

INTERNATIONAL

CRANES

AND SPECIALIZED TRANSPORT

www.craneworld.com
A KHL Group publication

Volume 28 ■ Number 11 ■ AUGUST 2020

Engines and
components

Articulating
cranes

ICT50
TRANSPORT

Transport special

THE MAGAZINE FOR EQUIPMENT USERS AND BUYERS





CC 2800-2

© Tadanor Ltd. 2020. Tadanor and Demag are trademarks of or licensed by Tadanor Ltd. or its subsidiaries.

Better than ever.

What do you expect from a new Demag crane? Most certainly that it does everything a little better than its successful predecessor. That's why you should definitely get to know the new Demag® CC 2800-2 crawler crane! Its optimized transportability, its maximum system length of 192 meters, its lifting capacity of up to 600 tonnes and the powerful drive train of the Demag® CC 3800-1 make it the first choice for many projects. See for yourself.

Above. Ahead. Always.

DEMAG[®]
TADANO GROUP

INTERNATIONAL CRANES AND SPECIALIZED TRANSPORT

VOLUME 28 ■ NUMBER 11 ■ AUGUST 2020



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

European partner:



Approved media partner for:



KHL CONTACTS

UNITED 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 Americas 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 6676
e-mail: cathy.yao@khl.com

UK/GERMANY/SPAIN/AUSTRIA/ SWITZERLAND/NORDIC NATIONS

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

KOREA

CH Park
Tel: +82 (0)2 7301234
e-mail: mci@unitel.co.kr

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 Kawahara
Tel: +81 (0)3 32123671
e-mail: kawahara@rayden.jp

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

MARKETPLACE

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

EDITOR'S VIEW



Just as I was thinking about a topic for this column, I received the full press pack for the new Gordon Murray Automotive T.50 supercar. I know it isn't a crane but maybe you could argue it is specialized transport.

No? It is, however, pretty special and, after all, this issue of ICST does focus on specialized transport and engines, the latter on page 26, so let's carry on.

The GMA T.50 is fantastically advanced and also somewhat oldschool. Its naturally aspirated petrol engine is devoid of even one turbocharger. I wonder if you could say the same for any new crane engines. The T.50's V12 is claimed as "the world's lightest, highest-revving, most power dense naturally aspirated road car engine." Displacement is "only" 3.9 litres and it makes more than 650 hp. I am happy with a 20-year-old 3.2 litre car that (kind of embarrassingly) makes less than half that. Mind you, early in my driving career I was proud of a 1.6 litre twin-cam that made about 110 hp, which back then was impressive (to at least one person I knew) and shows how much engine development has come on in the last 30 years.

Before the naysayers go on about gas guzzlers, only 100 examples of the T.50 will be built. That isn't going to make much of a dent in anything, other than perhaps the scenery and definitely your pocket (where it will burn a hole north of \$2.3 million plus taxes).

So, on this occasion I don't care how green or tree-hugging we should be and that is because this piece of design and engineering is sufficiently impressive and interesting to transcend all that. Like many of the technical achievements in our industry, the effort that has gone into this car is inspirational. Anyone unimpressed by at least some aspect of this thing must surely have given up.

Sorry, a bit strong but a large part of my interest in this car is in the design approach and the drive of its designer, professor Gordon Murray, to improve on its predecessor. As many will know, the T.50 is successor to the McLaren F1 he designed 30 years or more ago.

Attention to detail is touted as being key to the success of great things. In this case an amazing amount of attention must have been paid to details for such an achievement to have been realised. Much of its impressive performance comes from the fact that it only weighs 986 kg. That is around a third less than your typical supercar, Murray says.

With weight being an all-pervasive critical factor in our industry, imagine what you could do with that level of disparity between one crane or trailer and another.

ALEX DAHM

Editor



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

KHL CRANES

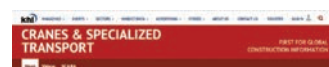


e-NEWSLETTER

Worldcrane week
Global news from International Cranes and Specialized Transport and American Cranes & Transport

www.worldcrane week.com

WEBSITES



www.khl.com/sectors/Cranes-and-Specialized-Transport/news

KHL Crane market
The online market place for buyers and sellers of used cranes

www.khlcranemarket.com

EVENTS

www.khl.com/events



www.khl-group.com/events/esta

**TOWER
CRANES**

NORTH AMERICA

www.khl-tcna.com

**WORLD CRANE
AND TRANSPORT
SUMMIT** CONFERENCE AND NETWORKING

www.khl-wcts.com



www.liftandmoveusa.com

MEMBER OF



KOBELCO

STRENGTH THROUGH EXPERIENCE SINCE 1930

KOBELCO G-Series

- EU Stage 4 or 5 compliant Power Plant, depending on crane model.
- Up to 25% reduction in fuel consumption thanks to G-mode, 3 new Energy Saving Systems from KOBELCO: G-Engine, G-Winch and Auto-Idle-Stop.
- Ergonomic, luxurious, spacious cab with Joysticks.
- High precision in positioning loads.
- Unrivalled smooth operating comfort.
- Dual pump flow for clamshell, bucket or material handling*
- Wide, large-capacity winches improve spooling and extend wire rope life.
- Large, colour monitor with pictograms provides outstanding visibility and immediate comprehension of essential operating data.
- Fast assembly and disassembly.
- Innovative, low weight upper frame and body within 3m transport width.
- Tractor-type crawlers.*
- Over-swing preventative device.*
- Machine inclination sensor.*
- Counterweight detect system.*
- Efficient transport.
- Low maintenance.
- Excellent reliability.
- Worldwide service.

* optional items



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

KOBELCO CONSTRUCTION
MACHINERY MIDDLE EAST AND
AFRICA FZCO
Sharjah, U.A.E.
Tel: +971-4-298-2020
shinohara.yoshio@kobelco.com

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
lzumi.shinsuke@kobelco.com

KOBELCO CONSTRUCTION MACHINERY
EUROPE B.V. FOR EUROPE, RUSSIA, CIS
Tel: +31-(0)36-549-5510
jos.verhulst@kobelco.com

KOBELCO CONSTRUCTION
EQUIPMENT INDIA PVT. LTD.
Tel: +91-120-4079900
fujita.sanshiro@kobelco.com

www.kobelcocm-global.com

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

IN THIS ISSUE



ON THE COVER



Our annual transport focus starts with the T50 ranking which has seen a return to a 'normal' level of growth after last year's downward blip. See page 15.

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 17th August 2020.

Material published in *International Cranes and Specialized Transport* is 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



© Copyright
KHL Group 2020
ISSN: 1747-700X

Printed by: Warners Midlands PLC, UK

FEATURES

ICT50 TRANSPORT **TRANSPORT 50** 15
In its 16th iteration the IC Transport 50 ranking of the world's largest specialized transport companies shows good growth but also a few surprises. *ICST* reports.

SPECIALIZED TRANSPORT 18
Specialized transport OEMs are trying to find the perfect balance between carrying capacity and tare weight, while meeting as many road regulations as possible. *ICST* reports.



REGULARS

- NEWS** 6
- BUSINESS** 13
- EQUIPMENT AND ACCESSORIES** 39
- ESTA NEWS** 41
- BACK PAGE** 43
- MARKETPLACE**
 - PRODUCTS, PARTS & ACCESSORIES 45
 - CRANES AND EQUIPMENT FOR SALE OR RENT 45

KHL TEAM

EDITOR
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
Leila Steed
GROUP EDITORS
Thomas Allen, Lindsey Anderson, Andy Brown, Steve Ducker, Mike Hayes, Fausto Oliveira, Cristián Peters, D. Ann Shiffler, 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 Hillelegonds
PRODUCTION & CIRCULATION DIRECTOR
Saara Rootes
e-mail: saara.rootes@khl.com
SENIOR PRODUCTION EXECUTIVE
Anita Bhakta
e-mail: anita.bhakta@khl.com
PRODUCTION ASSISTANTS
Charlotte Kemp
e-mail: charlotte.kemp@khl.com
Maria Clarke
e-mail: maria.clarke@khl.com
DESIGN MANAGER
Jeff Gilbert
EVENTS DESIGN MANAGER
Gary Brinklow
PRINT & DIGITAL DESIGNER
Mitch Logue
DESIGNER
Jade Hudson

VP GLOBAL SALES
Trevor Pease
e-mail: trevor.pease@khl.com
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
COMMERCIAL DIRECTOR
Paul Baker
e-mail: paul.baker@khl.com
FINANCE MANAGER
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

CIRCULATION & DATA MANAGER
Helen Knight
e-mail: helen.knight@khl.com
Tel: +44 (0)1892 786244
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
PUBLISHER
James King



ENGINES AND COMPONENTS 26
Development of electric drives will continue but there is still considerable life left in the internal combustion engine and associated components. Alex Dahm and *ICST* sister magazines *Diesel Progress* and *Diesel Progress International* report.

ARTICULATING CRANES 32
Other than the impact of Covid-19 news includes useful technological developments and innovation, plus interesting applications. Alex Dahm reports.



SC&RA

SC&RA COMMENT 35
Comment from *Joel Dandrea*, SC&RA chief executive officer.

SC&RA NEWS 36
Helping to develop talent in the industry is a key aim of the association. *Mike Chalmers* tracks the progress of four under 40 in the industry.

HIGHLIGHTS

■ The European Parliament has backed a delay in implementation of the Stage V engine emissions regulation. The original EU regulation (2016/1628) required a transition for non-road mobile machinery (NRMM) to Stage V engines in the power categories up to 56kW and equal to or above 130kW, by 31 December 2020. The amendment was brought about by the impact of the coronavirus pandemic. It gives equipment manufacturers an additional year to bring their modified equipment to market (31 December 2021).

■ Expansion of the Terex manufacturing footprint will see the USA-headquartered company also manufacture all three of its Terex Cranes lines in India. Terex Cranes which builds tower and rough terrain cranes, is based in Fontanafredda and Crespellano, Italy, respectively. The Franna brand of mobile pick and carry cranes is based in Brisbane, Australia. Production at these facilities will continue and the expansion will mean all three product lines also being manufactured at the Terex facility in Hosur, India, from 2021. Terex has 600 employees in India which includes an R&D unit of more than 150 engineers.

Another tower crane lift record by Marr's



Marr Contracting has completed what it claims as another world record lift for a luffing jib tower crane, this time in Turkey.

The Australia-based heavy lift tower crane specialist made the lift as part of its work to construct what will be the world's longest span suspension bridge, the 1915 Çanakkale Bridge across the Dardanelles Strait. Its overall length will be 4,608 metres, the central span will be 2,023 metres and the bridge tower height will be 318 metres.

Marr's 330 tonne capacity Favco M2480D heavy lift luffing jib tower crane, one of two on the site, lifted 155 tonnes at a height of 318 metres. With the top of the

crane standing 328 metres above the water, it took around 30 minutes to lift the centre section of the bridge's upper cross beam into place. Working on the Asian side of the Çanakkale Strait, the lift was a major milestone in the construction of the bridge.

Key to the plan was using the heavy lift tower crane's ability to carry heavy modular sections, instead of having to lift and then weld small pieces of steel together at height.

Simon Marr, Marr Contracting managing director, said, "DLSY knew what they wanted, and they were also open to a non-traditional heavy lifting solution. As experts in construction, the Joint Venture partners respected our expertise in heavy lifting and together we have been able to construct the tower stage of the project in record time.

The 155 tonne section of the UCB (upper cross beam) being lifting into position onto the bridge towers 318 metres above sea level

Silent power: Kunze works its electric Liebherr longer in the city

Working in a city will increasingly require cranes to operate more quietly. Using electricity to power the crane is one way to do this. Where a crane can be powered from rechargeable batteries or connected to the mains, it will run relatively silently. In addition to being quieter than running a diesel engine, there is no air pollution at the point of use.

German crane rental company Krandienst Kunze recently proved the point on a shopping centre roof project in Dresden. It used a Liebherr MK 88 Plus mobile folding tower crane with electric drive to replace glass roof panels.

The Radeberg-based company went to work in Dresden's old town district near the Frauenkirche church. Challenges included narrow

streets, awkward lifts out of the atrium over a 30 metre-high row of buildings and residential buildings surrounding the site. While the crane was driven to site and set up on outriggers using its diesel engine, when it was level, the engine was stopped and the crane switched over to electrical

power. Christian Jahn, crane operator, said, "I'll do everything else using site power, including assembly." Quiet operation meant the city allowed an extra hour of working both in the morning and the evening. Video of the project is here: <https://youtu.be/nRd-E0sL5Xk>



Mains site power allowed the crane to work almost silently in Dresden's historic old town and without engine exhaust emissions



HIGHLIGHTS

■ Manitex International has reduced its European bank debt by approximately €4.96 million, effective 20 July 2020. Improvements in working capital enabled the debt reduction and balance sheet improvement.

■ Illinois, USA-based Stevenson Crane Service provided the lifting capabilities for the Robert Parker Coffin Road Bridge project. To repair the 114-year-old bridge Stevenson used a 500 ton Liebherr wheeled mobile crane. The project was valued at US\$ 915,000.

SC&RA announces Job of the Year winners

The winners of the SC&RA 2020 Job of the Year competition were announced during an online award presentation.

The Rigging Job of the Year competition recognised four projects illustrating the expertise and talent needed to meet the most daunting and imposing professional challenges.

Winners were judged on safety; innovation; ingenuity; complexity; engineering and planning; and commercial terms/limitations.

The winners are: Under \$150,000

– Barnhart; \$150,000 - \$750,000 – Oxbo Mega Transport Solutions; \$750,000 to \$2 million: Barnhart; Over \$2 million – Fagioli SPA.

The Hauling Job of the Year competition judges graded on exceptional skill and superior ability when meeting some of the most difficult professional challenges. The following members were recognised for shipment routing, planning, overcoming physical elements, and safety considerations: Under 160,000 pounds (net) –

Transport Watson MTL; 160,000 to 500,000 pounds (net) – Emmert International; Moving – Oxbo Mega Transport Solutions.

For details on these projects see future issues of ICST.

SANY LAUNCHES 130 TONNER



Range-topping new Sany SCC1300TB

The new SCC1300TB is the largest model in Chinese manufacturer Sany's TB series of telescopic boom crawler cranes.

Making its debut in Singapore, the 130 tonner has a 60 metre boom in six sections and an 18.1 metre fixed jib. It offers a short set-up time, good handling and manoeuvrability, the company said. Its maximum load moment is 4,800 kNm. Pick and carry capability is 50 per cent higher than with conventional lattice boom crawlers, Sany said.

Operator comfort is enhanced by a new improved operator cab with a list of features that includes panoramic sunroof and 10.4 inch (112 mm) touch screen.

Sany said the SCC1300TB can work in conjunction with a rotary drilling rig to assist with installation of steel cages, carry out high voltage electric power line work and help with wind power work.

Mammoet completes at Dangote

After two years on site Mammoet has completed the heavy lifting and transport work at the Dangote refinery in Nigeria, Africa. It is the world's largest single train petroleum refinery. Mammoet's final job there was to install a 1,240 tonne propylene rounded bullet.

Work started for the Netherlands-headquartered international heavy lift and transport specialist in 2018. Its scope was receiving, inland transport, on site lifting and installation of hundreds of refinery components. Multiple shipments from all over the world saw components delivered to the purpose-built Dangote Quay Lekki in Lagos, Nigeria.



Mammoet installs the final bullet at Dangote

Equipment from Mammoet's vast fleet of heavy lifting and transport equipment ranged from conventional trailers and trucks, to self propelled modular transporter and wheeled and crawler mounted mobile cranes up to 1,600 tonnes.

At the top of the capacity scale Mammoet also used two of its largest super heavy lift ring cranes, a 5,000 tonne PTC 200 DS and a 2,000 tonne PT 50. These allowed more efficient approaches to lifting and installing heavy and oversized components, including a 3,000 tonne regenerator, Mammoet said. This component was claimed as the heaviest load ever transported over a public road in Africa. Another record was a 2,000 tonne crude column, claimed as the largest in the world. In total Mammoet transported 239 loads from jetty to site. Their combined total weight was 84,905 tonnes. The 154 items installed by Mammoet on site had a combined total weight of 68,415 tonnes.

Continuous change has characterised Berlin since the early 1990s, soon after the wall came down between east and west.

Contractor Mark A. Krüger Bauunternehmung used three Wolff tower cranes for the Gloria Berlin construction PROJECT in three parts. They worked on the 25.000 square metre site at Kurfürstendamm 12-15 for a year. April saw completion of the structural work, including two underground levels and six floors above ground, plus a technical level.

Installation of the cranes on the restricted city site was challenging. "Since a complete closure of the Ku'damm is virtually unthinkable and an adjacent subway line made it impossible to position a mobile crane outside of the construction pit, Wolffkran was asked to come up with a creative solution for the crane assembly," said Mathias Lippski, site manager at Mark A. Krüger Bauunternehmung.

SELECT CRANE DELIVERS TADANO

Florida, USA-based Select Crane Sales delivered two all terrain cranes to a customer in Egypt. The order included a 2004 Demag AC 350 and 2006 Tadano ATF 45-3.

The 350 tonne capacity Demag AC 350 with a maximum boom length of 64 metres is the most compact crane in its capacity class, Select said. It provides excellent manoeuvrability in tight spaces and quick set-up, the company continued. The 45 tonne capacity Tadano ATF 45-3 offers a five-section 33.8 metre telescopic boom.

"It's great to see demand coming back around the world and Select Crane is ready to meet the needs of our customers," said Jason MacKenzie, Select Crane Sales president.



The 350 tonne capacity Demag AC 350 has a 64 metre boom and a six axle carrier

London tower crane collapse

A tower crane collapsed on a construction site in the east of the UK's capital, London, killing one person and injuring four.

The red Wolff 355B luffing jib crane was on a site in Bow, to the east of the city. The fire brigade was called at 14.39 on 8 July. Graham Ellis, London Fire Brigade assistant commissioner, said, "A 20 metre crane has collapsed onto a block of flats under development and into two terraced houses on Compton Close."

The crane owner said in a statement: "The Wolffkran management and staff are deeply upset by this tragedy and express their deepest sympathy to the family of the woman that died in

the incident. Our thoughts are with all those affected, our own staff, and their families, and we thank the rescue teams for their work on site. Employees of Wolffkran Ltd have been on site since yesterday supporting the responsible authorities in their investigations and preparations to remove the crane from the site."

The company said it was one of Wolffkran's "most tried and tested cranes, reliable in operation worldwide, and currently on 18 sites across the UK. The crane on the construction site in Bow was only 10 years old and was fully erected on a 22 metre tower the day before the incident."

