitomo Heavy Industries Material Handling Systems																															
Sumitomo Heavy Industries Material Handling Systems	MALNATI SAS										V				V				V	V		V	V		V					V	V
Material Handling Systems																															
		V	V		V		V	V	V			V	V	V	V											V	V				

	SL	SUL	GL	GUL	G	CSU	BL	BU	SU	BE/L	S	R	S/R	C	F-EL	Н	MHE	Cr	Sc	Bln	Wg	S&I	DC	DC&A	ES	SS	RL/U	СВН	EC	0
Superior Industries																														
Superior Industries, Inc.	V	V					V	V		V	V	V	V	V		V											V			
Supreme Manufacturing, Inc.																														
Synergy Engineering Ltd	~	~				~	~	V		V	V	V	\	V		~	V	V	~				~	~			~	~	V	
Tadano Infrastructure Solutions Ltd.	1	1	1	1		1		1		V	V	V	V	V												1			V	1
Tamtron Group	•	•				•		·			•	•	Ť	Ť																
Tank Connection																									V					
TAPC - Total Air Pollution																											П			
Control TBA Group																								V						V
TBK Group by														~				~	V				V							
TD Micronic	V									V	V	V	V	V							V									
techNaero aps														V									V							
Tecpro Australia TEHNOROS					_																		~						~	7
Tele Radio	V	V	~	~	-	~					>	~	~	V			V			V				V	V		V		V	
Tele Radio i Lysekil AB	V	V	V	~	V	~	V	V		V	V	V	~	V	~		V	~					V	~	V	V	~	V		
Telestack Limited	V	V					V	V		V	V	V	V	V		V	V			V			V	V		V	V			V
Tenova S.p.A.	~	~		~		~	~	V			V	V	~	V		~				V					V	~	~		V	
Terex Deutschland GmbH	_	_			_		_	_		V							~						V				7			
Teufelberger Seil Ges.m.b.H		V		V				V	V	V				V																V
The Grab Specialist b.v.					V			•	•	•																				
The Hilliard Corporation																														
The Raring Corporation																							~							
THIELE GmbH & Co KG Thor Global Enterprises Ltd.	~						~	~	_	~	V	V		V		~	V												~	~
Thorwesten Vent							-	-																						
Tidfore Heavy Industry																														
Manufacturing Co., Ltd																														
Tinamu Labs AG																														
TMEIC																														
TMSA Tecnologia em Movimentação S/A	1	V	V	V	V	V	1	1		V	V	V	V	V		V			V	V	V	V	V			V	1			1
Tobu Jukogyo Co, Ltd.					V											V														
Topcon Technology Ltd																					V									
TPI Engineered Systems																														
Trans-Global Solutions, Inc																														
Trans-Global Solutions, Inc. Transship LTD														~																
TRF Limited (TATA)	V	V	V	~			V	V		V	V	V	~	V	~	~		~	V	V			V				V			~
Triodetic																							V		V					
Tru-Trac Rollers (Pty) Ltd																														
TSP Korea Tsubaki Conveyor																														
Systems India Pvt. Ltd																														
Tsubaki Kabelschlepp GmbH	V	V	V	V		V	V	V	V		V	V	V											V		V	V			
Tsubakimoto Bulk Systems																														
Corp.														V																
ULMA Conveyor Components Veenstra Machinefabriek B.V.																							,							
Verstegen Grijpers BV	•				V																		•							
Vibco Inc														V		~							V				V			
Vibrafloor		V				V		V				V														V	V			
Virta Inc.	~	V								V	V	V	~	V		~	V	V	~	V			~	V	V	V	V	V	V	V
VIVO consult s.r.o.																														
Vollert Anlagenbau GmbH Vortex Global Limited	V						V																V				V			V
VSR Industrietechnik GmbH	~	V	V								V	V	V	V									V							V
Wajax																														
WAMGROUP S.p.A.																														
WeatherSolve Structures Weba Chutes																							~						~	~
WEG																														
Weightron Bilanciai Ltd																														
Weir-Motion Metrics																														
Westmar Advisors	~	V												V		~							~				V		~	
Wirtech AG Wolf Material Handling														V																
Systems	~	V					~	~	1	V	V	V	V	V		~	~										V			
Wolf Point Engineers &																														
Contractors	V		V	V			V	V		V	V	V	V	V		V		V	V	V	V	V	V	V	V	V	~		V	
Wölfer by WiCHMANN E																														
GmbH Wood																								~						
World Domes																									V					~
Wuvio International																							V							
Yernaux-Pasage																					V									
ZAO SMM (CJSC SMM)																														
70440 01		1	1	1	1																						1	ı		
ZPMC - Shanghai Zhenhua								l .	l															. ا			1 1			
ZPMC - Shanghai Zhenhua Heavy Industries Company Limited	,	~	,	,			~	1			V	V	/	V										V					~	



320 T MATERIAL HANDLER FOR DEMANDING PORT HANDLING

- Bulk handling up to 38 m, Container handling and crane lifts up to 50 t
- Several power options: Diesel / Electric / Electric with Powerpack for independent maneuverability
- The new G series most comfortable, easy to operate, reliable in service
- Best overview from 22 m eye-level



Robert Aumüller

SENNEBOGEN

Maschinenfabrik GmbH

94315 Straubing, Germany
robert.aumueller@sennebogen.de



