

INTERNATIONAL

NOVEMBER 2014
www.craneworld.com
A KHL Group publication

cranes

AND SPECIALIZED TRANSPORT

Reaching new heights

bC India preview

Below the hook

The Knowledge

CATAP review

ICm20

SPMT



THE MAGAZINE FOR EQUIPMENT USERS AND BUYERS

XCMG ranks 1st in China and 5th in the world in construction machinery industry. With up to 280 dealers, XCMG's business covers 169 countries and regions. XCMG is looking for professional distributors to act as authorized dealers for XCMG brand machineries, including concrete machinery, tower crane, heavy duty truck and special truck, in following areas:



1. Concrete machinery: Thailand, Vietnam, Burma, Mongolia, The United Arab Emirates, Saudi Arabia, Nigeria, Kenya, Russia, Kazakhstan, Uzbekistan, Tajikistan, Turkmenistan.

Contact : Mr. Denny Duan, XCMG Imp& Exp co., Ltd.
TEL : +86 516 87892033 87892301
FAX : +86 516 87892035
EMAIL : concretemachinery@xcmg.com
duancw@xcmg.com



2. Heavy duty truck and mining truck: Vietnam, Burma, Laos, Cambodia, Thailand, Philippines, Indonesia, Saudi Arabia, Mongolia, Kazakhstan, Algeria, Nigeria, Sudan, Kenya, Tanzania, Ethiopia, Peru, Argentina, Columbia, Ecuador, Mexico

Contact : Mr. Jack Gao, XCMG Imp& Exp co., Ltd.
TEL : +86 25 52359925
EMAIL : dutytruck@xcmg.com
Haowei.gao@xcmg.com



3. Tower crane: Indonesia, Malaysia, Thailand, Philippine, Burma, South Korea, Mongolia, The United Arab Emirates, Kuwait, Saudi Arabia, Algeria, Russia, Kazakhstan.

Contact : Mr. Frank Liu, XCMG Imp& Exp co., Ltd.
TEL : +86 516 87767266
FAX : +86 516 87763896
EMAIL : towercrane@xcmg.com
hulin@xcmg.com



4. Truck-mounted crane, aerial working platform, tow truck, sanitation truck and bridge inspection platform: Saudi Arabia, Algeria, Angola, Mexico, Kazakhstan, Philippines, Indonesia, Russia, Columbia, Mozambique

Contact : Mr. Henry Shen, XCMG Imp& Exp co., Ltd.
TEL : +86 516 87892887 87892802
FAX : +86 516 87892802
EMAIL : specialtruck@xcmg.com
shenyu@xcmg.com



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



European partner: ESTA

Approved media partner



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
e-mail: cranes@khl.com

USA OFFICE

KHL Group Americas LLC
3726 E. Ember Glow Way,
Phoenix, AZ 85050, USA.
Ph: +1 480 659 0578, Fax: +1 480 659 0678
e-mail: americas@khl.com

SOUTH AMERICA OFFICE

KHL Group Américas LLC
Manquehue Norte 151, of 1108. Las Condes,
Santiago, Chile
Tel: +1 562 2885 0321
e-mail: cristian.peters@khl.com

CHINA OFFICE

Beijing Representative Office
Room 768, Poly Plaza, No.14,
South Dong Zhi Men Street,
Dong Cheng District, Beijing, P.R. China
Tel: +86 10 6553 6676, Fax: +86 10 6553 6690
e-mail: cathyyao@khl.com

UK/NORDIC NATIONS

John Austin, advertisement manager
UK Head Office
Tel: +44 (0)1892 786220
e-mail: john.austin@khl.com

GERMANY/SPAIN/AUSTRIA/ SWITZERLAND/CENTRAL EUROPE

Mike Posener, UK Head Office
Tel: +353 86 043 1219, Fax: +44 (0)1892 786258
e-mail: mike.posener@khl.com

THE NETHERLANDS

Arthur Schavemaker
Tel: +31 (0)547 275005, Fax: +31 (0)547 271831
e-mail: arthur@kenter.nl

FRANCE/BELGIUM/LUXEMBOURG

Hamilton Pearman
Tel: +33 (0)1 4593 0858, Fax: +33 (0)1 4593 0899
e-mail: hpearman@wanadoo.fr

ITALY

Fabio Potestà
Tel: +39 010 570 4948, Fax: +39 010 553 0088
e-mail: info@mediapointsrl.it

KOREA

CH Park
Tel: +82 (0)2 730 1234, Fax: +82 (0)2 732 8899
e-mail: mci@unitel.co.kr

TURKEY

Emre Apa
Tel: +90 (0)532 234 36 16
Fax: +90 (0)216 302 08 10
e-mail: emre.apa@apayayincilik.com.tr

CHINA

Cathy Yao
Tel: +86 (0)10 6553 6676, Fax: +86 10 6553 6690
e-mail: cathyyao@khl.com

JAPAN

Akiyoshi Ojima
Tel: +81 (0)3 3261 4591, Fax: +81 (0)3 3261 6126
e-mail: ojima@media-jac.co.jp

USA/CANADA

Matt Burk
Tel: 312-496-3314, Fax: 312-624-8673
e-mail: matt.burk@khl.com

Bev O'Dell

Tel: +1 (816) 886 1858, Fax: +1 (816) 886 1884
e-mail: bev.odell@khl.com



and Manitex were both well up into double figures.

Star performers in the 2014 *ICm20*, however, are the Japanese manufacturers. All have benefited from the surge in demand for equipment in the home market following the 2011 earthquake. Tadano sales for the 12 month financial year ended 31 March 2014 were up nearly 35 % on the year before. Hitachi Sumitomo was up 34 % while both Kobelco and Furukawa Unic were up nearly 25 %.

On the other side of the coin, other than ZPMC, which was up 15 %, all the previously strengthening Chinese manufacturers showed a decline in sales. Hardest hit was XCMG, down nearly 28 % from US\$ 2.2 to \$ 1.6 billion. Zoomlion was down 11 % and Sany less so at 5 %. For the full rundown on the *ICm20* see the feature on page 32.

Still holding up well among the western manufacturers is Palfinger, where record figures have been a regular occurrence, the latest being no exception. In the *ICm20*, growth at Palfinger was 11 % over the previous year and that double digit rise has been extended, to 13.7 %, for the first half of 2014.

Moving forward, however, to the latest results, for the third quarter of 2014, the growth seen in the *ICm20* has reversed both at Manitowoc and Terex where year-on-year sales were down more than 5 % and 7 %, respectively. It is unsurprising that their share prices were also down. Recent world events have begun to have a negative impact on the stock markets and the *IC* Share Index of crane manufacturers' share prices was down overall last month.

As this issue went to press, however, we were still eagerly awaiting the latest figures from Tadano, due out later in November, to see if the positive trend there continues.

ALEX DAHM

Editor



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

EDITOR'S VIEW

KHL CRANES



Worldcrane week
www.worldcraneweek.com

WEBSITE

CRANES & TRANSPORT khl
www.khl.com/cranes
KHL Crane Market
www.khlcranemarket.com

EVENTS

www.khl.com/events



MEMBER OF



Experience the Progress.



www.liebherr.com
info.lbc@liebherr.com
www.facebook.com/LiebherrConstruction

LIEBHERR

The Group

IN THIS ISSUE

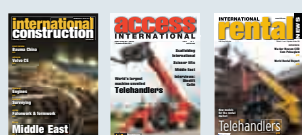
ON THE COVER



Crane company Clausen climbed the Swiss Alps with a Liebherr LTR 1060 to help extend the Gornergrat railway. See the story on page 10

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*, go to: www.khl.com/subscriptions or call +44 1892 784088 for details.



International Cranes and Specialized Transport is a monthly publication with a worldwide circulation. The annual airmail subscription rate is £195, US\$310, €235. *International Cranes and Specialized Transport* is published on the 15th of each month.

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 2014
ISSN: 1747-700X

Printed by: Garnett Dickinson Print, UK

FEATURES

ROUGH TERRAIN CRANES 15

The rough terrain crane is a versatile, robust and cost effective tool. *Laura Hatton* reports

SITE REPORT 21

Sarens put the first unit of the new Terex Boom Booster to work in the Netherlands. *IC* reports

SPMT 23

Transport companies are increasingly looking to invest in self propelled modular transporters. *Laura Hatton* reports

BELOW THE HOOK 29

Below the hook equipment is being customised to meet safety requirements. *Laura Hatton* reports



REGULARS

NEWS 6

BUSINESS 13

SPECIALIZED TRANSPORT NEWS 26

THE KNOWLEDGE 35

EQUIPMENT AND ACCESSORIES 53

BACK PAGE 55



ICM20 32

As an overall total this year's ICM20 ranking gives an impression of stability and little change. *IC* reports

CATAP REVIEW 41

A roundup from the first CATAP conference, Crane Safety Symposium and Crane Carnival in Singapore Crane Fair. Alex Dahm was there

BC INDIA PREVIEW 45

The third bC India exhibition promises plenty of new machines. *IC* reports

SC&RA

SC&RA COMMENT 47

Comment from *Joel Dandrea*, SC&RA executive vice president

SC&RA NEWS 49

The 2014 Crane & Rigging Workshop in Texas, USA, saw industry leaders and professionals from around the world gather at the Sheraton Dallas Hotel. SC&RA reports

KHL TEAM

EDITOR

Alex Dahm
e-mail: alex.dahm@khl.com
Tel: +44 (0)1892 786206

ASSISTANT EDITOR

Laura Hatton
e-mail: laura.hatton@khl.com
Tel: +44 (0)1892 786208

GROUP EDITORS

Lindsey Anderson
Lindsay Gale
Sandy Guthrie
Christián Peters
Murray Pollok
D Ann Shiffer
Chris Sleight
Helen Wright
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

PRODUCTION ASSISTANT

Louise Kingsnorth
e-mail: louise.kingsnorth@khl.com
Tel: +44 (0)1892 786246
SALES MANAGER
John Austin
e-mail: john.austin@khl.com
Tel: +44 (0)1892 786220
CLASSIFIED MANAGER
Paul Watson
e-mail: paul.watson@khl.com
Tel: +44 (0)1892 786204
FINANCIAL CONTROLLER
Paul Baker
FINANCE
Gillian Martin
e-mail: gillian.martin@khl.com
Tel: +44 (0)1892 786248
CREDIT CONTROLLER
Josephine Day
e-mail: josephine.day@khl.com
Tel: +44 (0)1892 786250

PRODUCTION ASSISTANT

Louise Kingsnorth
e-mail: louise.kingsnorth@khl.com
Tel: +44 (0)1892 786246
SALES MANAGER
John Austin
e-mail: john.austin@khl.com
Tel: +44 (0)1892 786220
CLASSIFIED MANAGER
Paul Watson
e-mail: paul.watson@khl.com
Tel: +44 (0)1892 786204
FINANCIAL CONTROLLER
Paul Baker
FINANCE
Gillian Martin
e-mail: gillian.martin@khl.com
Tel: +44 (0)1892 786248
CREDIT CONTROLLER
Josephine Day
e-mail: josephine.day@khl.com
Tel: +44 (0)1892 786250

BUSINESS DEVELOPMENT DIRECTOR

Peter Watkinson
CIRCULATION MANAGER
Hayley Gent
e-mail: hayley.gent@khl.com
Tel: +44 (0)1892 786233
OFFICE MANAGER
Clare Grant
Direct tel: +44 (0)1892 786201
e-mail: clare.grant@khl.com
EDITORIAL DIRECTOR
Paul Marsden
PUBLISHER
James King



The paper in this magazine originates from timber that is sourced from sustainable forests, managed to strict environmental, social, and economic standards. The manufacturing mill has both FSC & PEFC certification, and also ISO9001 and ISO14001 accreditation.

HIGHLIGHTS

■ Finnish contractor Hartela has signed a five-year co-operation agreement with rental company Ramirent in Finland to outsource its fleet of tower cranes. As part of the agreement, the companies said three Hartela employees would move to Ramirent. The news followed recent deals from Ramirent, including a three-year agreement with Sweden-based Skanska Maskin that makes Ramirent its preferred equipment rental partner, and a separate three-year agreement in Norway with Scandinavian contractor Veidekke.

■ Hiab, part of Cargotec, has signed an agreement with Gavelås Förvaltning to have a long-term distribution partnership in the Middle East. As a part of the transaction Hiab will sell Hiab Middle East LLC to Gavelås Förvaltning for an undisclosed sum. Greger Jacobson, Gavelås Förvaltning managing director, has worked within Cargotec for ten years. Greger Jacobson said, "I'm really looking forward to this opportunity as well as working with the dedicated and skilled team that we have in Middle East."

Constrained demand hits Manitowoc Cranes

Manitowoc said that revenue in its third-quarter result was hit by falling demand that prompted an update to its full-year outlook.

For the third-quarter 2014, net sales for Manitowoc Cranes was US\$ 569 million, down from the \$ 610 million in the third quarter of 2013.

Glen Tellock, Manitowoc chairman and chief executive officer, said, "Our third-quarter results remain challenged by a constrained demand environment globally. In the crane segment, sales were further impacted by the North American rough terrain

and boom truck markets, as well as weakness in the Latin America region. In addition, foodservice experienced weakness in select geographic regions, such as Russia and Asia Pacific, as well as certain product categories. Given these results, we are updating our full-year outlook for both cranes and foodservice.

In more detail, Tellock continued, "The continuing decline in the rough terrain and boom truck markets in North America and Latin America have continued to negatively impact our Crane segment performance.

However, we remain focused on the areas of the business within our control, which include executing our manufacturing initiatives and capturing purchasing savings as we strive for improved performance to close out the year. In addition, we will continue to drive cost-savings initiatives to mitigate weaker outlooks within select product categories and end markets."

For the full year, the company anticipates crane segment revenue to decline while it expects crane operating margins for full-year 2014 to be in the 7 % range.

New erection concept from Liebherr

Manufacturer Liebherr has developed a new system for erecting its 600 tonne capacity LR 1600/2 crawler cranes with long wind power boom systems.

Instead of using a large counterweight when erecting the boom systems, the new

concept uses an LTR 1220 telescopic crawler crane instead. According to the manufacturer, this way is more efficient, safer and reduces the amount of ballast that has to be transported.

The new concept was shown at a customer event at the Liebherr-Werk Ehingen factory in Germany. For the demonstration an LR 1600/2 was configured with an SL10DFB main boom system with a main boom measuring 153 metres long and a 12 m fixed jib. Normally to erect the boom, 350 tonnes of derrick ballast would be required. The ballast would then be reduced to 70 tonnes for hoisting the standard wind turbine components, and then returned to 350 tonnes when lowering the boom. In total, 350 tonnes of counterweight would need to be transported to site.