Maxikraft orders 17 Grove all terrains

As a first batch, six new Grove all terrain cranes left the German factory in June to join the Maxikraft fleet. The two 60 tonne capacity GMK3060Ls, three 90

tonne GMK4090s and one 150 tonne GMK5150L went straight from Wilhelmshaven to Maxikraft job sites. By November another 11 new Groves will have joined the fleet for a total of new 17 units.

Maxikraft Group already has Grove cranes. Owner Maik Kanitzky said, "The new Grove mobile cranes from Wilhelmshaven will help us modernise our fleet and offer impressive efficiency. They can travel with extensive equipment and counterweights, they have high load capacities, and as such, perfectly meet the needs of our customers. This focus on the customer is our trademark at Maxikraft."

KHL.COM



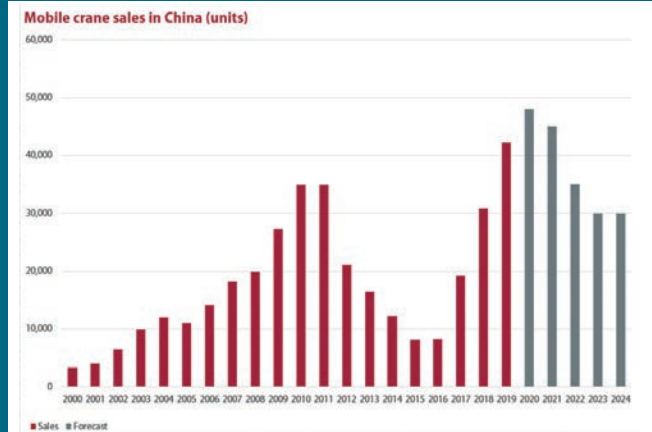
This year's ESTA Awards of Excellence will be staged online on 24 September and combined with a short conference, led by keynote speaker Wim Sarens, CEO of Sarens Group.

The online format will comprise the announcement of the ESTA Award winners alongside three presentations addressing key issues facing the crane and specialized transport sector.

Wim Sarens' keynote is The dynamic reality of the 2020-2022 market, while Chris Sleight, Off-Highway Research managing director, will report on the global market for cranes. A third speaker will be confirmed. The event is jointly organised by ESTA and International Cranes and Specialized Transport magazine.

Ton Klijn, ESTA director, said, "It is unfortunate we are unable to meet in person this year because of Covid-19, but we can still celebrate the achievements of our industry."

"Combining the awards with market presentations means that we can also provide attendees with valuable insights into business conditions and the challenges and opportunities facing the industry. We are delighted that Wim Sarens is our keynote speaker." khl-group.com/events/esta/



Sales in China of new mobile cranes (truck cranes, all terrains, rough terrains, and crawlers) are expected to reach an all-time high in 2020. Construction equipment sales overall in China are expected to rise 14 per cent in 2020, according to a revised forecast from Off-Highway Research. Sales of earthmoving, lifting and road building equipment in China are expected to total 418,180 units in 2020, compared to 368,115 in 2019. For more on this see the Business page in this issue and: www.offhighwayresearch.com

The first six of 17 new Groves for Maxikraft



Experience the Progress.



Liebherr crawler cranes – LR Series

- Superior lifting capacities, on-line load chart calculation
- Great variety of boom configurations
- Quick and easy assembly
- Easy and cost-effective transportation
- Derrick equipment for enhanced load capacities

Liebherr-Werk Nenzing GmbH
Dr. Hans Liebherr Straße 1
6710 Nenzing, Austria
Phone: +43 50809 41 473
E-mail: crawler.crane@liebherr.com
www.facebook.com/LiebherrConstruction
www.liebherr.com

LIEBHERR

Crane industry responds to Manitowoc 232 petition

Companies, trade organisations and governments from around the world have reacted strongly to Manitowoc's petition to the U.S. Commerce Department to levy tariffs on cranes imported into the United States, reports ICST sister magazine American Cranes & Transport.

The Department of Commerce launched a Section 232 investigation into Manitowoc's claims that the import of mobile cranes from Europe and Japan have impaired the domestic crane business and are a threat to national security.

Manitowoc produces crawler cranes, boom trucks and rough terrain cranes in the USA. It manufactures rough terrain cranes, all terrains and tower cranes in Europe. Manitowoc asked the Commerce Department to exclude two categories of mobile cranes, telescopic boom crawler cranes and all terrain cranes, both of which it imports from Germany.

For and against

Fifteen of the entities that commented to the Commerce Department are in support of Manitowoc, including Maxim Crane Works and Lampson International. Maxim is the nation's largest crane-owning company. Frank Bardonaro, Maxim COO, wrote, "The reality is the Europeans and Japanese are actually flooding the US market with foreign products via third party brokers and agents and have been for years."

William Lampson, Lampson International president, said, "Lampson agrees that American manufacturing has been under siege for many years as the playing field is tilted towards foreign entities dealing with limited regulations and paying very low manufacturing wages. When that is coupled with

unequal tariffs for imported equipment we are at a major disadvantage when selling our goods in our own country and abroad."

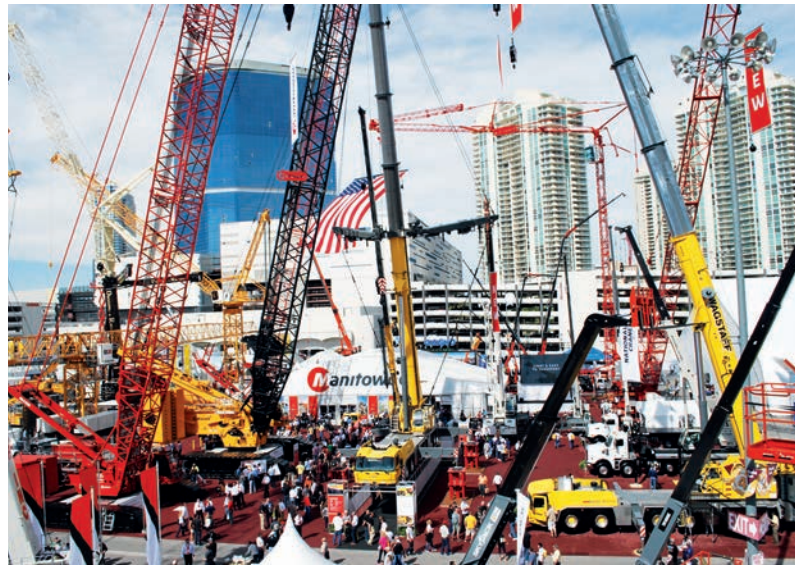
Fair trade

Some 45 of the public comments did not support Manitowoc's petition and the investigation. One was from Mike Liptak, president and COO at the All Family of Companies. All is the nation's third largest crane company. "As the largest privately-owned crane rental and sales enterprise in North America, we were surprised and disappointed to see the allegations Manitowoc has made... The petition itself is perplexing, and we strongly oppose the imposition of any such tariffs, which we believe are both unnecessary and unlawful."

Liptak also pointed out that "Manitowoc cannot satisfy the demands of the full US market because it does not manufacture mobile cranes above 550 [US] tons. Almost all cranes over 550 [US] tons are imported into the US. Additionally, these larger cranes are used for critical infrastructure projects including clean energy projects like windmills. Without these larger cranes these projects could not be fulfilled."

Buckner HeavyLift, a crane company based in North Carolina, took issue with several points. One was that "Fleet make-up and ownership is not purely a 'best cost' decision but rather a 'best value' decision. It is our stance that if Manitowoc focused on best value and were truly an innovation leader for the mobile crane industry, they would not need to have the US government protect their financial success."

Jennifer Gabel, owner of JK Crane based in New Jersey, said,



Manitowoc petitioned the US government to levy tariffs on US crane imports

"Perhaps it's because I'm an American woman, but I like my freedom to choose what and who suits my needs best (also known as free and fair trade)," Gabel said. "Let's not threaten that by supporting one company at the expense of many others."

Joel Dandrea, president and COO at the Specialized Carriers and Rigging Association, said, "SC&RA members include US domestic producers, US exporters and US importers of cranes and specialized transportation equipment. SC&RA therefore supports US laws and policies that promote free and fair trade. Free trade strengthens bonds of friendship, co-operation and economic productivity among the United States and other countries. It has the power to expand economic opportunities for US companies by opening markets and creating jobs."

Defence contracts

USA-based manufacturer Link-Belt, which is Japanese-owned, supplies mobile cranes to the US government, including the US military. Link-Belt vice president William Stramer wrote that it has no difficulty meeting the terms

of its government contracts, including those related to national defence.

Link-Belt also took issue with Manitowoc asking for exclusions for cranes it makes in Europe and imports into the USA. "In other words, rather than generally exclude all terrain cranes as a category, Manitowoc drafted a product exclusion designed to apply exclusively to their imported all terrain cranes."

Tadano America also provided copious comment and information, also stating that there is no threat to national security and that the investigation was initiated based on Manitowoc's petition that is "at best exaggerated and at worst, misleading information."

As for a timeline by the Commerce Department, it is generally believed that if the investigation takes the normal amount of time, it will be completed before the end of the year and land on the president's desk in early 2021. However, the decision could be fast tracked.

The full version of this story is on the ACT website at: www.americancranesandtransport.com

SMART SLING[®]

WWW.SMARTSLING.COM

MONITOR WHAT MATTERS:



INSTANT ALERT OF UNEXPECTED OVERLOAD

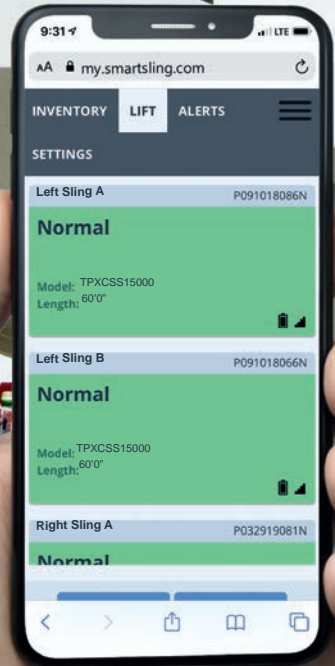
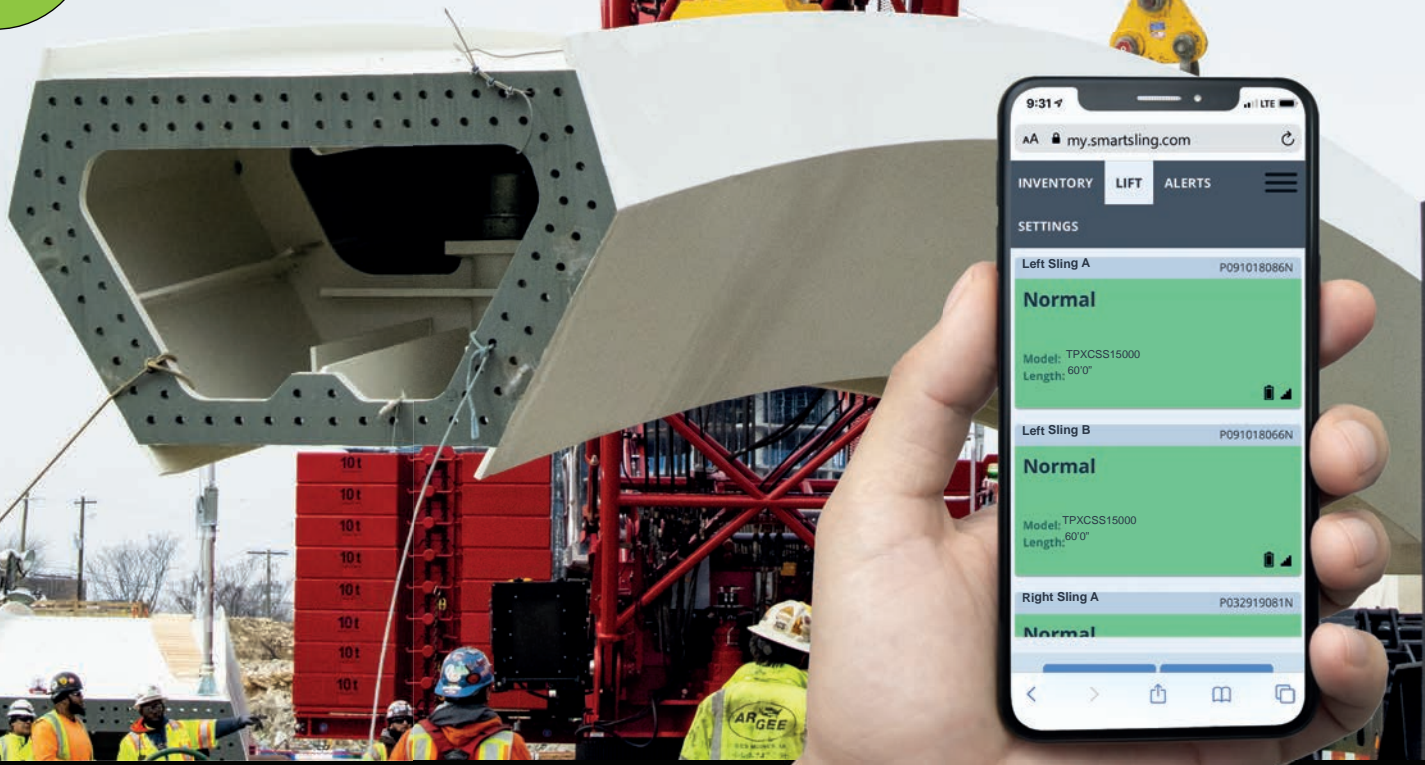


TWIN-PATH[®] SLING HEALTH STATUS UNDER LOAD



TAKE CONTROL OF CRITICAL LIFTS

SLING OVERLOAD SENSOR TECHNOLOGY



a1 Software

Your Data, Your Way

The Leader in 3D Lift Planning

Now bringing you more business tools for the unique needs of the crane industry.

iCraneTrax

Plug & Play Telematics

3D Lift Plan



Sales & CRM Tools



GPS, Telematics & Maintenance Info



Dispatch & Documentation



Detailed Reports



GPS Tracking



Maintenance Scheduling



Faults/Alerts Notifications



Usage Data



Realistic 3D, Animation, Import Google Earth or CAD



Outrigger & Crawler Loads



Detailed Rigging Plans



Largest Database of Cranes



The second quarter and half year results show the extent of Covid-19's impact but it is not all bad news. ICST reports

Q2 low point

As was expected, crane OEM financial results for the second quarter have been very difficult, revealing the scale of the Covid-19 downturn. But not all the news is bad.

Tadano's financial results – and the wider market data that it releases – offer a useful benchmark for crane sales worldwide and its latest figures, released on 4 August, make fascinating reading.

Most interesting, perhaps, is the Japanese manufacturer's assessment that "when the coronavirus disruption ends, the crane industry should recover relatively quickly." Of course, the 'when' is all-important, and unanswerable at present.

In Tadano's view, the industry's 'demand cruising speed' should not be markedly different pre- and post-Corona, but until that moment there will be two years of hardship; "One year to contain the pandemic and one year for market recovery."

The company estimates demand for cranes shrank by 47% in North America in the three months to 30 June, which compares to a -23% drop in Europe and a similar reduction in Japan (-24%) and the Middle East (-28%). These falls follow on from much lower double-digit reductions during the first quarter. It is a dramatic picture.

For Tadano itself, the acquisition of the Terex Demag

business masks the Covid impact on its results, with sales in the first quarter of its financial year (to 30 June) significantly up in Europe and North America. However, sales in Asia were down -22% and sales of truck loader cranes fell -23%. Given all this, it is notable that Tadano's net loss for the three months to 30 June was limited to a relatively modest Yen 1 billion (€8 million) on a total of Yen 43 billion (€345 million).

Meanwhile, the 18% drop in first half sales reported recently by Palfinger – with revenues falling year-on-year to €730 million – would show some agreement with Tadano's reduction in truck loader crane sales, although in Palfinger's case the period included the pre-Covid months of January and February (in Europe and North America at least). The company reported a 29% fall in EBITDA profits to €84.8 million.

Andreas Klausner, Palfinger CEO, said the company had quickly taken measures to adapt to the pandemic and struck a positive note; "Markets are stabilising, visibility is improving. The recovering European economy increases demand: the order book of Palfinger AG is now pretty much as it was at the end of 2019."

This overall picture, of a dramatic decline in the second quarter followed by a steadily improving situation, although still uncertain, is reflected in the IC Share Index, which rose by 6.5% in July, reflecting – we hope – that the worst is over.

AUGUST IC SHARE INDEX

STOCK	CURRENCY	PRICE AT START	PRICE AT END	PRICE CHANGE	% CHANGE	PRICE 12 MTHS AGO	12 MTH % CHANGE
IC Share Index*		79.33	84.54	5.20	6.56	66.59	19.14
Legacy IC Share Index**		210.96	223.47	12.51	5.93	225.09	-6.28
Dow Jones Industrial Average		25,832	26,280	447.87	1.73	26864.27	-3.84
FTSE 100		6,240	5,925	-315.41	-5.05	7589.10	-17.78
Nikkei 225		22,267	21,717	-549.59	-2.47	21540.99	3.37
Hitachi Construction Machinery	YEN	2,962	3,105	143.00	4.83	2551.00	16.11
Konecranes	€	20.64	21.56	0.92	4.46	26.45	-21.97
Kobe Steel	YEN	361	339	-22.00	-6.09	696.00	-48.13
Liugong	CNY	6.59	7.19	0.60	9.10	6.73	-2.08
Manitowoc	US\$	10.60	10.66	0.06	0.57	17.95	-40.95
Palfinger	€	19.60	22.90	3.30	16.84	23.45	-16.42
Sany Heavy Industry	CNY	20.37	21.11	0.74	3.63	14.19	43.55
Tadano	YEN	892	846	-46.00	-5.16	945.00	-5.61
Terex	US\$	18.21	18.85	0.64	3.51	30.45	-40.20
XCMG	CNY	6.25	6.35	0.10	1.60	4.81	29.94
Yongmao Holding	SGD	0.93	0.93	0.00	0.00	0.71	30.76
Zoomlion	CNY	7.18	8.28	1.10	15.32	6.13	17.13

*IC Share Index, 1 Jan 2011 = 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	7.066	6.984	-0.08	-1.16	6.90	1.19
€	0.891	0.854	-0.04	-4.14	0.91	-5.78
Yen	107.499	106.343	-1.16	-1.08	109.07	-2.50
UK£	0.803	0.768	-0.04	-4.40	0.83	-7.17

Period: Weeks 27 to 31

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 needs

Efficient MODULAR design
Adaptable | Flexible | Portable



Technical Experts
A team of in-house engineers and specialists, with over 200 years combined experience



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 Modulift Distributor, please visit our website: www.Modulift.com



Innovating the lifting industry, one lift at a time!

