INTERNATIONAL



THE MAGAZINE FOR EQUIPMENT BUYERS AND USERS



INTERNATIONAL AND SPECIALIZED TRANSPORT

VOLUME 29 NUMBER 9 JUNE 2021



Chosen as the offici magazine of the SC&RA (Specialized Carriers & Rigging Association)

European partner:







KHL CONTACTS

LINITED KINGDOM

KHL Group Southfields, Southview Road, Wadhurst, East Sussex TN5 6TP, UK. Tel: +44 (0)1892 784088 Fax: +44 (0)1892 784086 www.khl.com/ic

USA OFFICE

KHL Group Americas LLC 3726 E. Ember Glow Way, Phoenix, AZ 85050, USA. Tel: +1 480 6590578 e-mail: americas@khl.com

SOUTH AMERICA OFFICE

KHL Group Américas LLC Av. Manquehue Sur 520, of 205, Las Condes, Santiago, Chile. Tel: +56 9 77987493 e-mail: cristian.peters@khl.com

CHINA OFFICE

Beijing Representative Office, Room 769, Poly Plaza, No.14, South Dong Zhi Men Street, Dong Cheng District, Beijing, PR China 100027. Tel: +86 10 6553 6670 e-mail: cathy.yao@khl.com

GERMANY/AUSTRIA/SWITZERLAND/ SPAIN/UAE/REST OF THE WORLD

Mike Posener, sales manager Tel: +353 (0)86 0431219 e-mail: mike.posener@khl.com

UK/NORDIC NATIONS/MARKETPLACE/ CLASSIFIED ADVERTISING

John Austin Tel: +44 (0)1892 786245 e-mail: iohn.austin@khl.com

THE NETHERLANDS Arthur Schavemaker Tel: +31 (0)547 275005

e-mail: arthur@kenter.nl FRANCE/BELGIUM/LUXEMBOURG

Hamilton Pearman Tel: +33 (0)1 45930858 e-mail: hpearman@wanadoo.fr

ITALY

Fabio Potestà Tel: +39 010 5704948 e-mail: info@mediapointsrl.it

KOREA

Simon Kelly Tel: +44 (0) 1892 786223 e-mail: simon.kelly@khl.com

TURKEY

Emre Apa Tel: +90 532 2343616 e-mail: emre.apa@apayayincilik.com.tr

CHINA

Cathy Yao Tel: +86 (0)10 65536676 e-mail: cathy.yao@khl.com

JAPAN Michihiro Kawahar

Tel: +81 (0)3 32123671 e-mail: kawahara@ravden.ip

USA/CANADA

Matt Burk Tel: +1 312 4963314

e-mail: matt.burk@khl.com Bev O'Dell Tel: +1 816 8861858 e-mail: bev.odell@khl.com



ry and sunny weather has returned to the UK, spring is in full swing, everything has turned green and flowers have started blooming. Not all news, however, is full of the joys of spring. Also in the UK speculation was mounting at the time of writing that proposed further relaxation of Covid-19 restrictions in late June may be postponed depending on the progress or otherwise of the

so-called Indian variant of the virus and whether this or another takes hold again sufficiently to be termed another new wave.

While the whole thing is getting more than a little dull, a consistently brighter picture, at least of the crane industry, is painted by the results of our annual IC50 ranking of the world's largest craneowning companies. While last year we thought the covid impact would make itself felt more in this year's ranking than 2020, it seems we are still waiting for any negative hit to materialise.

As has been happening for several years now, there is overall growth in the IC50, this year at more than 7 percent, much stronger than last year's 1 % and rather better than was thought likely in the lead up to producing the table. There were more companies entering the table, more crawler cranes, greater overall capability, more capacity, and more.

In fact, it was pretty much more of everything, other than the number of employees and the number of depots. Even then it was only a marginal decline of much less than 1 %. To find out where your company, or somebody else's, appears in this year's IC50 ranking, see the feature starting on page 17.

Construction has continued relatively consistently and completely throughout the pandemic but now the talk has turned to interruption and disruption. This is not only to construction but to almost all other sectors, too, caused by shortages of goods and materials, notably timber and cement, computer chips and even the very steel shipping containers used to move pretty much everything (small enough to fit) around the world (more on dockside and port lifting in the feature on page 40). Let's see how the world unboxes this additional challenge.

ALEX DAHM

Editor

KHL CRANES













e-NEWSLETTER

Wörld**crane**week

www.worldcraneweek.com

WEBSITES



www.internationalcranes.media



www.khlcranemarket.com

EVENTS

www.khl.com/events



www.khl-itc.com



www.khl-group.com/events/esta



www.khl-wcts.com



www.liftandmoveusa.com

Correspondence is welcome and should be sent to: The editor, International Cranes and Specialized Transport, Southfields, Southview Road, Wadhurst, East Sussex TN5 6TP, UK

MEMBER OF





















KOBELCO CONSTRUCTION MACHINERY CO., LTD. TOKYO, JAPAN Tel: +81-(0)3-5789-2121 intlsales_cr@kobelconet.com

EQUIPMENT INDIA PVT. LTD.

Tel: +91-120-4079900 miyashita@kobelconet.com

Tel: +81-(0)3-5789-2121 S
intlsales_cr@kobelconet.com T
n
KOBELCO CONSTRUCTION

KOBELCO CONSTRUCTION MACHINERY MIDDLE EAST AND AFRICA FZCO Sharjah, U.A.E. Tel: +971-4-298-2020 KOBELCO CONSTRUCTION MACHINERY U.S.A INC. Tel: +1-281-888-8430 jack.fendrick@kobelco.com KOBELCO INTERNATIONAL (S) CO., PTE. LTD. Singapore Tel: +65-(0)6268-1308 hirakawa.takemichi@kobelco.com KOBELCO CONSTRUCTION MACHINERY EUROPE B.V. FOR EUROPE, RUSSIA, CIS Tel: +31-(0)36-549-5510 jos.verhulst@kobelco.com

KOBELCO CONSTRUCTION MACHINERY EUROPE B.V. FOR U.K., IRELAND AND SOUTH AFRICA Tel: +44-(0)1342-301122

ON THE COVER



Burger Grúas from Chile lifting components for an observatory in Chile. The 500 tonne Liebherr LTM 1500-8.1 is in TN configuration with full counterweight. See page 17.

SUBSCRIPTIONS

To subscribe to International Cranes and Specialized Transport or any of the magazines in the KHL portfolio: American Cranes & Transport; Cranes and Project Transport Turkey; International Construction; Demolition & Recycling International; Construction Europe; International Rental News: Access International: Access, Lift & Handlers; International Construction Turkey, etc, go to: www.khl.com/subscriptions or call +44 (0)1892 784088 for details.







International Cranes and Specialized Transport is a monthly publication with a worldwide circulation. The annual airmail subscription rate is £215, US\$345, €260. This issue of International Cranes and Specialized Transport is mailed on the 11th June 2021. Material published in International Cranes and Specialized Transport is protected under international convigint. International Cranes and Specialized

protected under international copyright law and may not be reproduced without prior permission from the publisher. International Cranes and Specialized Transport (USPS 017 158) is published monthly by KHL Group and distributed in the US by DSW, 75 Aberdeen Road, Emigsville, PA 17318-0437. Periodicals postage paid at Emigsville, PA. Postmaster: Send address changes to International Cranes and Specialized Transport, c/o PO Box 437, Emigsville, PA 17318-0437.



BPA Worldwide is the global industry resource for verified audience data and media knowledge. BPA Worldwide business media audits provide assurance, insight and advantage to business-to-business media owners and media buyers.

PUBLISHED BY



31

6

58

FEATURES



IC50 2021 17

Strong growth and little, if any, negative impact from Covid-19 in this year's ranking of the world's

largest crane-owning companies. ICST reports.

TOWER CRANE UPDATE

A roundup of the latest news and developments in this busy area of the crane industry. Christian Shelton reports.



REGULARS

NEWS

BUSINESS	15
SPECIALIZED TRANSPORT NEWS	27
EQUIPMENT AND ACCESSORIES	49
BACK PAGE	51
MARKETPLACE ■ PRODUCTS, PARTS & ACCESSORIES ■ CRANES AND EQUIPMENT FOR SALE OR RENT	53 53



WIND POWER TRANSPORT

As the benefits of wind power are being increasingly embraced around the world, specialized transport companies are busier than ever delivering key components. Christian Shelton reports.

DOCKSIDE LIFTING

40

Expanding operations while reducing negative environmental impact is a focus of ports around the world. Investing in new lifting equipment is key to achieving this. Christian Shelton reports.



SC&RA COMMENT

45

Joel Dandrea, SC&RA chief executive officer.

SC&RA NEWS

46

The global shipping container shortage grows problematic roots. Mike Chalmers reports.

KHL TEAM

FDITOR Alex Dahm e-mail: alex.dahm@khl.com Tel: +44 (0)1892 786206 **DEPUTY EDITOR** Christian Shelton e-mail: christian.shelton@khl.com NEWS WRITER

CAREER OPPORTUNITIES

Leila Steed GROUP FOITORS Lindsey Anderson, Andy Brown, Steve Ducker, Mike Hayes, Cristián Peters, D.Ann Shiffler,

Belinda Smart, Euan Youdale **WORLDWIDE CONTRIBUTORS**

Graham Brent, USA; Marco van Daal, Aruba; Heinz-Gert Kessel, Germany, Richard Krabbendam, Netherlands; Tim Maughan, Japan; Brent Stacey, Australia; David Weston, UK

SC&RA CORRESPONDENTS Mike Chalmers, Tim Hillegonds

EVENTS & CREATIVE DIRECTOR Saara Rootes e-mail: saara.rootes@khl.com

SENIOR PRODUCTION EXECUTIVES

Anita Bhakta e-mail: anita.bhakta@khl.com Charlotte Kemp e-mail: charlotte.kemp@khl.com

DESIGN MANAGER

Jeff Gilbert
EVENTS DESIGN MANAGER Gary Brinklow

PRINT & DIGITAL DESIGNER Mitch Logue **DESIGNER** Jade Hudson

SALES MANAGER

Mike Posener e-mail: mike.posener@khl.com Tel: +353 (0)86 043 1219

MARKETPLACE SALES

John Austin e-mail: john.austin@khl.com Tel: +44 (0)1892 786245

FINANCE MANAGER

anna.philo@khl.com

Alison Filtness e-mail: alison.filtness@khl.com Tel: +44 (0)1892 786212 CREDIT CONTROL Carole Couzens e-mail: carole.couzens@khl.com Tel: +44 (0)1892 786250 AUDIENCE DEVELOPMENT DEPUTY MANAGER Anna Philo

DIGITAL MEDIA DIRECTOR

Peter Watkinson e-mail: peter.watkinson@khl.com OFFICE MANAGER Samantha Head Direct tel: +44 (0)1892 786201 e-mail: samantha.head@khl.com **EDITORIAL MANAGER** Alex Dahm
EDITORIAL DIRECTOR Murray Pollok

CHIEF EXECUTIVE OFFICER James King
CHIEF FINANCIAL OFFICER Paul Baker
CHIEF OPERATING OFFICER









SPÈEDBINDERS

The Crosby Group has acquired Speedbinders.com, a USA-based designer and manufacturer of binders for heavy duty load securement.

The products are designed to provide faster tie-down and release times for drivers and safer load securement with less strain and fewer injuries, the company said.

Robert Desel, Crosby Group CEO, said, "The Torque Drive technology's dual focus on enhancing worker safety and improving productivity for drivers is a winning combination for the industry." Desel continued, "Speedbinders will provide additional opportunities for our valued channel partners, and together, we will bring this innovation to end-users worldwide "

Speedbinders' products include Torque Drive load binders which use a portable power drill to secure loads, eliminating the need for repetitive, manual operations common with lever and ratchet binders.

"It has been an incredible journey to see this business from concept to significant adoption and now a partnership with a world leader in load securement." said Steve Helline, founder, Speedbinders. "I can't think of a better steward of my business going forward and I look forward to supporting the continued adoption of Speedbinders in the market.'



Speedbinders is a USA-based designer and manufacturer of load securement binders

Zoomlion strengthens European presence

Chinese construction equipment manufacturing group Zoomlion Heavy Industry has increased its European presence with a manufacturing facility in Solferino, northern Italy. It will be used to manufacture mobile cranes, assemble tower cranes, and act as a distribution hub for forklifts and aerial work platforms.

Italian concrete machinery manufacturer CIFA, part of Zoomlion since 2008, was instrumental in the process and helped secure investment from Italian government funds.

Around 80 people will be employed. The site's total area is around 20,000 square metres, half of which will be used for crane production.



The premises are cabled to allow for the connection of stateof-the-art machinery with 4.0 technology, said Zoomlion. The halls are laid out according to lean production principles and have a host of safety systems, including gas leak sensors. Solar panels on the roof supply power for manufacturing activities and LED lighting throughout.

According to Davide Cipolla, CEO at CIFA and Zoomlion Europe, "In this very difficult period, we have been able to keep the investment plan envisaged for Italy unchanged, with the construction of a new plant, also thanks to funding from the Cassa Depositi e Prestiti and from SACE, through Garanzia Italia, the instrument of the Liquidity Decree intended to support Italian businesses to face the Covid-19 emergency. An enterprise that will generate a positive return in the local area also in terms of employment."

ICST Transport 50 call for entries

International Cranes and Specialized Transport is now accepting entries for the Transport 50 (T50) listing of the world's largest specialized transport companies.

Enter the ICST Transport 50 now and see if your company makes it into this year's list of the top specialized transport equipment-owning companies in

Every year ICST conducts an in-depth survey ranking the world's largest specialized transport companies based on the total maximum carrying capacity of their specialized transport equipment fleet.

The listing is well-established and one-of-a-kind. A place in the ranking is a prestigious achievement marked by

coverage in KHL Group publications, websites, social media, market reports and more.

If your company owns specialized transport equipment used to move oversize and-or, overweight loads then you may be eligible for a place in the top 50 list. Download your entry form at www.internationalcranes. media, complete it, and send to: alex.dahm@khl.com before Friday 9 July 2021.

It can also be helpful for us to



have a fleet list of your transport equipment, listed by type, make, model and capacity, so please feel free to include one.

If you have any questions, please call ICST editor Alex Dahm on +441892 786206.





Ainscough adding 37 Liebherr cranes in 2021

The UK's largest wheeled mobile crane rental company is spending £30 million (US\$ 42.5 million) on 37 new Liebherr cranes in 2021.

The first unit, a 700 tonne capacity LTM 1650-8.1 telescopic wheeled mobile crane, has already been delivered. The remaining models in the order will be a mix of LTM 1040-2.1, LTM 1060-3.1. LTM 1090-4.2. LTM 1110-5.1 and LTM 1230-5.1 (40 to 230 tonnes lifting capacity) wheeled mobiles.

The investment programme is a combination of replacement and growth but mainly growth, Ainscough said. There are more than 400 cranes in the fleet, based at 30 depots around the country and staffed by 900 people. Equipment fleet utilisation is currently running at 70%-plus, the company said.

New additions also help keep the fleet young, with the latest Stage V engines, better lifting performance and more sophisticated control

systems. To this end, Richard Everist, Liebherr Great Britain managing director, said, "many of the company's recent product innovations, particularly in relation to enhanced safety, have been developed in conjunction with Ainscough, and we are delighted that this collaboration has helped to deliver safe lifting solutions along with productivity and performance gains."

For Ainscough Peter Gibbs, chief executive officer, said, "The arrival of the LTM 1650-8.1 at the

HIGHLIGHT

Global construction equipment sales were stronger in 2020 than previously forecast, according to Off-Highway Research. OHR attributed it to stimulus from China in response to the pandemic and construction work being deemed essential in large parts of the world.

Before Covid-19 OHR expected a modest downturn following peaks in the last two years. The overall decline was forecast at five percent.

China's government, however, launched a largescale stimulus package. Huge spending saw the market rise another 30 % in 2020. Construction equipment sales rose to more than 412,000 units, with that increasing to more than 480,000 units if mobile cranes and compaction equipment are included.

start of May was a key moment for Ainscough Crane Hire, and our investment programme demonstrates our focus on updating our fleet in order to continually improve the service we offer our customers."



Two of the five new Liebherrs in the Q Crane & Plant Hire fleet

ensuring we can support our valued customer base with a wider range of equipment and adapting to their requirements."

Q Crane & Plant Hire adds its first Liebherr cranes

Crawler crane rental specialist Q Crane & Plant Hire in the UK has taken delivery of five new telescopic boom crawler cranes from Liebherr.

Three of the new additions are the 60 tonne capacity LTR 1060 model while the others are the larger, 100 tonne capacity, LTR 1100. They are the first

Brazilian crane service provider Cunzolo has bought a new full specification Tadano ATF 400G-6 all terrain crane. The 400-tonne class crane will be the largest capacity crane in the company's fleet - almost doubling the lift capacity of its previous largest crane. Cunzolo said the addition will allow it to serve more customers and a wider range of jobs. To effectively transport the boom, accessories, and the 136 tonnes of counterweight, the company also acquired ten additional truck trailers.

Liebherr cranes in the Oldhambased rental company's fleet.

Q Crane & Plant Hire has a mixed fleet of crawler cranes, including several units from Kobelco, up to 135 tonnes capacity. It also has excavators and other plant for rent and its own transport fleet.