Using the LTR 1220 as the main counterweight would mean that only 70 tonnes of counterweight would be required for use as suspended ballast, as during the erection

and lowering of the boom system, an LTR 1220 telescopic crawler crane could be used. For the demonstration the LTR 1220 was attached to the boom using an adapter.

"After the erection process the crawler crane is detached again" the manufacturer said.

The new concept can be used for all long boom systems up to a length of 156 m with a 12 metre fixed jib. This applies both to the new SL10 and SL13 systems and also to the existing SL4 system.

Using the LTR 1220 as derrick ballast for erecting tall wind power systems on the LR 1600/2 lattice boom crawler crane



HIGHLIGHT

■ Crane and transport equipment manufacturer Hyva Group, based in the Netherlands, has introduced a new line of cranes. The range includes the 0.5 tonne metre HB10 FFB, the HB15 FFB, a 1 tonne-metre rated unit, for medium loads or multiple fruit collection, and the HB50 FFB, 4.8 tonne-metre rated, for heavy loads or bulk material handling. The models are designed for the agricultural market, and can be used with a hook or a range of lifting attachments, including forks, grabs or augers, the manufacturer said. The cranes are designed in accordance with EN12999 European standard, and are ISO9001 certified.

Tuksu Engineering and Construction in Singapore, is using a Sennebogen 690 HD crawler crane to help with the construction of the Sentosa Gateway Tunnel project. The Sentosa Gateway Tunnel is being built to help ease traffic on the island of Sentosa, south of Singapore. Work for the crawler includes lifting formwork and accessories for foundation piling weighing up to 90 tonnes. To help with the work it is fitted with two winches. Challenges include working in a narrow area and working between traffic. Sales and service partner, Aly Energy, has been helping with service and maintenance.



AmQuip acquired by Clearlake

Clearlake Capital Group, L.P. has completed its acquisition of AmQuip Holdings in the USA from a consortium of investors, including Altpoint Capital Partners LLC. AmQuip is a leading crane rental company in North America. Financial terms of the transaction were undisclosed.

"We are excited to partner with Clearlake, which boasts a successful track record of backing, supporting and growing companies that provide services to the energy and industrial end markets," said Albert Bove, AmQuip CEO.

"Clearlake's operational expertise and financial resources will help solidify AmQuip's position as a leading North American

lifting solutions provider," Bove continued.

José Feliciano, Clearlake Capital Group founding partner, said, "AmQuip's strong focus on safety, customer service, and attracting, developing, and retaining skilled employees has positioned it as a leader in the crane rental space. We are excited to partner with the company's outstanding executive and professional team to grow AmQuip as a platform for industry consolidation, both organically and through acquisitions."

In addition to Bove and Feliciano, Arta Tabae and Colin Leonard of Clearlake will join the AmQuip board of directors.

Terex hit in the crane sector as revenue falls

Challenges in the crane sector and unfavourable exchange rates pushed Terex's profits lower in Q3, despite an increase in revenue.

Terex Cranes was the only Terex division down in the third quarter. Revenue was down 7 % to US\$ 420 million. Operating income came in at US\$ 21.8 million, a 25 % fall compared to a year ago.

Ron DeFeo, Terex chairman and CEO said, "Our results for the third quarter were in line with the revised guidance communicated in mid-September. Our Cranes segment met our lowered expectations for the quarter as end markets remain challenged. However, despite continued market environment challenges, we are anticipating sequential improvement from Cranes in the fourth quarter.

Revenue in the Materials Handling & Port Solutions

segment, which includes Gottwald port cranes and Demag industrial cranes, rose 2 % to US\$ 468 million.

Across the corporation, Terex said that its overall order backlog was 22.5 % higher than a year ago at US\$ 2.2 billion. Having said that, the company was cautious about its outlook.

"Predicting market improvements has been challenging and in the near term we will be assuming flat markets and only performance improvements that we can control," DeFeo added. "Consequently, we now expect our annual outlook for earnings per share to be at or near the bottom of our previously announced range of \$2.35 to \$2.50, excluding restructuring and other unusual items, on net sales of between \$7.3 billion and \$7.5 billion."

KHL.COM

■ SMALL IS BEAUTIFUL FOR ESTA



The winners of the 2014 ESTA Awards for lifting and transport at the ESTA Users Night and Awards Dinner 2014

Smaller companies are being encouraged by ESTA to show off their professionalism and skills. ESTA, the European Association of Abnormal Road Transport and Mobile Cranes, is keen for small and medium-sized lifting and transport companies to enter next year's ESTA awards.

Søren Jansen, ESTA director, said, "These awards are about the very best in the industry, not necessarily the biggest. We want the whole industry to celebrate their successes."

Categories include best crane, transport and SPMT jobs, along with ones for combined techniques, safety and innovation.

The awards will be presented at ESTA's Users' Night in Paris on Thursday 23 April, during the Intermat exhibition. The deadline for entries is 17 January 2015. For further information see: www.khl.com/esta and next month's issue for a full update

■ VOTE ONLINE FOR YOUR IC TOPLIFT 2014

This year's entries for the IC Top Lift 2014 competition is a selection of impressive lifts completed in the last 12 months. Pick your favourite from our selection of 10 outstanding lifting projects. For the full list of entries and the voting form visit the KHL website www.khl.com and the TopLift 2014 news story is at <http://bit.ly/1uu2TYD>. To register your vote please complete and return the form by Monday 20th November.

HIGHLIGHTS

■ International heavy lift and transport specialist Mammoet has replaced a 2,100 tonne bridge over a highway in Ottawa, Ontario, Canada, in a record time of 2.5 hours. The replacement of the 85 metre long Lees Avenue Bridge in Ottawa is the heaviest one to be carried out in Ontario. Mammoet was commissioned by Tomlinson Ltd to carry out the project. The bridge was installed using 96 axles of self propelled modular transporter (SPMT), built and designed by Mammoet and specialized trailer manufacturer Scheuerle, Mammoet said. Challenges during the lift were presented by the curved design of the bridge. This made it difficult to align the transporters beneath the bridge, a spokesperson said. The move was also carried out over a curved section of the motorway, adding to the challenge. The bridge was installed in 2.5 hours, beating the expected time frame of between four and six hours.

Steve Cripps, professional engineer and director at the Rail Implementation Office for the City of Ottawa, said, "This heavy lift project was an excellent example of the teamwork required to deliver the Highway 417 component of the OLRT Project. This project was another first in North America; the heaviest lift of a multi-span structure over a freeway to date."

OSHA adds three years to certification deadline

The Occupational Safety and Health Administration (OSHA) in the USA has issued a final rule to extend both the crane operator certification deadline and the existing employer duty by three years.

The requirements for the Cranes and Derricks in Construction final rule, published on 9 August 2010, proposed that the certification requirement deadline was extended by three years to

10 November 2017.

The rule also extends by three years the employer's responsibility to ensure that crane operators are competent to operate a crane safely. As this issue went to press there was a strengthening coalition of associations and other industry stakeholders opposing the extension of the deadline.

During the three-year period, OSHA will address operator qualification

requirements for the cranes standards, including the role of operator certification, the statement said. The final cranes and derricks rule required crane operators on construction sites to meet one of four qualification certification options by 10 November 2014.

The process of developing a standard to ensure crane operator qualifications has already begun, a spokesperson said.

Multi-billion project for Universal Cranes

Australian crane rental company Universal Cranes has put two 120 tonne capacity Grove rough terrain cranes to work on a multi-billion liquefied natural gas (LNG) construction project in Darwin, northern Australia.



The main contractor for the Ichthys LNG project is Leighton Contractors. The two Grove RT9130E-2 cranes will be on site for two years. Work for the models includes installing underground piping and equipment at the plant.

Challenges will include difficult weather conditions, including high temperatures, heavy rain and difficult terrain. Darwin Crane and Machinery

Services handles servicing and repair work.

Nick Morris, engineering and sales manager at Universal Cranes, said, "The cranes are used day in, day out to perform a huge variety of lifts so they need to be easy to set up and efficient."

The total cost of the Ichthys LNG project is expected to be more than AU\$10 billion (US\$ 8.8 billion).

TOPICS CONFIRMED FOR ITC 2015

Guidelines from FEM on tower crane foundation loads is the topic of the latest presentation confirmed for the 2015 International Tower Cranes (ITC) conference in London, UK.



Making the presentation at ITC 2015 will be Arnaud Miton, chairman of the FEM (Fédération Européenne de la Manutention) committee that wrote new guidelines. Miton is heavily involved in the development of standards for tower cranes, being chairman of the calculation sub-group at FEM PG CLE THC; chairman of tower crane safety at CEN/TC147/WG12; and a member of other working groups within ISO, CEN and national committees.

Organised by International Cranes and Specialized Transport and its publisher KHL Group, ITC 2015 will be held at the Millennium Gloucester Hotel in west London, UK, on 27 and 28 May. It will start with a networking reception on the evening of 27 May, followed by a full-day conference programme on the 28th.

The conference will include presentations on tower crane innovations, rental trends, project reports and safety issues.

An invitation to submit proposals for presentations will remain open until the end of 2014. More information on the conference will be published as it becomes available at: www.khl.com/itc



A new Barge Master BM-T40 system motion compensated knuckle boom crane on a pedestal has been installed on the new Wagenborg *Walk-to-Work* vessel. The vessel was designed and built by Royal Niestern Sander. The vessel can accommodate 20 crew and 40 service technicians. The T40 Barge Master system

can transfer materials in seas with wave heights of up to 3 metres. The crane has a 15 tonne capacity and can be used for maintaining wind turbines or unmanned platforms. The T40 is based on the Barge Master T700. Roll, pitch and heave are compensated, while surge, sway and yaw are fixed, a spokesperson said.

BEYOND EXPECTATION

Construction machinery manufacturer
with a complete range of products



ZOOMLION

**Bauma
China 2014**

Booth No.

A60/B60/A61/A66/A67

25-28 NOV. Shanghai

Find more at en.zoomlion.com

Copyright © 2014 Zoomlion group. All rights reserved.



Ski slope trek for Clausen

Crane company Clausen, based in Brig, Switzerland, used a Liebherr LTR 1060 to help extend a tunnel on the Gornergrat railway high up in Zermatt in the Swiss Canton of Wallis.

The Gornergrat railway is the second-highest mountain railway in Europe. It is being extended to accommodate a new downhill ski run.

The site of the tunnel build is 2,020 metres above sea level. To get to the site, the crawler was transported on a low loader to an altitude of 1,840 m above sea level. Company owner Geri Clausen then manoeuvred the crane the final 920 m to the site.

Challenges along the route include gravel tracks with tight bends and gradients of up to 40 %, a spokesperson

said. To prevent the crawler tipping over along the route, calculations to determine its centre of gravity were carried out. As a result, the crawler travelled without ballast and at a gross weight of 38 tonnes.

To manoeuvre the crawler around the tight bends, one metre lengths of square timber were placed under the inner crawler chains to act as pivots, a spokesperson added.

Another challenge was keeping the temperature of the gearbox and rollers down along the route. To achieve this, the oil level was slightly lowered in the gearboxes. This also helped to reduce splashing losses caused by the oil being swirled around, a spokesperson added. It took two hours to complete the journey.



The LTR 1060 handled gradients of up to 40 per cent going uphill to the site

HIGHLIGHTS

■ The Port of Everett seaport in the USA will add a 165 US ton (150 tonne) capacity Terex G HMK 7608 mobile harbour crane to increase its port capacity. The model, which be added in 2015, is part of a US\$ 1.5 million investment from the Port Commission. The G HMK 7608 will help the port handle over dimensional cargoes. Carl Wollebek, Port of Everett chief operating officer, said, "We are investing in our infrastructure and cargo handling equipment to continue with our reputation of safe and excellent service, quick and efficient turnaround times and huge lift capacity. With the addition of the GHMK 7608 and the authorised investments to upgrade our current mobile harbour crane, we will continue to be the preferred port of call for the construction and energy industries."

Following the new addition, the port will have two harbour cranes, which will work in tandem and three 45 tonne Hyster reach stackers.

Grand Parkway for Zachry-Odebrecht

Construction company Zachry-Odebrecht Parkway Builders (Zachry-Odebrecht), has begun the construction of a section of the 184 mile (300 km) Grand Parkway highway in the USA.

Once complete the Texas Department of Transportation's Grand Parkway will form a loop for the greater Houston, Texas, area in Harris and Montgomery Counties, a

spokesperson said.

Zachry-Odebrecht is a joint partnership between Zachry Construction Corporation of San Antonio, Texas, and Odebrecht Organization of Salvador, Bahia, Brazil. The company was awarded a US\$ 1.043 billion contract to complete a 38 mile section of the Grand Parkway.

The build has a 30 month schedule. More than 120 bridges will be built along the

38 mile (62 km) section. To help with the construction, Zachry-Odebrecht is using 20 Link-Belt cranes. Models on site include six, 60 tonne capacity, RTC-8065 Series II rough terrain cranes, eight 80 tonne capacity RTC-8080 Series rough terrains and six 70 tonne capacity TCC-750 telescopic boom crawler cranes.

The cranes are being used for a number of jobs, including assembly, loading and unloading bridge forms. Tasks include placing 6.8 tonne flare cap forms at a height 10.6 m and at radii up to 15.2 m. The RTC-8080 Series II is also being used to install false work forms that weigh up to 12 tonnes and measure 12.1 m long.

Travis Mross, Zachry-Odebrecht construction manager, said, "The bridges can be up to 1,219 metres in length because of a wide river or low water crossing and also for planning of future multi-road placements."



A 70 tonne capacity Link-Belt TCC-750 telescopic crawler crane at work

BUILT FOR THE WAY YOU WORK



A Terex rough terrain crane provides the best crane features in a powerful, maneuverable package. It is the most versatile lifting tool on the jobsite.



Contact us to learn
how we can work for you.

www.terex.com/cranes



Quadstar 1100
110 USt (100 t) capacity

Designed with you in mind:

- ▶ Rugged axles and machine structure withstand challenging environments
- ▶ Cab design focused on operator comfort and ergonomics reduces fatigue and improves productivity
- ▶ Compact chassis and three steering modes offer excellent jobsite maneuverability
- ▶ Full power telescoping boom provides optimal control and lift capacity



RT 45



A 600



RT 100

Ask about our full range of rough terrain cranes



TEREX®

WORKS FOR YOU.™



Lifting your dreams

bauma

China 2014

25-28 November

SEE US AT BOOTH NO. C60

Economic and geopolitical tensions came to a head in October and these combined with tough market conditions to push crane manufacturers' shares lower.