For more information contact

+ 44 (0) 1202 621 511
sales@modulift.com
www.modulift.com



ICT50

TRANSPORT

More mixed

In its 16th iteration the IC Transport 50 ranking of the world's largest specialized transport companies shows good growth but also a few surprises. *ICST* reports

Yes, the 2020 table overall is up, by a good 6.7 per cent. Within that, however, there are some declines. Last year the table was basically up in all areas whereas in 2020 there is more of a mix of ups and downs. An element of correction and smoothing out can also be sensed this year.

It presents a less unanimously positive impression than last year, which may be unsurprising because of that virus ravaging the world for the last few months of the period measured for the T50 (12 months to July). As in all other areas and industry sectors it has had an impact, often negative but not always. Social distancing and other lock down measures have played their part but the specialized transport industry's designation as a critical industry has allowed work to carry on through the crisis.

THE TRANSPORT 50

The Transport 50 Index is calculated using the total carrying capacity in metric tonnes of all specialized transport equipment in a company's fleet. The two main sections are specialized trailers and modular trailers and SPMT.

It is very much a work in progress and will always be evolving and changing. We largely rely on the submission of entry forms completed by the companies listed. We are always interested to hear from companies that have not yet entered the Transport 50. If yours is one of them, please let us know and look out for the 2021 Transport 50 entry forms and calls for entries on the KHL web site during the second quarter of the year. You are welcome to inquire at any time about the next T50. Already a valuable reference, with your help the Transport 50 will continue to improve.



The gap has now really opened up between the top two players in the T50

Acquisitive growth

Other events have also impacted the 2020 ICST Transport 50 ranking. At the top of the table Mammoet's acquisition of ALE is the big news. Its impact has benefited all who

followed behind the top two, i.e. all the other companies in the table, allowing them the potential to move up at least one place, all things being equal, although of course they are not, so it hasn't been as simple as that. It never is.

So, Mammoet not only retains its top spot but massively consolidates it with the added capability of the ALE heavy fleet. Three years ago ALE pipped Mammoet to first place for the first time in the history of the Transport 50 table. Buying the company was one way to stop that from happening again.

As with the IC50 ranking for crane-owning companies, the ALE acquisition has certainly put some distance between first and the new second place company, Sarens. Last year the disparity was that Sarens' capability was just over 60 % of Mammoet's. This year, »

however, With Mammoet and ALE combined, Sarens' capability is just under 40 % that of Mammoet.

Moving down the top ten, next is All Erection which has jumped to third from sixth place, ahead of Fagioli in fourth and Landstar in fifth, both of which are in the same places as last year. Daseke has gained a place in sixth. Barnhart at seventh made a strong gain from tenth, presumably at least partly because of its acquisition of fellow US heavy

lifting and moving specialist Burkhalter.

Entering the top 10 at eighth is NTC Logistics from India previously in 11th place. ATS Specialized drops a place at ninth while Maxim storms into the top 10 from 14th.

In totals

In terms of the overall table, compared with last year, as mentioned there are ups and downs. The total capacity of modular equipment in the top 50 companies is down,



2020 RANK	2019 RANK	COMPANY	COUNTRY OF HQ	DEPOTS	AREA OF OPERATION	EMPLOYEES
1	1	Mammoet	Netherlands	130	Worldwide	7,100
2	3	Sarens	Belgium	90	Worldwide	4,912
3	6	All Erection & Crane Rental	USA	37	USA and Canada	1,500
4	4	Fagioli	Italy	10	Worldwide	610
5	5	Landstar	USA	1,333	Worldwide	1,333
6	7	Daseke	USA	109	International	4,608
7	10	Barnhart Crane & Rigging	USA	51	Continental	1,550
8	11	NTC Logistics India	India	23	Continental	3,859
9	8	ATS Specialized	USA	15	International	1,365
10	14	Maxim Crane Works	USA	61	National	3,500
11	12	Bigge Crane and Rigging	USA	17	International	1,010
12	13	J. F. Lomma	USA	1	National	163
13	15	Al Jaber Heavy Lift & Transport	Abu Dhabi, UAE	8	Worldwide	850
14	16	Emmert International	USA	4	International	105
15	9	Bennett Motor Express	USA	130	International	320
16	20	Deep South Crane & Rigging	USA	7	North and South America	700
17	17	NCSG Crane and Heavy Haul	Canada	12	International	400
18	30	Edwards Moving & Rigging	USA	6	International	115
19	21	Transport Bellemare International	Canada	7	International	710
20	22	Hareket Heavy Lifting and Project Transportation	Turkey	6	Turkey, CIS, Middle East, Africa	450
21	18	Entrec	Canada	14	Canada and USA	550
22	24	Sterett Crane & Rigging	USA	9	National	70
23	19	Heavy Transport Inc (Bragg Companies)	USA	9	National	200
24	58	MSA Delivery Service	USA	6	North America	75
25	25	Daily Express	USA	8	International	178
26	23	Totran Transportation Services	Canada	2	North America	120
27	26	Berry Contracting / Bay Ltd	USA	8	International	3,500
28	28	Tradelossa	Mexico	7	Mexico, Southern USA, Central America	279
29	n/a	Nippon Express	Japan	32	Worldwide	945
30	27	SOP&G	Russia	5	Russia and CIS	700
31	31	Sankyu	Japan	10	Japan and Asia	300
32	32	Lampson International	USA	8	Worldwide	300
33	29	J Supor Trucking & Rigging	USA	5	International	182
34	33	Transportes Montejo	Colombia	9	Central America	700
35	35	Allelys Heavy Haulage	United Kingdom	2	UK, Ireland and mainland Europe	155
36	37	Vietranstimex	Vietnam	5	Vietnam, Laos and Campuchia	268
37	38	Havator	Finland	29	Northern Europe, Russia	600
38	39	Collett & Sons	United Kingdom	4	UK, mainland Europe, worldwide	156
39	40	Van der Vlist	Netherlands	11	Worldwide	600
40	34	Miller Transfer & Rigging	USA	18	International	87
41	41	Megatranz Transports	Brazil	3	Brazil, Bolivia, Paraguay	114
42	42	Berard Transportation	USA	5	National	75
43	43	Lift and Shift India	India	4	India, Middle East, Sri Lanka, Bangladesh, South East Asia	250
44	46	Beyel Brothers	USA	8	Regional	375
45	44	ML Holdings	USA	14	National	676
46	47	W.O. Grubb Crane Rental	USA	14	National	400
47	49	Contractors Cargo Co	USA	2	Western USA	40
48	45	DD&S Express	USA	57	Continental	19
49	50	Erickson's	USA	4	Regional	60
50	51	Transportes Noroccidental	Ecuador	12	Ecuador, Colombia, Peru	650



Tutt Bryant in Australia moving the 700 tonne Queen Beetle high speed trimaran ferry on 80 lines of SPMT

by 2.4 %, but specialized trailers are up nearly 3 % to a total of 763,884 tonnes.

Also down is the number of depots, by 1.29 %, to 2,381, whereas last year it was up nearly 7 % to 2412. The number of people working at the top 50 companies, however, has gone up by nearly 6 % to a total of 47,784,

up from 45,133 last year which, in turn, was up a massive 14.86 % from 2018. Finally, there were 24,317 tractor units at the top 50 companies, 5.57 % fewer than the 25,752 of 2019 but this figure seems to regularly swing quite a bit.

All this seems like an unusual amount of change. Perhaps it is the start of more to come or maybe things will settle down a little on a smoother and clearer path post Covid-19.

SENIOR CONTACT	WEB ADDRESS	NUMBER OF TRACTOR UNITS	MODULAR TRAILERS/ DOLLIES	SPECIALIZED TRAILERS	T50 INDEX 2019	T50 INDEX 2020	2020 RANK
Jan Kleijn, COO	www.mammoet.com	645	346,283	11,367	229,360	357,650	1
Wim Sarens, CEO	www.sarens.com	401	132,594	10,060	142,654	142,654	2
Michael Liptak, president	www.allcrane.com	480	90,340	30,500	78,490	120,840	3
Fabio Belli, CEO	www.fagioli.com	128	101,540	11,080	109,240	112,620	4
Rusty Cody	www.landstar.com	10,243	175	101,286	101,485	101,461	5
Chris Easter, CEO	www.daseke.com	4,543	6,398	72,663	61,801	79,061	6
Alan Barnhart, CEO	www.barnhartcrane.com	370	28,668	32,946	55,880	61,614	7
K Chandramohan, chairman and MD	www.ntcgroup.in	833	15,298	45,396	50,605	60,694	8
Gary Stang, senior VP and GM	www.atsinc.com	942	1,184	58,792	59,518	59,976	9
Bryan Carlisle, CEO	www.maximcrane.com	569	8,851	39,971	42,066	48,822	10
Weston Settlemier, president and CEO	www.bigge.com	102	26,205	20,733	46,938	46,938	11
James Lomma, president	www.jflomma.com	47	0	40,234	44,350	40,234	12
George Koshy, business development director	www.ajhl.com	0	35,116	0	34,476	35,116	13
Terry Emmert, president	www.emmertintl.com	91	27,792	3,620	31,412	31,412	14
David Lowry, CEO	www.bennettig.com	1128	4,720	26,360	56,560	31,080	15
Mitch Landry, president	www.deepsouthcrane.com	77	15,175	14,822	27,075	29,997	16
Andy Fraser, president and CEO	www.ncsg.com	157	9,233	16,434	30,025	25,667	17
Mark Edwards, CEO	www.edwardsmoving.com	60	16,360	8,767	15,140	25,127	18
Jean-Luc Bellemare, president	www.transportbellemare.com	250	6,394	18,159	24,114	24,552	19
Abdullah Altunkum	www.hareket.com	80	18,200	5,452	23,143	23,652	20
John Stevens, president and CEO	www.entrec.com	182	14,370	9,272	27,908	23,642	21
Jonathan Spong, president	www.sterettheheavyhauling.com	73	12,923	9,233	22,156	22,157	22
Robert Weyers, general manager	www.braggcrane.com	110	15,069	6,985	27,300	22,054	23
Jerry Rozum, president	www.msadelivery.com	59	0	21,460	5,440	21,460	24
Mark Eyer, VP operations	www.dailyexp.com	264	966	19,378	20,344	20,344	25
Scott Trousdale, VP	www.totran.ca	85	11,200	8,764	22,686	19,964	26
Berry Peterson, vice president	www.bayltd.com	160	17,382	2,495	15,784	19,877	27
Armando Lee, commercial manager	www.tradelossa.com	153	10,460	7,907	15,555	18,367	28
Yasuo Miyazaki	www.nipponexpress.com	57	13,360	3,564	n/a	16,924	29
Ildar Akhmetov, director	www.sopig.ru	120	10,192	6,460	15,736	16,652	30
Terunobu Yoshitomi, general manager	www.sankyu.co.jp	27	15,876	700	14,829	16,576	31
William Lampson, president and CEO	www.lampsoncrane.com	33	15,349	871	14,549	16,220	32
Doug Filos, director, heavy haul	www.jsupor.com	45	11,209	3,266	15,431	14,475	33
Luis Fernando Montejo, CEO	www.transportesmontejo.com	154	9,666	4,560	14,226	14,226	34
David Allely, director	www.allelys.co.uk	48	8,760	5,075	13,695	13,835	35
Bui Quang Lien, CEO	www.vietranstimex.com.vn	66	9,752	4,045	13,408	13,797	36
Erkki Hanhiova, board member	www.havator.com	16	9,246	4,000	13,246	13,246	37
David Collett, managing director	www.collett.co.uk	70	6,340	6,793	13,053	13,133	38
Dirk and Nico van der Vlist, directors	www.vandervlist.com	246	3,364	9,554	12,918	12,918	39
Mitchell Unger, president	www.millertransfer.com	120	0	12,138	13,823	12,138	40
Renato Zuppardo, commercial director	www.megatranz.com	52	11,140	735	11,875	11,875	41
Brett Berard, VP operations	www.berardtrans.com	42	9,902	1,510	11,412	11,412	42
Sameer Parikh/Romil Parikh, directors	www.liftandshift.co.in	10	10,950	270	11,220	11,220	43
Joseph Beyel, president	www.beyel.com	65	5,203	5,280	10,483	10,483	44
Scott Wilson, president	www.mlholdingscranegroup.com	240	2,130	8,464	10,830	10,322	45
William Grubb, president and owner	www.wogrubb.com	95	3,756	6,507	10,263	10,263	46
Gerald Wheeler, president and owner	www.contractorscargo.com	55	2,840	7,221	10,061	10,061	47
Rick Seleski, vice president	www.ddsexpress.com	187	707	8,909	10,580	9,615	48
Steve Erickson, president	www.ericksonsg.com	37	4,832	4,726	9,558	9,558	49
Edgar Andrade, managing director	www.noroccidental.com	300	4,120	5,100	9,220	9,220	50

Regulation weight

Specialized transport OEMs are trying to find the perfect balance between carrying capacity and tare weight, while meeting as many road regulations as possible. ICST reports

As Goldhofer says, “Sometimes just a few centimetres of running height or kilogrammes of deadweight are decisive for avoiding a lengthy detour.” For that reason, specialized transport OEMs are focused on making their products as compact and lightweight as possible, without compromising on performance or roadability. It is a tricky balance to strike.

For its own designs, Goldhofer says that “in addition to the basic principle of combining low deadweight with high axle loads, the focus in the development stage is on making the vehicles as versatile as possible so that they comply with a large number of different national regulations as standard.

“Haulage companies...benefit from the simple fact that they do not have to use different vehicles from country to country and save time and money by not having to transfer the cargo from one vehicle to another. And the degree of regulatory variation, which has to be covered by the standard vehicle or a special version, is considerable: from height and weight limits in Europe to changing rules for track width in the USA.”

Goldhofer, like its competitors, uses finite element methods to find the most effective design profile; “These results are then incorporated into new products and product enhancements, ranging from new special steels to reduced weld seams and innovative cargo deck coverings. This enables us to achieve further significant improvements in terms of deadweight, axle load, loading height and stability.”

For example, its new low-wear polymer deck coating is resistant to UV light and offers better surface friction for load safety,

but is thinner and lighter than previous coatings, with weight savings of up to 500 kg per vehicle.

For TII, manufacturer of the Scheuerle, Kamag and Nicolas brands, the need to meet the requirements of national regulations is a major design focus. “In this way”, it says, “TII Group ensures that customers can use their vehicles efficiently. This in turn depends heavily on the type of load. For example, the new EuroCompact FL02 and FL03 series have been optimised for a low weight as well as for the lowest possible loading height.

“This makes it easier for customers to pick up a wide variety of goods and, at the same time, it protects the road infrastructure, which has to be renewed in many regions. Until then, axle loads often must be reduced or bypasses taken, which costs time and money.” TII adds that the new EuroCompact series comply with the single-driver regulation despite the telescopic extension, because their turning circle is sufficiently compact.

Free movement

Faymonville says its trailers are designed “so that transport permits can be obtained as easily as possible in accordance with national and-or international legislation, the legally maximum permissible axle loads can be achieved and the costs for empty runs are kept as low as possible.”

It adds that Europe, Asia Pacific, Africa and South America use vehicles with very similar technologies and dimensions, while in North America it “has completely different requirements in terms of technology and design.”

It tries to find the optimum compromise between a low tare weight and robustness, but argues that its many years of experience “have shown that striving for ever lower tare weights is not expedient with these special vehicles....the payload is always at the forefront of the project objectives.”

German transport company Wocken Spedition uses its Broshuis 3+6 SL trailer to move a 71 tonne column



A Goldhofer PST/SL being used to transport a bridge section for contractor Vinci on La Réunion island

Ohio, USA-based Nelson Manufacturing Company says differing road regulations between US States “often throws a wrench in some plans. It makes it more difficult to design a trailer for a customer who wants to haul a particular payload all over the continental US.”

Nelson says there are many ways to save weight on a trailer, and the key is finding the sweet spot between reducing weight and maintaining structure and capacity; “We use any way that we can find to save weight by utilising aluminium wheels, fenders, lighter suspension components, or replacing any steel parts with aluminium where design criteria allows. If need be, we can also use 130KSI steel in high stress areas allowing us to reduce the amount of steel necessary.”

Meanwhile, Broshuis says trailers need to be designed to be “as low, light, and short as possible, so it’s more flexible in use. Thanks to our newest computer technology we can see exactly where we have to make our trailers stronger, but also where we can reduce weight.”

A Nelson Manufacturing trailer owned by Sterling Crane in the USA



First for Spedition Kübler

Spedition Kübler in Germany received the first low-bed semi-trailer in the new EuroCompact FL series from Scheuerle. The heavy-load logistics provider chose the Scheuerle vehicle for its outstanding versatility, load capacity in the payload segment up to 30 tonnes and easy handling, the company said.



The coronavirus Covid-19 has understandably caused major challenges when it comes to project execution and transport. Despite a global pandemic, Total Movements, a member of the Worldwide Project Consortium (WWPC) in India, shipped a project cargo of more than 12,000 freight tonnes from Chennai in India to Mongla in Bangladesh for the Rampal project site.

This was a prestigious project as Total Movement's client had to meet financial commitment to ship this cargo, the company said. Despite a peak period of lockdown which led to the disruption in seaport operations, the team was still able to complete the shipment with the support of the port and the selected carrier.

"With the two-axle EuroCompact low-bed semi-trailer, we can now offer our customers additional services in the payload class up to 30 tonnes," said Felix Mangold, Spedition Kübler technical manager.

Kübler will be able to carry out oversized transport assignments with the EuroCompact FL02. This includes machine relocations but also the transportation of construction machinery and particularly sensitive and costly shipments.

"The new EuroCompact model is also an extremely versatile transport solution because of its extensive range of equipment," added Mangold. According to the Spedition Kübler manager, this is especially important these days to optimise the vehicle utilisation

capacity, because every load and return load contributes to the economic efficiency of the low-bed trailer.

The new EuroCompact FL02 can handle loads of 37 tonnes. The height of the low bed on trailer is also only 200 millimetres. This means the loading height of the flat bed deck is just 300 millimetres. Another benefit of the new semi-trailer is its easy handling characteristics. The lift of 650 millimetres (suspension travel) in the pendulum axle bogie unit, in conjunction with the large steering angle, helps ensure the vehicle combination can negotiate problem areas. The vehicle still complies with the single-driver regulation when the telescopic extension is fully extended.