Commenting on his new additions Anthony Quinn, Q Crane & Plant Hire managing director, said, "This is an exciting opportunity for the business,

HIGHLIGHT

■ Crane manufacturer Manitex International won US\$1.7 million in follow-on orders to supply knuckle boom cranes to an undisclosed military entity. Production starts in the second half of 2021.

Steve Filipov, Manitex CEO, said. "When we announced the initial order in September, we noted potential for additional significant follow-on business. We are very excited this customer has chosen to do additional business with us and we look forward to a longterm relationship."

Marr installs two heavy lift luffers

Australia-based heavy lift tower crane specialist Marr Contracting (The Men from Marr's) has installed two M2480D heavy lift luffing tower cranes on a new project in Sydney.

Marr was awarded the heavy lift contract for construction of the new Sydney Metro Crows **Nest Station. Construction** partner AW Edwards awarded Marr the job after working with Sydney Metro during the frontend design of the project.

delivering crane solutions for other Sydney Metro projects, for example, the Sydney Yard Access Bridge (SYAB) and station redevelopment at Central Station, and new station developments at Martin Place methodology with the precast and modular construction methodology driven by Sydney Metro's overall project delivery schedule, Marr said.

Using two 330 tonne capacity M2480Ds addresses the challenge of how to provide the heavy lifting capacity the project needs within the small space of the station box construction site, said Marr, It also addresses other logistical challenges, including handling large precast elements weighing up to 100 tonnes, while working adjacent to one of Sydney's busiest roads.

Construction on the A\$370 million (US\$ 286 million) project started in January. Metro services are due to start in 2024, with Marr's scope of work at Crows Nest complete in 2022.

Previous experience includes and Barangaroo. The goal for this project was to align the craneage

Comparing them to the same period a year earlier, however, they were down, from \$48.7 million. Continuing operations showed a lower net loss of \$(0.8 million) against \$(7.0 million) in the first quarter of 2020. Another highlight was the

Among a mixed bag

of numbers at crane

first quarter 2021 sales

were up on the previous

quarter's \$45.2 million.

were higher than the

previous quarter.

manufacturing group Manitex,

Sales of US\$47.2 million

order backlog of \$107 million at the end of April 2021 - a 5-year high, Manitex said. Adjusted EBITDA was up 24 % to \$1.9 million, or 3.9 % of sales, from \$1.5 million, or 3.3 % of sales in the previous quarter of 2020.

Steve Filipov, Manitex International CEO, said, "Our first quarter results were in-line with our expectations and reflect increased net sales and adjusted EBITDA. "Our backlog has grown consistently over the past several quarters, evidence of a healthy recovery in demand in many of the markets that our products are uniquely suited for, and has surpassed \$100 million, giving us confidence that we will achieve a year of growth in 2021."



Electric Volvo truck with Hiab crane

Dutch company Vrijbloed Transport has taken delivery of what is tagged as the first 100 per cent electric heavy duty truck working in the civil engineering sector.

The Volvo FF Flectric 6 x 2 was delivered as a two-sided tipper mounted with a Hiab loader crane. It was put to work for civils contractor Dura Vermeer on road construction projects in and around Amsterdam, Netherlands. Dura Vermeer aims to be working completely emissions-free in city centres by 2025.

Commenting on the new truck Sander Haagedoorn, road manager at Dura Vermeer Infra Region North West, said, "Most of the electric trucks currently on the road are converted versions. Volvo Trucks is the first manufacturer to produce electric trucks completely and directly from the factory.

"This is a lot more sustainable because diesel components do not have to be produced first and then removed."

Keeping the weight down increases the available range of an electric vehicle. Helping

Working for Dura Vermeer, Vrijbloed Transport using its 100 % electric Volvo truck with Hiab crane

in this case was the electrically powered and relatively light Hiab X-HiPro 122 crane.

The electric truck uses a pair of 400 kW electric motors, each developing 850 Nm of torque. Power is from lithium-ion battery packs with a total capacity of

264 kW-h. Regenerative braking is fitted so energy from that, especially in stop and go traffic, helps charge the batteries.







40 tonne tele crawler new from Liebherr

Liebherr has announced a new 40 tonne capacity telescopic boom crawler crane. The LTR 1040 is a lightweight version of the 60 tonne LTR 1060.

The new model can be adapted retrospectively and turned into a 60 tonner. The main difference between the two is the amount of ballast they carry. The 40 tonner carries 20 tonnes less ballast than its bigger sibling. That is 10 tonnes off the central ballast and another 10 tonnes off the upper works.

Liebherr said its "lifting capacities up to a medium radius significantly surpass those of its competitors and its 40 metre telescopic boom is around 30 percent longer than the standard in the class." It means most work can be done without a folding jib, the company said.

A typical job for this type of

crane is prefabricated concrete assembly where it can run with a 2.5 metre erection iib and second winch for two hook operation. On four falls of rope capacity is 17.7 tonnes on the erection jib.

Capacity is 8.6 tonnes at a radius of 10 metres through 360 degrees. With the boom extended to 30.7 metres and in its fully raised position, it will lift 18.8 tonnes. Capacity is 10 tonnes with the boom fully extended to 40 metres. Adding a 16 metre double folding jib gives a maximum hoisting height of 55 metres and capacity is 3.1 tonnes.

For transport the LTR 1040 weighs in at 43.5 tonnes with 5.6 tonnes of ballast. Carrying that on a four axle semi-low loader trailer behind a three axle tractor gives less than 10 tonnes per axle, the manufacturer



said. Removing 5 tonnes of the ballast brings it down to 38.5 tonnes for the crane or a gross weight of less than 60 tonnes, the manufacturer said.

Its dimensions are also designed to make it transport friendly. The crawler frames can be sucked in to give a track width of 3 metres and it stands 3.15 metres tall

The equipment will be added to

Mammoet's Offshore Services

KHL.COM



VIDEO OF ONLINE ESTA AWARDS & MARKET UPDATE

Watch this year's ESTA Awards & Market Update presentation, including the announcement of all the winners plus four industry experts reporting on the crane and specialized transport sector.

The speakers were:

- Jens Ennen, CEO, Tadano Demag & Tadano Faun: World crane market and the post-Covid landscape
- Moritz Dickmann, director, Nöpel Group: Implications of reforms to VEMAGS transport permits
- Garrick Nisbet, projects director, Notus Heavy Lift & Dan Massey, senior project manager, Osprey: Update on heavy lift & transport activities at Hinkley Point C. The ESTA event was held online on 22 April 2021.

Mammoet gains unique winches

Dutch international heavy lift and transport specialist Mammoet has acquired UK winch, barge and equipment hire firm Land & Marine - a subsidiary of the engineering infrastructure contractor J Murphy & Sons.

The acquisition includes Land & Marine's linear winch fleet and associated pipe pulling equipment. This includes two state-of-the-art 800 tonne

Mammoet said are unique to the industry. Their patented design and utilises advanced hydraulic Mammoet claimed this will reduce downtime and increase efficiency. Mammoet also gains several smaller linear winches, ranging from 100 to 300 tonnes, and a range of drum winches.

capacity linear winches, which allows socket passing under load controls for accurate monitoring.

equipment fleet. "Land & Marine has a well-established reputation in the linear winch hire and pipe pulling market that Mammoet Offshore Services will uphold their standards whilst broadening our overall offshore services offering," said Barnaby Mills, general manager for Mammoet - Offshore Services. "The Land & Marine legacy, its specialist experience, combined with Mammoet's innovative



Andrew Ball, Murphy's natural resources sector director, said, "We wish Mammoet Offshore Services all the very best going forward."

approach, makes for an exciting combination moving forward."

Hovago orders nine Tadano cranes



Doron Livnat, Hovago, and Tadashi Suzuki, Tadano, seal the deal in person for nine new Tadano cranes

Dutch crane specialist Hovago has ordered nine new cranes from Tadano

The order included two 650 tonne capacity crawler cranes, five large all terrains on five axle carriers and a pair of telescopic boom crawler cranes.

The cranes will carry the new unified Tadano branding which takes effect from October. Using the new company nomenclature the all terrain models will be three units of the 220 tonne capacity AC 5.220(L)-1 (formerly

Demag AC 220-5) and two of the 250 tonne AC 5.250-1 (formerly Demag AC 250-5). The L in the designation is for longer boom (the new designation for the former Tadano ATF 220 5.1 is AC 5.220-1). All these in the Hovago order will be with diesel engines to meet the Euro V exhaust emission standard

Formerly Demag-designated CC 3800-1, the two large lattice crawlers are the 650 tonne capacity CC 38.650-1. The two telescopic boom crawler cranes

are the 156 tonne capacity (590 tonne-metre) GTC 1800EX and they retain their existing nomenclature.

Deliveries to Hovago which marks its 75th year in 2021, begin in the fourth quarter of 2021.

Commenting on his choice Doron Livnat, Hovago owner, said, "We are absolutely convinced of the quality and innovative strength of the Tadano brand. In the past 30 years, Hovago have bought hundreds of Tadano cranes to our full satisfaction."

Hovago has been buying Demag cranes for nearly 50 years. Its 15 units of the CC 3800 makes it the largest fleet owner of that model

With a view to there being further growth in the wind energy industry, Livnat also ordered the capacity-enhancing Boom Booster kits to go with the new CC 38.650-1s.

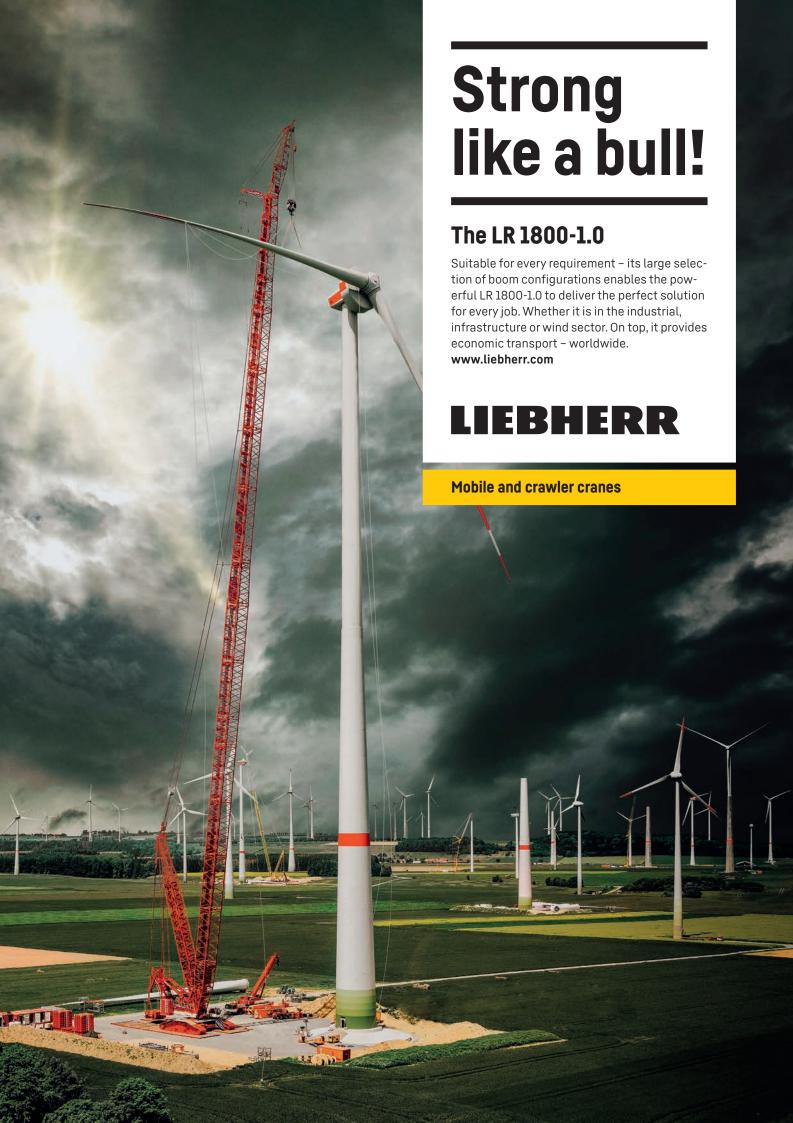
ON THE UP AT MANITOWOC

Net sales in the first quarter of 2021 were up 7.6 percent to US\$354.3 million over the same period of 2020 for USA-headquartered crane manufacturer Manitowoc.

Adjusted EBITDA was \$21.1 million, or 6.0 % of net sales, up by \$4.8 million over the first quarter a year earlier. Orders were \$473.6 million, up 26.3 % from a year earlier. The order backlog on 31 March 2021 was \$662.5 million, up 27.2 % year-on-year and an increase of 22.0 % from the previous quarter. For the period Manitowoc posted a net loss of \$3.1 million.

Commenting on the performance Aaron Ravenscroft, Manitowoc president and CEO, said, "I am proud of our team's execution during the quarter while navigating through the Covid-19 pandemic."







Unreserved public equipment auctions

Flexible financing approvals



Manitowoc 999 250 Ton Great Lakes Regional Event



Manitowoc 777 200 Ton Great Lakes Regional Event



Link-Belt LS218H 110 Ton Southeast Regional Event



Manitowoc 4100W Series 1 Houston, TX



Link-Belt HTC8675 | Los Angeles, CA



Link-Belt HTC-8670 70 Ton 8x4 Northeast Regional Event



Grove RT550E 30 Ton | Houston, TX



Grove RT890E 90 Ton Great Lakes Regional Event



1 of 2 – Terex RT780 80 Ton 4x4x4 Los Angeles, CA



Terex RT175 Northeast Regional Event



Tadano TR600XXL-4 60 Ton 4x4x4 Edmonton, AB



Link-Belt RTC80100 Series II 100 Ton 6x6x6 | Southeast Regional Event



Link-Belt RTC8050 Series II 50 Ton 4x4x4 | Southeast Regional Event



Link-Belt RTC-8090 90 Ton Houston, TX



Tadano TR-800XXL 80 Ton 4x4x4 Southeast Regional Event



Terex RT555 Great Plains Regional Event

320+ cranes in upcoming auctions

Houston, TX Great Plains Regional Event Northeast Regional Event Edmonton, AB Great Lakes Regional Event Southeast Regional Event

Jun 15–16 Jun 17

Jun 22-23 Jun 23-25

Jun 24–25 Jun 29 Online bidding information

► No minimum bids or reserve prices

► It's always free to register and bid online in any of our auctions, create your account now!

More items added daily
Call about selling: 1.800.211.39

Call about selling: **1.800.211.3983**

Financing & leasing availableUp to 100% financing, with no money down.

See complete listings at

rbauction.com



A bumpy ride

mixed outlook between weeks 16 and 20 of the IC Share Index compared to weeks 12 to 16. Five companies show a positive price rise, six companies display a fall, and there is one non-mover.

These figures perhaps reflect the continuing global turbulence caused by the coronavirus between weeks 16 and 20, with different countries at different stages of recovery or suffering additional waves of different variants of the virus.

The stand-out figure is USAheadquartered manufacturer Manitowoc's rise of more than 18 percent compared to last month. This correlates with

the Manitowoc company's first quarter 2021 results, which showed net sales were up 7.6 percent to US\$354.3 million over the same period of 2020.

Despite these positive signs, however, Manitowoc president and CEO Aaron Ravenscroft, is cautious regarding the road to recovery. "We are encouraged by positive trends in crane demand across all segments but, as the world normalises, we continue to see significant inflationary pressures and a multitude of supply chain challenges," Ravenscroft said.

This caution is underscored by the company's net loss of \$3.1 million in Q1, 2021.

Another USA-based manufacturer, Terex Corporation, shows the second highest share growth compared to last month's figures, with a rise of more than 15 percent. The company is actively pursuing a growth strategy in North America and to help effect this it has made staff appointments to effect this (see Back Page).

Terex also posted positive Q1 results, with sales of \$864.2 million, a 3.7 percent increase on the \$833.6 million achieved in the same period in 2020.

Last month both these companies. Manitowoc and Terex, showed a drop in their share prices compared to what they were in April.

Juxtaposing these positive financial results is Chinese multinational Liugong, whose share price has declined by more than 14 percent compared to the previous period.

In May's IC Share Index it showed the largest positive percentage change compared to the previous period of all companies in the listing, so this could simply be a natural drop following the high of the previous period. Perhaps the company's optimism following the Chinese President's visit has now faded.

With such a turnaround in fortunes compared to last month's Share Index for all three companies mentioned, perhaps the key takeaway is that one month can be a very long time in terms of a company's attractiveness to investors.