CHRIS SLEIGHT reports

All shook up

Various economic and geo-political tensions have been simmering for several months but, up until mid-September, the world's stock markets seemed to be brushing them off. Last month, however, saw investor confidence finally take a knock and the markets plummeted as a result.

It is difficult to identify a single flashpoint, as issues such as the Ebola outbreak in West Africa, war with insurgents in the Middle East, weak growth and the threat of deflation in the Euro-zone and poor relations between the West and Russia over Ukraine have been rumbling along for months.

October, however, did see

the realisation that these are having an impact on economic growth. Both Chinese and US GDP figures for 2014 look like they will be affected, and it looks like there will be an impact on the already sickly Euro-zone economy.

New confidence

This triggered a month-long decline in the world's stock markets from mid-September to mid-October which, for example, saw the Dow fall from its previous level comfortably above the 17,000-point mark to the low 16,000s.

Although the peak-to-through fall over this period approached 10 % for some

indexes, there was a healthy rebound towards the end of October.

Better-than-expected financial results from a number of key companies helped to lift the spirits and restore some investor confidence.

As a result the Dow finished week 44 a marginal 0.73 % higher than week 39, and there was also an improvement for the Nikkei 225. Crane manufacturers, however, have not enjoyed the same rebound, and the IC Share Index was 4.77 % lower over the same period.

Lower sales

Unlike the earthmoving equipment sector, where companies like Caterpillar and Volvo Construction Equipment saw improvements in revenues and margins over the third quarter, crane manufacturers seem to have been hit harder by the slowdown in emerging economies.

This was certainly the case for Manitowoc and Terex, which had already issued warnings about lower than expected sales of cranes before the results season started.

These losses were offset a little by small gains for a handful of crane manufacturers, but by and large the sector was down in October. This included many of the large Chinese groups, which had offered a glimmer of hope in September.

OCTOBER IC SHARE INDEX

STOCK	CURRENCY	PRICE AT START	PRICE AT END	PRICE CHANGE	% CHANGE	PRICE 12 MTHS AGO	12 MTH % CHANGE
IC Share Index*		62.88	59.88	-3.00	-4.77	53.91	11.08
Legacy IC Share Index**		370.75	335.29	-35.46	-9.57	363.31	-7.71
Dow Jones Industrial Average		17071	17195	124	0.73	15509	10.87
FTSE 100		6637	6516	-120	-1.82	6706	-2.83
Nikkei 225		16174	16414	240	1.49	14088	16.51
Hitachi Construction Machinery	YEN	2208	2235	27	1.22	2145	4.20
Konecranes	€	20.95	22.19	1.24	5.92	24.47	-9.32
Kobe Steel	YEN	178	175	-3	-1.69	176	-0.57
Liugong	CNY	7.12	7.26	0.14	1.97	6.71	8.20
Manitowoc	US\$	24.15	19.85	-4.30	-17.81	19.74	0.56
Palfinger	€	25.05	18.10	-6.96	-27.76	26.40	-31.46
Sany Heavy Industry	CNY	5.85	5.98	0.13	2.22	7.20	-16.94
Tadano	YEN	2019	1637	-382	-18.92	1179	38.85
Terex	US\$	32.36	27.38	-4.98	-15.39	35.59	-23.07
XCMG	CNY	8.89	8.63	-0.26	-2.92	7.85	9.94
Yongmao Holding	SGD	0.20	0.16	-0.05	-22.50	0.20	-22.50
Zoomlion	CNY	4.89	4.87	-0.02	-0.41	5.45	-10.64

*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	6.1542	6.112	-0.0422	-0.69	6.08	0.48
€	0.7883	0.7959	0.0076	0.96	0.7237	9.96
Yen	109.41	111.24	1.83	1.67	97.02	14.65
UK£	0.6148	0.6251	0.0103	1.68	0.6172	1.28

Period: Week 39 to 44

**Just because you're not on site,
it doesn't mean the job is
out of your sight.**

iCraneTrax

Plan. Monitor. Track. Report. From Anywhere.

You've trusted the robust features in **3DLiftPlan.com** to allow you to select your crane, plot your load and plan your lift.

Now combine **3DLiftPlan.com**'s features with the powerful online business management tools found in **iCraneTrax.com** and watch your business soar. You can plan dispatch, manage employees, track machine performance using telematics and run powerful reports on your company's performance. All online, all the time.



A1A Software

Your Data Your Way

A1A Software provides construction industry professionals software that is easy, convenient, customizable and affordable.

Link-Belt RTC-80150 Series II lifts a tower section for a transmission tower project in the San Gabriel Valley of Los Angeles County, California

The rough terrain crane is a versatile, robust and cost effective tool.

LAURA HATTON finds out about new models that are available

Steering for success

Rough terrain cranes are mainly used in bare (without an operator) rental fleets and in areas where the terrain is rough and unsuitable for other types of cranes, such as mining sites, refineries, infrastructure jobs and oil and gas projects.

These types of application mean that rough terrain cranes need to be highly manoeuvrable, as a spokesperson from

Manitowoc explains, “Four-wheel steering allows rough terrains to manoeuvre around constricted job sites, along with four-wheel drive capability. These features give cranes the ability to be used during the beginning phases of major projects and also in extreme areas where oil and gas exploration and development is currently taking place.”

In addition to these requirements,

manufacturers also offer Tier 3 and Tier 4 versions of their models, so they can work in areas that do not offer ultra low sulphur diesel fuel.

Latest models

The latest model to meet these demands from crane manufacturer Link-Belt is the 135 tonne RTC-80150 Series II. The model has a six-section, 12.9 to 59.5 metre pin and latch boom and four steering options, including independent front, independent rear, combination and diagonal. It has a 6.66 m turning radius for working on confined spaces on a jobsite. In addition, the operator's cab can tilt up to 20 degrees.

A spokesperson from Link-Belt says, “The RTC-80150 Series II joins our 100 tonne RTC-80110 Series II and 120 tonne RTC-80130 Series II to round out Link-Belt's line-up of six-wheel hydrostatic rough terrain cranes with over 100 tonne capacities. All of our rough terrain cranes have a full-length flat deck with integrated steps and handholds, and large swing out engine hood doors makes routine service checks really easy.”

The RT770E has an 8 x 3.33 m chassis and the crane is powered by a Cummins 6.7 litre diesel engine



ROUGH TERRAINS



The Grove RT540 has a 31 m four-section, full-power boom, with a maximum tip height of 47 m



LMI technology on Tadano rough terrain cranes automatically detects the extension width of the outriggers



Tadano's LMI technology monitors continuously to maintain a safe operation



Grove rough terrain cranes offered by TIL India

can move between crane models with ease. The system makes life so much easier on the job site, and the RT540 will suit a huge variety of jobs and complete work faster."

The model also has a new swing system which uses improvements in the crane's hydraulics and electronics to offer closer control and a better feel for the operator, the manufacturer said. The swing system works in conjunction with CCS.

Also new from Grove is the RT770E. The 65 tonne capacity crane has a five-section, full power 42 m boom, which has single-cylinder technology that eliminates the need for a hydraulic hose reel and boom inserts. Paul Cutchall, rough terrain product manager for Manitowoc Cranes in North America, explains, "We were able to lengthen the boom without adding more size and weight to the chassis. This enables the crane to be manoeuvrable, while delivering greater lift capacity and longer reach than other cranes in its class."

The RT770E has an 8 x 3.33 m chassis and is the crane is powered by a Cummins 6.7 litre engine. It has both four-wheel drive and four-wheel steering. In addition, it can be fitted with a 10.1 m to 17.1 m bi-fold swingaway jib providing a reach of 59.1 m and extended working radius of 43.9 m.

The latest model from US manufacturer Terex is the 65 tonne capacity Quadstar 1065. The crane has a 32.4 m main boom and is fitted with the new Terex cab. The model joins the Quadstar 1065, Quadstar 1075, Quadstar 1075L and Quadstar 1100. "Benefits [of the cab] include clear view of the load with hinged, tinted all glass skylight and tiltable cab, interior



automatically detects the extension width of outriggers, offers maximum lifting capacities through each area and stops the slewing before it reaches the limits of the allowed capacity when the motion from the longer outrigger area (Point A) to the shorter outrigger area (Point B),” a spokesperson from Tadano Japan says. “When the boom stops, the slow stop function brings the motion to a gradual halt, minimising swinging of the lifting load by inertial force. Even if the operator operates the crane without being aware of a change in the capacity, the LMI monitors it continuously to maintain safe operation.” ■



The 65 tonne capacity Terex Quadstar 1065 has a 32.4 m main boom and is fitted with the new Terex cab

designed for operator comfort, and easy to use, simplistic drive controls,” the manufacturer said.

Changing technologies

From TIL Limited in India, manufacturer and supplier of Grove products, is the 20 tonne Husky 620S, 30 tonne capacity RT 630C, 40 tonne capacity RT 740B, 55 tonne capacity RT 760 and the 75 tonne capacity RT 880.

“Changes in design include the introduction of high strength steel, improved and simplified electronics, longer boom extensions, compact designs, cabs with fewer blind spots and higher

ground clearance,” a spokesperson from TIL Limited says. “Improved productivity from our cranes, lower cost of ownership, lower initial investment and stronger residual values improve the return on investment for our customers.”

Crane manufacturer Tadano offers a range of rough terrain cranes from 12 to 70 tonnes for the Japanese market and from 12 to 145 tonnes for overseas markets. The latest technologies on these models are the load moment indicator (LMI), automatic speed reduction and slow stop function on slewing, the manufacturer says.

“The LMI technology

Visit us at



Booth N. H1.P18



MODULAR TRAILERS AND SELF-PROPELLED VEHICLES

INDUSTRIE COMETTO S.p.A.

12011 Borgo San Dalmazzo CUNEO (Italy) - Tel. +39 0171 263300

cometto@cometto.com
www.cometto.com

Nothing compares to the original!

1983 SCHEUERLE and Mammoet invented a vehicle that would change the world of heavy transportation forever. The SPMT (Self-Propelled Modular Transporter) entered the industry and changed more than only the ways of transportation: from then on, modular construction was lifted to another level. Module sizes transported on SPMT can weigh up to 15.000 tons or even more today – sky is the limit. SPMT has become a synonym for all sorts of modular self-propelled transporters today and the TII Group is by far the leading manufacturer in this class of vehicles worldwide.

The TII Group, incorporating SCHEUERLE, NICOLAS and KAMAG, is world market leader and 70 percent of all transports over 3.000 tons and 90 percent of all transports over 5.000 tons are realized with equipment manufactured by the TII Group.

Customers of the TII Group profit from the worldwide availability of self-propelled equipment of the TII Group for cross hire rental. This enables them to add additional axle lines to their capacities promptly if needed, opening new profit opportunities and guaranteeing full flexibility. The standard SPMT of the TII Group is container flat rack loadable and thus easy to mobilize to and demobilize from job-site.

The history of the SPMT is a history of technical innovations. Continuous development has made the SPMT one of the most evolved transport solutions worldwide. Nevertheless, all SPMT generations are coupleable amongst each other. Just recently, the TII Group has introduced a variety of SPMT innovations into the market.



InterCombi SPE



SPMT



SPMT



SPMT



K25 Power Booster



SPMT SL as split type vehicle – When two vehicles are too wide and one vehicle isn't wide enough the SPMT SL types solve the problem. They can be splitted in half, forming a 3-file combination combining manoeuvrability and tilting stability.



SPMT Widening Solutions – When flexible width is needed for higher tilting stability or fast changing loads with different sizes the SPMT Widening Solutions are the answer. Available as scissor or telescopic type the SPMT Widening Solutions offer flexible vehicle solutions that can be changed in minutes.



SPMT Light– Onsite tasks during construction and production are the ideal area of application for the SPMT Light. With its integrated Power Pack the vehicle is agile and makes handling heavy loads easy.



SPMT ES with 60 tons axle load – When a more rigid version is needed, the SPMT/ES fills the gap. Nevertheless, the regular 48 ton-model is likely to stay standard in regular transports around the world due to ground pressure limitations.

SPMT F with increased velocity – Increasing maximum speed means decreasing necessities to transport SPMT modules on trailers if they have to be relocated for transportation jobs. Growing oil and gas field sizes made this improvement necessary and the TII Group engineers delivered the solution.

SMPT AC for use down to -40°C – Especially in the oil and gas industry weather conditions are often harsh. The SPMT AC, equipped with an additional pre-heating unit, can be used without performance loss in temperatures as low as -40°C.



Van Beest B.V. is a leading manufacturer and supplier of wire rope- and chain accessories with branches in The Netherlands, Germany, France and the USA.

More than 80 distributors worldwide stock our Green Pin® and Excel® products.

The continuous high quality of Van Beest products can be used in the most challenging environments, such as the installation and maintenance of windmills.

Registered trade marks 'Green Pin' and 'Excel'



EXCEL®



E-mail: sales@vanbeest.com

www.vanbeest.com

Member of Van Beest International



LSI-ROBWAY

is Now a Trimble Company

"The combination of LSI's solutions with Trimble's geospatial, location, analytics, modeling and visualization tools provides opportunities to integrate crane safety more closely into construction project planning and execution."

Bryn Fosburgh
Vice President for
Trimble's Construction
Technology Divisions

LSI-Robway provides
safe load indicators to the
crane & lifting industry

What does the acquisition mean for
LSI-Robway customers?

LARGER GLOBAL REACH & SERVICE AREA

**INTEGRATION OF A WIDER RANGE OF
TECHNOLOGY OPTIONS & CAPABILITIES**

**EXPANDED R&D CAPABILITY FOR OUR
WORLDWIDE CUSTOMER BASE**



A TRIMBLE COMPANY

International/Direct Tel: +1.281.664.1330

Email: sales@loadsystems.com

www.loadsystems.com | www.lsirobway.com

A head for heights

International heavy lift and transport specialist Sarens put the first unit of the new Terex Boom Booster to work on a wind turbine erection project in the Netherlands. *IC* reports

Lift and transport service provider Sarens, headquartered in Belgium, used one of its Terex CC 8800-1 crawler cranes with the first unit of the new Boom Booster capacity enhancement system to install wind turbines at the Noordoostpolder wind farm in the Netherlands.