Spedition Kübler is the recipient of the first low-bed semi-trailer in the new EuroCompact FL series from Scheuerle

Riebe-GmbH expands fleet with Broshuis trailer

Rostock, Germany-based Riebe purchased a double extendable flat trailer from Dutch manufacturer Broshuis. The family business has been active in the market for more than 55 years and is maintaining its market position through the investment in open transport for extreme length transport.

"The choice to make this investment at Broshuis was quite simple," said Klaus-Dieter Riebe, Riebe managing director. "The pre-stress of the trailer plays a decisive role when transporting long concrete elements. We know that this is not easy, but that it is always perfect with a Broshuis trailer."

The trailers are galvanized and a 20 year service life is typical rather than exceptional.

"The double extendable trailer is equipped with integrated concrete spindles



Riebe GmbH has invested in open transport for extreme length transport

and therefore everything necessary for the safe transport of concrete elements," added Riebe. "On the one hand for stability to properly absorb the various point loads and on the other hand, simply securing loads through the integrated concrete spindles."





»ADDRIVE« THE 3 IN 1 SOLUTION THE VEHICLE AT A GLANCE

» Towed Module

- up to 36 t axle load
- max. 80 km/h in freewheel mode
- combinable with various THP modules

» Pusher vehicle

- for maximum traction and
- maximum speed in the drive mode
- mechanical system with 100% disconnect

» Self-propelled mode

- powerful traction for outstanding hill-climbing ability
- »ADDronic« for synchronizing additional self-propelled modules
- remote control



Duqm contracts in for Mammoet

Mammoet has been awarded two contracts for the Duqm oil refinery expansion project in Oman. The development occupies more than 2,000 acres and, when completed, will have the capacity to process approximately 230,000 barrels of crude oil a day.

The first contract came from a local manufacturer, comprising the inland and sea transport of nine LPG storage tanks, or bullets, for EPC-2 offsite and utilities scope of the project. Each 780 tonne bullet fabricated at a local facility in Sohar, was 72 metres long, 11 metres high and 8 metres wide. They were loaded-out on 44 axle lines of self-propelled modular transporter (SPMT) onto a barge provided by Mammoet in Sohar, bound for the Port of Duqm. On arrival at the Port of Duqm, the bullets were

transported 25 kilometres to the project site. At the refinery, the bullets were positioned onto their foundations using 1,600 tonne and 1,250 tonne capacity crawler cranes working in tandem.

The second contract was awarded by Agility Global Logistics (Agility) and involved receiving and transport of various reactors. The Agility contract was an essential component of the Tecnicas Reunidas' Process Unit scope of the project. This included handling a 1,130 tonne reactor measuring 33 metres long, 8.7 metres wide and 7.3 metres high, which was the heaviest cargo ever loaded-in at the Port of Duqm. All the reactors for Agility were safely delivered to the project site using 54 axle lines of SPMT.

"We are delighted to have successfully completed our scope for the Duqm refinery," said Vishal Buddhadev, general manager at Mammoet's Oman branch. "The close collaboration of the entire project team, including our clients, the Port of Duqm and the local authorities, enabled us to successfully deliver all key equipment safely and within the deadlines set."

Mammoet provided safe and timely transportation from factory to foundation in Oman



FONTAINE UNVEILS 60 TON MAGNITUDE 60LCC TRAILER

USA-based Fontaine Heavy-Haul has launched the Magnitude 60LCC trailer that hauls 60 ton loads in 13 feet (4 metres) with 4 axles close coupled. It is designed for customers operating where spread axle configurations are not required to maximise trailer loads, the company said.

"If local regulations allow a more concentrated load this trailer is a great choice," explained Todd Anderson, VP sales and marketing, Fontaine Heavy-Haul. "It can handle 60 tons without adding a flip box or a spreader. This means our customers get a much lighter trailer setup at a much lower acquisition cost. Plus, manoeuvrability is greatly improved since the overall length is reduced by more than 11 feet compared to a trailer equipped with a flip box, spreader and fourth axle. With its 60 ton capacity and 18 inch deck height, this trailer is a winner."

For spread axle configurations there is a 23 inch (580 millimetre) flip box and a Fontaine EQ1 spreader with a fourth axle. In this configuration the trailer can haul 55 tons (50 tonnes) in 16 feet (5 meters).



The Fontaine Magnitude 60LCC trailer hauls 60 US ton loads in 13 feet (4 metres) with 4 axles close coupled

www.ferrariinternational.com



Ferrari
International

Tel: +39 0522 2387
Vendite Italia: salesitalia@ferrariinternational.com
Export Dept.: salesinternational@ferrariinternational.com



SPX650

ALL THE CRANES
YOU NEED

DISCOVER IT
ONLINE



MINICRANES | MINIPICKERS
ARTICULATED CRAWLER CRANES
TELE-CRAWLER CRANES
VACUUM & TOOLS

www.jekko-cranes.com

SPECIALIZED TRANSPORT



WingMax is part of the TeleMax series
of flat bed semi-trailers from Faymonville



WingMax for the longest blades

As wind turbines get bigger their rotor blades also get longer. More than 70 metres is becoming increasingly common for the length of the blades, each of which has to be transported individually, often by road.

Faymonville's WingMax is a trailer designed to move the longest wind turbine blades. Not long ago these were around 60 metres long but now more than 70 metres is common. WingMax is part of the TeleMax flatbed semi-trailer series. Features include an hydraulically lifting and lowering gooseneck (by 1,700 mm) and pendular axles to allow negotiation of obstacles such as roundabouts. Also hydraulic is the steering and the suspension too, to give the sharpest possible steering angle and maximum stroke for long suspension travel. Versions are available with three or four axles.

The loading platform has a 4-fold extension and the length of the gooseneck is compatible with 5-axle trucks. The 19.5-inch pendular axles offer a steering angle up to 60 degrees and a 600 mm suspension stroke.

Sliding load supports for the blade tip frame allow the trailer to be shortened even under load. They help deal with winding roads. Hydraulic support legs simplify extension and retraction of the telescopic loading platform. Double-sided locking of the telescopic stages is for greater driving stability and the two axle bogie's 2 metre track width gives maximum lateral stability. The locking positions for extension are reinforced to help the transmission of pulling and braking forces.

A video of the new WingMax trailer is here:
www.youtube.com/watch?v=ZbjhE4Vy0x0

TALBERT LAUNCHES AC SERIES

Talbert Manufacturing in the USA has unveiled its Tag-A-Long Austin Carry-All Series (AC Series) trailer. The series is aimed to minimise load times and maximise productivity for everyday hauling of small- to mid-size equipment. The line of 10- to 25-US ton tag-a-long trailers features loaded deck heights, durable construction and a low, 7-degree load angle to transport a range of equipment from asphalt rollers and machines for dirt work to cable and pipe for gas and electricity utility applications.

Talbert's AC Series is suitable for use in industries such as general construction, paving, agriculture and oil fields.

"As contractors diversify their operations to meet changing demands, they require more flexibility from their equipment," said Troy Geisler, Talbert Manufacturing vice president of sales and marketing. "Our AC Series trailers are specially designed to maximise versatility while providing the durability and safety Talbert Manufacturing is known for."

For manoeuvrability, the dual axle AC-10 offers a 10 ton (9 tonne) capacity with an overall length of 29 feet 6 inches (9 metres). Deck length is 24 feet (7.3 metres) with 19 feet (5.8 metres) flat with a 5 foot (1.5 metre) beavertail. The AC-10 also has 5 foot 5 inch (1.65 metre) self-cleaning, spring-assisted rear ramps. Loaded deck height is 32.25 inches, (820 millimetres) making it suitable for clearing low-clearance obstacles, for example, on residential and commercial building sites and for urban utility operations.

The AC-20 is for contractors looking for larger capacity but with the same compact footprint. It offers a 20 ton, (18 tonne) capacity while maintaining the same deck dimension and loaded deck height. The AC3-25 has a 29 foot (9 metre) deck and a 25 ton, (23 tonne) capacity.

Talbert's AC Series is said to be ideal for use in industries such as general construction, paving, agriculture and oil fields





HOSE REELS - CABLE REELS - SWIVEL JOINTS

WELCOME TO REALITY

Dreams are not reel, it can be real.
For that we really work hard.



Management system certified in accordance with the requirements of ISO 9001 - ISO 14001 - ISO 18001

DEMAG S.R.L. | MAGENTA (MI) - ITALY | +39 02 9784488 | INFO@DEMAC.IT | WWW.DEMAC.IT

FASSI

DRIVING INNOVATION SAFETY & CONTROL

- | | | | | | | | |
|---|---|---|---|--|---|--|--|
| FX-Link
Integrated crane-truck connectivity
control | AWC
Automatic Winch Control
control | ACF
Automatic Crane Folding
control | CCD
Cabin Collision Detection
control | IMC
Integral Machine Control
control | GAS
Grabe Automatic Shake
control | FX901
Fassi Electronic Control
control | IoC
Internet of Cranes
service |
|---|---|---|---|--|---|--|--|

Day by day, Fassi works towards the future. It does so by focusing on digital and mechatronic innovation, introducing applications and technology to support human operators. 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

of control and safety. Predictive diagnostics, connectivity between 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.

More about:  fassi.com

 facebook.com/fassigruspa

Fagioli makes moves in Europe with giant bullets

Italian heavy lift and transportation specialist Fagioli has transported four industrial bullets from Italy to Croatia. The bullets were up to 80 metres in length. Two weighed 460 tonnes and the other two weighed 350 tonnes. The

job comprised loading the bullets onto barges in Italy and then loading them out in Croatia. The following video gives an insight into the scale of the job.

Key to the successful completion of the job



was the use of MSPE self propelled trailers from Italian trailer manufacturer Cometto. For the 350 tonne bullets a configuration of 12 + 12 axle lines in side-by-side configuration was used. For the 460 tonne bullets eight axle lines an open-compound configuration with bolsters was used. This comprised a front convoy of 6 + 6 axles in a side-by-side combination, plus a rear convoy of 8 + 8 axles in a side-by-side configuration. These were used for both the load-in and load-out.

Load-in required Fagioli to position the bullets onto a dedicated barge whilst also conducting the necessary ballasting operations. Once in position, the four



Gets you there



PAYLOAD

THAT GETS YOU THERE

The EURO-PX is the latest generation pendle axle low-loaders of Nootboom. The EURO-PX is available with 2 to 10 axle lines. Characteristic unique groundbreaking innovations include the deep and wide excavator trough in the axle assembly and the high legal maximum axle load. The combination of this excavator trough with minimum 12 tonnes per axle line makes the EURO-PX unrivalled across Europe. The successful application of innovation in order to meet the current market requirements can give companies engaged in special transport a significant competitive advantage.

Nootboom. Gets you there.

WWW.NOOTEBOOM.COM





Fagioli uses Cometto self propelled trailers to transport four giant industrial bullet tanks between Italy and Croatia

elements were then transported by sea to Croatia.

After the bullets were loaded out in Croatia they were transported up a steep hill with tight bends. Once at their final destination the bullets were temporarily stored on dedicated stands before being moved into the client's premises for final installation using a gantry lifting system.

"The Cometto self propelled trailers type MSPE worked perfectly well during the challenging transport of the four bullets, supporting the Fagioli team to the successful project completion," commented Giovanni Pescatori, Fagioli sales engineer.

EASIER MOVES FOR ATS

Crane Rental Association of Canada (CRAC) is working with the Alberta Ministry of Transportation to help cut time and expense when moving all terrain cranes.

A two-year pilot project will aim to make it easier to move AT cranes without the requirement for a boom dolly. The goal is to determine whether heavier axle weights are feasible in the longer term, and to see whether reduced red tape can bring about benefits for the industry as a whole, CRAC explained. AT cranes will be able to operate at higher axle weights. Weights will go from the current 7,900, 9,800 and 12,500 kg in spring, summer and winter, respectively, to 9,500, 11,500 and 12,500 kg.

SOCIALLY DISTANT TRAINING FROM DAF



DAF Trucks already supports many national and international fleet customers from its Haddenham, UK, headquarters with training and 'train-the-trainer' support

To maximise driver productivity and vehicle familiarity, CRS Building Supplies in the UK has taken advantage of the DAF Trucks' Driver Training Vouchers. The company took delivery of four DAF CF 370 three-axle rigs in March. Observing social-distancing guidelines, qualified DAF driver trainer, Ron Smith, delivered the training course to two drivers at CRS's Keynsham location in early June.

Since their introduction in February 2019, DAF Driver Training Vouchers are offered to all retail customers acquiring new DAF CF and trucks in exchange for a 2.5 hour training session. It encourages operators and drivers to take advantage of a professional introduction to their new trucks by one of a team of 25 regionally based DAF dealer driver trainers. Training includes in-cab and vehicle walk-round familiarisation, followed by an on-road familiarisation session, although this latter element is impossible under prevailing social distancing guidelines.

"The Driver Training Vouchers scheme is an excellent initiative," said Paul Gibbard, CRS transport manager. "Anything to extract maximum efficiency from our vehicles – and our drivers – can only be a good thing. We've been very pleased with the support from DAF Trucks and our supplying dealer, Kingdon Wessex DAF."

M250 Li-ion

Powered by Lithium Battery



- Max lifting capacity: 2500 kg
- Max outreach with Jib: 12,85 m
- Max lifting height with jib: 15,90 m
- Long-lasting Lithium battery
- Advanced electronic stability system
- Remote assistance
- Two man baskets capacity CE

Perfect for indoor job



SIMPLE ANSWERS TO COMPLEX LIFTING REQUESTS

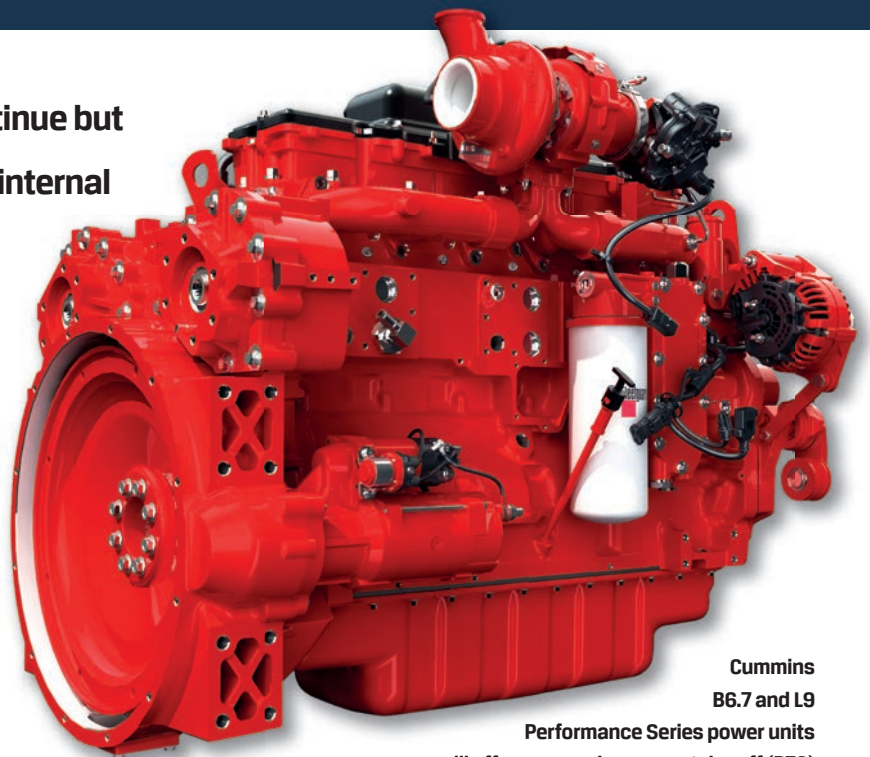
BG LIFT

by Brennero Gru 



www.bglift.com

Development of electric drives will continue but there is still considerable life left in the internal combustion engine and associated components. Alex Dahm and ICST sister magazines *Diesel Progress* and *Diesel Progress International* report



Cummins B6.7 and L9

Performance Series power units will offer new engine power take-off (PTO) capabilities to support crane applications

Driving ahead

In addition to the inevitable supply chain interruptions the Covid-19 virus has had further impact on the engine and components sector.

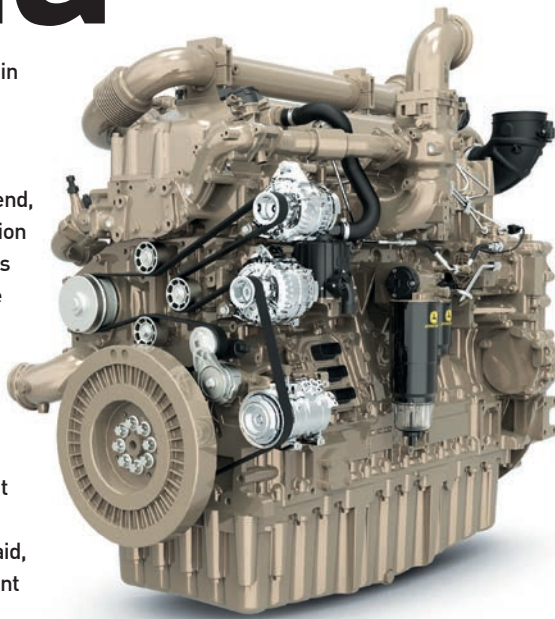
It led the European Parliament to extend, by 12 months, the Stage 5 exhaust emission transition deadlines for certain categories of engines to be fitted in non-road mobile machinery (NRMM) and tractors.

Commenting on the vote, Riccardo Viaggi, secretary general at CECE, the Committee for European Construction Equipment, which represents the interests of 1,200 construction equipment manufacturers through national trade associations in 13 European countries, said, "The Parliament's vote was vital to prevent further economic damage caused by the Covid-19 pandemic to our manufacturing industries and protect thousands of qualified jobs that depend on them.

"In response to a joint industry request in March, the European Commission tabled a proposal in June to postpone the 30th June and 31st December 2020 deadlines for the production and placing on the market of NRMM fitted with ≤ 56 kW and ≥ 130 kW transition engines."

While less of an upheaval in terms of necessary changes than it was to meet the previous standard, the extra time should provide some welcome relief in the form of a little breathing space for OEM's engineering departments.