JUNE IC SHARE INDEX

STOCK	CURRENCY	PRICE AT START	PRICE AT END	PRICE CHANGE	% CHANGE	PRICE 12 MTHS AGO	12 MTH % CHANGE
IC Share Index*		132.33	126.18	-6.15	-4.64	73.80	79.30
Legacy IC Share Index**		361.10	372.32	11.22	3.11	179.38	101.30
Dow Jones Industrial Average	•	34,036	34,021	-14.54	-0.04	23,685	43.70
FTSE 100		7,016	7,002	-13.43	-0.19	5,800	20.96
Nikkei 225		29,683	28,084	-1598.90	-5.39	20,037	48.14
Hitachi Construction Machiner	y YEN	3,515	3,525	10.00	0.28	2,505	40.32
Konecranes	€	38.41	36.86	-1.55	-4.04	18.60	106.51
Kobe Steel	YEN	759	763	4.00	0.53	375	102.40
Liugong	CNY	10.55	9.02	-1.53	-14.50	6.68	57.93
Manitowoc	US\$	21.34	25.32	3.98	18.65	8.16	161.52
Palfinger	€	36.80	38.30	1.50	4.08	18.52	98.70
Sany Heavy Industry	CNY	31.84	29.08	-2.76	-8.67	19.31	64.89
Tadano	YEN	1,211	1,087	-124.00	-10.24	785	54.27
Terex	US\$	45.78	52.92	7.14	15.60	13.79	231.98
XCMG	CNY	7.48	7.15	-0.33	-4.41	6.27	19.30
Yongmao Holding	SGD	0.40	0.40	0.00	0.00	0.67	-40.30
Zoomlion	CNY	12.32	11.06	-1.26	-10.23	6.84	80.12
*/CShare Index 1 Jan 2011 - 10	0 **!	CShara Inday	and Annil 200	2 (week 17)	100		

**Legacy IC Share Index, end April 2002 (week 17) = 100



EXCHANGE RATES - VALUE OF US\$										
CURRENCY	VALUE AT START	VALUE AT END	VALUE CHANGE	% CHANGE	VALUE 12 MTHS AGO	12 MTH % Change				
CNY	6.522	6.433	-0.09	1.39	7.10	-8.09				
€	0.835	0.825	-0.01	1.25	0.93	-9.77				
Yen	108.898	109.276	0.38	-0.35	107.37	1.43				
UK£	0.727	0.711	-0.02	2.25	0.82	-11.08				
Period: Weeks 16-20										





Now available from The Crosby Group:









BlokCam M3

BlokAlert



For more information, contact your Crosby Group area sales manager or Peter Hird at peter.hird@thecrosbygroup.com.

Return on the bottom line







aving braced for a negative impact

Last year's table was produced when
the virus was a relatively new thing so it had
limited impact at that time. While it may
yet still have a further delayed impact,
over the last year things have
mainly continued in a positive

said to have happened.

from the corona virus on this year's table, it was a pleasant surprise to see it wasn't the case. The opposite could even be

direction, some of them strongly. An increase

in the total



IC 50 CRANES

Little if any negative impact from

Covid-19 on the *IC*50 ranking

of the world's largest crane-

owning companies saw it

continue on a growth path,

this year by almost

8 percent. ICST reports

We are pleased to have Burger Grúas from Chile in the table this year (66th place) and also on the front cover of the magazine. The spectacular project was lifting components for The Rubin Observatory telescope at Cerro Pachón, Región de Coquimbo, Chile. The 500 tonne capacity Liebherr LTM 1500-8.1 telescopic crane was put to work in TN configuration with full counterweight. Among other loads, in March it lifted a 28 tonne ring component of 10 metres in diameter

INTERNATIONAL CRANES AND SPECIALIZED TRANSPORT

R/	ANK					AREA OF	
2021	2020	COMPANY NAME	BASED	DEPOTS	EMPLOYEES	OPERATION	SENIOR CONTACT
1	10	Mammoet	Netherlands	111	6,273	Worldwide	Jan Kleijn
2	20	Sarens	Belgium	90	5,032	Worldwide	Wim Sarens
3	3€	Maxim Crane Works	USA	61	3,750	Worldwide	Bryan Carlisle
4	40	Lampson International	USA	7	300	Worldwide	William Lampson
5	5€	Sanghvi Movers	India	25	1,462	National	Rishi Chandrakant Sanghvi
6	90	BMS	Denmark	45	1,500	Worldwide	Jens Enggaard
7	60	Buckner Heavy Lift Cranes	USA	3	250	Worldwide	Douglas Williams
8	70	Bigge Crane and Rigging	USA	24	1,017	National	Weston Settlemier
9	80	All Erection & Crane Rental	USA	34	1,546	Worldwide	Michael Liptak
10	NEW	China Nuclear Industry Mechanical Engineering Co Ltd	China	5	424	Worldwide	Li lanqing
11	NEW	Shandong Gulf Lifting Engineering	China	5	442	Continental	Haotian Yu
12	110	Sinopec Heavy Lifting and Transportation	China	9	1,060	Worldwide	Wang Guohua
13	14 🖸	Al Faris	Dubai, UAE	11	3,250	Continental	Hillary Pinto
14		MIC	Japan	9	680	National	Hisashi Ohyama
15	120	Weldex	Scotland	2	160	Worldwide	lain McGilvray
16	10 ♥	Deep South Crane & Rigging	USA	8	700	Worldwide	Mitch Landry
17	13 O	Denzai Holdings Corporation	Japan	24	920	Worldwide	Kohki Uemura
18	16 👁	Tat Hong	Singapore	35	1,700	Worldwide	Michael Ng
19	17 O	Al Jaber Heavy Lift	United Arab Emirates	8	800	Worldwide	George Koshy
20	180	Barnhart Crane and Rigging	USA	55	1,550	National	Alan Barnhart
21	20 ♥	Hovago Cranes	Netherlands	2	20	Worldwide	Doron Livnat
22	240	SoP&G	Russia	5	800	Continental	Ildar Akhmetov
23	19 👁	Tiong Woon Crane and Transport	Singapore	11	949	Continental	Michael Ang Guan Hwa
24	23 👨	Prangl	Austria	15	672	Continental	Christian Prangl
25	210	Marmon Crane Service	USA	48	2,175	Worldwide	Tim Benjamin
26	25 ♥	Schmidbauer	Germany	30	670	Worldwide	Werner Schmidbauer
27	26 ♥	Integrated Logistics	Kuwait	3	2,137	Continental	Saleh Al Huwaidi
28	39 ↔	Uchimiya Transportation & Engineering	Japan	7	400	National	Seiji Tani
29	27 o	TNT Crane & Rigging	USA	41	1,400	National	Mike Appling
30	280	Wasel	Germany	15	490	Continental	Matthias Wasel
31	290	Fagioli	Italy	10	590	Worldwide	Fabio Belli
32	30 O	Felbermayr Transport und Hebetechnik	Austria	46	1,700	Continental	Horst Felbermayr
33	47 O	Chunjo Construction	Korea	17	100	Worldwide	Chang Hwan Jang
34	310	Alareedh (Mohammad Abdullah)	Saudi Arabia	9	1,500	Continental	Ali Mohammad Al Areedh
35	220	TopKran	Russia	5	750	Continental	Grigori Grigorian
36	32 o	Eurogrùas	Spain	25	994	Worldwide	Antonio Carrion Fernandez
37	40 o	W.O. Grubb	USA	12	500	National	Michelle Grubb
38	33 O	Chu Kai Public Company	Thailand	6	600	National	Thongchai Pairrungsri
39	35 ♥	Mediaco Levage	France	80	2,000	Continental	Alexandre-Jacques Vernazza
40	340	PVE Cranes & Services	Netherlands	4	105	Worldwide	Joost Bömer
41	520	Mountain Crane Services	USA	8	249	National	Paul Belcher
42	NEW	Public Crane Malaysia	Malaysia	5	168	National	Dato' Tan
43	36 o	Aertssen Kranen	Belgium	7	448	Worldwide	Tom Deckers
44	38 ⊘	PT. Superkrane Mitra Utama	Indonesia	4	684	National	Leonardy Tan
45	420	Bragg Crane Service	USA	13	1,000	National	Mike Roy
46	410	Tokyo Juki	Japan	8	215	National	Taku Tsuruoka
47	37 o	Sarilar Heavy Lift & Transport	Turkey	5	500	Worldwide	Erkan Gürbüz
48	45 O	JF Lomma	USA	8	180	Worldwide	Frank Signorelli
49	43 o	Ainscough Crane Hire	UK	32	900	National	Derek Gow
50	46 o	Hareket Heavy Transport and Lifting	Turkey	6	450	Worldwide	Abdullah Altunkum

JOB TITLE	WEB SITE	WHEELED MOBILE CRANES	LATTICE CRANES	LARGEST CRANE	LARGEST CRANE CAPACITY	<i>IC</i> INDEX 2021	RANK 2021
Chief operating officer	www.mammoet.com	964	255	SK 350	5,000	3,567,104	1
Chief executive officer	www.sarens.com	1,130	434	Sarens SGC-250	5,000	2,782,093	2
Chief executive officer	www.maximcrane.com	2,850	515	Manitowoc 31000	2,300	2,379,800	3
President and CEO	www.lampsoncrane.com	64	393	Lampson LTL-3000	2,722	1,279,570	4
Managing director	www.sanghvicranes.com	305	291	Terex Demag CC 3800-1	650	1,014,570	5
Chief executive officer	www.bms.dk	540	54	Liebherr LR 11350	1,350	892,992	6
Chief executive officer	bucknerheavylift.com	9	168	Liebherr LR 11350-P	1,350	842,567	7
President and CEO	www.bigge.com	746	330	Liebherr LR 11000	1,000	799,083	8
President	www.allcrane.com	1,764	330	Manitowoc 21000	907	656,630	9
General manager	www.cnecc.com/jixie	9	26	Sany SCC36000A	3,600	650,047	10
Managing director	www.hwlifting.com	10	109	Sany SCC40000A	4,000	644,549	11
General manager	www.segroup.cn	68	50	XCMG XGC 88000	4,000	590,303	12
•	www.alfarisgroup.com	953	80	Liebherr LR 11000	1,000	560,210	13
Vice president	www.micjp.com	274	178	Terex CC 8800-1	1,600	515,186	14
Managing director	www.weldex.co.uk	0	136	Liebherr LR 11350	1,350	501,100	15
President	www.deepsouthcrane.com	262	28	VersaCrane TC 36000/2		495,220	16
	•			Liebherr LR 11350 P-1800	2,700	493,220	17
Chief operating officer	www.denzai-j.com	340	300		1,350		
Chief executive officer - Asean		153	477	Terex CC 8800-1	1,600	488,022	18
Business dev. director	www.ajhl.com	175	87	Terex CC 8800-1 Twin	3,200	410,000	19
Chief executive officer	www.barnhartcrane.com	522	52	Demag CC 8800	1,250	391,720	20
President and founder	www.hovago.com	134	54	Liebherr LR 11000	1,000	389,885	21
Director	www.sopig.ru	39	50	Demag CC 8800-1	1,600	372,474	22
Chief executive officer	www.tiongwoon.com	224	178	Terex CC 8800-1 BB	1,600	368,816	23
Managing director	www.prangl.at	188	13	Terex AC 1000	1,000	354,137	24
President	www.marmoncranes.com	1,044	104	Liebherr LTM 1750-9.1	800	353,831	25
Chief executive officer	www.schmidbauer-gruppe.de	388	18	Liebherr LR 11350	1,350	341,070	26
Chief executive officer	www.integrated-me.com	543	56	Terex CC 8800-1 with Boom Booster	1,600	336,302	27
Director	www.uchimiya.co.jp	170	61	Terex CC 6800	1,250	312,078	28
Chief executive officer	www.tntcrane.com	570	55	Liebherr LTM 1750-9.1	750	275,859	29
Chief executive officer	www.wasel-krane.de	210	20	Liebherr LR 11000	1,000	245,000	30
Chief executive officer	www.fagioli.com	21	20	Liebherr LR 13000	3,000	235,673	31
Senior partner	www.felbermayr.cc	411	33	Liebherr LR 11000	1,000	189,268	32
Chief executive officer	www.chunjo.com	47	37	Manitowoc 31000	2,300	183,015	33
Deputy CEO	www.alareedh.com	531	7	Demag CC 3800 BB	650	182,955	34
Chief executive officer	www.top-kran.ru	62	73	Liebherr LR 11350	1,350	182,187	35
President	www.eurogruas.com	383	10	Liebherr LR 11350	1,350	180,301	36
Chief executive officer	www.wogrubb.com	284	81	Liebherr LR 1750/2	750	179,382	37
Chief executive officer	www.chukai.co.th	502	107	Demag CC 6800	1,250	174,789	38
President and CEO	www.mediaco.fr	820	17	Liebherr LG 1750	800	171,750	39
Chief executive officer	www.pvecranes.com	5	81	Terex CC 6800	1,250	171,600	40
Chief executive officer	www.mountaincrane.com	92	68	Liebherr LR 11000	1,000	161,929	41
Managing director	www.publiccrane.com.my	58	49	Terex Demag CC 8800	1,250	160,895	42
Business unit manager	www.aertssen.be	77	100	Terex Superlift 3800	650	156,583	43
Engineering maintenance	www.superkrane.com	150	105	Liebherr LR 1750	750	148,941	44
Executive vice president	www.braggcrane.com	367	47	Liebherr LR 1750/2	750	145,272	45
President	www.tokyojuki.com	53	72	Demag CC 6800	1,250	144,114	46
Chairman	www.tokyojuki.com www.sarilar.com.tr	89	48	Zoomlion ZCC 32000		144,114	47
					2,000		
Chief operating officer	www.jflommainc.com	110	105	Manitowoc 18000 Max-er	750	135,000	48
Sales and marketing director	www.ainscough.co.uk	400	4	Liebherr LTM 1800 w. special equip.	1,000	132,000	49
General manager	www.hareket.com	54	22	Demag CC 6800	1,250	129,826	50

R/A	NK					AREA OF	
2021	2020	COMPANY NAME	BASED	DEPOTS	EMPLOYEES	OPERATION	SENIOR CONTACT
51	440	Guay Inc.	Canada	22	500	National	Jean-Marc Baronet
52	49 O	Bracht Group (Bracht, Hoffmann, Wilden)	Germany	18	765	National	Dirk Bracht
53	51⊘	Johnson Arabia	Dubai, UAE	4	400	Continental	Martin Kirby
54	55 ↔	Jousai Transport & Crane	Japan	26	442	National	Ichiro Kurikawa
55	61 o	Locar Guindaste e Transportes Intermodais	Brazil	8	1,400	National	Julio Simões
56	53 o	Chubu Kogyo (CKK)	Japan	14	215	Worldwide	Masayuki Shimada
57	60 o	Kynningsrud Nordic Kran	Norway	15	335	Continental	Pål Kynningsrud
58	54 ♥	Windhoist	UK	4	520	Worldwide	Euan Fenelon
59	56 O	Gruas Roxu	Spain	9	285	Worldwide	José Manuel García Suaráez
60	59 o	Havator Group	Finland	32	450	Continental	Christoffer Landtman
61	48 O	NCSG Crane and Heavy Haul	Canada	9	300	National	John Woulfe
62	89 o	Aydintas Crane & Heavy Transport	Turkey	5	160	Worldwide	Hamza Aydin
63	65 ↔	Berry Contracting	USA	5	3,500	Worldwide	Berry Peterson
64	62 O	Sterett Crane & Rigging	USA	8	120	National	Jonathan Spong
65	58 ♥	Scott-Macon Equipment	USA	8	200	Worldwide	Allan Woodruff
66	NEW	Burger Grúas	Chile	3	295	Continental	Raul Burger
67	67 ©	Crane Norway Group (Nordic Crane)	Norway	5	300	National	Erik Andersen
68	66 o	Marco Crane and Rigging	USA	6	239	National	Dan Mardian Jr
69	69€	Antar Cranes Services	Singapore	6	200	Continental	Andrew Tan
70	71 @	Ohya Corporation	Japan	3	209	National	Kazuhiko Ohya
71	76 ©	Makro Engenharia	Brazil	8	1,158	National	David Rodrigues
72	50 ♥	Johnson Crane Hire	South Africa	18	450	Continental	Peter Yaman
73	57 ©	Sistem Crane Rental & Heavy Haulage	Turkey	3	158	Worldwide	Kemal Akinli
74	73 o	Beyel Brothers	USA	9	400	Local	Joseph Beyel
75	72 0	Vernazza Autogru	Italy	8	160	Continental	Diego Vernazza
76	79 o	Stevenson Crane Service	USA	4	216	National	Donna Stevenson
77	75 ♥	Shethia Erectors	India	3	700	Continental	Darshan Shethia
78	78 €	Barkat Cranes & Equipments Pvt Ltd	India	5	430	Continental	Preet Bedii
79	77 o	Yonehara	Japan	30	972	National	Hiroki Yamada
80	90 ↔	Superior Cranes	USA	8	225	Worldwide	Joe Everett
81	146 ଡ	Wiesbauer	Germany	5	180	Continental	Thomas Wiesbauer
82	83 o	Lift Source Machinery	USA	1	9	Worldwide	Don Udelson
83	68 o	Imperial Crane Services	USA	2	200	Worldwide	BJ Bohne
84	640	Custom Truck One Source	USA	45	1,800	National	Fred Ross
85	92 o	Northwest Crane Service	USA	11	126	National	Andy Hodges
86	91 @	Ness Campbell Crane	USA	9	350	Regional	John Anderson
87	820	Hokazono	Japan	9	205	Local	Naoki Shimowada
88	96 ↔	Dielco Crane Service	USA	1	112	Local	David Dieleman
89	86 ♥	Jassim Transport and Stevedoring	Kuwait	2	1,850	Continental	Adel Kohari
90	84 ♥	H&E Equipment Services	USA	11	2,285	National	Cary Burr
91	NEW	Expertise Contracting	Saudi Arabia	3	1,394	National	M Suthakar
92	81 o	Dozier Crane & Machinery	USA	5	40	Worldwide	Dozier Cook
93	95 ↔	Amirkabir Arvand	Iran	6	105	Continental	Mohammadreza Ghezelbash
94	87 O	Capital City Group	USA	7	310	National	Brian Gibson
95	88 O	Mr Crane, Inquipco	USA	3	150	National	Andy Steinberg
96	94 🔿	Big B Crane	USA	3	116	Regional	Daniel Basden
97	93 ♥	BKL Baukran Logistik	Germany	6	300	Continental	Jörg Hegestweiler
98	NEW	Amherst	Canada	6	150	Local	Chris Welstead
99	63 ♥	Izmir Vinç	Turkey	1	145	Worldwide	Bulent Kusgoz
100	1190	Smith Cranes and Construction	New Zealand	5	215	National	Tim Smith