The Noordoostpolder wind farm is made up of 38 Enercon-126 wind turbines. To carry out the lifts the CC 8800-1 lattice boom crawler with the Boom Booster kit was set up in BSSL and LF configuration. It was fitted with a 138 m main boom, including 72 m from the Boom Booster kit, and an 18 m LF extension. Total length was 156 m, enabling the crane to lift the hubs to a height of 135 m while using an angular offset of 20 degrees, a spokesperson said. For the lifts, the crawler was fitted with 295 tonnes of counterweight, 60 tonnes central ballast and 400 tonnes of superlift counterweight.



Once the turbine towers had been assembled, the CC 8800-1 was used to lift the remaining parts of the turbine into position

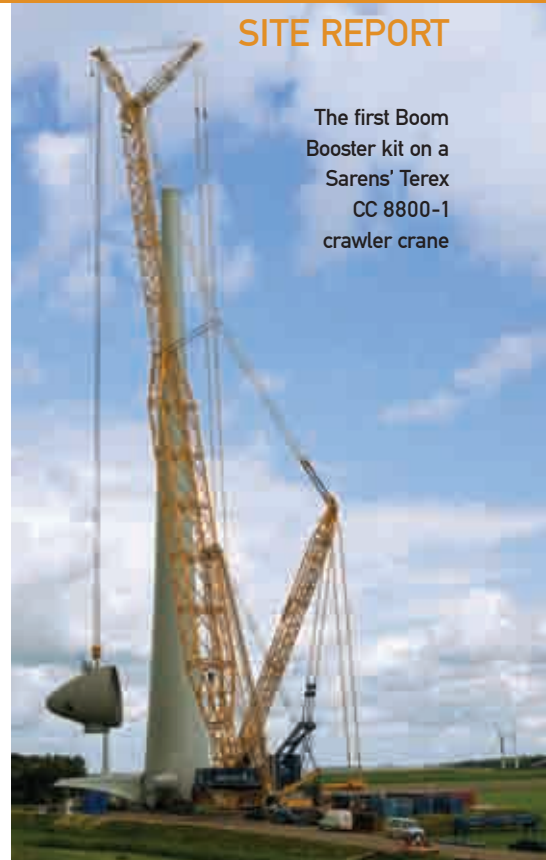
The Terex Boom Booster kit is designed to increase the lifting capacity of the 1,600 tonne capacity Terex CC 8800-1 crawler crane, particularly at short radii. The kit is a lattice boom structure with a width of 10 metres and a length of up to 72 m. It was transported to site from the Terex factory in Zweibrücken, Germany, using 12 trucks. It took 48 trucks to transport the crane to site and 28 trucks to transport the superlift counterweight. A further 28 trucks were used to transport mats, load distribution components and work site equipment to the site. Further trucks were used to transport a 100 tonne and a 200 tonne capacity assist crane.

Double duty

Once on site and assembled, the two assist cranes were used to erect the turbine towers. The CC 8800-1 was then used to lift the remaining main components of the turbine into position on top of the tower. The 170 tonne nacelle was lifted at a radius of 40 m, while the generator, which weighed 260 tonnes, was lifted at a radius of 36.5 m. The hub, including adapters, weighed 375 tonnes and was lifted at a working radius of 33 m. The three rotor blades weighed 40 tonnes each and were lifted at a radius of 23.5 m.

To install the turbines, a platform was created for the crawler to work on, raising the crane 3 m above ground level, a spokesperson said. The access ramp was 7 m wide and had a 2.5 % slope and ground pressure of 10 tonnes per square metre. When moving around the site, the assist cranes moved on mats and final locations were levelled out.

Further challenges included trenches alongside the access road. To overcome this, a special bridge was set up so the booms could be set up. Hendrik Sanders, Sarens project manager, said, "The Boom



The first Boom Booster kit on a Sarens' Terex CC 8800-1 crawler crane



The 170 tonne nacelle is lifted at a radius of 40 metres

Booster kit is about 50 per cent heavier than the CC 8800-1 crane's standard boom, but the way it was designed made self-assembly possible with the superlift. The setup time was pretty close to what the standard boom would have taken anyway.

"It's as if the kit had been designed specifically for our project at Windpark Noordoostpolder. Needless to say, that's why we decided to try it out there."

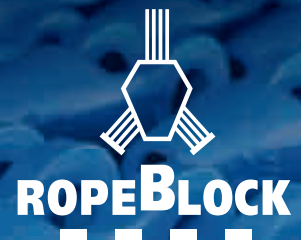
The CC 8800-1 is staying on site for about a year. It will work alongside a CC 9800 owned by Enercon.

www.ropeblock.com



Ropeblock **ADVISES, ENGINEERS,**
MANUFACTURES and markets **SAFE** and
HIGH QUALITY crane blocks, swivels, sockets, sheaves
and hooks for the **GLOBAL LIFTING** and wire rope industry

Kampenstraat 1 | NL-7575 ER Oldenzaal | The Netherlands
T +31 (0)541 532 300 | F +31 (0)541 536 575
E sales@ropeblock.com



GOLDHOFER HEAVY-DUTY MODULES

QUALIFIED SOLUTIONS FOR EXTREME TRANSPORT CHALLENGES.

Our heavy-duty modular systems can be individually matched to meet your requirements. At Goldhofer, providing qualified solutions means not only building resilient high quality products, but also giving our customers highly functional solutions for transportation and logistic challenges. Through our comprehensive project engineering and competent after sales program, Goldhofer is there when you really need to get down to business.

Goldhofer products are the result of over 300 years of investment, development of new technologies, and perfection of our customer service. One thing is absolutely clear; Economy is ultimately a function of high resale value, long term durability, and safety. This is what we stand for and promise.

Invest in your future. Goldhofer – The Original.

WWW.GOLDHOFER.DE

Tradelossa transporting 900 tonnes of cargo using self propelled modular transporter at the Etileno XXI oil and gas project in Latin America

Equipment that delivers

Transport companies are increasingly looking to invest in self propelled modular transporter (SPMT). LAURA HATTON looks into the benefits of SPMT and reports on the new models available

Some of the features that make self propelled modular transporters (SPMT) so desirable are its adaptability and ability to work in confined areas while carrying a heavy load. The biggest markets for SPMT include offshore, oil and gas, industrial, automotive, mining, steel plants, pulp and paper and power generation sectors.

Onshore wind markets are also relevant for SPMT, as is road infrastructure, such as bridge building. To meet the demands

that these sectors require, SPMT offers high capacity, high bending moment, speed and great tractive force. A spokesperson from transport company Lift and Shift India, explains, "The latest generation of SPMT tend to have a carrying capacity of 45 to 60 tonnes per axle line. We are exploring the possibility of utilising these higher capacity axles for transports and load outs of super heavy offshore structures and super heavy lift cargo (SODC)."

The demand for increased capacity, however, may be restricted to niche markets, as a spokesperson from Transdata adds, "It may be that the demand evolves towards higher capacity. This may happen in large shipyards and for large offshore projects, from 3,000 to 4,000 tonne cargoes as routine cargoes."

Going beyond the 60 tonne axle load for normal road transport and other working areas, however, is not something that is expected, as a spokesperson from Tii Group explains, "We do not see big fleets growing in this range since the ground pressure will be too high for worldwide standard barge loads and off site operations."

"The 60 tonne units might mostly operate in general mostly indoors for very special applications and in a niche market within the SPMT world."

Faymonville SPMC is used to transport a 400 tonne piece in France



Allely transports a blast furnace section weighing 500 tonnes



Goldhofer PST/ES-E modules

A 5,000 tonne evaporator from Doosan is transported by Almajdouie in Saudi Arabia using Scheurle SPMT

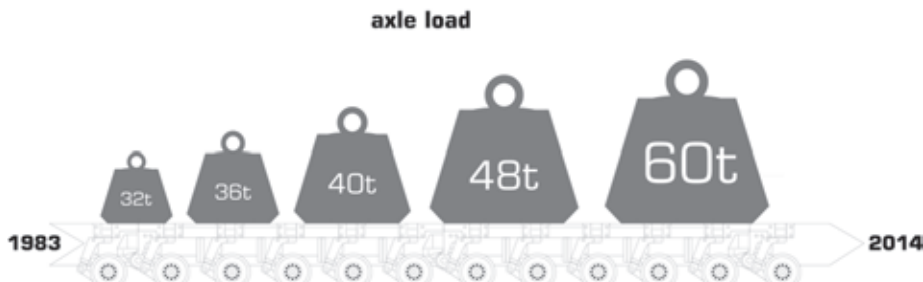
Fleet figures

To meet demands, the latest model of SPMT in transport service provider Allely's fleet is Goldhofer PST/SL-E. The company has purchased an additional 20 lines, increasing the fleet to 40 lines and four power pack units (PPU). David Allely, Allely director says, "We chose this over the more traditional SPMT equipment for the greater stability offered when working a 2-file trailer. We also have the option of connecting standard trailer bogies to increase carrying capacity, albeit with the loss of some of the steering function."

For transport specialist Lift and Shift India, SPMT is one of the company's main tools. "We have extensively operated them for various projects in the past," a spokesperson from Lift and Shift India says. "We own and operate 64 axles in Oman and 224 axles in India. Models are from the Nicolas MHD ME and the MHD ME R series."

Mexican transport company Tradelossa also uses SPMT. It owns 24 lines of Goldhofer SPMT. "We use SPMT in a lot of different combinations, including double wide and single wide," a spokesperson from Tradelossa says.

The latest model of SPMT in transport



An example of the increase in axle capacity for SPMT

service providers Transdata's fleet is Cometto MSPE trailers. "The trailers have a capacity of 40 tonnes per axle line, 1.4 m axle spacing configuration, advanced electronic management system and Cometto software," a spokesperson says. "The models are also fitted with suspension allowing stable lifting together with enough ground clearance during load outs and have an electronic steering of 120 degrees. Other features include electronic piloting control line on each drive axle and the ability to have synchronised operation between two separate convoys."

Latest models

To keep up with customer demands, trailer manufacturer Goldhofer introduced the SPMT 2.0 series, which was unveiled in 2014. New models include the PST/ES-E (285) with electronic multi-way steering and hydraulically adjustable track width, the PST/ES-E 6 (315) with an axle load of 45 tonnes and the PST/ES-E (385), which has an axle load capacity of 60 tonnes. "With a track width of 1,810 mm, the PST/ES-E (285) has 24 % greater lateral stability than a conventional SPMT with a track width of 1,450 mm," the manufacturer says. All the new modules can be fitted with standard low-loader or truck tyres in 215, 285, 315 and 385 mm widths. For reduced tyre wear the models have a steering angle of 135 degrees. Four power pack units are

available, with 150, 207, 360 and 390 kW. A hybrid drive is also available.

From Tii Group is the Scheuerle SPMT H-2.43 m model with a 60 tonne axle load capacity. The model has a higher spine beam length, tubeless 15 inch tyres and an axle spacing of 1.4 m, the manufacturer says. The model is designed to be operated for indoor use and is fitted with a widening solution. Other models in the range include the Scheuerle SPMT F and the Scheuerle SPMT-Arctic, which can operate at temperatures down to minus 40 degrees Celsius.

"In regard to widening solutions we provide three different systems, including the SPMT SL with mechanical extension spacer pieces, according to the required dimension by the client, the Widening SPMT scissor system, with different width adjustments possible and the Widening SPMT telescopic widening system," the manufacturer adds. New generations of the PowerBooster and PowerPacks with hybrid propulsion have also been designed.

The latest product from Faymonville is the APMC PowerMAX, with its three modes, including trailer mode, assist mode and SPMT mode, and the SPMC Powermax. "The heavy-load modules with hydraulically driven drive axles are the perfect solution where conventional heavy-load tractor units no longer have sufficient pulling force to move extremely heavy loads, or if the use of tractor units has to be dispensed with altogether for reasons of space," a spokesperson from Faymonville says. The SPMT are aided with a touch screen display, which provides data and an overview of the settings when more than one SPMT unit is being used.



Transdata use SPMT to transport a pipe rack internal haulage at a petrochemical facility in Rio de Janeiro, Brazil



Transport company Sarens use a Faymonville SPMC Powermax to move cargo in Europe

Experts in the design and manufacture of standard and custom designed Lifting Equipment

- Modular Spreader Beams up to 400t in stock and available for worldwide distribution
- Modular Spreader Beams for 2-5000t and spans up to 100m/330ft
- Experts in Custom Lifting Solutions and projects requiring high QA standards
- Quality assured products, all fully tested and certified
- DNV Design Approved as standard



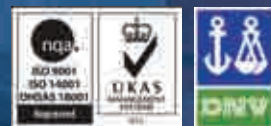
Spreader Beams



Lifting Beams



Spreader & Lifting Frames



Head Office : +44 (0) 1202 621511
US tel: 011 44 1202 621511
sales@modulift.com
www.modulift.com

Modulift®

WWL ALS IN WINCH MOVE

Specialist freight company WLS ALS transported a 110 tonne winch from Wallsend to Telford, United Kingdom. The winch was 8.3 metres long, 5 m wide and 4.3 m high. "The winch had been partially decommissioned on site in Wallsend and stored on concrete blocks set 1 m off the ground and 3 m apart," a spokesperson said. "Initially loading was to be carried out using a 500 tonne crane, however the WWL ALS team devised a more cost-effective solution and used a self propelled modular trailer (SPMT)."

To load the winch, Goldhofer PST E SPMT was positioned between the concrete blocks and self-loaded by using its hydraulic suspension. The concrete blocks were then removed and the cargo was offloaded onto a set of supports to allow a five bed modular low loader to be positioned underneath ready for road transport. Dimensions for the road transport were 35 m long, 5.2 m wide and 4.9 m high. On arrival at Telford the winch was transferred from the road transport onto Goldhofer PST E SPMT and transported to its destination at the factory.

The 110 tonne winch was transported from Wallsend to Telford in the United Kingdom



WLS ALS manoeuvres an 85 tonne press through a tight entrance on specially commissioned a self propelled modular transporter (SPMT) at a site in Sheffield, UK. The press had been transported from Kehl in Germany. It was 9.95 metres long, 2.82 m wide and 2.12 m high.

Trojan trucks debut for ALE

H heavy lift and transport specialist ALE has unveiled a new heavy haul truck designed and manufactured by ALE engineers.

The new model, the Trojan, is designed to be able to pull 300 tonnes on a 14 % gradient. It is able to link up multiple tractor units in a command and drone convoy and has synchronised steering, vehicle braking, electrics, engine and transmission to match the engine speed and gear ratio for the required torque. Other features of the new truck include reduced emissions and fuel savings up to 40 % compared to previous models, a spokesperson said.