Hydrogen as a fuel to replace petrol or diesel, especially for heavy trucks, is in the news again. Crane manufacturer Liebherr's Components Division is developing what it describes as climate-friendly injection



Due in 2022, John Deere Power Systems launches its largest diesel ever, the 18.0 L. It will take the company's power range to 870 hp

solutions for hydrogen. The company says, "As the internal combustion engine is still the dominant form of propulsion for mobility today, Liebherr's Components Division sees it as a logical step to also advance the internal combustion engine for the use of carbon dioxide-neutral fuels."

Liebherr is working on direct hydrogen injection "that is ready for series production in correlation with the binding carbon dioxide targets for trucks introduced in 2019." The first engine tests are scheduled before the end of 2020.

Power take off

In a move aimed at increasing the capability and flexibility it offers, the Cummins B6.7 and

L9 Performance Series Power Units (diesel engines) will have new engine power take off (PTO) capabilities that are suitable for crane applications.

Cummins' Performance Series are available from 75 to 503 kW (100 to 675 hp) delivered as a complete ready-made package. This comprises engine, exhaust aftertreatment system, radiator and cooling system, plus ancillaries such as mounting feet, hoses and an air cleaner. More than 60 % of the content is pre-approved to make

the machine integration process simpler and quicker.

Jeremy Harsin, Cummins off-highway marketing director, said, "To increase the flexibility and capability of the power units, we are integrating new single and dual rear-engine power take-offs (REPTO). These complement their standard PTO capability used for items such as hydraulic pumps.

As an example, fitted with the dual REPTO, the L9 will have a total drive capability of

KUBOTA'S NEW 300 HP DIESEL

Kubota Engine America Corp. (KEA) has introduced the largest diesel engine in the company's history with the unveiling of the model S7509, a six-cylinder 300 hp unit.

Production will be in Japan and the global launch is scheduled for 2023.

It is a 7.5 litre Tier 4 Final/Stage 5 diesel with a rated output of 306.2 hp (228.4 kW) at 1,900 min⁻¹. Kubota says the new engine has a maximum torque of 1,324.7 Nm at 1,500 to 1,600 min⁻¹.

driving additional pumping capability through SAE B 2 and 4 bolt mounts. Integrated into the flywheel housing, the dual REPTO's added weight is approximately 100 kg.

"For crane manufacturers, they have the ability to efficiently drive more from the engine without the need for additional aftermarket systems. This would support driving hydraulic pumps for all sorts of machine functions from steering systems to fans, etc. It will reduce installation costs and complexity, for a more integrated solution," says Harsin. Single and dual REPTO options will also be available for Cummins B6.7 and L9 base engines, supplied without power unit parts.

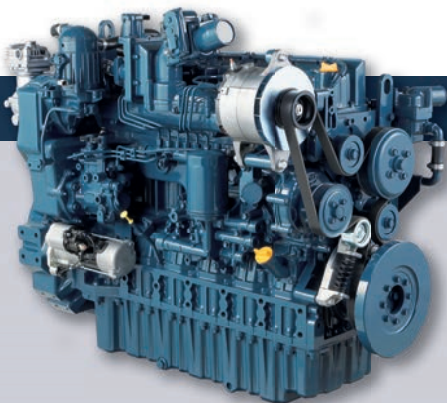
Big diesel

John Deere Power Systems (JDPS) has announced updates in both its engine and powertrain component ranges. They include the introduction of the new 18.0 L diesel engine, coming in 2022 and the North American debut of the latest versions of its electric off-highway drivetrain components.

Introduction of the 18.0 L model in 2022 will move the top end of the JDPS power range to more than 650 kW. The engine, the largest ever from John Deere, will be built at the company's Engine Works facility in Iowa, USA.

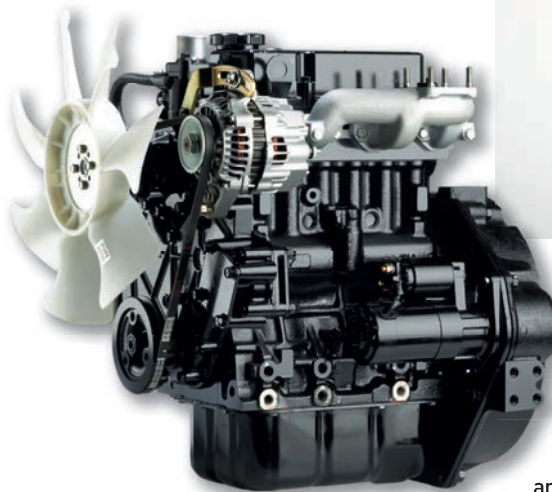
Like the company's 13.6 L engine, the rear gear train on the larger 18.0 L is designed to reduce noise as well as torsional and crank stress. The overall design will also include a three-piece wiring harness with a protective channel.

Talking of the 13.6 L, full production is due to start later in 2020. It is available in the 300 to 510 kW power range and has self-adjusting hydraulic lash adjusters (hydraulic tappets) and high-pressure common-rail fuel injection. Model-based controls will enable advanced prognostics capabilities, with fewer sensors and improved transient response, the company says. The auxiliary drive can take full power off the front of the crankshaft and



Bore and stroke is 110 x 132 mm and it is a turbocharged and turbo-aftercooled design with diesel oxidation

Mitsubishi S3L2 three-cylinder, 1.3 litre water-cooled diesel with an output of 18.4 kW



offers forward-facing SAE A, B, B-B and C drives and a rear-facing SAE C auxiliary drive.

For aftertreatment, the 13.6 L will have an inline integrated emissions control system (IECS) from John Deere. It will be a single canister with integrated mixer and DEF (diesel exhaust fluid) injector.

Ryan Cawelti, manager, worldwide engine market planning at JDPS, said the 13.6 L now includes a no-DPF solution for both Tier 4 Final variable and constant speed markets, in addition to the dual certified solution for Tier 4 Final/Stage 5 markets.

Down the capacity scale, the big news with the JDPS 4.5 L engine range will be expansion of the non-EGR (exhaust gas recirculation) offering in 2021. The John Deere 4.5 L engine ranges from 55 to 129 kW. This includes single and series turbocharged versions covering 63 to 129 kW. The expanded options offer configurations with and without a diesel particulate filter (DPF) for both variable and constant speed markets.

JCB Power Systems is also extending its

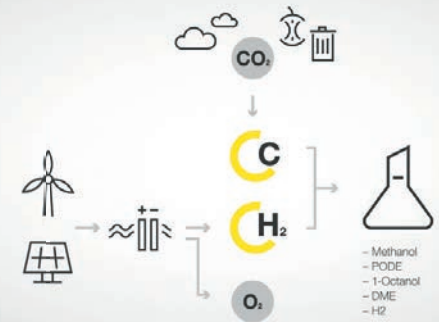
Cylinder deactivation (CDA) deactivates a number of cylinders during low-load or idle engine running conditions

BY MIKE OSENGA

catalyst (DOC), diesel particulate filter (DPF) and selective catalytic reduction (SCR) aftertreatment system. Further, it has a direct injection, common rail fuel system.

The engine is 1,160 mm long, 713 mm wide and 987 mm high, excluding the DPF and SCR mufflers and the cooling fan. Dry weight is listed as 1,000 kg.

Other design features include 100 % power take-off at the flywheel and fan side, as well as a selection of flywheel housings and

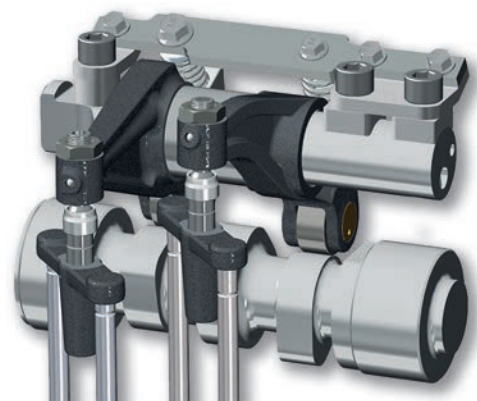


One way Liebherr is preparing for the future is with hydrogen fuel injection

industrial engine range, with the six-cylinder Dieselmax 672. It is an electronically-controlled, common-rail design for lower certified markets and many components are shared with units used in the company's excavators. The 7.2 litre engine is rated at 212 kW (284hp), at 2,000 min⁻¹. It uses a cylinder, block and bedplate design based on the 444/448 Dieselmax.

No exhaust aftertreatment is needed and the common rail system contributes to high performance with class-leading fuel economy, the company says. It benefits from single-sided service access and has automatic auxiliary drive belt tensioning and a 2,000-hour valve clearance adjustment interval to reduce service downtime.

In other news, Mitsubishi released a compact diesel three engine line up to comply with the EU Stage V regulations to reduce the footprint and total cost of ownership for »



flywheels for OEM coupling. The exhaust side auxiliary PTO takes up to two hydraulic pumps in addition to the intake side PTO. The engine also has one-side maintenance and an automatic belt tensioner.

"This is the significant second step up in horsepower for Kubota's 09 series in recent years, following the launch of the 211 hp V5009 at ConExpo-Con/Agg in 2017, which began production this year," said Tomokazu Matsushita, KEA president.

YOUR GEAR DESERVES SMART ENGINEERING



ROPEBLOCK

THE RIGHT LIFTING PRODUCTS WHENEVER AND WHEREVER YOU NEED THEM

Ropeblock hardware can be found worldwide wherever lifting components in cranes are in contact with the wire rope. Our products are designed to contribute to consistent safety and efficiency in any type of lifting & rigging application. By combining extensive knowledge of blocks, sockets, and rigging gear, with a unique approach we call Smart Engineering, we deliver products that will fit any bill, both functionally and financially. **Engineered for efficiency.**

ROPEBLOCK.COM

CRANE & RIGGING WORKSHOP

SEPTEMBER 16-17, 2020



WE'RE GOING VIRTUAL THIS YEAR!

You can experience the premier crane & rigging event of the year now without spending a dime on airfare or hotel. Join us for this exclusive virtual event featuring interactive sessions, a 3D exhibit center, collaboration with peers and more.

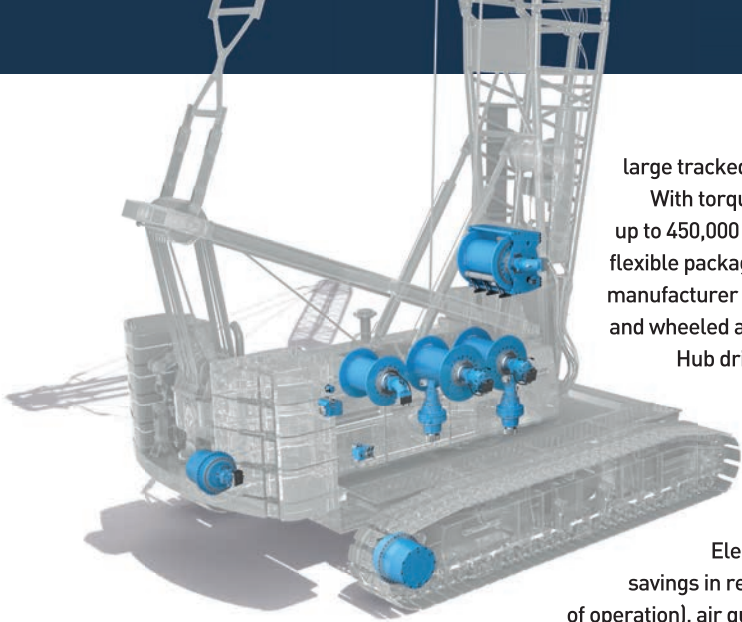


**VR glasses are subject to change.*

REGISTER TODAY AT WWW.SCRANET.ORG/WORKSHOP2020

BROUGHT TO YOU IN
PARTNERSHIP WITH

ais Software



New Dana Spicer Torque-Hub drives and winch drives for crawler cranes

operation and maintenance. The three engine models can meet the regulations without the addition of any after treatment system.

The new Mitsubishi diesels are the L3E, a three-cylinder, 0.95 litre water-cooled engine available in two power options; 13.4 kW at 2,700 min⁻¹ and 15.8 kW at 3,000 min⁻¹ and the S3L2, a three-cylinder, 1.3 litre water-cooled model with an output of 18.4 kW at 2,500 min⁻¹.

One or two engines

While the trend towards using one engine instead of two on larger cranes brings efficiencies, this could result in suboptimal emissions and fuel economy, according to Jacobs Vehicle Systems. The company has developed two in-engine technologies that address this crane powertrain conundrum.

Two-step VVA (variable valve actuation) is designed for mixed mode and stationery equipment. It optimises the engine's combustion cycle for operation, emissions and fuel consumption by changing the intake and/or exhaust valve motions between two modes.

Cylinder deactivation (CDA) deactivates a number of cylinders during low-load or idle engine running situations, resulting in optimised thermal running conditions of the after treatment systems. Combined with fuel injection controls, both emission and fuel consumption can be improved.

CDA and two-step VVA can be combined as modular systems within the same engine kit hardware. While VVA addresses operating conditions faced by off-road and power generation applications, CDA is more valuable to off-road operation. Crane operators could benefit from a hybrid of the two, Jacobs said.

Moving along the drivetrain, Dana Incorporated has introduced a new series of eight Spicer Torque-Hub drives, expanding the company's offering of drive and motion technologies for crawler cranes and other

large tracked vehicles.

With torque ratings from 80,000 Nm up to 450,000 Nm, the new drives offer flexible packaging and gear ratios to meet manufacturer preferences for tracked and wheeled applications. Spicer Torque-Hub drives can be packaged

with Brevini hydraulic pumps and motors, the company said.

Going electric

Electrification can bring savings in relation to productivity (cost of operation), air quality and carbon dioxide emissions, but the best solution is strongly dependent on vehicle parameters and duty cycle. OEMs need to identify this potential across their range of machines and have the information to select modular systems that bring advantages across the fleet.

UK-based global engineering and environmental consultancy Ricardo says it is well-placed to advise. It has electrification experience across all sectors, works on off-highway propulsion systems, has expertise in virtual engineering, and runs a programme of research and development. It says it offers "prioritised approaches that drive costs out of electrification and maximise efficiency, where we see strong pull from our global customers."

The Ricardo Architecture Independent Modelling Tool is used to find the optimum xEV system for each machine and duty cycle and explore opportunities to rationalise the powertrains of the existing product line-up. Combining simulation outputs with Ricardo's cost model allows trade-offs and sensitivities to be explored to identify the most cost-efficient solutions for end users.

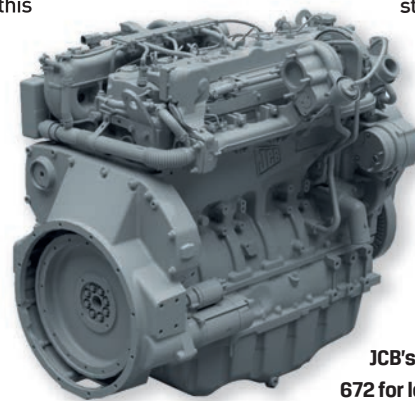
John Deere Power Systems has expanded its range of OEM electric drivetrain

components. The JDPS portfolio is designed to be modular for ease of OEM integration, minimising the need to re-engineer vehicles for testing and implementing electrification.

Those components include a family of high power, high speed e-machines packaged with John Deere Electronic Solutions (JDES) inverters. A compact speed adapter connects the e-machines to an array of existing pump drive and gearbox offerings to provide flexible power generation or traction drive solutions.

First shown in March 2020 was an electrically-driven three-speed transmission to go alongside the previously announced single-speed electric gearbox. JDPS said the gearboxes have options to connect with existing on-highway or industrial axles via standard driveshafts.

Transmission options include inline single or dropbox dual driveshaft outputs, as well as single- or multi-speed options, with parking brakes and disconnects. ■



JCB's six-cylinder Dieselmax 672 for lower certified markets

INCREASING DRIVETRAIN TORQUE FOR MOBILE CRANES

To increase the drivetrain torque when pulling away from rest and when accelerating, Finnish gearbox specialist Katsa has developed a two-speed drivetrain gearbox for heavy electric utility vehicles, including electric trucks, mobile cranes and other special mobile equipment.



With increased torque the electric motor can be selected based on nominal drive cycle, while peak torques are achieved with the gearbox. The gearbox has two ratios and speed ranges. First gear can have a speed reduction ratio between 2 and 4 : 1. Second gear is a direct drive 1:1 ratio. Gear shifting is mechanical via a pneumatic or hydraulic cylinder. A synchroniser unit is incorporated to ensure smooth engagement.

It can be used with motors up to 350 kW and there is a range of mounting options, including direct SAE flange or shafts.

Ricardo offers its Architecture Independent Modelling Tool for design work



THANK YOU TO OUR 2020 SPONSORS

BRONZE
[\$1,000 - \$3,000]



SILVER
[\$3,100 - \$8,000]





GOLD [\$8,100 - \$15,000]



PLATINUM [\$15,000 - \$25,000]



DIAMOND [\$25,000+]



Other than Covid-19 there have also been some useful technological developments and innovation, plus interesting applications.

ALEX DAHM reports

A range of change

All manufacturers of articulating or knuckle boom cranes have been affected by the virus. Its impact has been strong, gradually hitting all world markets and reducing the number of orders for new cranes, as reported by Italian manufacturer Fassi Gru, for one.

It is reflected in the first half year sales figures. At Palfinger sales were down 18 per cent and Hiab owner Cargotec Group (three crane manufacturers) posted a 9 % decline. For just the second quarter of 2020 Hiab sales, at €243 million, were down 32 % on the €358 million of the same period a year earlier. "Orders received improved month-by-month after a weak April," says Mika Vehviläinen, Cargotec CEO, "which provides reason to believe that the bottom was reached in the second quarter for orders received."

Practically, the virus has meant big change. Early on in the pandemic Italy, home to many articulating crane manufacturers, was hard hit. At Fassi, for example, "We had re-organise our way of working. We had to introduce a strong safety protocol to protect our employees. With customers we have increased our use of remote conferencing to keep in touch. Similarly, with service and training we have had to re-think they



Swiss application for a Palfinger PK 37.002 TEC 7 delivering construction equipment for Rust + Co

way we work, using different tools," says spokesperson Silvio Chiapusso.

Elsewhere in Europe, at Hiab, after closing assembly units earlier in the year, all were back in operation by June and the supply chain was normalising, the company says. "Despite the crisis, we systematically continued to execute our strategy. We increased our investments in digitalisation and projects to improve the cost and eco-efficiency of our products. During the quarter, we also continued to develop our supply chain and organisation with the divestment of our share in the RCI joint venture in China, and closing down our assembly unit in India," explains Mika Vehviläinen.