JOB TITLE	WEB SITE	WHEELED MOBILE CRANES	LATTICE CRANES	LARGEST CRANE	LARGEST CRANE CAPACITY	<i>IC</i> INDEX 2021	RANK 2021
President	www.gruesguay.com	429	20	Liebherr LTM 11200-9.1	1,200	128,867	51
Chief executive officer	www.bracht-autokrane.de	286	28	Liebherr LTM 1750	750	109,600	52
Managing director	www.johnsonarabia.com	250	50	Terex Demag AC 700	700	106,215	53
President	www.jousai.co.jp	165	65	Liebherr LR 1750/2	750	105,944	54
President	www.locar.com.br	207	25	Liebherr LR 1800	800	102,330	55
President and rep. director	www.ckk-net.com	146	59	Demag CC 8800-1	1,600	100,591	56
Chief executive officer	www.nckynningsrud.com	195	17	Liebherr LTM 1650-8.1	700	100,350	57
Interim COO	www.windhoist.co.uk	21	3	Liebherr LTM 11200-9.1	1,200	98,382	58
Sole administrator	www.gruasroxu.com	176	5	Liebherr LTR 11200	1,200	96,980	59
Chief executive officer	www.havator.com	188	45	Liebherr LR 1750	750	93,381	60
VP business dev	www.ncsg.com	165	27	Liebherr LTM 11200.9-1	1,200	92,050	61
Board member	www.aydintasvinc.com.tr	41	16	Terex AC 1000	1,000	88,835	62
Vice president	www.bayltd.com	101	23	Liebherr LTM 11200-9.1	1,200	87,165	63
President	www.sterettcrane.com	148	41	Terex CC 2800-1	600	86,610	64
Executive vice president	www.smequipment.com	451	50	Tadano ATF220G-5	220	84,329	65
President and CEO	www.burgergruas.com	34	9	Liebherr LG 1750	750	83,892	66
General manager	www.cranenorway.com	111	16	Terex CC 3800-1	650	79,488	67
President	www.marcocrane.com	209	29	Manitowoc Grove GMK7550 megawing	450	79,376	68
General manager	www.jpnelson.com.sg/antar	5	234	Zoomlion QUY350	350	79,312	69
President and director	www.human-ohya.co.jp	97	39	Liebherr LR 1750/2	750	78,579	70
Chief executive officer	www.makroengenharia.com.br	313	11	Liebherr LTM 11200-9.1	1,200	72,375	71
Executive – sales and projects	www.jch.co.za	202	4	Liebherr LR 1750	750	69,900	72
General manager	www.sistemcrane.com	42	10	Liebherr LR 1750	750	69,183	73
President	www.beyel.com	195	57	Manitowoc 21000	907	68,245	74
Chief executive officer	www.vernazzautogru.com	41	10	Terex Demag CC 6800	1,250	66,793	75
President	www.stevensoncrane.com	177	29	Liebherr LTM 1650-8.1	700	62,610	76
Assisstant manager	www.shethia.co.in	101	59	Demag CC 6800	1,250	62,500	77
Chairman	www.barkatworld.com	41	8	Liebherr LR 1750	750	60,419	78
Manager	www.yonehara.co.jp	395	50	Tadano AR5500M	550	59,094	79
President	www.superiorcranes.com	114	17	Demag CC 6800-1	1,250	58,611	80
Chief executive officer	www.wiesbauer-krane.de	81	15	Liebherr LR 11000	1,000	58,100	81
Chief executive officer	www.lsmcrane.com	86	21	Liebherr LTM 1750-9.1	800	58,065	82
President and CEO	www.imperialcrane.com	190	29	Liebherr LTM 1500-8.1	500	54,000	83
Chief executive officer	www.customtruck.com	443	11	Sany SCC8150	150	54,000	84
President	www.northwestcraneservice.com	38	6	Liebherr LR 11000	1,000	52,890	85
President	www.nesscampbell.com	106	8	Liebherr LTM 1500-8.1	500	51,870	86
Director	www.hokazono.co.jp	104	41	Tadano AR-5500M	550	51,562	87
President	www.dielcocrane.com	67	18	Liebherr LR 1600/2	600	51,455	88
Chief executive officer	www.jtckw.com	155	9	Demag AC 700-9	700	51,300	89
Senior VP of cranes	www.he-equipment.com	223	0	Grove RT9165	150	50,700	90
Senior technical manager	www.expertindus.com	176	0	Liebherr LTM 1500-8.1	500	49,509	91
Owner and president	www.doziercrane.com	71	45	Kobelco CK 3300G-2	300	48,825	92
President and CEO	amirkabir-co.com	40	35	Krupp 11000	1,000	48,225	93
President and CEO	www.ccgroup-inc.com	131	37	Manitowoc MLC650	650	44,754	94
President and CEO	www.mrcrane.com	65	20	Liebherr LR 1750	750	44,748	95
President	www.bigbcrane.com	47	42	Liebherr LR 1500	500	44,640	96
Chief executive officer	www.bkl.de	116	0	Liebherr LTM 1650-8.1	700	44,350	97
Vice president	www.amherstgroup.ca	65	0	Liebherr LTM 1400	400	44,349	98
General manager	www.izmircrane.com	22	20	Liebherr LG 1750	750	44,125	99
Managing director	www.smithcranes.co.nz	56	43	Terex CC 2800-1	600	42,591	100
5 5							

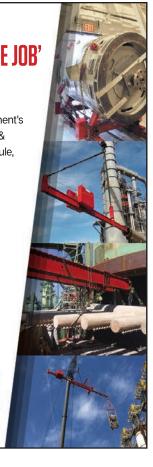


WHY DOES A 'REMOVE AND REPLACE JOB' MEAN LESS OUTAGE DOWNTIME?

We know that downtime is the bane of plant management's existence. That's why Barnhart has a team of Remove & Replace™ specialists and "cool tools" that reduce schedule, downtime, cost and most importantly – do so safely.

- Our Remove and Replace Team has developed specialized strategies to remove and replace equipment from the tightest spaces in your plant.
- We have created "cool tools" and techniques that can reduce a project's schedule from weeks to days and days to hours.
- Contact Barnhart for 'Remove and Replace' examples that prove how we reduce time and save money.







THE BASKET OF EIGHT

In 2017 it was planned to create a new group of ten companies for 2018 but, because the fleets of the two acquired companies in the sample were retained by another in the group, the eight were retained. The companies in the group are as follows: Mammoet, Sarens, Lampson, Sanghvi Movers, All Erection, Tat Hong, Al Jaber and Maxim, which includes the assets of Essex and AmQuip, following their acquisition in September 2016 and April 2017, respectively by Maxim. The idea of maintaining the same companies is to continue to allow the accumulation of data from the first Basket of 10 in 2009.

In 2021 more figures in the sample were down than up. Depots was down 5.36 % to 371 from 392. The number of employees was down 4.16 % to 20,863 from 21,788. Capacity of the largest crane was up 4.39 %, to a total of 21,379 tonnes from 20,479 in 2020. The total Index, however, was down, by 1.72 %, to 12,577,789 from 12,798,518.

number of entries for three years now sees this year's total of 216 companies exceed last year's 210, in turn, up from 201 companies the year before.

The *IC* Index value used to rank the companies in the table is calculated using the combined total maximum load moment of the cranes in a company's fleet. The total figure this year for all 216 companies is 31,903,004 points, up an impressive 8.99 percent on the 29,271,977 points total in 2020.

We focus on the top end of the chart so, narrowing it down to look at the Top 100, the total increase was similarly impressive and still the biggest for years, at 7.89 %, up from 27,928,500 to 30,132,072 points. Last year's figure was up just one percent on the year before. The top 100 total value this year exceeds that of the entire 210-company 2020 total figure.

It is great to report 15 new entries to the table in 2021, several from the Americas but also China, India, Malaysia, Saudi Arabia and the United Kingdom. Just three companies were deleted this year; two because we only had old data and one, Entrec, because it was liquidated and the assets joined ProLift, at 149th place this year.

So, to the placing, yes, Mammoet is still number one where it has been since the listing began in 1995. This year, however, the global giant's Index figure has declined, down 9 % to 3,567,104 from 3,924,174. That is the equivalent of the entire fleet of a company a quarter of the way down the table, for



example, Prangl from Austria.

While some of this reduction at Mammoet is evidence of a shift in emphasis from owning equipment to owning expertise, it is also part of a realignment of equipment type according to application and may well rise again.

Second in the 2021 IC50 is Sarens, with an Index figure of 2,782,093, up 0.79 % from 2,760,331. In 2020 the company added a large electric super heavy lift ring crane, the 100,000 tonne-metre rated SGC-90 and dropped some capability elsewhere. The gap between the top two companies in 2020 was 1,163,843 points while this year it is 785,011, having closed the gap on Mammoet by an impressive 33 % or one third over the year.

Third, fourth and fifth-placed companies Maxim, Lampson and Sanghvi, respectively, all retained the same positions from last year. Next, in sixth place, is BMS, up three and displacing Buckner from sixth to seventh, in turn pushing Bigge from seventh to eighth and All Erection from eighth to ninth.

Rounding out the top ten is the first new entry, China Nuclear Industry Mechanical Engineering Co Ltd. This company may have few cranes but they are large, including the 3,600 tonne capacity Sany SCC36000A lattice boom crawler crane. Right behind it in 11th is the next new entry, also from China. Shandong Gulf Lifting Engineering has the even larger, 4,000 tonne capacity, Sany SCC 40000 lattice crawler crane.

Next of the new or returning entries is Public Crane Malaysia at 42nd place, followed by Burger Grúas (this months's cover photo) from Chile, in at 66th place. Next is Expertise Contracting from India at 91, followed by Amherst, from Canada at 98. The remaining nine new entries are outside the top 100.

Other metrics

Following a similar pattern of recent years, the total number of wheeled cranes owned by the ten companies with the largest fleets by number of units has declined very slightly, by 0.25 %, to 11,384 from 11,413 in 2020. In terms of the lattice boom crane fleets, the total owned by the ten companies with the most units, at 3,559, was up 6 % from 3,357 units in 2020 and the biggest increase in several years.

While the total Index for the Top 100 companies was up strongly, it was a mixed picture among the other parameters, several of which were down. As with the largest fleets above, the total number of wheeled cranes in the Top 100 was down, here by 3.15 % or close to 1,000 units, while the number of lattice cranes was up, by 5.7 % or around 400 units. There were nine fewer depots (down 0.59 %) so a negligible change. The number of employees was 0.09 % lower than last year, 76 fewer people.

Looking just at the Top 20 companies, the numbers of depots and employees were basically unchanged from the previous year with less than a one percent change upward for the former (5 more) and 55 fewer employees (-0.17 %). It was a similar minimal change for the number of wheeled cranes, up by 41 units or 0.37 %. Only the number of lattice cranes was significantly different, with the top 20 largest companies adding 192 cranes, up by 4.68 %.

This last figure is made all the more

impressive by the fact that in terms of numbers of units the two companies leaving the top 20 between them had 232 lattice cranes whereas the two new entries displacing them only have 135. So the 97 unit difference was also made up on top of the 192 unit increase, i.e. 289 in total.

NOTES FOR THE IC50

Companies are ranked by their *IC* Index, calculated as the total maximum load moment rating, in tonne-metres, of all cranes in a fleet. All companies in the list, plus other prospective ones, have the opportunity to supply fleet information and the other requested data for inclusion in the ranking. Where companies supply the full data the figure used is calculated by them.

In some cases, where no data is submitted, or is incomplete, we have based a company's equipment fleet figure on an *ICST* estimate. In cases of insolvency, acquisition or lack of sufficiently recent information, companies are withdrawn from the table.

While we make great effort to ensure the accuracy of information provided, it cannot be guaranteed and *ICST* accepts no liability for inaccuracies or omissions.

The *IC*50 Index will next be updated in the first quarter of 2022. If you think your company should be included, please contact *ICST* for an application form. Note that tower cranes are not in the main *IC*50 table here because they appear separately in the special *IC* Tower Index published in the September issue of *ICST*.

Similarly, specialized transport equipment is also featured in a separate ranking, the *IC* Transport50, in the August issue of the magazine. Calls for entries in these tables are also issued and widely publicised like the ones for the *IC*50. Please look out for them at www. international cranes. media or www.khl.com, in the World Crane Week e-mail newsletter, in the paper magazine and across social media, including Facebook, LinkedIn, Instagram and Twitter.





TOP CRANE LTD

info@top-kran.ru top-kran.ru +7 (495) 643-80-80







More about: fassi.com

digital and mechatronic innovation, introducing applications and

These devices are developed entirely by Fassi and can be activated either

remotely or via selector switches and can assist the operator both in terms

technology to support human operators.

machines, **control** of load handling and cabin **safety** are just some of the **innovative functions** available which make the work of the **operator ever more important and central**.



SPECIALIZED TRANSPORT NEWS





Two roads had to be crossed between the port and the new petrochemical plant, Mammoet moved at night to minimise traffic disruption

One of the biggest modules on

the GCGV project in Texas, USA,

was moved by Mammoet on 496 lines

of SPMT

Mammoet moves on GCGV plastics project in Texas

Nearly 500 axle lines of self propelled modular transporter (SPMT) were used to move the largest modules so far loaded in to the GCGV plastics plant construction project.

At the peak of the project Mammoet had 1,578 lines of SPMT in operation on the Gulf Coast Growth Ventures (GCGV) site in Texas.

Swiss transport specialist Samuel Amsler moved a large 24 tonne steel container 100 km across Switzerland. To move the container Samuel Amsler used a two-axle MegaMAX low bed semi-trailer made by Luxembourg-headquartered special vehicle manufacturer Faymonville.

The semi-circular container was loaded from an inland vessel onto the drop deck in Muttenz, Switzerland. From here it travelled to the unloading point in Emmen near Lucerne. The container was 21 metres long and the overall combination length was 32 metres. The semi-trailer's hydraulic suspension, which can be lifted or lowered by 600 millimetres, enabled crash barriers and road signs to be avoided by the load, which partly protruded by 1.86 metres at the sides. The semi-trailer's pendle axle bogie has a steering angle of 60 degrees which Samuel Amsler said helped it complete all turning manoeuvres.

USA. GCGV is a joint venture between Exxon Mobil and Saudi Arabian petrochemical company SABIC, set up to develop a plastics manufacturing facility in San Patricio County.

To move the largest module Mammoet used eight sets of SPMT, each with 62 axlelines, for a total of 496 axle-lines. Before making the moves an almost 5 mile (8 km) temporary road was especially built for the project. It crossed Highway 181 and the FM 2986 roads which were closed to allow the

transports through. Mammoet worked with the Texas Department of Transportation to make the closures at times least inconvenient for other road users.

Commenting on the moves Wendell Johnson, Mammoet project manager, said, "Mammoet is pleased to have the opportunity to provide our equipment and expertise to GCGV." SPMT was brought in from six Mammoet depots around the world, drawing from its fleet of more than 4,700 axle lines.

Faymonville launches 19 axle unit in North America

Manufacturer Favmonville has unveiled the latest model in its HighwayMax trailer range, which now includes a new product for the North American market, the HighwayMax Dollv&Booster.

It is an extendable super heavy haul trailer composed of nine hydraulically steered pendular axles, a 3-axle jeep dolly and a 3-axle nitro booster. Including the truck. this unit creates a 19-axle combination and achieves a legal payload capacity of about 240,000 pounds (109 tonnes) at 20,000 pounds (9 tonnes) per axle.

The jeep dolly and booster are detachable enabling them to be loaded on the trailer for empty runs thus avoiding the need for permits, the manufacturer said. The truck and trailer combination length is less than



The HighwayMax Dolly&Booster is composed of nine hydraulically steered pendular axles, a 3-axle jeep dolly and a 3-axle nitro booster

110 feet (33.5 metres) and the loading platform can be extended up to 82 feet (25 metres). The spacing between axle tridems is adaptable to 14, 16, 18 and 20 feet (4.3, 4.9, 5.5 and 6 metres).



Edwards Moving & Rigging in the USA used its Goldhofer Faktor 5 high girder bridge and 72 lines of Goldhofer THP modular transporter on a project to move power components.

Four Kenworth prime movers were used to pull the power generating components to a generating facility in Florida. The configuration put 576 tyres on the ground. Edwards obtained permits for payloads ranging from 700,000 pounds to almost 900,000 pounds (318 to 408 tonnes). The heaviest had a combined gross weight of 1,887,985 pounds (856 tonnes) and, at 334 feet (102 metres) long, was almost the length of a football field. It was 17 feet 6 inches (5.3 metres) tall.