The Trojan truck weighs 72 tonnes and



has a maximum road speed of 48 miles per hour (78 km/h). It is powered by a 700 bhp Volvo Penta six cylinder inline Euro 5 diesel engine. For the UK primarily it will be used with a girder frame.

Upcoming jobs for the new truck include a contract to move 23 transformers from the works at Stafford to Ellesmere Port, Liverpool, UK. The transformers can weigh up to 350 tonnes. David Boughey, ALE UK director, said, "In addition to

Marraffa picks Goldhofer for Italian job

I talian heavy transportation and crane service specialist Marraffa Srl used a Goldhofer combination of heavy-duty PST/SL-E and THP/SL (245) modules for the transportation of a column from a plant in Modomec in Massafra and to the port of Taranto, Italy.

The cargo was transported along the SS7 (Bari-Taranto) and SS106 highways. In total, two SPMTs with a total of 42 axles and 336 wheels (8 wheels per axle) were used. Power came from two 360 kW power packs.

The transport weighed around 650 tonnes. Due to the size and weight of the cargo, the transport was accompanied by an escort, which was provided by Marraffa. National utility company Enel was also used to provide assistance for passage under transmission lines on the highway.

The average speed for the journey was limited to 4 km/h and the column



Goldhofer heavy-duty PST/SL-E and THP/SL (245) modules

was transported over night to a parking area. The journey continued to the SS106 highway the following night. The column travelled along a lane going against the usual flow of traffic, a spokesperson said. It was transported to the port of Taranto where it was loaded onto the *MV Trina* for shipment to Russia.

The three-day transport operation was the largest one to be carried out on public roads in Puglia and the second largest transport in the history of Italy, a spokesperson said. It took 21 months to plan the operation, work out equipment requirements and carry out road adaptations.



The column travelled to the port of Taranto where it was loaded onto the *MV Trina* for shipment



The two Trojan trucks already built.
Four more will follow

this contract we've got a number of small single moves for various suppliers. Going into next year we're moving some Siemens units for the Western Link Project. The units will come into Ellesmere Port and then will be transported into the UK."

Commenting on the development of the truck, Gary Butler, ALE project manager and designer of the Trojan, said, "We wanted to replace our current fleet of trucks with a specification that improved

on vehicle performance, capability and fuel efficiency but there was no other truck on the market that delivered this. We therefore designed our own, based on our specific requirements, which included computer synchronisation, future-proof electronics, automatic gear change, ABS, transmission retardation, a good footprint for power and torque, and a stainless steel cab.

"Through the custom drive and transmissions, we are now able to deliver the required power to move abnormal loads more efficiently, more smoothly and in a more environmentally friendly way. It was very much a team effort and without the hard work from everyone involved, the truck could not have been created."

ALE has produced two of these vehicles and a further four are in production. They will be used by ALE for a number of power applications in the UK and in the United Arab Emirates.

ELDFISK TOPSIDE LOADOUT COMPLETED



The weights of the various modules ranged from 1,600 to 11,500 tonnes

ALE has completed the load-out of the Eldfisk 2/7s topside modules in Stord, Norway. The project lasted 12 months and involved weighing, jacking, self propelled site moves, load-ins and the final load-out of the completed modules. The weights of the various modules ranged from 1,600 to 11,500 tonnes. The final operation involved the load-out of the two completed modules onto the Saipem S44 barge.

The C00 Process module weighed 11,500 tonnes and the UQ0 Utility/LQ module 7,000 tonnes. The operations used more than 400 axle lines of SPMT and the ALE hydraulic ballast pump system which has a 1,000 cubic metres per hour pumping capacity.

ALE was responsible for the full design and engineering of each activity and included the ballasting designs for the load-in/outs, a spokesperson said.

transported to the quarry. Two mechanics from Van der Vlist accompanied the transport to reassemble the machine once on site. The wheel loader was rebuilt with the help of two mobile cranes.

Van der Vlist adds value in wheel loader project

Transport company Van der Vlist helped transport a 105 tonne Komatsu WA 800 wheel loader from the Netherlands to a quarry in southern Norway.

The machine was transported from



the Van der Vlist headquarters in the Netherlands where it had been kept in storage. Before the wheel loader could begin its journey it was modified in the heavy lift workshop at Van der Vlist's Groot-Amers site. Modifications included installing ride-control and adding central greasing and extra working lights.

The wheel loader measured 13.7 metres long, 4.58 m wide and 5.27 m high. It was dismantled into 12 pieces for the transport. The sections were loaded onto trailers and

The 105 tonne Komatsu WA 800 wheel loader was transported from the Netherlands to a quarry in southern Norway



Boscaro

Patented equipment
for the building industry






Boscaro s.r.l. 36020 Campiglia del Berico (VI) ITALY via G. Cederle, 1 - Tel. (+39) 0444 866520 - Fax (+39) 0444 866350
e-mail: info@boscaroitalia.com - www.boscaroitalia.com



GUNNEBO
Industries



Innovative - High Quality - Accessible - Durability

Peace of Mind



Phone: +46 21 838 200

Email: export@gunnebolifting.com

www.gunneboindustries.com

The Guardian-Line is a non-conductive tag line system designed to protect the rigger from electrocution



The Guardian-Line from Insulatus

Below the hook equipment is increasingly being manufactured and customised to meet specific safety requirements.

LAURA HATTON reports

helps riggers and ground crew to guide and maintain a level control over an elevated load.”

Another specific safety standard for below the hook equipment is the EU and UK safety standard *BS EN 13155:2003* for below the hook vacuum lifters, often used for placing glass windows and large panels. The standard states that when used on construction sites vacuum lifters should be dual circuit or fitted with a secondary safety device if they are single circuit. A spokesperson from GGR Group explains, “Each vacuum circuit on a dual circuit lifter must be independently capable of carrying the full rated load. Load capacity ratings for lifters also include a safety factor to cover most variations in slip resistance (due to contamination on the glass or pads), and weight magnification which may occur when cranes or hoists do not operate smoothly.”

These safety standards, combined with the trend for oversized large format glass units, have led to the development

>

Safe lifting

Lifting projects often have to meet very detailed safety requirements, particularly in the energy sector. As a spokesperson from Modulift explains, this has led to a rise in the need for lifting gear to be manufactured under strict quality control, and with significant safety factors built in, to ensure a safe lift.

Safety factors such as insulating links to avoid accidents with power line contact is one of these key design issues. To meet

these demands, manufacturer of below the hook equipment Insulatus launched the Load Insulator, an insulating link that can self test. It is suitable for use in tough construction environments and can work in wet or dirty conditions, the manufacturer says. Also from Insulatus is the Guardian-Line, which connects the line to a load to produce an insulated tagline. It is designed to be used with the Load Insulator when working with an elevated load.

“The Guardian-Line is a non-conductive tag line system,” a spokesperson from Insulatus says. “It is a solution to the US Government requirement that non-conductive tag lines must be used when working close to energised power lines. It is designed to protect the rigger from electrocution and hazards of handling conventional rope in lifting operations. In addition, it

The flat grab stone lifter is another below the hook device offered by GGR Group



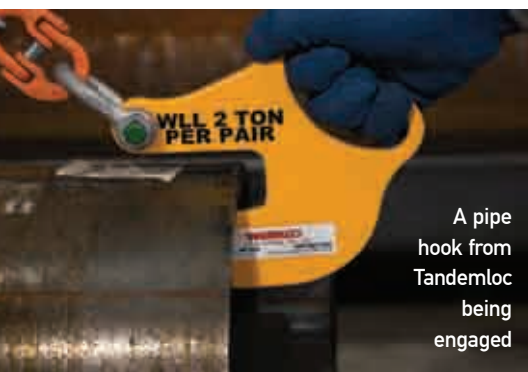
BELOW THE HOOK



The Hydraulica 2600 used here with a 6 tonne capacity Unic URW-706 mini spider crane on a glazing project in Blackfriars, London, UK. Each of the 7 metre tall panels to be installed weighed 2.1 tonnes and formed the building's reception area. The Hydraulica's 210 degree powered rotation and 90 degree hydraulic tilt functions allowed larger loads to be accurately manipulated into the correct position for installation with minimal manual handling required, GGR says

of vacuum lifters with quad-circuit technology, including the Hydraulica 2600 and Quad-Curve 2000. The models are offered by GGR Group and have independent vacuum circuits with a pump, reserve tank, non-return valve and vacuum gauge for each circuit. If one of the machine's independent vacuum circuits failed then the remaining three are there to safely hold the load weight.

The Quad-Curve 2000 has four independent vacuum circuits and a 2 tonne capacity. GGR has also added the 1 tonne capacity Quad-Curve 1000 lifter to its hire fleet. Graeme Riley, GGR Group CEO, says, "The Quad-Curve 2000 is the



A pipe hook from Tandemloc being engaged



The Modulift CMod modular spreader system in action

highest capacity curved glass lifter in GGR's range. It is designed to safely lift convex panels with a minimum radius of 3.5 metres. When fitted with all 32 suction pads and its extension arms, the machine's lifting frame spans 6.9 metres to accommodate the largest architectural glass units."

The Hydraulica 2600 Quad-Circuit Compact offers 2.6 tonnes of lifting power and has four vacuum circuits with four on-board maintenance-free pumps. It has 210 degree powered rotation and 90 degree hydraulic tilt functions.

To meet the required safety standards, GGR's single, dual and quad circuit vacuum lifters include low vacuum indication, vacuum reserve tanks, one-way valves and automatic pump activation. In addition, the vacuum lifters are tested, serviced, calibrated and fitted with genuine manufacturer's spare parts by qualified in-house lifting technicians, a company spokesperson adds. As part of GGR's vacuum lifter testing service, a Report of Thorough Examination is provided with details of any repairs carried out and a date for the next service, as required by the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER).

Lifting solutions

The latest product from below the hook equipment manufacturer Modulift is the CMod Modular Spreader System. The design includes a new method of connection to the hook to allow for optimum versatility, the manufacturer says. "A spreader frame is a method of lifting a load from four points, with a modular spreader frame being one that can be adapted to suit multiple spans," a spokesperson says. "A modular spreader frame must have the ability to rotate the top slings at the corners or it will not be a viable solution at higher capacities and longer spans. Our CMod system uses

the same struts as our standard spreader system which increases the modularity across our range."

A feature of the CMod system is the Corner Plate, which allows for a direct connection via a shackle to the top slings. This removes the requirement for any moving or rotating parts, the manufacturer adds. "This enables us to reach very high capacities with our frame whilst keeping our pricing very competitive," a spokesperson adds. The largest stock size can lift up to 140 tonnes and reach spans of 16 x 16 metres. Larger capacities and spans are available on request. Modulift develops its standard range to have DNV type approval up to 1,000 tonnes.

From manufacturer Tandemloc, based in Havelock, North Carolina, USA, are a new range of pallet lifters, several new sizes of coil hooks, heavy-duty pipe grabs and, most recently, pipe hooks which include three different capacities in the product family.

"The pipe hooks have been designed with the user in mind and they differ from their competitors by having flame-cut and machine burnished comfortable hand holds," the manufacturer says. "These hooks are a simple but elegant example of making it better. They are available in 2, 4, and 8 US ton (1.8, 3.6 and 7.2 tonne) capacities and are packaged in pairs as kits complete with adjustable length chain assemblies to allow use on a range of pipe lengths."

Tandemloc produce below the hook devices that are fully compliant with safety standard ASME B30.20 (2013) and are designed in accordance with ASME BTH-1-2011. The manufacturer says that each and every deliverable below the hook item is proof tested to at least 125 % of the stated working load limit (the pipe grabs are proof tested to 200 %) and proof test certifications are provided with each shipment.

SLINGS TO THE MAX

Slingmax® Rigging Solutions is a technology and marketing company, associated with the best companies in the rigging business inside and outside the USA.

The Slingmax® family of products includes the Twin-Path® brand in synthetic slings and the CornerMax® brands for cut protection for synthetic slings. Our Gator-sling™ brands are well-known multi-part wire rope slings.

Our technology results in a competitively priced product line that is far ahead of any competition. Our built-in sling inspection and safety features are not available anywhere else. And this technology is backed up by the most extensive testing program in the sling industry. Our policy of continuous improvement is well documented.

Here are some important features of our products.

- **Proof of concept testing to 600 tons**
- **Cycle tests to 50,000 cycles with no strength loss**
- **CoverMax® sleeve tests for abrasion and UV resistance**
- **More testing than any other sling product**

The Power of... **SLINGMAX®**



P.O. BOX 2423, ASTON, PA 19014-2423 USA
TEL: 800-874-3539 • 610-485-8500 • FAX: 610-494-5835
www.slingmax.com

Smooth surface

As an overall total this year's ICm20 ranking of the world's largest crane manufacturers by revenue gives an impression of stability and little change. Underlying that, however, are some big shifts, both up and down, in the fortunes of manufacturers since last year's table. IC reports

The total revenue for the world's 20 largest crane manufacturers in IC's 2014 ICm20 ranking by sales revenue is US \$28.1 billion – little different from (marginally lower than) last year's figure of \$28.5 billion.

While all appears calm on the surface changes underneath have seen huge increases in sales by Japanese manufacturers and, conversely, large falls among the Chinese manufacturers. Among the figures from the US and European manufacturers there is less of a clear picture.

Following the earthquake in 2011 Japanese manufacturers have benefited from a surge in demand for equipment to rebuild the devastation. Spectacular percentage increases among the Japanese

manufacturers are headed by Tadano with a 34.8 % revenue increase compared to last year's figure, bringing its sales to US\$ 1.8 billion.



NOTES ON THE ICm20

Figures used in this table are from calendar year 2013 or the 12 month financial year to 31 March 2014. The year-on-year percentage change figures for revenue mentioned in the article were calculated in the reporting currencies of the manufacturers. They are not calculated from the figures given in the table which are conversions into US dollars from the various reporting currencies. For the figures in this year's table the exchange rates from the reporting currencies into US dollars were as follows:

Euro 1 = US\$1.26, US\$1 = JPY 111,
1 CNY= US\$0.16356 / 6.11 CNY = US\$1,
RM(MYR) 3.30241 = US\$1.