Positive impact

Another notable effect of the pandemic, according to Hiab, is that customers have become more interested in remote maintenance services. Sales in the service

The first electric 16R Hyva Kennis e-Power roll loader crane delivered by Hyva Benelux

portion of group's business have continued to increase through the crisis.

What are customers looking for in their new cranes? Fassi says, "Systems to assist the operator to work with more safety, to be more efficient, and to have a more reliable product. To do this we have to use all the technology in our hands."

Two things customers are looking for are quieter operation, so cranes can operate in cities at night, and for cranes to produce less pollution at the point of operation. Several manufacturers offer or are working on electric versions of their cranes.

Hyva Benelux has delivered its first electric 16R Hyva Kennis e-Power rollover crane. The company says it will be a game changer. It will be used in the Amsterdam area, around Schiphol Airport where strict environmental rules and regulations need to be observed, Hyva says. Powering the crane electrically offers improved energy efficiency and lower environmental impact.

Clean power

"It also provides a much healthier working environment for crane operators as they no longer need to work with the noise and exhaust fumes from a diesel engine. The crane can be operated early in the morning or late at night and still comply with the current regulations. With these performance advantages and longer operating times, [customer] Combex [Bouwlogistiek] can differentiate its fleet and increase productivity and flexibility," Hyva explains.

The power system consists of an electric motor, battery pack and an electronic control system. The batteries can be recharged while the truck is running on the road. Also, the crane can be operated with power from the battery when the truck engine is switched off. Allard Tadema, Combex Bouwlogistiek technical director, commented, "Following





Fassi and Volvo Trucks developed the Drive by Fassi system to remotely operate the truck, at

up to 5 km/h, using the crane's control transmitter

extensive research and positive feedback from many drivers, we are very pleased with this new purchase. We are always looking to invest in the future, and we are confident that this Hyva Kennis e-Power solution will be a significant step in lowering our environmental impact."

The trailer has an On Road Recharge (ORR) system to give enough battery capacity for a day's work.

New integrated onboard technology from Fassi and Volvo trucks allows an operator to manoeuvre a truck from outside the cabin via a radio remote control transmitter. A Fassi V7 radio control unit is used to operate a Volvo truck with a steering wheel that eerily turns on its own.

Integrated technology

The system is useful where access to a site is awkward and the operator is helped by being able to reposition themselves for the best view to manoeuvre the vehicle.

Using the new Drive by Fassi system, combined with the Exster interface developed by the Swedish company, allows the truck to be driven reliably and safely at up to 5 km/h, Fassis says. It is a development of Fassi's FX-Link, which manages vehicle functions from the radio control unit and allows the operator to check the condition of the crane directly from the truck dashboard.

Four requirements are for the Drive by Fassi technology are: the FX-Link system; one of two electronic control systems – either

Hiab FrameWorks with T-Cranes and T-Bodies sees an entire standard body, crane and subframe mounted to a Ford Transit pick up

the FX500 or FX900 – installed on the crane; the V7 Fassi radio control unit; and a Volvo Trucks vehicle from the FH or FM series fitted with the Exster (External Steering Remote Control) interface and assisted Volvo Dynamic Steering.

For extra safety the truck has emergency stop buttons position all around it on each side. It won't move with the crane unfolded or the stabilisers deployed.

From manufacturing

Generating less pollution is also a growing requirement on the manufacturing side. Hiab's Mika Vehviläinen says, "we aim to reduce the CO2 emissions of raw material sourcing and product use phase by at least 50 per cent from the 2019 levels by 2030. In addition, we aim to be carbon neutral in our own operations by 2030."

Something else to help manufacturers provide a better product and service is Hiab FrameWorks. The company describes it as a crane installation system to make working with Hiab as hassle free possible. FrameWorks is especially relevant now in the time of the Covid-19 pandemic. "What is important for us, is to get our customers back in business as fast as possible and with the least burden possible," says Kent Linberg, FrameWorks division product manager.

FrameWorks aims to reduce overall complexity for customers in "being able to access high quality finished products, as easily and as hassle-free as taking a ready-made product from the shelf."

Cranes covered by FrameWorks are from small to large and the T-Cranes and T-Bodies elements are given as examples of how simplicity and a standard setup can be made available to the customer in a short time. OEM truck and vehicle manufacturers, and body builders can benefit from T-Bodies products as engineered solutions designed to fit the most common truck types.

Entire rear beds allow Hiab cranes to be carried in the most effective way, the company said. T-Bodies come in a kit said to be simple to mount using basic tools and working to a set of instructions. After a new truck is delivered there is time pressure on the installation. Different designs being ready and available means customers lose less time. There is no need to find multiple



F345RB NEW FROM FASSI

Latest Fassi crane has a wide field of application, including outside the construction industry.

Fassi Gru's newest model is the 33.2 tonne-metre rated F345RB. Its maximum hydraulic outreach with jib is 20.9 metres. Three key features are that it is versatile, compact and light, the manufacturer says. It is in the XE-dynamic series and has continuous slewing. Versions with between two and eight boom sections can be specified. All the jib combinations available for other Fassi models in the same category are also available for the new model.

Its specification includes ADC (Automatic Dynamic Control), the D850 digital hydraulic valve bank, the RCH/RCS radio control and the FX500 control unit. The list also includes FSC (Fassi Stability Control), CPM (Crane Position Monitoring), FS (Flow Sharing), XF (Extra Fast), MPES (Multi Power Extension System), XP (Extra Power) and ProLink (Progressive Link). Options include the D900 valve block and V7RRC radio remote control.



The Epsilon crane on this new Mercedes Econic for Eurovia Contracting in the UK lifts 3.7 tonnes and has an outreach of 8.2 metres

suppliers and make ad-hoc choices which vary for each installation.

T-Bodies gives OEM manufacturers a choice of kits made exactly for their brand, including the administrative detail of fitting in with their ordering systems and configurators. Customers can then get necessary certifications directly from Hiab which reduces paperwork.

Swiss civil engineering company Rust + Co was already a Palfinger customer when it decided to add another crane. The family-owned company added a PK 37.002 TEC 7 to help transport construction machinery. Rust + Co was started more than 70 years ago. Since 2011 it has been run by third generation family member Peter Rust Junior.



be profitable. be influential. be seen.

belong to SC&RA

join today

www.scranet.org/join



**Specialized Carriers &
Rigging Association**

OUR MEMBERS **LIFT & MOVE** THE WORLD



YOUR ROPE IS
OUR PASSION

More than a rope.

Get to know our committed team members, and they will work hard to realise your challenges with passion, competence and dedicated service – with over 60 years' experience to call upon.

Call direct for assistance:



CASAR Drahtseilwerk Saar GmbH | Casarstr. 1 | 66459 Kirkel | GERMANY | Phone: +49 6841 8091-333 | E-Mail: info.casar@wirecogroup.com | Website: www.casar.de

Infrastructure challenges

Covid-19 offered up a new set of challenges to infrastructure-related companies around the world just as many layers of the transport and construction industry were already juggling various global disruptions connected to capital availability, evolving social and environmental priorities and increased urbanisation.

With global interruptions in travel and transport, supply chains and consumer behaviour overall, what we once took for granted in terms of market stability and basic infrastructure planning is now being reconsidered from just about every angle.

It's also hard not to consider both the immediate and long-term impacts on the air travel and freight industries – will airport designs change; will volume demand at the ports alter supply chains and operational practices as well?

While it's difficult to predict exactly how the impact of Covid-19 will alter the course of the infrastructure sector in general, there are some key areas that will likely feel it more immediately.

As mentioned, supply chain disruption is a conversation being had around the world on multiple levels and within near-endless sectors. The operational resilience needed to maintain the integrity



and efficiency of construction and transport supply chains around the world is imperative, even if adapted on the local level with secondary suppliers.

To that end, as it stands, reliance on international supply chains, particularly connected to manufacturing, has never been more obvious. Rebuilding them probably isn't realistic but industry leaders should consider it a top priority once we're out of the woods with the pandemic. Built-in operational resilience tools – like adaptable multi-supplier relationships, predictive assessment criteria and capacity-constraint recognition for all supplier tier levels – should be high on the list of modifications once the rebuilding begins.

Aware and connected

The labour problem certainly hasn't subsided, with or without a pandemic. For many industry companies around the world, projects came to either a temporary or longer-term close as Covid-19 evolved. Travel bans also impacted worker availability. But technology played an important role, as teams were able to come together offsite and continue with various duties given the circumstances. What many companies have begun to realise is that offsite staff operations can be productive and, as a result, project workflows, such as modular and offsite production, are a realistic possibility moving forward.

Pandemic or not, the infrastructure needs of the world haven't slowed down, they've just been delayed. The need for investment in large-scale projects certainly isn't waning. In fact, Covid-19 has taken the infrastructure stress already pressing on the global economy and catapulted any pre-existing funding and finance challenges into even greater visibility. As almost every study reveals, the gap between infrastructure capital demand and supply is not narrowing, it's widening. And as is often the case, not enough investment is making its way to underdeveloped countries.

Experts suggest that the one possible solution to meeting tomorrow's need for infrastructure financing is to help direct more private finance into infrastructure, particularly in emerging markets – and to better prepare projects, better implement de-risk investments and use a broader range of financing mechanisms.

Perhaps the more ongoing challenge in the infrastructure conversation is the need to identify projects that are significant long-term contributors to economic livelihood – and recognise priorities that have emerged in recent months, like the need for greater digital connectivity, robust utility infrastructure and healthcare provision.

While it's not exactly each individual company's obligation to solve these challenges, we can certainly both better serve our own objectives, as well as the efficacy of the industries in which we operate, by remaining as aware of and connected to the many conversations like this one that inevitably impact our futures. ■

SC&RA LEADERSHIP

SPECIALIZED CARRIERS & RIGGING ASSOCIATION CHAIRMAN

Thomas Bennington
Duncan Machinery Movers
Lexington, Kentucky, USA

PRESIDENT

Jay Folladori
Bennett International Group,
McDonough, Georgia

VICE PRESIDENT

Kevin Johnston
J&R Engineering,
Mukwonago, Wisconsin

TREASURER

Michael Vlaming
Vlaming & Associates,
Vallejo, California

ASSISTANT TREASURER

Ed Bernard
Precision Specialized,
Brantford, Ontario, Canada

ALLIED INDUSTRIES GROUP CHAIRMAN

Troy Burkett
Nelson Trailers, Ottawa, Ohio

CRANE & RIGGING GROUP CHAIRMAN

Randy Sever
PSC Crane & Rigging,
Piqua, Ohio

TRANSPORTATION GROUP CHAIRMAN

Troy Tallent
Omega Morgan,
Portland, Oregon

LADIES GROUP CHAIRWOMAN

Jennifer Hollerbush
Garrod Hydraulics,
Manchester, Pennsylvania

SC&R FOUNDATION PRESIDENT

Dave Wittwer
Hays Companies,
Salt Lake City, Utah

VICE PRESIDENT

Geoff Davis
Unified Logistics Operating
Group,
Bethesda, Maryland

TREASURER

Jennifer Gabel
JK Crane, Kenil, New Jersey



CHIEF EXECUTIVE OFFICER

JOEL DANDREA
5870 Trinity Parkway
Suite 200
Centreville, VA 20120, USA
Tel: +1 703-698-0291
Fax: +1 703-698-0297



Helping to develop talent in the industry is a key aim of the association. MIKE CHALMERS tracks the progress of four under 40

4 under 40

Year after year, SC&RA cultivates future industry leaders while at the same time strengthening its own leadership base in an effort to advocate for the greater good of the transportation and construction industries. This year's "4 Under 40" class provides yet another promising glimpse at the level of talent both the industry as well as the Association can expect in years to come.



Chris Alain

New responsibilities

Born in Toronto, Ontario, Canada, Chris Alain spent the first 13 years of his life first growing up in a small village east of Quebec City, and then in Houston, Texas, USA, as well as in Tulsa, Oklahoma. The family, which had evolved around trucking for a few generations, eventually returned to Quebec City.

"My grandfather had been a long-time executive at the Quebec Transport Commission, my uncles were both over-the-road drivers for many years and my mother had evolved with Nova Permits for a number of years before I joined them in 2005," he explained.

Having found a vocational fit, Alain worked his way up through Nova. "It allowed me to learn the basics of it all, the equipment, how things could be loaded,

the various rules that had to be respected depending on the jurisdiction the carrier was driving through."

He eventually landed in the pilot car department and, after some time, moved on to a permit agent position. "Over time, I took on more challenging customers and new responsibilities within the company, getting involved with superloads and special projects that required careful planning and attention. I've also had the chance to be involved in the development of ambitious permit and pilot car solutions that have made an enormous impact in our industry to this day."

As for his appreciation for SC&RA, Alain agreed that his membership has certainly opened doors and provided opportunities that may not have developed as easily otherwise. "It gives me the fuel and drive to continue making an impact for the Association and the industry. I plan on being involved for many years to come, and I hope to inspire others to join in on this journey."

Every little segment

Before Sarah Emig got off the ice and traded her skates for the family business – Connely Crane Rental – she played professional hockey in both Germany and New Zealand.

"I grew up just outside Detroit; we were a big hockey family – my brother and I played," she confirmed. "I played at Adrian College, a small school in southern Michigan, and then played overseas for a couple years."

After taking hockey as far as she could,



Sarah Emig



Emig returned home to the family business. "I knew I would always come back and be at Connely Crane," she indicated. "I was twenty-five when I landed here, and when I first started, I was out in the field as an oiler. I'm actually still in the apprenticeship programme to be an operator, a journeyman. I've got two classes left."

Ultimately, Emig will play an evolving role at Connely in the office, eventually transitioning to leadership positions in time. "That said," she added, "I'm currently learning every little segment of the business – but when we're busy, anyone in the office that can run a crane will jump out and get into one if needed. And that keeps it exciting."

To that end, with Connely being as "busy as ever," Emig sees both opportunity and cause for reflection. "All the jobs that were



on hold are back up and running – we’re hiring people. But people are wondering throughout the industry if this will last – will these companies be able to afford new jobs once the current ones wrap up?”

Changing roles

A California native, Precision Crane Rental’s Tyler Elliff seemed destined to pursue the family business from an early age. “I’m third-generation at Precision; I started working summers after the eighth grade,” he said. “During high school, I was able to gain more knowledge and see the real-world applications of what we do. On my eighteenth birthday, I obtained my CDL. Shortly after that, I obtained my NCCCO crane operator certification.”

A true child of the industry, Elliff embraces the opportunities he’s been



Tyler Elliff

presented with. “My grandfather and father have paved a unique road of hard work and industry knowledge that I intend to continue,” he stressed.

After attending his first SC&RA meeting by secretly sleeping on a friend’s couch in the hotel room for a few days, Elliff knew this was an organization that would impact his career over the long term. “My expectations were to acquire more role models that will help me define who I am within this industry as well as make the connections necessary to help change our industry into a safer, more interesting and more fun environment than it was when I was introduced into it.”

Currently vice president at Precision, though he admits his role changes daily depending on the challenges presented, Elliff believes that during times of industry-wide challenge, companies should “...do our best to keep working-class people working. To do so, we have to work, and customers need someone to talk to in order to schedule that work. As America gets back to work, we need to be aware of our surroundings and respect the rules put in place by the authorities. If we don’t provide jobs, eventually one pandemic will transform into another.”

Skin in the game

Born and raised in the Kansas City area, Robert Hall, director of safety at Wilkerson Crane Rental, Inc., played college football, then arena football, and eventually fell into logistics and supply chain through various companies, including FedEx, KOHL’s Distribution Centers, Grainger Industrial Supply and more.

“However, once I joined SC&RA, the size and magnitude of moving OS and OW loads, coupled with the crane and rigging challenges, required even more creative thinking, challenging decision making and greater risk and reward.”

Hall began his career at Wilkerson after meeting Jeff Holt, director of operations, at the 2018 SC&RA Specialized Transportation Symposium in St. Louis. “I let him know I was looking to join a company that actually owned trucks, that owned cranes and had more skin in the game. It was also very important to me to stay with an SC&RA member company.”

Nearly three years later, Hall has his fingerprints on almost every department at Wilkerson. “I’ve enjoyed being a utility player – everything from IT, continuous improvement, procurement, HR, sales, contract negotiation and safety. As we are growing, roles are becoming more defined and more process-oriented, which is allowing me to be more focused in my day-to-day as the director of safety. And I can’t see a better-fitting role for me.”

One of the most glaring challenges Hall sees at Wilkerson is regulatory. “We’re governed by two bodies: OSHA and DOT/FMCSA,” he said. “Part of the time, we fall under OSHA rules and regulations, and part of the time, we abide by DOT rules and regulations. This creates a lot of grey area and contradicting judgement calls. Regardless, Wilkerson is focused on making sure we’re compliant with both while maintaining open dialogue with our team to make sure they understand and buy in. Again, the end goal is everyone gets home safe. This includes our employees, our customers and the public we encounter on a daily basis.”

As for his take on leadership and the industry, Hall keeps it pretty simple. “If we want to grow, we have to surround ourselves with people who are highly skilled in areas that we are not. And if we find ourselves to be the smartest person in the room, it’s time to look for another room. That said, since joining both Wilkerson and SC&RA, I haven’t had to search for another room.” ■



Robert Hall

ONLINE ESTA AWARDS OF EXCELLENCE & MARKET UPDATE 24 SEPTEMBER 2020

15.00 (NETHERLANDS TIME)

The ESTA Awards event is going virtual in 2020

The new online format will combine the announcement of the winners of the ESTA Awards of Excellence with a market webinar addressing some of the key issues facing the crane and specialized transport sector.

SPEAKING TO INCLUDE:



**The dynamic reality of
the 2020-2022 market**

Wim Sarens

CEO, Sarens Group



**The global crane
industry**

Chris Sleight

MD, Off-Highway Research

Final speaker to be announced.

FREE REGISTRATION – NOW OPEN - WWW.KHL.COM/ESTA

Europe's premier crane and transport
awards evening, created and organised
jointly by ESTA and *International Cranes
and Specialized Transport*.

**INTERNATIONAL
CRANES
AND SPECIALIZED TRANSPORT**



AWARD SPONSOR



TADANO

DEMAG[®]

TADANO GROUP

SUPPORTING SPONSOR



**SPIERINGS
MOBILE CRANES**

WIKA offers new fully certified crane control

For cranes that are not at risk of tipping and for lifting systems, WIKA offers the ELMS1, a fully certified safety control to protect against overload. ELMS1 warns of switching thresholds and then switches the crane off in the

STORM-PROOF STRAIGHTPOINT



Straightpoint (SP) equipment proved it can withstand the Indonesian monsoon season during an application involving testing of a 15 tonne capacity frame using a 50 tonne Tadano TG500E truck crane.