Preparation for the transport was essential as the load had to be navigated 13 miles (21 km) through a densely populated area while crossing structures and moving underneath overpasses without issues. The

(Above) Edwards used its Goldhofer Faktor 5 High Girder Bridge, 72 lines of Goldhofer THP and four Kenworth Prime Movers to transport power generating components

pre-planning phase involved many hours as members of the Edwards team reviewed permits and route surveys to stay ahead of the project and be ready to start transport once the components arrived.

The Faktor 5 was chosen for even weight distribution and to get the clearance needed to traverse under utility lines and fixed overhead obstructions. Tight turns were a challenge as the convoy wound its way through a densely populated urban area in South Florida.

With the load delivered Edwards transloaded the components to smaller PST trailer configurations and delivered them to the hook.

CUMMINS Q1 REVENUES JUMP 22 % FROM 2020

Columbus, Indiana, USA-headquartered Power system manufacturer Cummins reported total first quarter 2021 revenue of US\$6.1 billion, up 22 percent from the same period in 2020.

Sales in North America increased 7 % while international revenue increased 45 %, driven by strong demand across all global markets as well as new product sales in China and India, the company said.

"Demand accelerated in the first quarter, as the global economy continued to improve, driving strong sales growth across most businesses and regions and resulting in solid profitability," commented Cummins chairman and CEO Tom Linebarger.

Engine segment sales at Cummins were \$2.5 billion, up 14 % from the same period the previous year. On-highway revenues increased 15 %. This was driven by strong demand in the North American truck and pickup markets and off-highway revenues increased 9 %, driven by strong demand in international construction markets, said Cummins, Sales increased 10 % in North America and 24 % in international markets

In outlook Cummins raised its full year 2021 revenue guidance to 20 to 24 %, an increase from 8 to 12 % due to stronger demand across all markets.

Oman-based logistics provider Khimji Ramdas Shipping has delivered six items of fullyassembled oil rig equipment for Abraj Energy Services SAOC - Oman's largest drilling company.



The oil rigs were transported from Jebel Ali Port to the Bahja Region of south-central Oman. The largest item weighed 470 tonnes and measured 38 metres long, 14 metres wide and 11 metres high. The total weight of the packages was 1,744 tonnes.

Khimji Ramdas Shipping managed the sea and land transportation logistics and it also employed the services of Dutch heavy lift and transport specialist Mammoet.

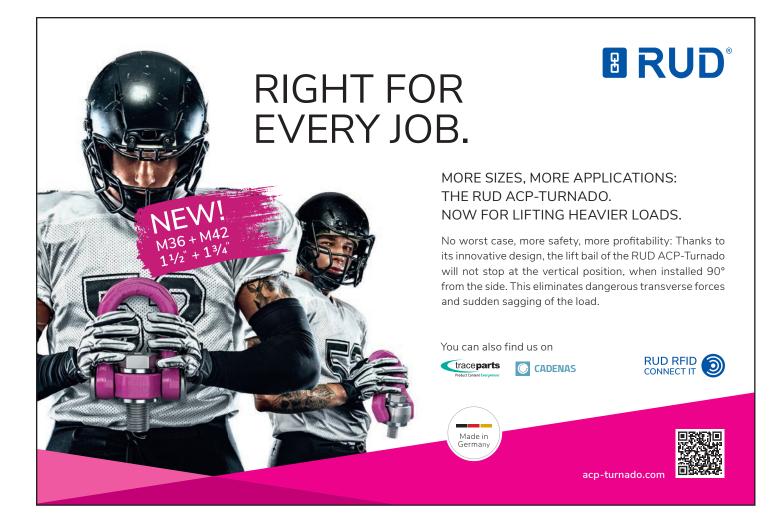




Visit us: stand A19











Zoomlion says its smart tower crane manufacturing plant can produce one tower crane every 18 minutes

With manufacturer product developments and bulging order books for crane rental companies around the world, there's a lot going on in the tower crane sector in 2021.

CHRISTIAN SHELTON reports

Reach for the sky

f you've noticed a lot of tower crane coverage over the last few issues of *ICST* that's because the sector is booming.

There's so much activity, in fact, that we have added this extra tower crane round-up in order to inform you on some of the sector's latest developments.

Starting with crane product development, Gdańsk, Poland-based tower crane manufacturer Krupinski Cranes has received two grants from the EU for the development of its tower cranes.

The first EU grant is for the development of a tower crane with permanent magnet electric motors and an energy recovery system, powered by a 230 Volt supply, which Krupinski estimates could reduce fuel consumption about 50 percent. Once finished, it will be a 220 tonne-metre tower crane with 65 metre jib, and a lifting capacity of 10 tonnes. Krupinski says the project has a value of Euro1.2 million.

The second grant is for the development of technology that allows for comprehensive management of a tower crane based on actual working conditions.

Krupinski says it aims to achieve this using cutting edge technology, including the Internet of Things, the HMI (human-machine interface) and advanced monitoring of critical technical and business parameters of the M2M (machine-to-machine) crane. The project has a value of Euro0.8 million.

Daniel Gwóźdź, chairman of the board at Krupinski, added, "We will use a 40 to 50 kW battery pack which will also charge when the crane lowers a load or when it applies brakes while slewing."



Smart manufacturing

In China, construction equipment manufacturer Zoomlion says that 2021 has been a busy year with multiple orders received from overseas clients. It says this is the result of its active international expansion plan (see News, Zoomlion strengthens European presence), increasing customer confidence in the quality of Chinese products, and the increasing competitiveness of China's high-end equipment manufacturing in the global market. It is doing well on home ground, too, receiving an order worth \$70 million at the start of 2021 from Chinese steel company Panhua.

In May the company completed the second phase of its smart tower crane manufacturing

plant, located in Changde, Hunan Province, which went into operation. Zoomlion says the plant it is expected to generate an output value of CNY 20 billion (US\$3 billion) annually and is capable of producing a tower crane every 18 minutes.

The factory is fully digitised to integrate big data analysis and technologies, including industrial internet, information system, visualisation to achieve fully covered networking and man-machine interaction the company says.

Lofty ambitions

Prestige projects and luxury apartments are further fuelling demand for tower cranes. Chipping Norton, Australia-based Cosmo

TOWER CRANE UPDATE

Cranes, for example, has erected its Terexmade CTLH 192-12 hydraulic luffing jib tower crane for the first time. The crane is being used to help build luxury apartments for property developer JQZ in Sidney.

The CTLH192 is Terex's most recent model in its new generation of European-built cranes. It has a low in-service radius of three metres and an out-of-service radius of eight metres. The model has a maximum jib length of 55 metres and a capacity of 12 tonnes. Terex said the crane has its latest control system, Terex Power Plus (TPP), Power Match functions, and T-Torque slewing system with customisable settings. It is quick and easy to setup, too, Terex adds.

In Berne, Switzerland, contractor Estermann hired three Wolff tower cranes, two 6031.8s and a 6015.8, to help construct the BäreTower. Once complete, the building will be 100 metres high with 152 rental apartments, a hotel and a medical centre.

According to the cranes' manufacturer Wolffkran, intensive teamwork was needed early in the planning phase as the job site was near the Bern-Belp Airport and this impacted the cranes selected for the job. Wolffkran said the planning team opted for its Clear series cranes due to their lower assembly heights and maximum overall heights.





Both the crane assembly and operation had to be reported to the Federal Office of Civil Aviation and the two highest cranes were equipped with obstruction lights and warning sleeves on their slewing parts. Due to the immediate proximity of the construction site to a rail line all three cranes were also fitted with a working range limitation to comply with the safety requirements of the railroad.

In Puebla, Mexico, a J52NS tower crane from Spanish manufacturer Jaso is being used to build The Helea Tower, which is being hailed as an iconic work of architecture. It is a 33-storey, twisting skyscraper comprising residential apartments that reaches a height of 142.5 metres.

To carry out the project, the work is being executed in two phases. In the first phase the concrete core of the building was built. In the second phase, the building's metallic structure will be reinforced. According to Jaso, due to the characteristics of the core and its dimensions, it was not possible to install a crane that could be erected inside the structure, so a J52NS was chosen with

a configuration of sections and bracing that allowed this crane to reach an underhook height of 150 metres.

With the core completed, a derrick crane with a capacity of 12 tonnes was installed which, together with the J52NS, assisted in the mounting of a J240 on a metal structure which was specially designed to support the loads on the roof of the tower.

Before starting the second phase, with the help of the J240, the derrick and the J52NS were dismantled. Once the second phase is completed, the derrick will be reinstalled for the final dismantling of the J240.

Freestanding record

In the UK, tower crane rental and sales company Bennetts Cranes has increased the height of a freestanding luffing jib tower crane to 105 metres for the construction of a residential development in Fulham, London. It says this makes it the tallest freestanding (not tied to the building) luffing jib crane currently in operation in the UK.

The crane, a Raimondi LR 213, is being used for a residential development in Fulham, London, Bennetts erected it in August 2020 at Chelsea Creek, where a selection of one-, two- and three-bedroom homes is being built by St George, part of Berkeley Group.

Bennetts said the height is not extraordinary for a crane, with tower cranes that are tied to buildings going to much greater heights than this. The crane is unique

> at this height, however, because it is freestanding and a luffing jib crane.

Typical freestanding luffing jib cranes would be between 30 and 60 metres tall for residential developments, with some occasionally reaching 70 >>>

SELF ERECTOR NEWS: WAGSTAFF ACOUIRES BRONSON

In the USA, Wagstaff Crane has acquired Potain self erecting tower crane dealer Bronson Crane. The purchase of the self erecting tower crane specialist sees Wagstaff take over all its assets and business functions, although Bronson Crane will continue to trade under its existing name, and operate from the Wagstaff building in Murray, Utah.

"For almost 60 years, we've offered the most complete line of hydraulic cranes in the Intermountain West," said Jim Wagstaff, co-owner of Wagstaff Crane and now Bronson Crane. "In that time, we've operated virtually every type of Manitowoc mobile crane

there is. Now it's time to expand our services even further by taking the logical next step and providing Potain's tower crane offering, too."

From left to right: Ronnie Wagstaff, Jacob Neilson, Kevin Wagstaff, Judd Wagstaff, Whitney Tucker, Jan Bronson, and Earl Bronson





WIND BLADETRANSPORT 3.0



The intelligent transport system that grows with its tasks.
Up to 100 m and 35 t.

MORE AT WIND.DOLL.EU

For every manoeuvre, every wind blade and any requirement of today and tomorrow.



TOWER CRANE UPDATE

metres or more. There are currently none known to be operating in the UK freestanding at more than 100 metres, the company said.

In April 2021 a team from Bennetts Cranes used a 1.000 tonne mobile crane to add mast sections and increase the height of the LR 213 from 55 metres to 105 metres. The crane has base tower sections 4.6 metres square (more than double the typical freestanding crane tower of around 2 metres) to withstand the forces at such a height.

The LR 213 is working on site with two further tower cranes: an LR 273, one of Raimondi's newest luffing jib cranes with an 18 tonne load capacity, and a 10 tonne capacity Raimondi LRH174 hydraulic luffer.

High praise

Also in London, Bennetts Cranes was commissioned by Curo Construction to provide lifting services for a church redevelopment project. The company provided a Jost JTL 158 tower crane on the site of Dundonald Church in South London where the existing building was demolished to make way for a new church and residential scheme to benefit the local community.

The JTL 158 was erected at 24 metres. with a 35 metre jib, and a maximum load of 4.6 tonnes. It was used for lifting the steel



frame into place, as well as moving other materials on the site.

'This was a small urban site to work on, with little space, and the Jost JTL 158 was a good choice for the job, with the ability to lift the steel frame into place," commented Edward Seager, managing director at Bennetts Cranes.

Bennetts has more than 70 Jost units in its rental fleet, 20 of which are JTL158s. These are primarily used for constructing concrete frames for house builders.

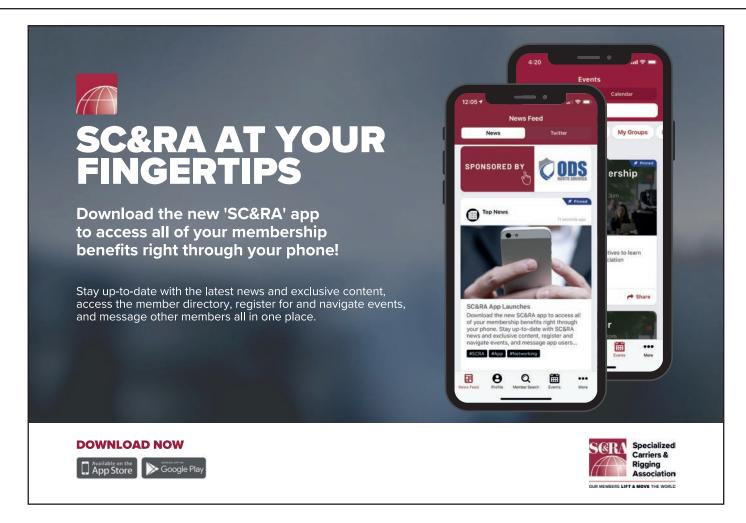


A Jost JTL 158 being used by Bennetts in London. Bennetts owns more than 70 Jost cranes

In September 2021 Bennetts Cranes is also scheduled to receive the first new model of a 36 tonne capacity luffing jib model from Spanish manufacturer Saez.

The new large luffer will have the nomenclature SL 730. The prototype is currently undergoing testing. Another version, called SL 730 ROS, will also be launched at the same time, revealed Saez. This one will have a much shorter out of service radius, Saez says.

With so much activity in the sector going on we will revisit it with another feature in September - stay tuned.









AN EXTENSIVE RANGE OF TOWER CRANES, SUITABLE FOR ALL TYPES OF CONSTRUCTION PROJECTS

OVER 50 YEARS

of experience designing, manufacturing, supplying and offering support services for tower cranes for construction.

+20,000 CRANES

manufactured by COMANSA

COMMITTED TO LIFTING EVOLUTION

ASIA

Hangzhou - P.R. China +86 571 8299 5555 sales@comansa.cn

INTERNATIONAL HQ

Huarte - Spain +34 948 33 50 20 sales@comansa.com

NORTH AMERICA Pineville (NC) - USA +1 800 589 7980 sales@lcacranes.com



WIND POWER TRANSPORT

As the benefits of wind power are being increasingly embraced around the world, specialized transport companies are busier than ever delivering key components. CHRISTIAN **SHELTON reports**

ccording to the Global Wind Energy Council's 2021 Global Wind Report the wind industry worldwide installed a record 93 GW of new capacity in 2020 - a 53 percent year-on-year increase, showing strong resilience in the face of Covid-19. This increase in wind power capacity has been made possible by the extensive construction of wind farms and has meant specialist transport companies have been kept busy moving turbine components.

Transportation specialist Van der Vlist, for example, finished transporting parts for the Geefsweer and Oosterhorn windfarm in The Netherlands in March 2021: in total Van der Vlist transported 384 loads for the project. Challenges included bypassing high-voltage cables and poor ground conditions. Despite these difficult circumstances Van der Vlist says all journeys were made without any noteworthy incidents.

Record breakers

In February 2021 Portuguese transport company Laso announced it had transported the largest wind turbine blade moved to date



on the Iberian Peninsula. The SG170 wind turbine blade for onshore use was 84 metres long. To move it Laso used a Mercedes SLT tractor with 250 tonne torque converter, a Nooteboom adapter with inter dolly, a five-axis dolly with hydraulic suspension to compensate for blade inclinations. A video of the job can be seen here: www. international cranes. media / 8010491. article

In April Laso won the The European Association of Abnormal Road Transport and Mobile Cranes (ESTA) transport award for trailer and load under 120 tonnes gross combined weight. The company won the award for its work transporting wind turbine blades for the Alecrim-Urze Wind Farm project in Paúl da Serra on the island of Madeira. It transported 12 turbine blades,

each 67 metres long, on winding roads and through tunnels on the Portuguese island.

Laso has also now completed work it started in December 2020 transporting nine wind turbines to the new Tocha II Wind Farm in Cantanhede, Portugal.

In the UK, Bristol-based heavy haulage specialist Plant Speed transported what are believed to be the longest wind turbine blades ever moved by road in the UK.

The blades and their spacer frames measured 68.252 metres long and weighed around 24 tonnes each. They were unloaded from a vessel at Avonmouth Dock and secured for transportation on Plant Speed's Nooteboom extendable Super Wing Carrier trailers. The trailers were towed by Plant Speed's trio of 250 tonne Mercedes-Benz SLT tractor units.

The blades were transported on a 24 mile (39 km) journey to Magor. The route included motorway travel and crossed the Prince of Wales Bridge. It was completed without incident in one hour and 20 minutes.

Dutch international heavy lift and transportation specialist Mammoet also uses Nooteboom Super Wing Carriers and Nooteboom Mega Windmill Transporters to transport wind turbine parts. The company used these trailers, along with a number of different semi-trailers and low beds, to transport the components for 22 wind turbines for Siemens Gamesa Renewable

Plant Speed transported the longest wind turbine blades moved by road in the UK





transportation undertaken in the country, with the route covering more than 3,500 km.

Rough riders

As the parts being transported were fragile and the roads extremely bumpy Mammoet used its hydraulic modular trailers to absorb the uneven road conditions. These also spread the weight of the sections, decreasing ground bearing pressure on bridges and reducing the need for additional civil works, said Mammoet.