RANK	COMPANY		SALES US\$ (MILLIONS)	
	2014	2013	YEAR 2013	YEAR 2012
1	1	Liebherr	4,162	4,518
2	2	Terex Cranes	3,630	3,332
3	3	Cargotec	2,625	2,813
4	5	Manitowoc Cranes	2,506	2,441
5	4	Konecranes	2,420	2,797
6	6	Zoomlion	2,041	2,319
7	8	ZPMC	2,006	1,750
8	9	Tadano	1,818	1,362
9	7	Xuzhou Heavy Machinery (XCMG)	1,553	2,161
10	10	Sany	824	871
11	11	Palfinger	786	758
12	12	Kato Works	681	745
13	13	Columbus McKinnon	583	597
14	14	Link-Belt	572	509
15	15	Kobelco Cranes Co	510	459
16	16	Sennebogen	405	415
17	17	Hitachi Sumitomo	334	281
18	18	Favelle Favco, including Krøll	252	219
19	21	Furukawa Unic Corporation	230	163
20	20	Manitex	196	164



Furukawa Unic Corporation has entered the top 20 ranking in 19th place, having reported a 24.6 % increase in its sales revenue from 2012 to \$ 230 million in 2013. Keeping on trend, both Hitachi Sumitomo and Kobelco Cranes have also seen major increases, with total figures increasing by 34 % and 24.5 %, respectively.

On the flipside, in line with the slowdown in the Chinese economy, Chinese manufacturers Zoomlion and XCMG both reported lower sales. Despite this, Zoomlion retained its position in 6th place in the table and XCMG remains in the top 10 but is down two places to 9th.

Sany remains in tenth place, where it has been for the last three years, with a smaller drop than its domestic rivals. Moving out of the top 20 this year is Fuwa, despite its acquisition of Jinzhong and reported sales revenue of \$175 million, it was down on the year before.

Against the tide

Of the Chinese manufacturers the only exception was port and industrial crane builder ZPMC, where sales were up 14.98 %, to \$ 2 billion. Much of this company's business is from outside China and it was enough to push it up

one place in the table to 7th.

Elsewhere in the top 10 positions of the top three are the same as 2013. Liebherr retains its top position, with sales of \$4.1 billion, up 5.75 % on last year.

Terex Cranes and Cargotec have also retained second and third positions, respectively, from the year before. Terex Cranes reported a 9 % increase, to \$3.6 billion from \$ 3.3 billion.

Notable this year is USA-headquartered Manitowoc Cranes. Following on from its two-place gain in last year's table, it has moved up another place this year, to 4th with a 5.2 % increase in sales. It swapped places with Konecranes which, despite gaining ground in previous years, reported a 9 % decrease in sales for the 2013 calendar year.

New to the top 20 last year was Manitex which has retained its 20th position. It reported a sales increase of 19 %.

All the remaining companies in the top 20 have retained their 2013 positions, including Palfinger, Kato Works, Columbus McKinnon, Link-Belt and Sennebogen. Despite reporting a 10 % increase in sales, Favelle Favco, including Krøll, remains in 18th position.

WEB SITE	WHEELED MOBILE	CRAWLER	TOWER	LOADER	EOT	DOCKSIDE	OFFSHORE	INDUSTRIAL
www.liebherr.com	✓	✓	✓			✓	✓	✓
www.terex-cranes.com	✓	✓	✓		✓	✓		✓
www.cargotec.com				✓		✓	✓	
www.manitowoc.com	✓	✓	✓	✓				✓
www.konecranes.com					✓	✓	✓	
www.zoomlion.com	✓	✓	✓	✓				
www.zpmc.com						✓	✓	
www.tadano.co.jp	✓	✓		✓				
www.xcmg.com	✓	✓	✓	✓				
www.sany.com.cn	✓	✓	✓			✓		
www.palfinger.com	✓			✓			✓	
www.kato-works.co.jp	✓							
www.cmworks.com					✓	✓	✓	
www.link-belt.com	✓	✓						
www.kobelco-cranes.com	✓	✓						
www.sennebogen.de	✓	✓				✓		✓
www.hands-crane.com		✓				✓		
www.favellefavco.com		✓	✓			✓	✓	
www.furukawaunic.co.jp	✓	✓		✓			✓	
www.manitexinternational.com	✓			✓				



- ▶ Sockets ▶ Rigging screws ▶ Shackles
- ▶ Blocks ▶ Hooks ▶ Mooring components
- ▶ Swivels ▶ Sheaves ▶ Fairleads



De Haan Special Equipment B.V. | P.O. Box 4 - 9500 AA Stadskanaal
T: +31 (0)599 613 300 - F: +31 (0)599 621 168 | www.dehaan-se.com

- DE HAAN SPECIAL EQUIPMENT - THE SOLID BRAND SINCE 1898 -

COMBI MAX

Award-winning combinability!



THE REVOLUTION IN HEAVY HAULAGE

- ➔ **Extendable modules**
- ➔ **Modules with recess**
- ➔ **One-Neck-Technology**

FAYMONVILLE DISTRIBUTION AG

Duarrefstrooss 8 | L-9990 WEISWAMPACH

T: +352 26 90 04 155 | F: +352 26 90 04 425 | sales@faymonville.com

www.faymonville.com

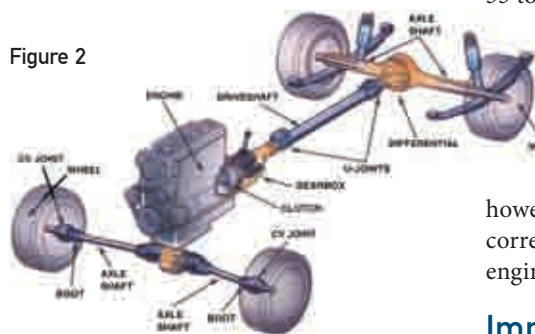
Pull force explained

MARCO VAN DAAL'S
technical article
this month is about
definitions and the ways
of calculating the pull
force of heavy haulage
tractor units

Pull Force is the force that a truck or prime mover can exert onto a transporter or any type of trailer for that matter. The end user is often just interested in how many tonnes or pounds the unit can pull.

To go from horsepower (hp) to pull force many terms and conversion factors are thrown on the table, including the number of driven axles, gearbox ratio,

Figure 2



ABOUT THE AUTHOR



Marco van Daal has been in the heavy lift and transport industry since 1993. He started at Mammoet Transport from the Netherlands and later with Fagioli PSC from Italy, both leading

companies in the industry. His 20-year plus experience extends to five continents and more than 55 countries. It resulted in a book *The Art of Heavy Transport*, available at: www.khl.com/books/the-art-of-heavy-transport/

Van Daal has a real passion for sharing knowledge and experience – the primary reason for the seminars he holds around the world.



Figure 1

rear end ratio, differential, tyre size, truck weight and fifth wheel capacity.

A truck can deliver a pull force equal to 80 to 90 % of the weight carried by the drive axles. The truck in Figure 1 weighs 35 tonnes. The rear two axles are drive axles and carry 10 tonnes each, the third rear axle and the steering axle carry 7.5 tonnes each. The maximum pull force this truck can generate is between 16 tonnes and 18 tonnes. This, however, will only be the case if the correct gear is chosen and if sufficient engine power is available.

Important factors

The power and torque of a truck is delivered by the engine and is expressed in hp / kW or lb-ft / Nm. A power of 1 hp equates to about 745 W and a torque of 1 lb-ft equates to about 1.36 Nm (Newton-metre). A 400 hp engine with a maximum torque of 1,500 lb-ft can deliver 298 kW and about 2,036 Nm.

To understand the difference between power and torque it is important to understand that power is a measure of the rate at which work is delivered and is measured per unit of time. It may help to know that the definition of horsepower is based on the assumption that a horse can move 33,000 pounds 1 foot per minute, therefore, 1 hp = 33,000 lb-ft/min = 550 lb-ft/sec.

Torque (lb-ft and Nm) is the measure of an object's tendency to rotate about a point and is not measured per unit of time but (in the case of engines) per crankshaft revolution. In terms of rating an engine, it is the application that determines whether power or torque is the more important measurement. When speed or a certain duty cycle is required, the engine power is of importance. When pull force is important the engine torque is of importance as this determines if the truck will be able to move the object.

How a truck works

For readers new to the industry, the following is a basic explanation of a typical truck driveline. In the engine the power and torque is created as the combustion energy is delivered to rotate the crankshaft via pistons and connecting rods (see Figure 2). The speed of this shaft is

>

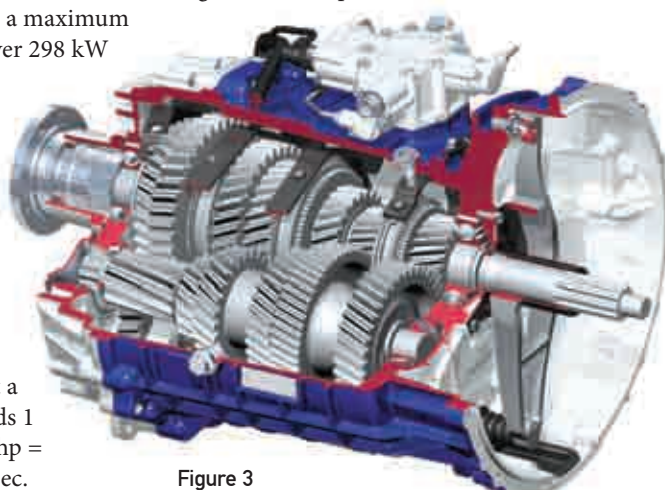


Figure 3

Delivering lasting solutions

Global technology leader

in the manufacture of wire and rope solutions for the world's most demanding applications.

Our superiority relies on continuous innovation, quality assurance and technical expertise throughout the organisation and along the supply chain.



United Kingdom:

Tel: +44(0)1302 565100, sales@bridon.com

USA:

Tel: +1 800 521 5555, marketing@bridonamerican.com

Germany:

Tel: +49(0) 209 8001 0, info@bridon.de

www.bridon.com



THE KNOWLEDGE

determined by the engine RPM, which in turn is influenced by the throttle.

Engine power and torque is not required all the time, for example, when idling at a traffic light. Immediately behind the engine output shaft is the clutch, which can be engaged or disengaged. When the clutch is disengaged the engine runs but no power or torque is delivered to any mechanical part of the truck. When the clutch is engaged the engine power and torque sets an array of gears in motion.

In gear

The first set of gears are in the gearbox. Figure 3 shows an open gearbox. In it the protruding shaft connects to the engine output shaft. The large open bell-shaped housing bolts to the engine block and covers the flywheel. The flywheel is a large steel disc that rotates inside the bell housing. The function of the flywheel is to store kinetic energy. The speed of the flywheel is not easily changed because of its weight and momentum. This means that the flywheel helps to keep the shaft rotating at the same speed. It is useful because piston engines usually have uneven torque per piston and per firing.

The gears in the gearbox are different diameters, each set with its own ratio. The gear ratio is calculated from the number of teeth on each gear but that is cumbersome. The manufacturer can supply you with the ratio of each gear. First gear is most important as this is the one that will set the truck and transporter in motion. The ratio must be large enough to ensure a slow starting speed. Ratios of 16, 18 or 20 to 1 are not unheard of. For comparison your average car has a first gear ratio of 3.5 or 4 to 1. The output of the gearbox is connected to a drive shaft via a universal joint. In practical terms a gear ratio of 20:1 means that it takes 20 crankshaft revolutions of the engine to make one drive shaft revolution.

So now we have the drive shaft rotating. The drive shaft is connected by a universal joint to a differential. The differential has two functions:

- It allows the rear wheels to rotate at different speeds in turns and curves. The outside rear wheel needs to rotate faster than the inside rear wheel, the differential allows for this. See Figure 4.
- The gears in the differential are designed with a certain ratio, similar to the gearbox, with the difference being that the differential has one set (designed) gear ratio. This differential gear ratio is called the final drive ratio or rear end ratio. A differential gear ratio of 10 means that it takes 10 drive

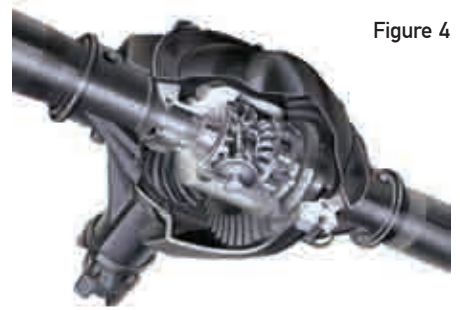


Figure 4

shaft revolutions to make one drive axle shaft revolution.

The differential has a disadvantage. Since it allows differential speeds between the two wheels, in case one wheel loses traction and starts spinning, the entire power and torque goes into that wheel as this is the way of the least resistance. Many trucks nowadays have built-in differential locks. Once the lock is engaged both wheels rotate at the same speed no matter if one axle has lost traction.

Note: a differential lock can only be used on straight roads as it completely eliminates the possibility of speed differential between left and right sides of axles in turns.

If we now look at the total gear reduction between the gearbox (reduction 20) and the differential (reduction 10) we can conclude that it takes 20 crankshaft revolutions to make one drive shaft revolution and 10 drive shaft revolutions to make one rear axle shaft revolution. Therefore, it takes $10 \times 20 = 200$ crank shaft revolutions to make 1 rear axle shaft revolution.

At the end of each drive axle shaft we find the wheels. The diameter of the wheels or tyres has an influence on the velocity of the vehicle. Larger diameter tyres gain speed much quicker than smaller diameter tyres. In addition, larger diameter tyres generally have a lower rolling resistance, particularly in off-road condition.

Below are a few definitions that will be used in next month's article to determine a truck's pull force and if this is sufficient for the application:

MAXIMUM TORQUE (TM)

The maximum twisting force the engine can produce at a certain RPM. Note: as we are interested in pull force the engine's power is not taken in consideration

MAXIMUM TRACTIVE FORCE (F1 TOTAL)

Maximum amount of force that the engine can supply to the tyres of the drive axles

MAXIMUM TRACTIVE FORCE PER AXLE (F1 AXLE)

Maximum amount of force divided by the number of driven axles

APPLIED ENGINEERING TO

HEAVY HAULAGE & LIFTING



SETTING NEW LIMITS



ENGINEERING AND EQUIPMENT ARE
THE SOLUTION TO YOUR HEAVY
TRANSPORT & LIFTING NEEDS

TOWERLIFT AND STRAND JACKS - CRAWLER CRANES - SPMTs - SKIDDING SYSTEM
ELEVATOR SYSTEM - GANTRY CRANES - SHIPS AND BARGES - SCREW JACKS

WWW.FAGIOLI.COM - INFO@FAGIOLI.COM

THE KNOWLEDGE

MAXIMUM TRACTION OR MAXIMUM RIMPULL (FRP)

Maximum total amount of force that the tyres can apply to the road surface without slipping

MAXIMUM TRACTION OR MAXIMUM RIMPULL PER AXLE (FRP AXLE)

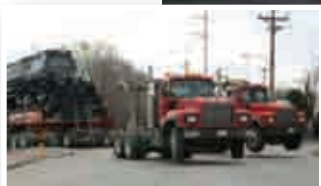
Maximum total amount of force per drive axle that the tyres can apply to the road surface without slipping

REQUIRED PULL FORCE (F REQ)

Force required to set the truck and transporter in motion.