Lifting equipment and services provider Wiguna Artha Lestari used an SP Radiolink Plus load cell and wireless Hand Held Plus to load test a frame and record measurements amid rain clouds.

The load cell has a separate internally sealed enclosure providing electronic components with IP (Ingress Protection) 67 (NEMA 6) even with the battery cover plate missing. "IP67 means equipment meeting that criteria can be dropped into a body of water to a meter deep for half an hour," explained Yoshiro Dharmadi, director at Wiguna Artha Lestari. "While not a practical scenario for our use of the equipment, it gives us peace of mind."

■ For more information see: www.straightpoint.com

event of an overload.

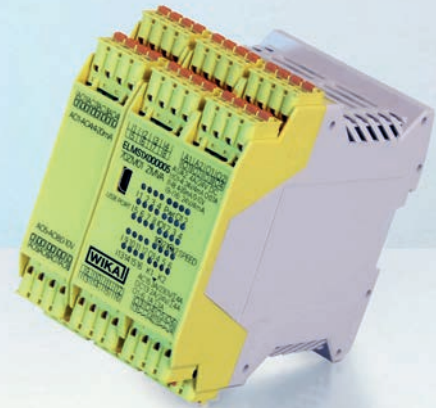
ELMS1 combines safety electronics, software and safety force transducers. It is also the world's first dual-hoist system approved by the German social accident insurance association (DGUV). With a dual hoist system on a dockside crane, up to four shipping containers can be lifted at the same time.

A multi-functional and configurable safety switching device, the electronics consist of

a control module and individual function modules that can be mounted next to each other and are connected via a redundant, standard DIN-rail bus.

The safety electronics accept a wide range of digital and analogue inputs. Several analogue outputs and field bus modules are available for those non-safety-relevant parts of the application during normal operation.

The status of the inputs and



outputs, operating voltage and other diagnostic messages are displayed on a LED matrix.

■ For more information see: www.wika.com

Power Pad HD Lite from Crowland

Crowland Cranes has launched Power Pad HD Lite outrigger pads made from high-grade aluminium in a range of sizes to suit specific needs.

The pads are all 100 mm thick and operate on a 50 mm bed of

Etha-foam ground protection with capacities ranging from 60 to 125 tonnes.

Power Pad HD Lite comes standard with corner-mounted lifting and locating eyes enabling units to be stacked and lifted in

packs of four. The new inbound lifting point design enables users to place multiple mats side by side and position them in a modular format, if required.

Developed to provide a cost-effective solution to transporting large outrigger mats to site, this new lightweight product weighs 66 kg per square metre, so a set of four (1,190 kg per set) can be transported to site on most 3.5 tonne flatbed trucks. The product also lends itself to those operators who prefer to carry large outrigger pads on their machines without exceeding UK axle weights.

■ For more information see: www.crowlandcranes.com



Crowland's new aluminium Power Pad HD Lite

MSA SAFETY HARD HAT WHITE PAPER

Safety product designer, manufacturer, and distributor MSA Safety, has published a head protection white paper following an industry panel webinar hosted by the company and attended by health and safety professionals.

The white paper, titled, Are you getting the maximum benefits out of your head protection? reviews the vital importance of head protection for workers. "Worker safety has and always will be paramount," said Jim Cliff, UK product sales manager (industrial), MSA Safety. "But we believe that a quality hard hat – one that's well-balanced, well-ventilated and easily adjustable for a comfortable fit – can also increase confidence and help to improve a worker's general well-being, both of which can make a workforce more productive and efficient."

■ For more information see: www.msasafety.com



MSA is helping workers to get the most out of their head protection

TOWER CRANES NORTH AMERICA FREE ONLINE CONFERENCE

The essential learning event for tower crane professionals across North America.

SAVE
THE
DATE

OCT 22
2020
FREE
ONLINE CONFERENCE

This year Tower Cranes North America (TCNA) will be held as a virtual event. In these unprecedented times the need to share ideas and information has become even more crucial.

Speakers and topics will be:

Business cycles in the tower crane market

Mike Heacock, Morrow Equipment Company

Forecasts for construction activity

Kenneth D. Simonson, Associated General Contractors of America (AGC)

Tower crane insurance and risk mitigation

Jeff Haynes, USI Insurance Services

Safe assembly & disassembly of tower cranes

Mike Walsh, Dearborn Engineers & Constructors, Inc.

Round-table on crane inspections

Chris Smith (Morrow),
JR Moran (Brasfield & Gorrie)
Jeffrey Hammons (JHam Group Consulting)

Rental companies and contractual obligations

Stephen Jehle, P&J/Arcomet

FOR SPONSORSHIP OPPORTUNITIES CONTACT:

MATT BURK

TEL: +1 312 496 3314

E-MAIL: MATT.BURK@KHL.COM

MIKE POSENER

TEL: +353 860 431219

E-MAIL: MIKE.POSENER@KHL.COM

BEV O'DELL

TEL: +1 816 886 1858

E-MAIL: BEV.ODELL@KHL.COM

HEADLINE SPONSORS



SUPPORTING SPONSORS



EVENT PARTNER



CREATED AND ORGANIZED BY



www.khl-tcna.com



News from the European Association of Abnormal Road Transport and Mobile Cranes (estaeurope.eu)

BECOME AN ESTA SUPPORTER

If you and your organisation would like to become more involved in ESTA's work, and take part in some top quality and enjoyable networking at the same time, then why not see if you are eligible to become an official ESTA Supporter.

For a year's membership it costs €840 and includes a range of benefits.

■ To find out more, see: www.estaeurope.eu/Supporter

COVID-19 UPDATES

ESTA has created a new section on its website for announcements regarding Covid-19 and links to other useful websites.

CONTACT ESTA

For more information about ESTA and its work, see the association's website at: www.estaeurope.eu/summit or contact: Caroline van Geest, ESTA office manager, on +31 (0) 71 572 4705 or officemanager@estaeurope.eu or Graham Anderson, ESTA communications officer, on +44 (0) 1865 318123 or andersonmedia@btinternet.com

Call for rethink on VEMAGS

ESTA and Dutch member TLN have written a letter to the German authorities raising concerns about changes to the VEMAGS permit issuing system introduced at the end of June.

TLN and ESTA said the VEMAGS changes will raise costs, make the system more complex and bureaucratic and discriminate against foreign abnormal transport companies.

The changes include reducing the number of permit application locations and new regulations for margins on dimensions, weights and axle loads which ESTA and

TLN believe will burden the system and the environment.

ESTA also intends to lobby Dutch MEPs in the European Parliament to raise the issue in Brussels. The VEMAGS changes came into effect on 20 June.

Ton Klijn, ESTA director, said, "This is a serious issue and is causing a great deal of concern. ESTA and TLN have received an initial reply that was rather defensive but we will continue our combined efforts hoping the German authorities will take the necessary action and amend the new system as soon as possible."



FIRST ONLINE GENERAL ASSEMBLY

The association held its first online General Assembly meeting. The original meeting was to be held in Amsterdam, Netherlands but was postponed due to Covid-19. There were more than 20 delegates. Ton Klijn, ESTA director, said, "We should thank the ESTA office manager Caroline van Geest for organising it so well. Obviously, it was not as good as meeting personally but, perhaps, online meetings like this will be a useful addition to our repertoire." The meeting heard that the organisation's membership numbers remain strong, despite the pandemic. ESTA had 29 ordinary and special members, 39 affiliated company members and 21 supporters.

ECOL works in Canada

Crane operators holding a European Crane Operators Licence (ECOL) will be able to work in British Columbia, Canada – and vice versa – without undertaking additional training, following the conclusion of a groundbreaking agreement in July.

ESTA's ECOL scheme has signed a mutual recognition agreement (MRA) with the British Columbia Association for Crane Safety (BCACS). The move followed a meeting of the ECOL Expert Committee in May.



The meeting – held electronically due to Covid-19 – agreed to an alignment of standards between ECOL and the BCACS. The two sides then signed a formal MRA, a process that was completed on 8 July.

For the full story, see the ECOL website: www.ecol-esta.eu

* Four more training institutes have applied to join the ECOL system. To date, ECOL has trained and examined 28 teachers and examiners, and certified 30 operators.

BOOST FOR MARKING AND LIGHTING CAMPAIGN

ESTA's campaign to harmonise international marking and lighting regulations for heavy transport and abnormal loads has received a major boost.

It has won the backing of the VDA, the influential German automotive industry association and will be presented to the UNECE committee responsible for administering international conventions on traffic regulations. The next meeting of the committee was due in July but is delayed until October due to Covid-19.

Iffet Türken, ESTA Section Transport vice-president, said, "This is very good news and shows that we are slowly and steadily making progress."

Türken, who is a board member at trailer manufacturer Kässbohrer, added, "The current

situation is absolutely ridiculous. The rules for marking and lighting of abnormal transports are different in every EU country."

In 2018 ESTA set up a cross-industry working group led by Türken and Section Transport president, André Friderici of Switzerland-based Friderici Spécial, to study the regulations around Europe and produce its own recommendations. That report was published in 2019 and presented to relevant organisations to garner support.

Türken continued, "This is perhaps not the most important topic, but a recurring and costly nuisance. Why does everyone want their own signs? And why is a side marking board in one country 50 x 50 cm and in another country 42.5 x 42.5 cm?"



GUARANTEE YOU RECEIVE EVERY ISSUE

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

1 CHOOSE YOUR DIGITAL MAGAZINE/S

Access

- Access International
- Access, Lift & Handlers (North America)

Cranes

- American Cranes & Transport (North America)
- International Cranes and Specialized Transport

Construction

- Construction Europe
- International Construction
- Construcción LatinoAmericana (Spanish)
- Construção Latino Americana (Portuguese)

Demolition

- Demolition & Recycling International

Rental

- International Rental News

2 CHOOSE YOUR E-NEWSLETTER/S

Access

- Access International
- Access, Lift & Handlers

Cranes

- World Crane Week
- KHL Crane Market

Construction

- Construction Europe
- World Construction Week
- Construction Technology News
- Construcción LatinoAmericana (Spanish)
- Construção Latino Americana (Portuguese)
- 国际建设月讯中文版 (Chinese)

Demolition

- Demolition & Recycling International

Rental

- International Rental News

Concrete

- Concreto Latinoamericano (Spanish)
- Concreto Latino-Americano (Portuguese)

Post to: KHL Group, Circulation Department,
Southfields, Southview Road, Wadhurst,
East Sussex, TN5 6TP, UK
Fax to: +44 (0)1892 784086
Scan and e-mail: circulation@khl.com



3 BUSINESS TYPES

- Contractor/sub-contractor
- Equipment Rental
- Consultant/Engineer
- Distributor/Agent/Equipment Sales
- Manufacturer
- Specialized/Heavy Transport
- Energy/Windpower/Petrochemical
- Government
- Airports/Ports/Docks/Offshore
- Private/Public Utilities
- Mining/Quarrying/Aggregate
- Finance
- Association/Education/Research
- Other (please Specify): _____

4 YOUR DETAILS

First Name: _____
 Last/Surname: _____
 Job title: _____
 Company: _____
 Country: _____
 County/State: _____
 e-mail: _____

We require your e-mail address to be able to send you a digital version of the products that you have selected.

5 YOUR PREFERENCES

KHL Group may email you information regarding other KHL products relevant to you as a construction professional.

If you do not wish to receive such information, please tick the selected box below.

e-mail

KHL Group may email you information about new products and services from relevant parties in the construction industry.

I would like to receive e-mails from KHL about other third party products

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:

SIGNATURE: _____

DATE: _____

EVENTS DIARY

2020
JDL EXPO

9 to 11 September 2020
Beaune, France
<https://jdlexpo.com>

SC&RA CRANE & RIGGING
WORKSHOP

16 and 17 September 2020
Online virtual event
www.scranet.org

ESTA AWARDS OF
EXCELLENCE

24 September 2020
Online virtual event
www.khl-group.com/events/esta/

DIESEL PROGRESS SUMMIT

20 October 2020
Online virtual event
www.dieselprogresssummit.com

TOWER CRANES NORTH
AMERICA (TCNA)

22 October 2020
Online virtual event
www.khl-tcna.com

WORLD DEMOLITION SUMMIT

12 November 2020
Online virtual event
www.khl.com/wds

INTERNATIONAL RENTAL
CONFERENCE

23 November 2020
Shanghai, China
www.khl-irc.com

BAUMA CHINA

24 to 27 November 2020
Shanghai, China
www.bauma-china.com

INTERNATIONAL OFFSHORE
CRANE & LIFTING CONFERENCE

24 to 26 November 2020
The Event Complex Aberdeen
(TECA), Scotland, UK
www.liftingoffshore.com

2021

SC&RA JANUARY BOARD &
COMMITTEE MEETINGS

6 to 9 January 2021
Sun Valley, Idaho, USA
www.scranet.org

IPAF SUMMIT
(INTERNATIONAL POWERED
ACCESS FEDERATION)

18 March 2021
London, UK
www.ipaf-summit.info

IAPA AWARDS -
INTERNATIONAL AWARDS
FOR POWERED ACCESS

18 March 2021
London, UK
www.ipaf-summit.info

PICTURE OF
THE MONTH

The coronavirus Covid-19 may have stopped the honky tonk music bars on Broadway, Nashville, Tennessee, USA, but local crane rental company Clark Crane didn't miss a beat.



The company has been providing cranes in southeast USA for more than 35 years and wasn't about to stop. Construction continued apace throughout the pandemic as demonstrated here by its Liebherr LTM 1400-7.1 working on an almost deserted main strip. What would Johnny Cash have made of all this, we wonder?



PEOPLE NEWS



■ **JENS ENNGAARD**, CEO at Danish international crane company BMS, has been appointed vice president of ESTA's Section Cranes. Enggaard already holds the post of ESTA treasurer and will fulfil both roles for the remainder of his term. He was asked to do both as the ESTA Board had reached its maximum number of members under its statutes.

■ Stevenson Crane Service in the USA has appointed **JESS MACMILLAN**, P.E., as director of engineering. MacMillan improve engineering efficiency in internal planning strategies, providing engineered



and stamped drawings to discerning customers and he will bring increased project management bandwidth to some of Stevenson Crane Service's most complex client projects.



■ **ALLEN AL-SUWAIDI** has joined the Kirby-Smith Machinery team in the USA as an account manager for KSM Pipeline Services. Al-Suwaidi will be responsible for managing existing customer accounts of KSM's Pipeline Services division, which operates independent of territory restrictions, as well as developing new customers nationally in the pipeline construction industry.

Al-Suwaidi joins KSM with 16 years of experience in heavy

equipment. Al-Suwaidi holds ten salesman of the year awards across various companies, plus awards for sales and rental revenue and an innovation award.

■ In the UK, the Association of Lorry Loader Manufacturers and Importers, ALLMI, has appointed **ALAN JOHNSON** as chairman.



Johnson is a director at Palfinger UK and has more than 30 years' experience in the industry. Johnson was ALLMI chairman between 2003 and 2006 and has retained his Board position throughout. He was also the association's technical director between 2009 and 2016.

Johnson said, "I'm extremely honoured to be appointed."

■ 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.



PRODUCTS, PARTS & ACCESSORIES

45

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.

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.

CRANES AND EQUIPMENT FOR SALE OR RENT

45

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

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

(rss) ropeandsling.co.uk
Lifting products and services to the construction and engineering industry

Air... Moving Loads In The Most Difficult Explosive Conditions Hoisting Technology
UK Distributor and Service Partner for JDN Products (Hire and Sales)

J-D-NEUHAUS
1780 engineered for extremes
www.jdneuhaus.co.uk

HIRE • SALES • INSPECTION • REPAIRS • ON SITE TESTING • MANUFACTURE • TRAINING



Rope and Sling Specialists Ltd
Nationwide Distributor and Gold Standard Service Partner

Email
Steve@rssgroup.co.uk
Call now

0800 6124 360

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

CRANES AND EQUIPMENT FOR SALE OR RENT

USED MINI CRANES FOR SALE

VISIT US ONLINE



BUY NOW AT USEDMINICRANES.COM

- USED TRAILER CRANES**
- USED MINI SPIDER CRANES**
- USED MINI CRAWLER CRANES**
- USED PICK & CARRY CRANES**



+44(0)161 683 2584





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

CRANES AND EQUIPMENT FOR SALE OR RENT • CRANES AND EQUIPMENT FOR SALE OR RENT • CRANES AND EQUIPMENT FOR SALE OR RENT • CRANES AND EQUIPMENT FOR SALE OR RENT

M. Stemick GmbH
Kran- u. Baumaschinenhandel



ALL TERRAIN-CRANES

Make / Type	y. o. m.	Drive	Boom / Fly Jib
30 t Faun ATF 30-2L	2004	4x4x4	28,50m + 8,00m
35 t Liebherr LTM 1030-2.1	2005	4x4x4	30,00m + 15,00m
40 t Demag AC 40 City	1999	6x4x6	31,20m
40 t Terex-Demag AC 40 City	2008	6x6x6	31,20m + 13,00m + 1,20m
45 t Faun ATF 45-3	2006	6x6x6	34,00m + 15,00m
50 t Grove GMK 3050	2003	6x6x6	38,10m + 15,00m
50 t Terex-Demag AC 50-1	2007	6x6x6	40,00m + 17,60m
50 t Terex-Demag AC 50-1	2007	6x6x6	40,00m + 17,60m
55 t Liebherr LTM 1055/1	2004	6x6x6	40,00m + 16,00m + 2,50m
55 t Liebherr LTM 1055-3.1	2005	6x6x6	40,00m + 16,00m
55 t Liebherr LTM 1055-3.1	2005	6x6x6	40,00m + 16,00m
60 t Faun ATF 60-3	2004	6x6x6	40,00m + 16,00m
60 t Liebherr LTM 1060/2	2005	8x6x8	42,00m + 17,00m
60 t Liebherr LTM 1060/2	2004	8x6x8	42,00m + 17,00m
65 t Tadano Faun ATF 65G-4	2006	8x6x8	44,00m + 16,00m
65 t Tadano Faun ATF 65G-4	2006	8x6x8	44,00m
80 t Tadano Faun ATF 80-4	2006	8x8x8	48,50m + 16,00m
80 t Terex-Demag AC 80-2	2007	8x8x8	50,00m + 17,60m
90 t Liebherr LTM 1090/2	1997	8x8x8	52,00m + 19,00m
90 t Tadano Faun ATF 90G-4	2007	8x8x8	51,20m + 1,60m
100 t Liebherr LTM 1100-4.1	2004	8x8x8	52,00m + 19,00m
100 t Terex-Demag AC 100	2005	10x8x8	50,00m + 17,00m
100 t Terex-Demag AC 100-4	2009	8x8x8	50,00m + 18,00m + 1,50m
130 t Grove GMK 5130-1	2007	10x8x10	60,00m + 18,00m
140 t Terex-Demag AC 140	2006	10x8x10	60,00m + 2,50m
160 t Liebherr LTM 1160-5.1	2007	10x8x10	62,00m + 22,00m
200 t Terex-Demag AC 200-1	2008	10x8x10	68,00m + 17,00m + 2,20m
250 t Liebherr LTM 1250/1	2003	12x8x10	72,00m + 22,00m

LATTIC-BOOM CRAWLER CRANES

180 t Sennebogen 5500 Star Lifter 2007 52,30m + 52,30m

Tel: +49 2364 108203

Fax: +49 2364 15546

Mobile: +49 172 2332923

e-mail: info@stemick-krane.de

Internet: www.stemick-krane.de

M. STEMICK GMBH
Kran- u. Baumaschinenhandel, Import - Export
D-45721 Haltern / Germany

Import - Export

Used Cranes

Demag CC 2500-1

Year	2010
Capacity	500 t
Main boom	36 - 84 m
Luffer	24 - 84 m
Upper hours	10,843 h
Counterweight	40 t (CB) + 160 t



Tadano HK 70

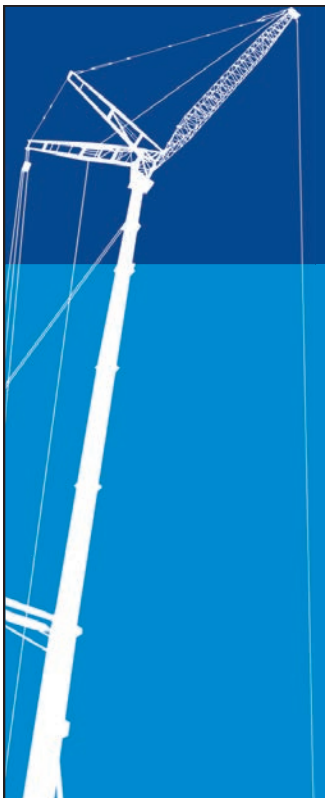
Year	2009
Capacity	70 t
Main boom	11 - 44 m
Boom extension	11 - 16 m
Kilometers	107,000 km
Upper hours	9,600 h
Counterweight	15 t



Your contact:
usedcranes@tadano.com



© Tadano Ltd. 2020.