Another specialist transport company battling uneven and difficult conditions when transporting a wind turbine shaft was Wisconsin, USA-based G&G Specialized Carriers. The route to the destination was a little more than 100 miles (162 km) but it was complicated by below zero-degree temperatures, 12 inches (300 mm) of snow on the ground and high winds. "The route was 103 miles of pure hell," said G&G president, Robbie Swan. "Blowing snow, high winds and cars were parked and stalled along the roadway. There were also a lot of tight turns."



Energy in Norway. The route was between between the port of Egersund to a site near Maakaknuten and has been captured in this spectacular video: www.internationalcranes. media/8012716.article

Further afield

In Kazakhstan Mammoet delivered 13 wind turbine tower sections, weighing 67 tonnes and measuring 30 metres, for the second phase of the Astana Expo 2017 wind farm project at the end of 2020. In doing so, it has broken its own record for the longest land



Rostock-Trans used its new Faymonville semi-trailer to move tower segments in Northern Germany



WIND POWER TRANSPORT

The 67 tonne turbine shaft was loaded onto a Faymonville MultiMax 3+3 single drop trailer at the Port of Milwaukee, USA, using a Manitowoc crawler crane. According to Swan, the trailer was key to completing the journey. "If we didn't have this Faymonville single-drop trailer, this trip would have been a flop," he said. The turbine shaft sat within circular saddles lashed to the trailer with chains. The duration of the journey was 12.5 hours. The turbine was 36 feet (11 metres) long and the loaded-out transport was 94 feet (29 metres) long. Full story: www. americancranesandtransport.com/ 8011231.article

In Northern Germany, transport company Rostock-Trans used its new Faymonville 3+5 VarioMax low bed semi-trailer to move tower segments. According to Faymonville, the semi-trailer's vessel deck can be hydraulically widened to allow maximum load width flexibility so that tower segments can be transported at the optimum height, depending on their diameter. The vessel deck can be continuously adjusted from the basic width of 2,990 mm up to 4,690 mm to suit the freight. In addition, the low bed semi-trailer is telescopically extendable in length.

Swedish transport company Uddevalla Specialtransporter used its Faymonville WingMax to transport a wind turbine blade with a length of 69 metres. Uddevalla Specialtransporter has two quadruple extendable three-axle WingMax flatbeds in its fleet which are designed to enable safe transport of XXL wind turbine elements safely and economically.

The 19.5 inch (500 mm) pendular axle provides offers a steering angle up to 60 degrees and a stroke of 600 mm, says Faymonville. In combination with an hydraulic



Uddevalla Specialtransporter using its Faymonville WingMAX in Piteå, Sweden to move a 69 metre blade

lifting and lowering gooseneck, the WingMax enables wind turbine blades transportation to negotiate obstacles, Faymonville adds.

Offshore matters

In offshore wind energy transport, Schiedam, Netherlands-based heavy construction equipment designer and manufacturer Huisman has launched the Motion Compensated Platform designed to quickly and safely transfer wind turbine components from a feeder vessel.

Huisman said that because the use of an internationally flagged Wind Turbine Installation Vessel is restricted under the USA's Jones Act, a feeder vessel with a Motion Compensated Platform offers a reliable and efficient solution for transportation of components in USA waters. The Motion Compensated Platform provides a stable deck area, says Huisman, because it actively counterbalances the effects of vessel's motion. This means that lifting heavy components and moving empty jack-up

vessels can be done in more severe weather conditions, thus increasing the weather window for operations.

The dimensions and capacities of the Motion Compensated Platform are optimised for next-generation wind turbines and are designed to compensate for five degrees of vessel motions. The Motion Compensated Platform can be integrated into the hold of a vessel and aligned with the main deck, making it easy to skid cargo across the platform. A video of the Motion Compensated Platform can be seen here: www. international cranes. media / 8012718. article

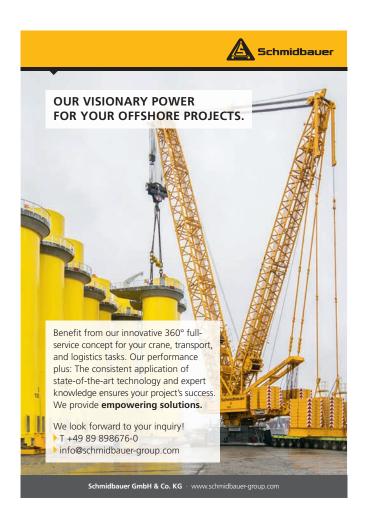
German heavy-load transportation specialist Schmidbauer will carry out the harbour handling of three prototype floating wind turbines for an offshore wind farm being built off the Mediterranean coast near Marseille in France, for EDF Renewables in 2022.

The floating turbines will be installed in deep waters out of view from the coast. As they float, they can also be installed in much deeper waters, up to 800 metres deep, to catch the strongest and most consistent wind. Schmidbauer believes this could become a huge growth area especially as the technology opens also new possibilities in the USA where suitable offshore locations exist mostly with water depth greater than 200 metres.

For the harbour handling operations the company will provide a Liebherr LR 11350 crawler crane, a Demag CC 2400-1 crawler crane, 130 tonne capacity auxiliary cranes, and 48-axle lines of SPMT, in spring 2022.

With governments around the world urgently looking to meet strict climate targets and energy companies rushing to build and expand wind farms the future of wind power transport looks prosperous. Combined with new emerging technologies, such as the floating turbines, the wind energy rush could well be the new gold rush.









Increasing efficiency

Expanding operations while reducing negative environmental impact is a focus of ports around the world. Investing in new lifting equipment is key to achieving this goal. CHRISTIAN SHELTON reports

ith the rise of eCommerce, which was massively boosted over the past 12 months during global lockdown as consumers shopped from behind the safety of their computer screens, many ports around the world are seeing increasing amounts of traffic. This is one driver behind why multiple ports are upgrading old and tired lifting machinery with new cranes that can efficiently unload large container ships whilst also supporting their green ambitions.

Fuelled by the flourishing offshore wind power industry, ports around the world are also finding themselves at the front of a green revolution - a position enhanced by the presence of electric dockside cranes.

With overland transportation routes becoming increasingly inefficient, with a greater ecological impact, many ports are looking to establish themselves at the cutting edge of environmentally responsible heavy transportation and logistics.

Nigeria may not be the first country that comes to mind when thinking of places that are at the forefront of environmental responsibility yet at the entrance to Lagos harbour you'll find a 600 tonne capacity heavy lift terminal crane that was built in just seven days and has minimal environmental impact: the Mammoet Terminal Crane (MTC 15).

The Lagos Deep Offshore Logistic Base (LADOL) transformed itself into a heavy lift terminal thanks to a strategic partnership agreement with Dutch international heavy lift and transportation specialist Mammoet forged in January 2020.

LADOL is a one-stop-shop for multinational industrial and oil and gas companies operating in West Africa and it has expanded its capacity for project cargo handling and logistics with the aim

of becoming more efficient.

The MTC 15 was installed in May 2020. It has a maximum load moment of 15.000 tonne-metres, lifts at a radius of up to 41 metres and boasts a lifting speed of 1.6 m/ min delivered by four 22 tonne winches.

The crane's low environmental impact comes in a number of ways: it has a low ground-bearing pressure, of 10 tonnes per square metre, which can be further reduced with additional load spreaders. As mentioned, erection takes just seven days and requires only one 80 tonne crane for assembly. To reduce transport costs the crane uses water as ballast. Up to 20 containers can be filled to provide 520 tonnes of ballast. The containers are filled with bags, just like those used to ship wine in bulk. These are filled with water at the site and use a counterweight system to signal if ballast levels need to be checked. The MTC 15 is controlled remotely, allowing the operator to manoeuvre it from the best possible viewing position. Once assembled, the crane requires only one operator.

The MTC 15 will be used for the loading and offloading heavy items such as columns, vessels, reels, engines and other such project cargo.



Scandinavian style

In Norway, the Karmsund Havn port authority, which runs the Haugesund Cargo Terminal at the Port of Karmsund, is furthering its lifting capabilities with the addition of a second Liebherr LHM 550 mobile harbour crane due to increased business at the port. The company bought its first one in 2019. It says the addition of a second LHM 550 will enable it to now offer tandem lifts of up to 308 tonnes to better serve the growing offshore wind industry.

The harbour crane will be operated on electricity, which fits with Karmsund Port Authority's green objectives. The crane will be able to operate the entire dock area at Husøy, and is equipped for handling containers, bulk cargo and project loads. The new machine has a maximum lifting capacity of up to 154 tonnes and a maximum outreach of 54 metres. It was shipped fully assembled by the heavy load carrier Meri from Rostock, Germany, to Karmsund, Norway, in March.

In Sweden, with the aim of increasing its green credentials, the Port of Södertälje has acquired the first Liebherr mobile harbour crane running on fossil-free HVO100 diesel. The crane was purchased in 2020 and delivered in March 2021. It is already in operation at the port. It has a lifting capacity of 124 tonnes and 360-degree mobility. It is





being used to handle a wide range of goods. The crane comes with various assistance systems including the Vertical Line Finder, the Teach-In system or the Advanced Container Control make it a partially automated and intelligent crane, claimed Liebherr. In addition, due to the proximity of the port to the city, noise insulation has been installed on the crane.

Electrifying ambitions

In the UK, the Port of Tyne is looking to becoming carbon neutral by 2030 and an all-electric port by 2040. The Port of Tyne is working through an asset electrification programme, which involves the conversion of legacy materials handling assets from diesel to low carbon electricity. Once completed this will include what it claims as a first for a UK port: to convert an existing diesel powered Liebherr mobile harbour crane to be fully electric. Existing diesel-powered Drax Hoppers, used for bulk material handling, are also being electrified. These two initiatives



The Port of Södertälje has bought a Liebherr mobile harbour crane that runs on fossil-free HVO100 diesel



Chinese shipping company China Cosco Shipping Corporation has mounted two Konecranes Gottwald Model 8 Cranes on a barge. The cranes will be operated by Cosco Shipping Bulk Co. (Cosco Bulk) off the coast of Guinea, Africa, where they will be used in the expanding bauxite mining industry. These two new cranes will trans-ship bauxite for the production of aluminium from river barges onto ocean-going vessels and will bring the total number of Konecranes Gottwald cranes on barges in the region to 12.

The cranes have been specially built for use on the open sea, with a maximum outreach of 43 metres and a 63 tonne grab curve for continuous-duty bulk handling. They are designed in accordance with Lloyd's Register Code for Lifting Appliances in a Marine Environment, which allows them to be operated at wind speeds up to 24 m/s and at maximum wave heights of 2.5 metres.

alone have reduced the port's diesel consumption by 260,000 litres and eliminated 700 tonnes of carbon dioxide emissions, the port says.

The Port of Tyne has also invested in a new fleet of electric vehicles, LED lighting in every building and asset, smart energy monitoring meters and considering installing solar panels on warehouse buildings.

Got a Gottwald

In the Netherlands, Antwerp-based oversized cargo transportation specialist Gosselin Logistics – has purchased a Gottwald Model 5 mobile crane, made by Finnish company Konecranes. It will be used for dockside lifting duties at its terminal on the Albert Canal, Deurne.

The crane has a 51 metre radius and will be deployed primarily for containers and breakbulk cargo. The Konecranes Gottwald Model 5 has a maximum load capacity of 125 tonnes for heavy lifting jobs.

"The widening of the Albert Canal and the expansion of our quay wall have had a positive impact on our activities," said Marc Smet, CEO of Gosselin Group. "Gosselin continues to invest in sustainable and environmentally responsible logistics via inland waterways. We want to apply inland navigation and multimodal solutions as often as possible to ease the pressure on local and other roads and to offer certainty to our clients. After all, the number of containers being processed continues to rise."

The crane was delivered via the inland waterway and assembly began in May 2021.

Remaining in Antwerp, Antwerp Container Terminal (ACOT) – part of SEA-invest, a



Gosselin Logistics's new Konecranes Gottwald Model 5 was delivered in pieces by barge

global terminal operator specialising in dry bulk, fruit and liquid bulk - has ordered two Liebherr ship to shore container cranes. The two new cranes are the same as a previous model Liebherr supplied in 2020. The models have an outreach of 60 metres, a span of 30 metres, a back-reach of 25 metres, a lift height over rail of 46 metres, and a safe working load of 65 tonnes under twin lift spreader. The cranes have offset primary rocking beams to allow flexibility in future operations and can operate on quays with a span of 30.48 metres as well as 30 metres. The new cranes will sit on a 900 metre long deep-water berth, allowing ACOT to handle super post-Panamax vessels with up to 22 rows across the deck.

Container cranes

Morocco-based Tanger Alliance opened the TC3 terminal at the Port of Tanger Med

DOCKSIDE LIFTING

at the start of 2021. The new terminal has been fitted with eight Liebherr ship-to-shore cranes (STS) 26 rows across, enabling it to handle the world's largest container ships, with a container storage yard equipped with 22 rubber-tyred gantry cranes (RTG) and 40 terminal trucks.

The last of the container cranes arrived at the port from Ireland in May and the crane entered service in April 2021. According to Liebherr, the new cranes bring the operational capacity of the new terminal to over 1.5 million TEU per annum.

The cranes were ordered between March and November 2019, with delivery scheduled to take place during 2020 and 2021. Liebherr worked with Mammoet on the transportation of the cranes. Due to the Covid pandemic with its global lockdown and strict restrictions the cranes were first erected at a remote site in Cadiz, Spain, before being shipped two at a time to Morocco.

Smart steering

In Brazil, the Sepetiba Tecon terminal, located at the Port of Itaquai - approximately



Tanger Alliance's new TC3 terminal has eight Liebherr ship-to-shore cranes



80 km from Rio Janeiro – has placed an order for nine Kalmar rubber tyred gantry cranes (RTGs). The terminal is part of parent organisation Companhia Siderúrgica Nacional (CSN), a major steel producer.

According to Kalmar, its RTG combines the best of diesel and electric technology for fuel savings, low emissions and easy maintenance. The order was booked in Cargotec's fourth quarter order intake. Delivery is scheduled to be completed in the first quarter of 2022.

The units delivered to Sepetiba Tecon will be configured to handle 6+1 wide with 1-over-6 high stacking and will have a lifting capacity of 40 tonnes under the spreader. To ensure greater fuel economy and lower emissions, the cranes will include a Variable Speed Generator system, which automatically optimises the rotational speed according to the required power, fully-electric Bromma spreaders and large tyres that enable minimal ground pressure.

The RTGs will be fitted with Kalmar SmartRail automated gantry steering system that automatically controls the gantry

with centimetre precision on its travelling path, improving the terminal's operational efficiency. The cranes will also be equipped with SmartRail CPI (Container Position Indication) system, a real-time tool to track and report container moves.

Sustainable solutions

In the USA, at the Port of Baltimore's Seagirt Marine Terminal, port operator Ports America Chesapeake (PAC) has invested in 15 new hybrid RTG cranes from Konecranes, significantly increasing the current RTG container handling capacity at the port.

According to PAC, the purchase has been made with the aim of expanding operations and reducing diesel emissions as part of the terminal's long-term plan to have fully electric operation and zero tailpipe emissions. The new RTGs will replace older equipment and will be delivered in three batches, starting in Q1 of 2022.

The cranes will be remotely operated and equipped with a number of operator and safety-enhancing smart features.

"As we anticipate additional e-commerce growth and numbers to continue to rise at the Port of Baltimore with the expansion of the Howard Street Tunnel, we are committed to finding sustainable expansion solutions, like our partnership with Konecranes," said Bayard Hogans, vice president of PAC.

From this snapshot of the current dockside lifting sector, it is clear that there is high demand for new efficient cranes that are in line with the increasing prioritisation of environmental considerations around the world. The paradox, of course, is that although the lifting machines might be at the forefront of green heavy lifting technology, many of industries they serve negatively impact the environment. For this to change is outside the remit of the lifting industry but at least the dockside lifting sector is working to minimise its environmental impact. Find out more about what the lifting and specialized transport industry is doing to be green in next month's Environmental Matters feature.

RTG SIMULATOR TRAINING FROM CM LABS

Canadian simulation specialist CM Labs, developer of Vortex training simulators, has launched a simulator training solution for rubber-tyred gantry operators. Exercises include working with over-height, open-top, breakbulk and liquid containers, plus standard 20-, 40-, and 45-foot containers. Trainees can lock onto containers with twistlocks and can also manage chain lifts and an over-height frame. The simulation accurately represents twistlock



behaviour and provides operators with the realistic experience of locking the spreader onto the container, the company said.

In addition, CM Labs recently released an Exercise Builder feature in its ports training packs, for both yardside and quayside equipment. It enables instructors to create new exercises, choosing between 12 types of containers, creating custom loading and unloading sequences.

A video about the Exercise Builder can be seen here: https://youtu.be/lmt9mqfYlA4



DISCOVER THE LATEST TEREX TRT 90 ROUGH TERRAIN CRANE.

With its only 3 m width, TRT 90 is easy to transport and maneuver on jobsite. The five section, 47 m fully hydraulic boom features three boom telescoping modes and can be further extended with additional 9 & 17 m jibs to extend your capabilities on long reach applications.

The new TEOS Operating System, with its 10" touch screen display and customizable electro-proportional joysticks, offers improved information flow and accessibility to increase operating efficiency.