- For the truck to start moving, two conditions should be met:
 - 1 Frp axle > F1 axle
The maximum force that the tyres can apply to the road (Frp axle) should be larger than the actual tractive force (F1 axle) applied. If this condition is not met, the truck's tyres will slip.
 - 2 F1 total > F req
The maximum force that the engine can supply (F1 total) should be larger than what the truck needs (F req) to start moving.

The information in this article is useful to determine the truck's pulling capacity, but it must be remembered that this is a theoretical number.



How do you really find out the power (pulling capacity) of a truck so you do not have

any surprises when it needs to deliver this force? The only real test is to put it to the test. This is not a test recommended by the manufacturers but it is one that will tell you the power of the truck. Connect the truck via a wire rope sling and a load cell to an immovable object. Let the truck pull in its lowest gear, slowly increasing the RPM, when the engine stalls or dies, you have reached the maximum for this truck. When the drive axles spin, you could add more counterweight and perform the test again, provided that the fifth wheel capacity and that of the axles and tyres is sufficient.

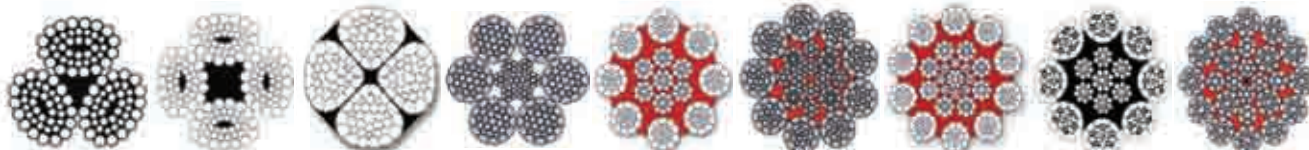
Several cautionary notes follow here:

Never stand between the truck and the immovable object.

When performing this test, be aware that in the chain of components between the engine and the rear axles, the drive shaft is often the weakest link (the cheapest components and the easiest to replace). The standard drive shaft may not be strong enough for this test and can suffer catastrophic failure. You may need a stronger drive shaft version for heavy pulling.

This test needs to be performed only once in the life time of a truck, unless an engine or gearbox is replaced.

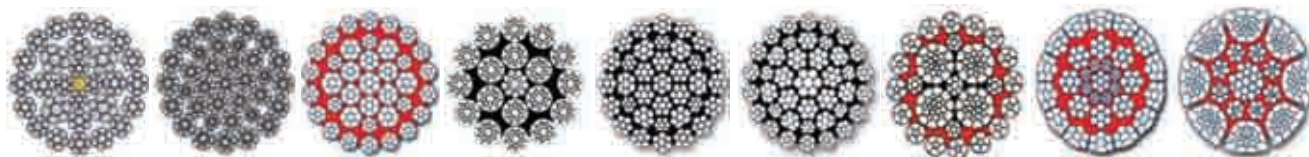
NOTE: Every effort is made to ensure the accuracy of the contents of these articles. If you find any mistakes, a brief notification and explanation would be appreciated.



WE HAVE A WIDE RANGE OF CRANE ROPES TO SERVE YOUR NEEDS!

广泛的钢丝绳规格、大量的存货

我们能满足您对钢丝绳的各种需求!



Ropes Technology Corporation
Far East Pte Ltd

27 Tuas Avenue 8, Jurong
Singapore 639242

Tel: (65) 6861-6066 Fax: (65) 6861-3088

Email: sales@ropes-tech.com.sg

Web: www.ropes-tech.com



GOT A CHALLENGING JOB REQUIREMENT?

MANITEX HAS THE ANSWER

Manitex's unrivaled ability to understand customer needs means that your application is covered. With models ranging from 17-70 Ton, you'll find our cranes lifting among oil fields, power lines, high rises and cul de sacs, all with equal ease. Whether you need to service wells or raise roofs, there's a Manitex model to get your job done quickly, and get it done right.



When you buy a Manitex product, you're buying reliability and peace of mind. Our products are backed by Uptime, our commitment to support thousands of units lifting every day around the globe.

BETTER PRODUCT, BETTER PAYBACK.

Discover which Manitex is right for you. Find a dealer: www.manitex.com or 877-314-3390

Manitex



LINDEN COMANSA

TOWER AND LUFFING-JIB CRANES



Construcciones Metálicas COMANSA S.A.

Tel. +34 948 335 020 | Fax. +34 948 330 810
 export@comansa.com | www.comansa.com
 Pol. Urbizkain, Crta. Aoiz Nº 1
 31620 - Huarte (Navarra), SPAIN



Linden Comansa AMERICA LLC

Tel. +1 704 588 7729 | Fax. +1 704 588 3986
 sales@lcacranes.com
 www.lcacranes.com
 11608 Downs Rd. Pineville NC 28134, USA



Hangzhou Comansa JIE Construction Machinery Co. Ltd

Tel. +86 571 8299 5555 | Fax. +86 571 8299 6555
 export@comansajie.com.cn
 www.comansajie.com.cn
 Jingjiang, Xiaoshan, Hangzhou P.C. 311223, CHINA

Singapore success



The first International Cranes and Transport Asia Pacific (CATAP) conference, the Crane Safety Symposium and Crane Carnival were all part of the Singapore Crane Fair. ALEX DAHM was there

The final attendance figures for the inaugural International Cranes and Transport Asia Pacific conference (CATAP) and the associated Singapore Crane Fair speak for themselves.

CATAP had 167 attendees and was one of three events in the first Singapore Crane Fair, held in late September.

First was the Crane Carnival on 28 September, attended by more than 1,500 crane industry people and their families. This event was held for the first time in 2013 when it drew a crowd of 800. In addition this year, 226 people registered for the industry recruitment drive initiative. "The turnout was incredibly positive, showing that people are becoming more aware of the tremendous opportunity available in the crane industry," commented Alan Chan, Singapore Crane



The first International Cranes and Transport Asia Pacific (CATAP) conference in September 2014 attracted more than 160 attendees

Association (SCA) chairman, one of the event's organisers.

A dozen or more cranes were on display to visitors and there were operator skills challenges and more than 30 exhibitor booths. The Crane Carnival was aimed at potential employees and the existing crane industry workforce and their families. Aims of the event were to raise awareness of industry developments, highlight the workplace health and safety aspect and show the professionalism of the industry's workforce.

Safety focus

On the 29th was the Crane Safety Symposium, attended by more than 400

industry stakeholders focusing on ways to raise awareness of and improve industry safety by reducing the number of accidents and near misses. Singapore's Ministry of Manpower (MOM) has taken action against 79 companies following Operation Goldcrest, a special enforcement operation targeting the construction industry. It was conducted from 1 July to 31 August 2014 and focused on unsafe lifting practices and crane operations. For details of the outcomes see our separate news story.

After the Crane Safety Symposium, on 30 September, was the inaugural International Cranes and Transport Asia Pacific (CATAP) conference. Following a



Rajiv Biswas, chief Asia economist at IHS, gave a comprehensive review of the industry's prospects in the region

Guest of honour at the 2014 Singapore Crane Carnival and speaker at the International Cranes and Transport Asia Pacific (CATAP) conference was Mohamed Abdul Akbar, chairman of the WSHC (National Crane Safety) Taskforce in Singapore



LEFT: On the oil and gas industry panel in the first of the two round table discussions at CATAP were, left to right, Dirk Verwimp from Sarens, Cor-Henk Roolvink from Foster Wheeler and Bryan Cronie from Mammoet



CATAP REVIEW

The Chinese market round table at CATAP consisted of representatives from, left to right, Zhang Han Xu from XCMG, Li Mingqi from Sany, and Su Wu from Zoomlion

welcome from Alex Dahm, *International Cranes and Specialized Transport* magazine editor, was an introduction by Ted Plafka, conference chairman and experienced senior journalist in the region.

Highlights of the event included an insight into Burma's developing crane market from Han Soe Kyaw who runs Two Elephant Crane & Forklift, the country's largest crane rental company. Rob West, general manager at Tat Hong's Tutt Bryant Heavy Lift & Shift, gave an insight into standards, expectations and challenges of crane rental in Australia.

In addition to quality speakers it was also a theme extending to the delegates throughout CATAP and the Singapore Crane Fair. A long list of leading crane companies represented by attendees at the event included the following; AsiaGroup Leasing, Bok Seng, Hiap Tong, Hong Fa Logistics and Engineering, Hontrade Engineering, Mammoet, Sarens, Tat Hong, Tiong Woon, Tutt Bryant, Vanaja Crane Hire, and Vema Crane.

Setting the scene

Keynote speaker at the start of the CATAP event was Rajiv Biswas from IHS who set the scene with an economic roundup and outlook for the region. Following Biswas with a focus on safety in Singapore's crane industry was Mohamed Abdul Akbar Bin Mohamed Abdul Kader, chairman of the National Crane Safety Taskforce in Singapore. Akbar is also managing director at Nan Guan Construction Pte Ltd.

Akbar commented on the Singapore Crane Fair, "To put together an event of such scale requires strong collaboration among key stakeholders, namely SCA, SCAL [Singapore Contractors Association], the Building and Construction Authority,

Doing a deal at sponsor Modulift's display booth during the CATAP conference



WSH Council, MOM [Ministry of Manpower], and *International Cranes and Specialized Transport* magazine. Many thanks to the team for coming up with the Singapore Crane Fair to help raise the profile of the crane industry."

Safety at CATAP was the key theme continued by Bryan Cronie, Mammoet Asia Pacific regional SHE-Q and training director, who explained the importance of creating a safety culture. A round table session on lifting and transport in oil & gas and petrochemical environments was one of several sessions helping to generate a lively participation from attendees asking questions from the floor. Cronie was on the

At CATAP Han Soe Kyaw from Two Elephant Crane and Forklift in Myanmar gave insight into his country's burgeoning crane and transport market

panel, accompanied by Dirk Verwimp from Sarens and Cor-Henk Roolvink from Foster Wheeler.

Helping to make the whole event possible was a long list of sponsors and exhibitors, both end user companies and equipment manufacturers. Among many other companies were the following: Antar, Blue Star Crane Service, Huatong (Asia), Jaso, JCB, Lifting Equipment Engineers Association, LSI Robway, Manitowoc, Mobile Cranes Asia, Modulift, Pollisum Engineering, Sany, Scheurle/Nicolas/Kamag, Sin Heng Heavy Machinery, Tanglin Corp, Terex, Tiong Woon, Tong Soon Crane, XCMG, Yongmao Machinery, Zoomlion.

Event organisers, supporting associations and other organisations involved included, the Building and Construction Authority, Crane Industry Council of Australia, Ministry of Manpower, National Commission for the Certification of Crane Operators, Singapore Cranes Association, Specialized Carriers and Rigging Association, The Singapore Contractors Association, the Singapore Workplace Safety and Health Council. ■



Pulling together at the 2014 Singapore Crane Fair to improve crane safety was a group of senior people from crane companies who signed up to the Crane Industry Safety Pledge



Together We Move Forward!

Growing Global, Leading Manufacturer in China, Your Right Choice!

Specialized in R&D and Manufacture
**SPMT · Modular Trailer · Marine Hoist
 Shipyard Transporter.**

 **天捷重装**
 Tianjie Heavy Industries

WUHAN TIANJIE HEAVY INDUSTRIES CO.,LTD.
SHANGHAI FULANGJIE IMPORT & EXPORT CO.,LTD.
 Tel: +86 21 50137666
 Fax: +86 21 50137717
 Email: fulangjie25@fulangjie.com
 Website: www.fulangjie.com



SYSTEM
Meister
TC 100

**The modular
 Off-road-transport system**



Meister
 AUTOKRANE · LADEKRANE · SONDERLÖSUNGEN

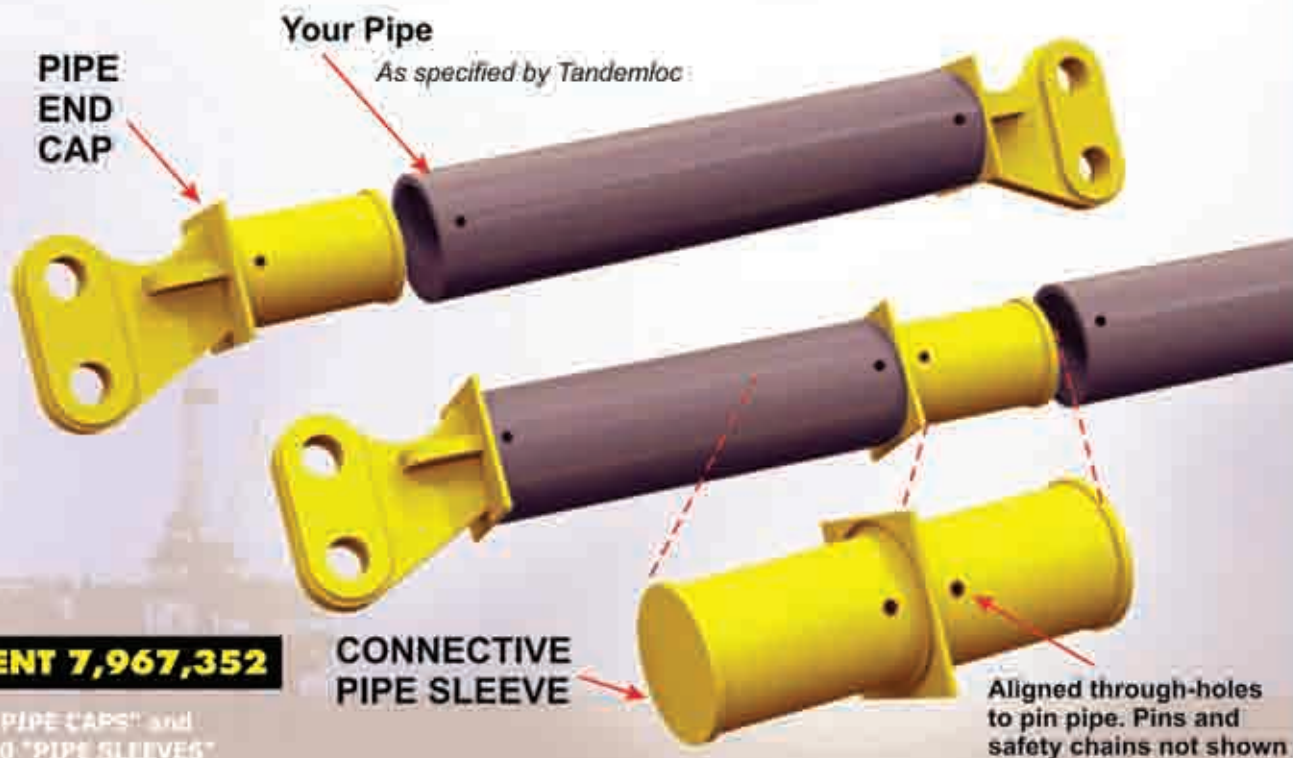
Jochen Meister
MEISTERKRAN
 Gewerbestraße 3–5
 64807 Dieburg
 Fon +49 (0) 6071 1314
 Fax +49 (0) 6071 881555
 info@meisterkran.de
 www.system-mammut.de





LIFTING • SECURING • MOBILIZING

SPREADER BAR KITS



PATENT 7,967,352

AC25C "PIPE CAPS" and
AG08A00 "PIPE SLEEVES"

Create the Exact Length You Want —

Slip and pin them together fast. Better than modular designs that use fixed length bolted together sections. Easy-to-use pins replace easy-to-lose bolts and nuts.