INTERNATIONAL SALES & BARE RENTAL SOLUTIONS

ALL TERRAIN CRANES

1x	130 t	Liebherr LTM 1130-5.1	NEW!
1x	130 t	Grove GMK 5130-2	2014
1x	160 t	Liebherr LTM 1160-5.2	NEW!
1x	160 t	Demag AC 160-5	2019
1x	170 t	Grove GMK 5170-1	2016
2x	220 t	Tadano ATF 220G-5	2012/2016
1x	220 t	Liebherr LTM 1220-5.2	2016
1x	250 t	Demag AC 250-5	2019
2x	250 t	Grove GMK 5250L	2016/2017
1x	300 t	Grove GMK 6300L	2016
1x	750 t	Liebherr LTM 1750-9.1	NEW!

CRAWLER CRANES

1x	400 t	Demag CC 2400 SL	2009
1x	650 t	Demag CC 3800 SL + LUFFER	2013
1x	650 t	Demag CC 3800 SL + WIND	2015

PLEASE VISIT OUR NEW WEBSITE

Toermalijnring 2200
3316 LC Dordrecht
The Netherlands
info@hovago.com
+31(0)10 892.04 75



Established in 1946
Member of the ProDelta group
www.hovago.com

HOVAGO
Your global cranes partner

JRL LONDON TOWER CRANES

HIRE & SALES



YONGMAO

SAEZ
CRANES

TEREX | COMEDIL



Worldwide Sales
Nationwide Hire
Spare Parts Supply
Maintenance & Technical Support

ALL CRANES AVAILABLE
Luffing & Saddle Jibs
Jost Saez
Yongmao Comedil



4 Elstree Way, Borehamwood, Hertfordshire, WD6 1RN - Tel: 020 8327 4060 - Fax: 020 8236 9391
sales@londontowercranes.co.uk - Web: www.londontowercranes.co.uk - ISO 9001 Registered Company



MAMMOET
Used equipment

+31 (0) 10 2042 618

usedequipment@mammoet.com



Terex-Demag AC 700. YOM 2009
Location: Netherlands



Scheuerle 3+bed+5. YOM 1989
Location: USA South



Terex Counterweight Carrier (CC3800-SL)
YOM 2015 Location: Edmonton, Canada



Volvo FMX 440. YOM 2015
Location: APAC



Sennebogen 5500 SL. YOM 2007
Location: Malaysia



Hyspec SPMT's 116 lines + 9 PPU's.
All Retrofitted in 2016
Location: Malaysia and The Philippines.



Tadano GR 300 EX. YOM 2009
Location: Netherlands



Sennebogen 3300 SL. YOM 2005
Location: Netherlands



Kenworth T800 Boom Truck. YOM 2006
Location: Edmonton, Canada

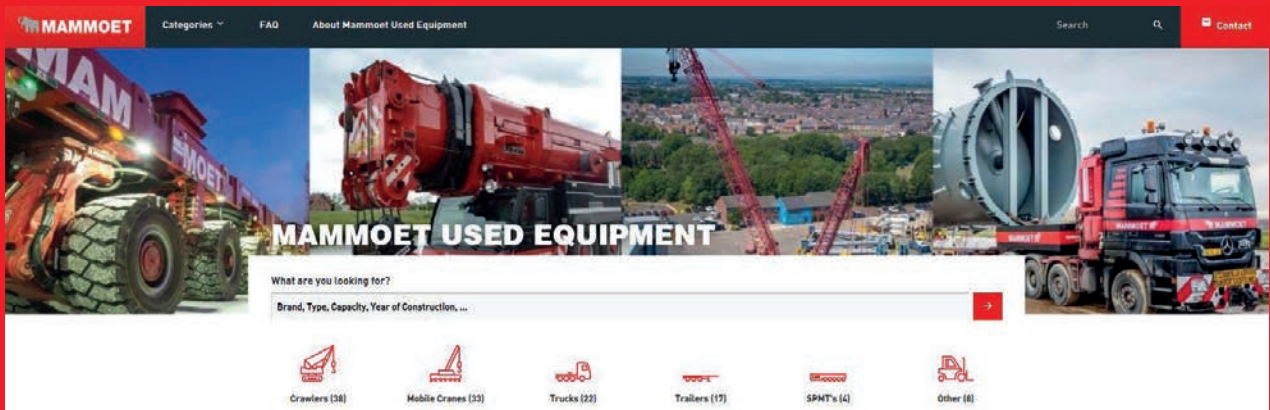


FAUN HZ40.45-45. YOM 1989
Location: Hixon, United Kingdom



2 X Goldhofer THP/SL 6-line.
YOM 2008 Location: APAC

MAMMOET SMARTER, SAFER, STRONGER
www.MammoetUsedEquipment.com



CRANES AND EQUIPMENT FOR SALE OR RENT • CRANES AND EQUIPMENT FOR SALE OR RENT • CRANES AND EQUIPMENT FOR SALE OR RENT • CRANES AND EQUIPMENT FOR SALE OR RENT

+31 30 774 0004 www.re-move.com



- ↑ Leasing
- ↑ Bare Rental
- ↑ Sale & Lease Back

OUR WORLDWIDE FLEET:

- Mobile Cranes 55 – 750ton
- Crawler Cranes 80 – 1.350ton
- Rough Terrain Cranes 55 – 100ton
- Mobile Tower Cranes 4 – 6 axles
- Heavy Transport Equipment

GLOBAL CAPACITY PROVIDER FOR HEAVY LIFT AND TRANSPORT EQUIPMENT

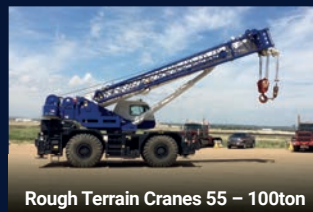
CRANES 4 CRANES



Mobile Cranes 55 – 750ton



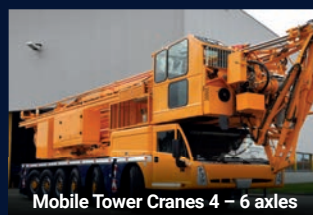
Crawler Cranes 80 – 1.350ton



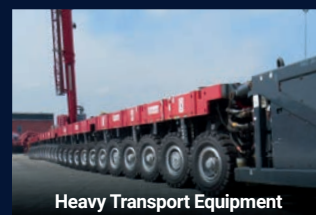
Rough Terrain Cranes 55 – 100ton

CRANES AND EQUIPMENT FOR SALE

CHECK OUR WEBSITE FOR LATEST STOCK



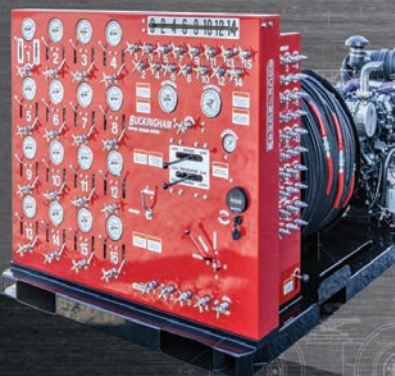
Mobile Tower Cranes 4 – 6 axles



Heavy Transport Equipment

WWW.CRANES4CRANES.COM

SYNCHRONIZED HYDRAULIC LIFTING AND MOVING SYSTEMS



BUCKINGHAM

STRUCTURAL MOVING EQUIPMENT

www.BuckinghamEquipment.com

(610) 488-8969



Computer-Controlled Electronic Dolly Steering System



HIGH

CAPACITY CRANE PADS



FROM **OUTRIGGER PADS**


Huge range of crane pads in stock and ready for next day delivery when you order by 2pm

01952 671403
outriggerpads.co.uk

BE CONFIDENT. BUY QUALITY.

CRANES AND EQUIPMENT FOR SALE OR RENT

CRANES AND EQUIPMENT FOR SALE OR RENT • CRANES AND EQUIPMENT FOR SALE OR RENT • CRANES AND EQUIPMENT FOR SALE OR RENT • CRANES AND EQUIPMENT FOR SALE OR RENT



HOMAR B.V.

Import - Export Hydraulic and Lattice Boom Cranes

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

TELESCOPIC CRANES						
Capacity	Manufacturer	Type	Year	Drive/Steering	Boom/lift (m)	Delivery
450 t	Liebherr	LTM 1450 N	1992	16 x 8 x 14	50 / 61 / 84	direct
400 t	Liebherr	LTM 1400	1988	16 x 8 x 12	50 / 61 / 84	direct
250 t	Liebherr	LTM 1250/1	2003	12 x 8 x 10	72 / 22	direct
200 t	Terex-Demag	AC 200-1	2008	10 x 8 x 8	66 / 17+1,7	direct
200 t	Liebherr	LTM 1200	1993	12 x 8 x 8	54,5 / 22	direct
200 t	Liebherr	LTM 1200	1990	12 x 8 x 8	54,5 / 22	direct
160 t	Liebherr	LTM 1160-5.1	2007	10 x 8 x 10	62 / 22	direct
160 t	Liebherr	LTM 1160/2	2000	10 x 8 x 10	60 / 22	direct
140 t	Terex-Demag	AC 140 Compact	2012	10 x 6 x 8	60 / 17	direct
140 t	Terex-Demag	AC 140	2006	10 x 8 x 8	60 / 2.5+run.	direct
130 t	Grove	GMK 5130-1	2007	10 x 8 x 10	60 / 18	direct
120 t	Liebherr	LTM 1120/1	1998	10 x 8 x 10	56 / 21	direct
100 t	Terex-Demag	AC 100-4	2009	8 x 8 x 8	50 / 18+1,5+r.	direct
100 t	Terex-Demag	AC 100-4	2008	8 x 8 x 8	50	September
100 t	Liebherr	LTM 1100-5.2	2007	10 x 6 x 8	52 / 19	direct
100 t	Terex-Demag	AC 100	2006	10 x 8 x 8	50	direct
100 t	Terex-Demag	AC 100	2005	10 x 6 x 8	50 / 17	direct
100 t	Liebherr	LTM 1100-4.1	2005	8 x 8 x 8	52 / 19	direct
100 t	Liebherr	LTM 1100-4.1	2004	8 x 8 x 8	52 / 19	direct
100 t	Demag	AC 100	2000	10 x 6 x 8	50,2 / 17	direct
90 t	Tadano-Faun	ATF 90 G-4	2008	8 x 8 x 8	51,2 / 1,6	direct
90 t	Liebherr	LTM 1090/2	1997	8 x 6 x 8	52 / 19	direct
80 t	Terex-Demag	AC 80-2	2007	8 x 8 x 8	50 / 17,6	direct
80 t	Terex-Demag	AC 80-2	2007	8 x 8 x 8	50 / 17,6	direct
80 t	Faun	ATF 80-4	2006	8 x 8 x 8	48,5 / 16	direct
80 t	Grove	GMK 4080-1	2006	8 x 6 x 8	51 / 15	August
80 t	Grove	GMK 4080-1	2006	8 x 6 x 8	51 / 15	direct
80 t	Grove	GMK 4075-1	2005	8 x 6 x 8	43,2 / 17	direct
80 t	Demag	AC 205	1996	8 x 8 x 8	50 / 17,6	direct
70 t	Liebherr	LTM 1070-4.1	2005	8 x 6 x 8	50 / 16	direct
70 t	Liebherr	LTM 1070/1	1996	8 x 8 x 8	40 / 15,8	direct
70 t	Liebherr	LTM 1070/1	1996	8 x 8 x 8	40 / 15,8	direct
70 t	Liebherr	LTM 1070	1990	8 x 8 x 8	42 / 18	direct
65 t	Tadano Faun	ATF 65 G-4	2006	8 x 6 x 8	44 / 16	direct
65 t	Tadano Faun	ATF 65 G-4	2006	8 x 6 x 8	44	direct
60 t	Terex-Demag	AC 60-3 L	2008	6 x 6 x 6	44	direct
60 t	Liebherr	LTM 1060/2	2005	8 x 6 x 8	42 / 17	direct
60 t	Liebherr	LTM 1060/2	2004	8 x 6 x 8	42 / 17	direct
60 t	Liebherr	LTM 1060/2	2004	8 x 6 x 8	42 / 17	direct
60 t	Faun	ATF 60-3	2004	6 x 6 x 6	40,2 / 16	direct
60 t	Faun	ATF 60-3	2003	6 x 6 x 6	40,2 / 16	direct
60 t	Liebherr	LTM 1060/2	2003	8 x 6 x 8	42 / 17	direct
60 t	Liebherr	LTM 1060/2	2002	8 x 6 x 8	42 / 17	direct
60 t	Faun	ATF 60-4	2000	8 x 6 x 8	40,2 / 16	direct
55 t	Grove	GMK 3055	2006	6 x 6 x 6	43 / 15	August
55 t	Grove	GMK 3055	2006	6 x 6 x 6	43 / 15	direct
55 t	Liebherr	LTM 1055-3.1	2005	6 x 6 x 6	40 / 16	direct
55 t	Liebherr	LTM 1055-3.1	2005	6 x 6 x 6	40 / 16	direct
55 t	Liebherr	LTM 1055/1	2004	6 x 6 x 6	40 / 16+2,5+run.	direct
55 t	Liebherr	LTM 1055/1	2002	6 x 6 x 6	40 / 16 + 2,5	direct

More machines, crane details and photos on: www.homar.nl

ONLINE AUCTION

Mitsubishi Hitachi Power Systems Africa (PTY) Ltd

Mitsubishi Hitachi Power Systems Africa (PTY) Ltd - Sale 8



TADANO ROUGH TERRAIN MOBILE CRANES




Featuring:

Tadano GR - 550EX, 55 Ton, Rough Terrain Mobile Crane (2009)
Tadano GR - 700EX, 70 Ton, Rough Terrain Mobile Crane (2010)

Auction Closing: Wednesday, 26 August 2020 from 14:00 ZA
Asset Locations: Delmas, Mpumalanga and Lephalale, Limpopo - South Africa
Viewing Details: By appointment (Mon - Thurs) from 09:00 - 15:00 ZA
Contact Person: kyle.botha@liquidityservices.com
 +27 (0)72 230 2915 • +27 (0)21 702 3206

For more info: www.go-dove.co.za





Terms and conditions available on our website. Refundable registration fee and FICA documentation required to participate. AUCTIONEER: GoIndustry DoveBid S.A. (Pty) Ltd.

For a wide variety of used cranes look no further than...



KHL Crane Market

The online market place for buyers and sellers of used cranes

The unique Crane Market package offers you three ways to sell used cranes in one simple to use package.

Online
 khcranemarket.com: unlimited crane listings, pictures, detailed descriptions, contact details and company logo

Digital
 e-mail marketing: in the KHL Crane Market e-Newsletter. Your featured cranes in an e-newsletter sent to more than 29,000 potential buyers worldwide every two weeks

Print
 A quarter page advertisement in the Marketplace section of *International Cranes and Specialized Transport*



khcranemarket.com

To find out more see the website or contact Bev O'Dell
e-mail: bev.odell@khl.com • tel: 816-886-1858







UCM HOLLAND

USED CRANES AND PARTS - SHIPPING WORLDWIDE



Axles



Telescope Cylinder



Jibs



Cabins



BIG SALE UP TO 30% OFF



Winches



Slewrings



Engines



Gearboxes

For more crane parts you can visit our website @ ucmholland.com



SCAN ME

- +31655886363
- @UCMHolland
- @ucmholland
- @UCM Holland

BIGGER, HIGHER, STRONGER

High reach

- 52 m main boom / 15 m jib

Maximum flexibility

- travel with load

Easy set-up

- self assembly system

130t

MOVE
BIG
THINGS



Telehandler
5,5 t

Balancer
130-300 t

Material Handling
17-420 t

Duty Cycle Crane
13,5-300 t

Crawler Crane
50-300 t

Telescopic Crane
16-130 t

Mobile Harbour Crane
300 t

Bernhard Kraus

SENNEBOGEN
Maschinenfabrik GmbH
94315 Straubing, Germany
bernhard.kraus@sennebogen.de

SENNEBOGEN