- 90 t lifting capacity
- 47 m max boom length
- Additional 2-section jib of 9/17 m
- 66 m max tip height with jib









www.terex.com/cranes



Modulift

working between the hook and the load

The Original and the Best

Spreader Beams, Frames, Lifting Beams and Custom lifting equipment designed and manufactured according to your specific requirements

- Efficient MODULAR design Adaptable | Lightweight | Portable
- Technical Experts
 A team of in-house engineers and specialists, with over 200 years combined experience in the design and manufacture of lifting equipment
- New State of the Art Factory
 Faster turnaround times, increased
 storage space and all our standard
 products in stock and available for
 next day delivery
- Global Distribution Network
 To find your nearest stockholding
 Modulift Distributor, please visit
 our website: www.Modulift.com

Innovating the lifting industry, one lift at a time!



sales@modulift.com

www.modulift.com

No better time for cybersecurity

ost-pandemic, companies are doing their best to hustle back to work, while also embracing technology at record levels. At first glance, both these scenarios seem like overall positives. But it's also a crucial time to remind companies across construction and transport to do everything possible to protect their cyber assets.

To put it into context, malware, short for malicious software, is a blanket term for viruses, worms, troians and other harmful computer programs hackers use to wreak destruction and gain access to sensitive information - and then demand money to remedy.

The ransomware virus that recently infected Colonial Pipeline in the USA - overwhelming its internal computer network and initiating one of the largest disruptions of American critical infrastructure by hackers in history - resulted in a US\$5 million payout. This is an alltoo-common concession that many businesses eventually surrender to so they can salvage operational systems and data as well as keep private intellectual property and related proprietary information.

To put it into perspective, over half a million pieces of malware are detected around the world per day. Currently, there are more than one billion malware programs in circulation around the world



(and growing rapidly). Every minute, four companies around the world fall victim to ransomware attacks. And with the Internet of Things (IoT) rapidly inserting itself into all-things construction and transport, it should be emphasised that three in four infected IoT devices are computer routers.

An extremely desirable target for hackers, once infected, a router can then spread the infection to the local network, infecting dozens of additional devices and basically handcuffing an entire organisation.

Worth the Cost

Fortunately, we're not completely helpless to prevent cyber-attacks, though it will require an ever-increasing, ever-evolving level of vigilance to stay a step ahead of the cybercrime community.

For starters, train your employees. Experts estimate 88 percent of data breaches are caused by human error. Employees with little to no background in information security easily succumb to phishing emails, or unknowingly contribute to the distribution of malware. It's critical to incorporate cybersecurity training with your annual safety training. Make sure to share specific examples, such as tips for handling confidential information, the ways cybercriminals exploit e-mails through phishing links and the proper process for reporting a suspected cybersecurity incident.

In addition, keep software up to date. Your organisation's data is at greater risk if you're using old software and obsolete applications. It's also wise to use multi-factor authentication, which adds a layer of security to the login process. One well-known example is the security system used by most banks where a user is required to sign in with a password and a system-generated code that is sent to their mobile phone for them to input as part of the login.

Moreover, a lot of companies don't dispose of technological assets properly. Laptops, mobile devices or tablets hold valuable company data and must be fully wiped. Even printers and copy machines record data today, so they will need the same treatment. And practice makes perfect: cyber-security plans are as fundamental as fire-safety plans. You must constantly review and practice - even periodically undergoing audits of your cybersecurity environments to ensure adequate coverage.

It goes without saying in the digital era: get yourself a solid cyber-insurance policy. Many construction or transport outfits, especially smaller ones, believe they don't have any real cyber risk, and opt for an insurance policy that blends cyber with professional liability insurance.

You don't want to learn the hard way that the limited coverage offered by these policies is insufficient. The good news is, managing your cyber risk will make your organisation a more attractive risk to insurers, and an appropriate policy will be more than worth the cost if or when you've been compromised.

SC&RA LEADERSHIP

SPECIALIZED CARRIERS & RIGGING **ASSOCIATION**

CHAIRMAN

Jav Folladori

Transportation consultant, Jacksonville, Florida, USA

PRESIDENT

Kevin Johnston

J&R Engineering, Mukwonago, Wisconsin, USA

VICE PRESIDENT

Ed Bernard

Precision Specialized, Brantford, Ontario, Canada.

TREASURER

Michael Vlaming

Vlaming & Associates, Vallejo, California, USA

ASSISTANT TREASURER

Scott Bragg

Bragg Companies, Long Beach, California, USA

ALLIED INDUSTRIES GROUP CHAIRMAN

Enerpac, Menomonee Falls, Wisconsin, USA

CRANE & RIGGING GROUP CHAIRMAN

Pat Collins

Link-Belt Cranes Lexington, Kentucky, USA

TRANSPORTATION GROUP CHAIRMAN

Keith Settle

Oxbo Mega Transport Solutions, Scappoose, Oregon, USA

LADIES GROUP CHAIRWOMAN

Karen Millsap

Ridewell Suspensions, Springfield, Missouri, USA

SC&R FOUNDATION PRESIDENT

Dave Wittwer

Hays Companies

Salt Lake City, Utah, USA

VICE PRESIDENT

Geoff Davis

Unified Logistics Operating Group Bethesda, Maryland, USA

TREASURER

Jennifer Gabel

Construct Your Health Kenvil, New Jersey, USA



CHIEF EXECUTIVE OFFICER

JOEL DANDREA 5870 Trinity Parkway **Suite 200** Centreville, VA 20120, USA Tel: +1703-698-0291 Fax: +1703-698-0297



The global shipping container shortage grows problematic roots. **MIKE CHALMERS reports**

Finding boxes

n recent decades, shipping has become the backbone of global trade, with more than 90 percent of world trade in goods being carried by the international seaborne shipping industry. This type of supply chain requires an enormous number of shipping containers but the shipping industry has suddenly found itself at an impasse of global proportions.

In short: the world has run out of shipping containers, and the impact of this reality could very well start rippling through daily life around the world in a way that most people, and industries, are simply unprepared for.

That said, some SC&RA members around the world have seen this emerging dilemma up close and have been sounding the alarm

accordingly but, to many, the reality is just starting to land on industry's doorstep, and

"The Chinese now manufacture all the marine containers in the world," explained Carl Bentzel, U.S. Federal Maritime Commissioner. "And there's one company

in particular that manufactures about eighty-five percent, with some others filling in. But they're all connected to China and classified by the U.S. government as a state-owned enterprise."

Bentzel noted that,

Carl Bentzel, U.S. Federal **Maritime Commissioner**

concern is growing.



traditionally, this Chinese system has been pretty efficient at getting containers built. "They're connected with steel production in China, so the steel guys crank out these containers, and it's all dictated by the Chinese

He added, "They're also connected to the

Chinese maritime companies, so the container shipping line, COSCO [China Ocean Shipping Company], is interlocked together."

Pre-Covid. said Bentzel. the world was plugging along, business as usual, but the pandemic disrupted the process, and the ripple effect took root throughout 2020.

"During the pandemic, we saw about 20 percent reductions across the board around the country in the movement of containers through US ports. And that took place in February, March and April of 2020, so it really slowed down."

Adding to the predicament, Bentzel continued, intermodal chassis providers decided that this lull in the action was a good time to do maintenance and take many of these crucial pieces of equipment out of service and move them around. It should be noted that a significant portion of the world's intermodal chassis are also produced in the People's Republic of China.

"So a lot of equipment used in moving containers was taken out of the port structure, and since the industry had slowed down significantly, the Chinese stopped production of containers completely," he

Delays once the containers are unloaded from ships are further exacerbating the problem





China's COSCO, above, owns more than 1,000 ships, Like Denmark's Maersk, left, it has some of the world's largest container ships

said, "In that three-month period, we saw a substantial reduction in the production of containers as well as the availability of intermodal chassis for movement in the US."

But then around March and April 2020, China started to re-open, and manufacturing exploded with retail goods coming out of the country. "Production and commerce that was 20 percent down in the volumes of containerised cargo came back 20 percent over what it had been the previous year - a swing of 40 percent volume capacity in May, June, July of last year – so the market was caught flat-footed," Bentzel illuminated. "And remember, this was and is happening all around the world. These big volumes switched over in May and June, and they didn't have enough equipment at ports, etc., to handle it, and so everything started to slow down at the ports."

Bentzel indicated that companies would be ready to get cargo off the ships and out of the gates, but there were no wheels to transport with. "By February of this year, we had around 45 to 50 ships outside of L.A. Harbor alone - with hundreds of thousands of containers each just sitting there waiting to get to birth in LA [USA]."

Sounding the alarm

While the situation is abating ever so slightly in certain ports around the world, Bentzel pointed out that extremely high volumes will continue for the rest of 2021, "For example, the port of Savannah [Georgia, USA] had a forty-six-percent increase in April over the year before," he said. "Those volumes will continue for the rest of the year. At the same time that this has been going on, the Chinese are not manufacturing containers any faster.

They can run three shifts, but they're only running one shift – and it's tripled the cost of leasing a container, and slowed the whole process down."

Many industry insiders believe Chinese factories are keeping container production low to keep their newbuild prices high, which negates the hope on the cargoshipper side that the market might soon be flooded with excess new containers, thereby bringing freight rates down and soothing the alobal bottleneck.

"It's taking some shipping lines two weeks to get a container to China, to a shipper who wants it," said Bentzel, "and then it's taking two weeks when we get to the US, to get into port and get through the port complex. It's then taking two weeks when we ship it over to the rail line, because they're having problems with chassis and their own equipment as well, and the railyard. So it's taking up to 60 days longer than it ordinarily would."

All of this is contributing to even less equipment that is available for use, confirmed Bentzel, and that impacts the entire transportation supply chain, which includes many SC&RA members.

"We're seeing one- to two-month delays, and that includes manufacturers who rely on getting components in," he emphasised. "So for SC&RA members that need components and equipment for whatever they're doing steel beams for a big project, for example they're seeing substantial delays. And that includes the specialized haulers that move cargo that is now being held up. Tripling of rates is what we're hearing in many cases.

"It's convoluted. It started with the slow down as a result of Covid. Then a big surge. Then injury and illness to our longshoreman who handle the equipment, and then not enough equipment available to handle the surge. And now the backlog has created an issue, combined with volumes that are not stopping."

For SC&RA members, manufacturers aren't getting component parts - parts that go into largescale items that would be moved and then used on jobsites. "There will be instances, if not already, where a company might have to say, well, we can't use the crane today because we're still waiting on the cargo that we're supposed to lift," Bentzel affirmed. "There could certainly be a large impact on the manufacturing and building sectors with imports and a lack of production of required materials."

As for now, Bentzel hopes that publicising this information is one of the most effective ways to not just sound the alarm, but manifest change. "We have a fact-finding investigation that is currently underway," he added.

"We also have some trade powers, but we're looking at publicising this as a first step, and we do have some operational suggestions that we're going to work on with industry to try and get some more efficiencies into the system. We're talking to railroads because they utilise the same system. But ultimately, we really don't have a great answer as of yet. We can't really exert physical control - we can point out what's going on, and maybe at a higher level, the government says to the Chinese, what are you doing? You're hurting us," Bentzel continued. "Essentially, we're stuck with a commercial market trying to respond to a government-controlled economic policy. We have a just-in-time delivery system that sustains manufacturing (in the US), and at the moment, it's more like just-in-case - i.e., buy as much as you can in case you don't get your cargo.

"So we need to get the word out and start looking for ways to solve the issue, before it gets to the point that people head out to the stores, and there is much less on the shelves."

TOWER CONFERENCE & RECEPTION



NICE, FRANCE • 1-2 DECEMBER 2021

IT'S TIME TO MEET AGAIN

The event for everybody involved in the tower crane industry, from crane rental companies and contractors to manufacturers and distributors.

CONFERENCE SPEAKERS:

KEY NOTE: Christophe Simoncelli - SVP Europe, Manitowoc & SVP Tower Crane Operations

Eduardo Estelles - Managing director, Windcrane

 $\textbf{Marc Lambert -} \ \textbf{Founder} \ \& \ \textbf{CEO}, \ \textbf{Lextan}$

Lisa Hübscher - Sales Manager, AMCS

ROUND-TABLE: automation and remote control of tower cranes

Jean-Charles Delplace - CEO, SMIE & CEO, Smart Jobsite

Mor Ram-On - CEO, INTSITE

Marc Lambert - Founder & CEO, Lextan

1 DECEMBER 2021

- Planned tour or offsite event TBC
- Evening networking reception

2 DECEMBER 2021

- Full-day conference
- Post- conference farewell/drinks reception





GOLD SPONSOR



GOLD SPONSOR







































TMD Friction has launched another 70 new aftermarket brake disc fitments for commercial vehicles.

The new Textar branded solid and vented brake discs are for popular truck, trailer and bus applications, TMD said. Included are types to suit Mercedes-Benz, DAF, Volvo, Renault, Iveco, Scania, Boya, Neoplan, Solaris and Kögel applications.

Each disc has venting technology for improved cooling, TMD said, with a heat channel to improve heat dissipation and to help minimise vibration.

Textar products are manufactured "in strict accordance with OE tolerances and exceed the ECE R90 requirements," the company said. They are available in an online catalogue called Brakebook.

Textar's latest discs join a range that also includes brake pads, other accessories and wear indicators.

For more information see: https://textar.com

Modulift lifting frame for Mocean Energy

Aberdeen, UK-based wave power specialist Mocean Energy used a custom-made lifting frame from Poole, UK-based engineering company Modulift to help lift and lower a prototype 20-metre long, 38-tonne wave energy machine into the North Sea for its first sea-based test.

With the aid of the lifting frame the wave energy machine, called Blue X, has now undergone its first wet testing, load tests and ballast testing at Rosyth in Scotland.

Cameron McNatt, managing director and co-founder of Mocean Energy, outlined why it required a lifting frame, "Lifting is a critical operation for Blue X - the device is lifted on and off of transport, into and out of the water - sometimes over steep quaysides. And it's complex - Blue X is a hinged machine that can be lifted in two configurations.



"Modulift provided a fit-forpurpose solution and delivered not just the lift beam but also the rigging and helped in the design process. We are extremely grateful for Modulift's support throughout Blue X launch programme."

Blue X has now been transported to Orkney for further testing at the European Marine Energy Centre.

Modulift added that it is looking to further expand its presence in the wave energy industry with both its offthe-shelf and custom lifting equipment.

For more information see: www.modulift.com

CM LABS LAUNCHES PORTABLE DESKTOP SIMULATOR

Montreal, Canada-based simulation specialist CM Labs Simulations has launched the Vortex Edge Plus - a portable, desktop equipment training simulation system.

The desktop simulator runs all of CM Labs' construction and forestry equipment training packs. The system can be set up within minutes and, due to its portability, CM Labs said it is suitable for the classroom or as a tool for



attracting talent at events such as job fairs.

For more information see: www.cm-labs.com

Underwater automatic lifting hook

A new Elebia remote hook is now available as a subsea version. It is built from durable materials to withstand use in the tough underwater environment.

The printed circuit board and the lithium-ion battery are not inside the automatic hook but instead are placed in a watertight cylinder which remains out of the water to maintain radio communication with the hook's

remote control. This cylinder also has an external radio frequency antenna and LED status indicator to provide visual confirmation of hook status at all times.

The motor, which remains inside the marine version of the hook, is isolated by an internal cylinder from the possible influence of water within the frame structure and is Spanish smart lifting solutions company Elebia Autohooks has launched the subsea hook - an automatic hook for underwater lifting applications

hermetically sealed for additional protection, Elebia said. The subsea automatic hook and the subsea cylinder are connected by a transmission

> For more information see: https://elebia.com

cable of up to 30 metres.



Delivered direct to your device for you to access anywhere Complete the form below or register online at khl.com/digitalsubs

Somplete the form below of	10913	ter office at killiooni, argitalsabs
1 CHOOSE YOUR DIGITAL MAGAZI	NE/S	3 BUSINESS TYPES
Access		Contractor/sub-contractor
Access International		Equipment Rental
Access, Lift & Handlers (North America)		Consultant/Engineer Distributor/Agent/Equipment Sales
Cranes		Manufacturer
American Cranes & Transport (North America)		Specialized/Heavy Transport
International Cranes and Specialized Transport		Energy/Windpower/Petrochemical
Construction Construction Europe		Government
International Construction		Airports/Ports/Docks/Offshore
Construcción LatinoAmericana (Spanish)		Private/Public Utilities
Construção Latino Americana (Portuguese)		Mining/Quarrying/Aggregate
Demolition		Finance Association/Education/Research
Demolition & Recycling International		Other (please Specify):
Rental		
International Rental News		
		4 YOUR DETAILS
2 CHOOSE YOUR E-NEWSLETTER/S		First Name:
Access		Last/Surname:
Access International		Job title:
Access, Lift & Handlers		Company:
Cranes	_	Country:
World Crane Week		County/State:
KHL Crane Market		
Construction		e-mail:
Construction Europe		We require your e-mail address to be able to send you a digital version of the products that you have selected.
World Construction Week		of the products that you have selected.
Construction Technology News		
Construcción Latino Americana (Spanish)		5 YOUR PREFERENCES
Construção Latino Americana (Portuguese) 国际建设月讯中文版 (Chinese)		KHL Group may email you information regarding other KHL products relevant to you
Demolition		as a construction professional. If you do not wish to receive such information, please tick the selected box below.
Demolition & Recycling International		e-mail
Rental	_	C IIIaii 🗀
International Rental News		KHL Group may email you information about new products and services from relevant parties in the construction industry.
Concrete		I would like to receive e-mails from KHL about
Concreto Latinoamericano (Spanish)		other third party products
Concreto Latino-Americano (Portuguese)		All e-mails will contain a link in the footer to enable you to unsubscribe at any time. For more information, please see our Privacy Policy: www.khl.com/privacy-policy
		6 SIGN AND DATE:
Post to: KHL Group, Circulation Department,	l	
Southfields, Southview Road, Wadhurst,		SIGNATURE:
East Sussex, TN5 6TP, UK		

DATE:

Fax to: +44 (0)1892 784086

Scan and e-mail: circulation@khl.com

EVENTS DIARY

SC&RA BOARD & COMMITTEE MEETINGS

August 2021

Date and venue to be confirmed www.scranet.org

COMMERCIAL VEHICLE SHOW

31 August to 2 September 2021 NEC, United Kingdom www.cvshow.com

SC&RA CRANE & RIGGING WORKSHOP

14 to 16 September 2021 Chicago, Illinois, USA www.scranet.org

VERTIKAI DAYS

22 and 23 September Peterborough, UK www.vertikaldays.net

SINGAPORE CRANE WEEK

27 September to 3 October 2021 Singapore www.tal.sq/wshc

GIS SHOW 2021

7 to 9 October 2021

Piacenza, Italy aisexpo.it

INTERMAT INDIA 2021

18 to 20 October 2021 Mumbai, India india.intermatconstruction.com

WORLD DEMOLITION SUMMIT

20 and 21 October 2021 Chicago, USA www.demolitionsummit.com

DIESEL PROGRESS SUMMIT

25 and 26 October 2021 Chicago, USA www.dieselprogresssummit.com

SC&RA ANNUAL CONFERENCE

25 to 29 October 2021 San Antonio, Texas, USA www.scranet.org

17 to 21 November 2021

Zaragoza, Spain www.feriazaragoza.com/ smopyc-2021

INTERNATIONAL TOWER CRANES

1 and 2 December 2021 Nice, France www.khl-itc.com

LIFTEX BAHRAIN

21 and 22 March 2022

Bahrain, UAE www.liftex.org



To complement this month's dockside lifting feature deputy editor Christian snapped this 1973 Jones crawler crane which is still in use at the Medway Wharf Marina on the river Medway in Kent, UK. The marina is a family-run business established by Ivan Dozin and his wife Jacqui more than 40 years ago and, since 1999, it has been run by their daughter Sally, who also operates the crane. According to Sally, lifting lovely boats needs a woman's touch! The Jones crawler weighs 46 tonnes (with extra ballast) and, originally, had a safe working load of 20 tonnes – although Sally says due to the age of the crane, with many parts having been refurbished, she does not use it to lift more than eight tonnes these days. It has a 60 foot jib and the spreader beam is also around 40 years old but has recently been refurbished by Crowland Cranes in Peterborough.

PEOPLE NEWS

Italian manufacturer Raimondi Cranes has appointed



DIEGO BORGNA as the company's new deputy managing director to

spearhead operations. With more than two decades in the global crane sector, Raimondi says Borgna is widely acknowledged as one of the industry's leading experts.

Borgna's career achievements include factory internationalisation and modernisations of production plants in various geographies.

As part of his role as deputy managing director, he will collaborate with Raimondi commercial director, Cristian Badin, on developing new product ranges, as well as planning for the demand of specific new market business.

Terex Cranes has renewed its focus on North America



with two new appointments. JONATHAN **CALDWELL** has been made

Terex tower crane sales representative and will be responsible for growing the Terex tower crane business across North, Central and South America.

Caldwell studied civil engineering at the University of Central Florida and started in the industry as an application engineer at AmQuip Crane Rental, now owned by Maxim.

■ MICHAEL GOLL has become

Terex's business development manager, RT Cranes, North America. He will



be responsible for directing the sales strategy for Terex rough terrain cranes and Franna pick and carry cranes across North America, in partnership with growing its distribution network nationwide

Goll has more than 20 years of business development experience and, in his most recent position as a business development and regional sales manager at Wiggins Lift Company, he created the industrial lift division of high-capacity forklifts and established a dealer footprint throughout North America.

These appointments follow the appointment of Andreas Ernst to general manager, cranes Americas (announced earlier this year) and are part of the company's growth strategy.

■ Please send picture of the month entries and all other back page-related information to International Cranes and Specialized Transport, KHL Group, Southfields, Southview Road, Wadhurst, East Sussex TN5 6TP, United Kingdom, or by e-mail to alex.dahm@khl.com. Entries for Picture of the month should include: the month and year taken, the place, type of crane, owner and project, plus any other relevant information.

MARKETPLACE

International Cranes and Specialized Transport's Marketplace is designed to help readers find the products and services they need. The Marketplace is divided into colour coded sections to help you quickly find what you need.



53

PRODUCTS, PARTS & ACCESSORIES

Operational aids, communication systems, components, controls, software, crane mats and outrigger pads, crane repair, hydraulics, jacks, attachments, personnel baskets, rigging hardware, rollers, slings and chains, tires, winches, wire rope, batteries, braking systems, and new, used and refurbished parts.

CRANES AND EQUIPMENT FOR SALE OR RENT

Crane, rigging and lifting equipment for sale or rent, new or used.

SAFETY, TRAINING & INDUSTRY SERVICES

Training, insurance, inspections, financing, consulting and safety equipment.

SPECIALIZED TRANSPORT

Transportation permits, freight forwarding, heavy haul, pilot car services, trailers, wheels and tyres.

CAREER OPPORTUNITIES

Employee recruitment and job postings.

To advertise in the International Cranes and Specialized Transport Marketplace, please contact:

JOHN AUSTIN on:

Tel: +44 (0)1892 786245

e-mail: john.austin@khl.com

INTERNATIONAL CRANES AND SPECIALIZED TRANSPORT JUNE 2021

VAN DER HILST INTERNATIONAL b.v. EQUIPMENT, COMPONENTS & PARTS FOR HEAVY EQUIPMENT

Looking for equipment parts? Try us!

We deliver anywhere in the world for more than 30 years!

Van der Hilst International b.v. tel. +31-38-376 28 56

Ampèrestraat 21 Fax +31-38-376 46 65

8091 XX Wezep E-mail info@hilstinter.com

The Netherlands

www.vanderhilstinternational.com



Grove, Manitowoc, Demag, Volvo, Liebherr, Krupp, P&H. Potain. Cummins. Deutz. Allison. Clark

Used Cranes

Demag AC 100/4-L

Year 2014
Capacity 100 t
Main boom 60 m
Kilometers 74,000 km
Upper hours 5,242 h
Counterweight 26.1 t



Tadano Faun ATF 180G-5

 Year
 2014

 Capacity
 180 t

 Main boom
 13.2 - 60 m

 Kilometers
 57,540 km

 Upper hours
 7,657 h

 Counterweight
 50 t





Your contact:

usedcranes@tadano.com

DEMAG®

© Tadano Ltd. 2021



TADANO



INTERNATIONAL CRANE SALES Solutions for all your fleet needs











- Used Crane sales all manufacturers dealt with
- Tower Cranes Crawler Cranes Mobile Cranes
- Spare parts
- Technical support and advice
- Logistics, shipping and transport management
- Erection, dismantling and climbing services

For more information on our products and services please visit: www.kenaxo.co.uk • Email: enquiries@kenaxo.co.uk

brian@kenaxo.co.uk +44 (0)7408 839161 • cornelis@kenaxo.co.uk +44 (0)7800 843076

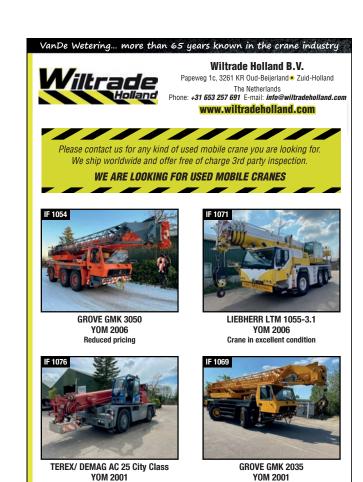
M. STEMICK GMBH

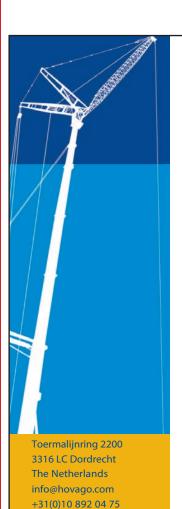
D-45721 Haltern / Germany

Kran- u. Baumaschinenhandel, Import - Export

CRANES AND EQUIPMENT FOR SALE OR RENT







INTERNATIONAL SALES

Fax: +49 2364 15546

Mobile: +49 172 2332923

e-mail: info@stemick-krane.de

Internet: www.stemick-krane.de

& BARE RENTAL SOLUTIONS

ALL	TERRAII	N CRANES
1x	200 t	Tadano

1x	200 t	Tadano ATF 200-5.1	NEW!
2x	220 t	Tadano ATF 220G-5	2012/2016
1x	220 t	Tadano AC 5.220-1	NEW!
1x	230 t	Liebherr LTM 1230-5.1	NEW!
1x	300 t	Demag AC 300-6	2019
1x	250 t	Tadano AC 5.250-1	NEW!
1x	450 t	Liebherr LTM 1450-8.1	NEW!
		·	

CRAWLER CRANES

1x	650t	Tadano CC 38.650.1 BOOMBOOSTERPLUS	NEW!
1x	650 t	Demag CC 3800 SL + LUFFER	2013
1x	650 t	Demag CC 3800 SL + WIND	2015
1x	750 t	Liebherr LR 1750/2	2015

ROUGH TERRAIN CRANES

IX	100 t	(US) Tadano GR-TUUUXL	2015

TELESCOPIC CRAWLER CRANES

1x	156 t	Tadano GTC 1800	NEW!

PLEASE VISIT OUR NEW WEBSITE



Established in 1946
Member of the ProDelta group

www.hovago.com









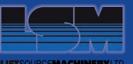
HOMAR B.V.

Import - Export Hydraulic and Lattice Boom Cranes

Tel: +31-341-253982 Web: www.homar.nl E-mail: info@homar.nl

E-mail					E-maii: imi	nan: info@nomar.ni		
	TELESCO	PIC AT-CRANES						
	Capacity 450 t 400 t 250 t 200 t 200 t 200 t 160 t		LTM 1200/1 LTM 1200	Year 1992 1988 2003 2008 2003 1993 2010 2001	Drive/Steering 16 x 8 x 14 16 x 8 x 12 12 x 8 x 10 10 x 8 x 8 10 x 8 x 8 12 x 8 x 8 10 x 8 x 8 10 x 6 x 10	Boom/jib (m) 50 / 61 / 84 50 / 61 / 84 72 / 22 68 / 33+1,7 60 / 43 54,5 / 22 60 / 22 60 / 22	Delivery direct direct direct June direct direct direct	
	160 t 140 t 130 t 120 t 110 t 100 t 100 t 100 t	Grove Liebherr Tadano-Faun Terex-Demag Terex-Demag Liebherr Liebherr	AC 100 AC 100 LTM 1100-4.1 LTM 1100/2	2007 1997 2008 2006 2005 2004 2002	10 x 8 x 10 10 x 6 x 10 10 x 8 x 10 10 x 8 x 8 10 x 6 x 8 10 x 6 x 8 10 x 6 x 8 8 x 8 x 8 10 x 6 x 8	60 / 22 60 / 17 60 / 18 45 / 18 52 / 16,2+runn. 50 50 52 / 19 52 / 33	direct June direct direct direct direct direct direct June	
	90 t 80 t 80 t 70 t 70 t 70 t 65 t 65 t	Liebherr Grove Demag Faun Liebherr Krupp Liebherr Tadano-Faun Faun	RTF 65-4	2007 2006 1996 1993 2005 1993 1990 2006 1994	8 x 8 x 8 8 x 6 x 8 8 x 8 x 8 8 x 6 x 8 8 x 6 x 8 8 x 8 x 8 8 x 8 x 8 8 x 8 x 8 8 x 6 x 8	50 / 19+runn. 51 / 15 50 / 17,6 42,1 / 16 50 / 16 38,1 / 16 42 / 18 44 / 16 40,5 / 16	direct direct direct direct direct direct direct direct	
	60 t 60 t 60 t 60 t 60 t 60 t 55 t	Grove Terex-Demag Faun Liebherr Faun Liebherr Liebherr Demag Grove	GMK 3060 AC 60-3 L ATF 60-4 LTM 1060/2 ATF 60-3 LTM 1060/2 LTM 1060/2 AC 55 City GMK 3055	2014 2008 2005 2004 2004 2003 2002 2007 2006	6 x 6 x 6 6 x 6 x 6 8 x 6 x 8 8 x 6 x 8 6 x 6 x 8 8 x 6 x 8 8 x 6 x 8 6 x 6 x 6	43/15 44 40,2/16 42/17 40,2/16 42/17 42/17 40/1,3 43/15	June direct June direct direct direct direct direct direct June direct	
	55 t 55 t 55 t 55 t 50 t 50 t 50 t	Grove Liebherr Liebherr Liebherr Liebherr Liebherr Terex-Demag Terex-Demag Terex-Demag	GMK 3055 LTM 1055-3.1 LTM 1055-3.1 LTM 1055/1 LTM 1055/1 LTM 1050-3.1 AC 50-1 AC 50-1	2006 2005 2004 2004 2002 2012 2012 2007 2007 2006	6 x 6 x 6 6 x 6 x 6 6 x 6 x 6 6 x 6 x 6 6 x 6 x	43 / 15 40 / 16 40 / 16 40 / 16+2,5+run. 40 / 16 + 2,5 38 40 / 17,6 40 / 17,6 40 / 17,6	direct direct direct direct direct direct direct direct	
	50 t 50 t 50 t 50 t 45 t 45 t 45 t	Terex-Demağ Terex-Demag Liebherr Liebherr Faun Faun	AC 50-1 AC 50-1 LTM 1050/1 LTM 1045-3.1 ATF 45-3 ATF 45-3	2005 2004 1997 2006 2006 2005	6 x 6 x 6 6 x 6 x 6 6 x 6 x 6 6 x 6 x 6 6 x 6 x	40 / 17,6 40 / 16,5 34 / 16 34 / 15,2 34 / 15,2 34 / 15,2	direct direct direct direct direct direct	
- 1		More maci	nnes, crane d	etans a	na pnotos on	. www.nomar.	III"	

CRANES AND EQUIPMENT FOR SALE OR RENT



YOUR RENTAL/RPO PARTNER FOR AT's, RT's & CRAWLERS

> Houston, TX 77024, USA Phone: +1 (713) 975-7702 e-mail: info@LSMcrane.com





(50+) TADANO RT CRANES IN FLEET

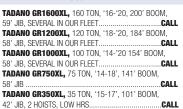
LIEBHERR LTR1100 & 1220, 120/240T

LIEBHERR LTM1250-5.1/1230-5.1, 300/275TON, 18-'21, 197'/246' BOOM, 69' JIB, RENT/RP. LIEBHERR LTM1160-5.2, 190 TON, '18-'20, 203' BOOM 62' JIB, RENT/RENT TO OWN ... LIEBHERR LTM1130-5.1, 155 TON, '18-'20, 197' BOOM 62' JIB. RENT/RENT TO OWNCALL

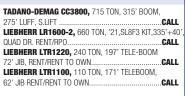
ALL TERRAIN

LIEBHERR LTM1110-5.1, 125 TON, 197' BOOM, 62' JIB. RENT/RENT TO OWN

ROUGH TERRAIN







OVER 100 UNITS IN FLEET CALL FOR ALL YOUR CRANE NEEDS!!

www.LSMcrane.com









MORE THAN JUST A CRAWLER CRANE LIFTING, DUTY CYCLE, DYNAMIC COMPACTION, **DIAPHGRAM WALL, CLAMSHELL (30-300 T.)**

WE WISH EVERYONE A LOT OF STRENGTH, STAY STRONG

www.zw-cranes.com

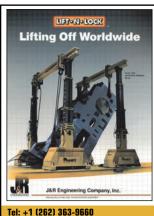






Reach Even More Potential Buyers 2020 BPA Audited Circulation Now 16,530

> Advertise in the next issue contact John Austin: Tel: +44 (0) 1892 652776 E-mail: john.austin@khl.com



LIFT - N - LOCK

Lift and move heavy loads safely and conveniently with J&R Engineering hydraulic boom gantries as detailed in this brochure. The exclusive LIFT-N-LOCK® feature holds up the load in the event the lift cylinder loses pressure. Other exclusive patented safety feaures include Stabilizer bars, Octagon booms, Load sensing, Digital height indicating system and Oscillating header plates. Field proven models up to 1800 ton capacity and lift heights up to 100 feet. Crawler mounted gantries up to 700 ton capacity and other specialized lifting and transportation equipment available

Fax: +1 (262) 363-9620

E-mail: info@jrengco.com Web Site: www.jrengco.com



Stuck wheel? Need to change o-ring?

Removing wheel does not have to be a pain in the crane.

- Number 1 in the market for big wheel removal
- Saves time and money
- 0-ring change without removing the wheel
- Suitable for mobile cranes, dumpers, loaders, etc

Read more: en,rimwizard,fi