Tremendous Capacity Range —

Tandemloc kits allow you to build spreader bars with capacities ranging from 28,000 lbs to over 3 million lbs!

Efficient and Economical —

Reuse pipes for other lengths by cutting shorter or splice them together using Tandemloc "Sleeves"

Save Freight Costs or Add Value —

Buy your pipe locally or buy it from us and we'll paint it and label it for you. We can test the assembly too, upon request. (If you purchase pipe locally, be sure to follow our standards to avoid failure of spreader!)

Huge Inventory on Hand —

We stock virtually every size End Cap we make.

Fast Delivery from Stock

Our large stocking inventory includes a wide range of capacities, which means quick shipment to your site. We can expedite shipment from our North Carolina, USA manufacturing facilities.



PROOF TESTED SINCE 1984

Call Toll-Free: 1-800-258-7324

www.tandemloc.com

Tel: (252) 447-7155 • info@tandemloc.com • TANDEMLOC, Inc • 824 Highway 101 • Havelock, NC 28532 USA

TWISTLOCKS • CONTAINER LIFTING EQUIPMENT • CONTAINER TOW BARS • LOAD LEVELING LIFT SLINGS • ADJUSTABLE LIFT BEAMS

FIXED LENGTH SPREADER BARS • TELESCOPIC SPREADER BARS • FORKLIFT SPREADERS • SPREADER FRAMES • SPREADER BAR KITS



Indian showcase

Despite tough market conditions, the third bC India exhibition promises plenty of new machines built specifically for the needs of the local market. *IC* reports

December's bC India construction equipment exhibition in Delhi is expected to take up 120,000 square metres of exhibition space, according to the organisers. This will make it about the same size as the last event in 2013.

The show will be held for the third time, from 15 to 18 December this year at the India Expo Centre in Greater Noida, Delhi. It will be its first time in Delhi, having previously been held in Mumbai in 2013 and 2011. The inaugural show occupied 88,000 square metres, and grew to 120,000 square metres in 2013 when it welcomed 28,000 visitors.

According to organiser bC Expo India, which is a joint venture between the USA-based Association of Equipment

manufacturers (AEM) – responsible for the ConExpo-Con/Agg exhibition, among others – and Messe München International (MMI) of Bauma fame, there are plenty of big names taking part.

Among the companies signed-up are Kobelco, Liebherr, Potain, Sany, Terex and Zoomlion. There will also be seven national pavilions at bC India, from China, Germany, Italy, South Korea, Spain, the UK and USA.

Market health

India's construction equipment market is going through a tough patch. According to specialist forecasting company and consultant, Off-Highway Research, which has an office in Delhi, unit sales of construction equipment were down 15 % last year, and a further 16 % decline is expected for 2014. A bounce-back is, however, expected in 2015.

Despite a subdued market, bC India will see the launch of plenty of new construction machines. Manitowoc, for example, will introduce two new flat top

tower cranes from Potain, the MCT 205 and MCT 85.

Raman Joshi, Manitowoc Cranes India managing director, said, "The new topless Potain cranes are easy to erect, highly efficient and very reliable – the three major requirements of crane users across the country."

The Potain MCT 205 has a capacity of 10 tonnes and can lift 1.75 tonnes at the end of its maximum 65 m jib. Assembly can be in as few as four lifts and the heaviest group of components is 7.9 tonnes, the manufacturer says. Its full 65 m jib can be placed in a single lift.

The capacity of the MCT 85 is 5 tonnes and it can lift 1.1 tonnes at the tip of its 52 m maximum jib. Ease of assembly on site is a key feature and, to help achieve this, components like the counter jib and tower head are assembled as a single component at the Potain factory in Pune, India, and can be lifted as such on site.

Manufacturer Liebherr, meanwhile, will show several new machines, including the 85 EC-B 5i flat top tower crane, which is also assembled in Pune. The crane offers a 5 tonne capacity and 1.3 tonne load at the tip of a 50 m jib. Also on show will be an LTM 1220-5.2 wheeled mobile telescopic crane, a five-axle unit that offers a 60 m telescopic boom and a 220 tonne capacity.

This preview is only a small selection of the new machines that will be on show at bC India in 2015. For more information visit: www.bcindia.com/en/



Liebherr's 85 EC-B 5i tower crane is designed for confined sites. The tower sections have a footprint of 1.2 m x 1.2 m



"Xpertise at Our Fingertips, Anytime, Anywhere!"

Our crane rental specialists are equipped with mobile sales tools to supply our customers with the critical information they need at a moments notice!

Our clients come first. Needing critical information has no boundaries, whether you're at a job site, work or home. Maxim Crane employees have all the answers at their fingertips. Your sales experts using their X-Tabs can create quotes and access orders, reports, load charts and equipment schedules all from their tablets and smart phones.

Maxim Crane Works is the only coast-to-coast provider of comprehensive lifting services in the United States. We provide start-to-finish, turnkey lifting services including: site evaluation, engineering, lift planning, project management, rigging, transportation and outsourcing - making Maxim Crane's product and service offering the most comprehensive in the industry.



www.maximcrane.com

1-877-MAX-LIFT • 1-877-629-5438

info@maximcrane.com

NYLACAST

ENGINEERING PLASTIC SOLUTIONS

Custom components and materials with:

- Exceptional resistance to wear and abrasion
- High impact strength
- High load capacity
- Self lubricating materials
- Low coefficient of friction
- Lightweight - 1/7th of steel
- 25 x the life of phosphor bronze
- Reduced maintenance needs and machine downtime
- Custom formulation of materials



EVERY DAY SUPERHEROES



Scan this advert with the layar app to access exclusive content

in t i YouTube



DISCOVER MORE ABOUT THE NYLA-HEROES BY VISITING:

WWW.NYLA-HEROES.COM

NYLACAST
PIONEERS OF THE ORIGINAL OIL FILLED NYLONS
OILON & NYLUBE

bauma
China 2014

Visit us
at Stand
W4.725

+44 (0)116 276 8558
engineer@nylcast.com
www.nylcast.com

COMMENT

Joel M Dandrea

As strong as its members



The Crane & Rigging Workshop in September boasted 552 attendees – 94 of which were first-timers. In addition, we enjoyed 32 internationals, representing Aruba, China, Germany, Guatemala, Mexico, Netherlands, Peru, Puerto Rico, and UAE. This is an indication of true growth, and not just good economic times. It is evidence that the Association is healthy, and that members and potential members are recognising the value of a relationship with SC&RA.

The Workshop marked the end of the SC&RA conference lineup for 2014. It stood as an example of the progress we continue to see each time we allow our members the chance to get together.

We often receive thanks from our many attendees for the effort we make to put together the events, but we wanted to take this opportunity to thank you, our valued members.

We appreciate your feedback, your input, and your contributions; it serves as the foundation behind SC&RA's success. The strength of this Association, and in many ways, the strength of the industry, depends on your continuous innovation, perseverance, and interest in the success of one another. Your success is our success.

As a result, our strength is measured and, often determined by, involvement. We encourage our members to become involved in the various groups and committees – to establish a voice and contribute through participation – especially on the international level. We encourage any members who have been “standing on the outside” to get involved. The evidence is all around; the success of SC&RA is a collaborative effort.

Within this relationship, we keep each other updated and are aware of both successes and challenges, and in the case of Southeast Asia at the moment, development trends.

Industry investment

Thailand, long known as merely a prime vacation spot, is now, along with its neighbours, courting investors as an ideal

opportunity for companies in the manufacturing and service industries. The Thailand Board of Investment (BOI), a government agency created in 1966, is helping to boost innovation and opportunity in sectors such as automotive, alternative energy, biotech, petrochemicals, food processing, and electronics. In fact, investment applications have reached record highs in the last several years.

The BOI is making things much easier for foreign businesses to operate in Thailand by expediting the work permit and visa approval and renewal process. A BOI-supported company can often receive necessary paperwork, including tax incentives, waived restrictions, and exemptions on import duties, within three hours.

Expansion and ease of business within a booming marketplace is another draw in Southeast Asia for multinational companies. Thailand was rated 18th on the World Bank's Ease of Doing Business index last year – out of 189 countries. And the future is getting brighter for the region – where, according to Bloomberg, construction and manufacturing capacity is expected to tap a market that could surpass Western Europe by the end of the decade.

Upgrades in infrastructure have allowed Thailand to connect to its neighbours through highways. Places like Cambodia, Laos, Vietnam, Malaysia, and China are now more easily accessible. High-speed rail will reach southern China in less than a decade. Bangkok's Suvarnabhumi Airport, in the middle of a \$2 billion enhancement, will handle 60 million air passengers a year by 2017.

In late 2015 the Association of Southeast Asian Nations (ASEAN), with 10 member countries, will form the ASEAN Economic Community (AEC) – with a goal of strengthening the region economically on an international scale. As a result, an estimated 64 million jobs will be added in the next two years. Combined, ASEAN's GDP exceeds \$2.3 trillion. Now is the time to look for opportunity in Southeast Asia. ■



WHO'S WHO

SPECIALIZED CARRIERS & RIGGING ASSOCIATION

EXECUTIVE VICE PRESIDENT

Joel Dandrea
5870 Trinity Parkway, Suite 200
Centreville, Virginia, 20120, USA
Tel: +1 (703) 698 0291
Fax: +1 (703) 698 0297
www.scranet.org

CHAIRMAN

Ron Montgomery
Intermountain Rigging & Heavy Haul
Salt Lake City, Utah, USA

PRESIDENT

Alan Barnhart
Barnhart Crane and Rigging
Memphis, Tennessee, USA

VICE PRESIDENT

Bruce Forster
Rigging Gear Sales
Dixon, Illinois, USA

TREASURER

Delynn Burkhalter
Burkhalter
Columbus, Mississippi, USA

ASSISTANT TREASURER

John McTyre
McTyre Trucking
Orlando, Florida, USA

ALLIED INDUSTRIES GROUP CHAIRMAN

Eddy Kitchen, Kitchens Crane & Equipment, Chesterfield, Virginia, USA

CRANE & RIGGING GROUP CHAIRMAN

Larry Curran, JJ Curran Crane Company, Detroit, Michigan, USA

LADIES GROUP CHAIRWOMAN

Karen Wood, Wheco
Richland, Washington, USA

TRANSPORTATION GROUP CHAIRMAN

Jay Folladori, Landstar
Jacksonville, Florida, USA

SC&R FOUNDATION OFFICERS

PRESIDENT:

Robert Moore
NBIS
Atlanta, Georgia, USA

VICE PRESIDENT:

Stephanie Bragg
Bragg Companies
Long Beach, California, USA

TREASURER:

Jim Sever
PSC Crane & Rigging
Piqua, Ohio, USA

Advertising in Print Media?

...Always look for a BPA Audit!

As an independent, 3rd party auditing company, BPA's audit of *International Cranes and Sepcialized Transport* guarantees that your sales message is seen by the intended recipient.



- ✓ **TRUST**
- ✓ **INTEGRITY**
- ✓ **REASSURANCE**

International Cranes and Specialized Transport magazine is THE ONLY international lifting magazine that carries a BPA audit!

How do I determine which publication to place my advertising?

Easy, choose one which is BPA Audited!

A BPA audit is the only way to ensure your message reaches the intended recipient. Magazines without a BPA audit cannot guarantee this.



The 2014 Crane & Rigging Workshop in Texas, USA, saw industry leaders and professionals from around the world gather at the Sheraton Dallas Hotel. SC&RA reports

International value

The 2014 Crane & Rigging Workshop, held from 24 to 26 September in Texas, USA, secured the SC&RA schedule for the year in productive fashion. The event allowed members to experience an exceptional lineup of educational sessions, committee meetings, and networking events.

Attendance at this year's Workshop reflected a growing trend for SC&RA membership: international value. Of the 552 attendees, 32 internationals represented: Aruba, China, Germany, Guatemala, Mexico, Netherlands, Peru, Puerto Rico, and United Arab Emirates. In addition, 94 first timers packed into the First Timer's Briefing, which gave them an opportunity to meet other new members and learn more about the Association. The Exhibit Center floor was no exception, with a record 85 booths.

"I was very pleased for the experience; it was an excellent opportunity to learn about the Association and a great overall conference," said first-timer Mauricio Gandara from Tecno Montajes in Mexico.

On the towers

This year's Workshop featured a meeting of SC&RA's Tower Crane Committee, which included a special presentation on air rights when working with mobile and tower cranes. The energy level remained high the following morning at the Crane & Rigging Group committee meetings, when



With an emphasis on safety and compliance, this year's sessions provided an opportunity for the many in attendance to stay current on the industry's most up-to-date information



Members experienced an exceptional lineup of educational sessions, committee meetings, and networking events

the Safety Education & Training meeting hosted more than 100 attendees.

New at this year's event was the anticipated debut of the SC&RA Meeting App. The digital app will be used during all meetings in the future. Features include: attendee search, messaging, ability to create your own schedule and notes, surveys and polls, maps, and even an exhibit centre layout. Many members used the app in Dallas to navigate their way amid the crowds during the week.

Joe Contrera started the opening session with his presentation *Getting Beyond Great! How to Achieve Extraordinary Results!* Contrera, president and founder of Alive @ Work, addressed the crowded room with a simple assertion: "Just being good enough won't cut it." His presentation established TAGS, which stands for talents, attitude, goals, and skills. "Everyone has an internal tag," he said. "It's what we think about ourselves internally – and it builds us up or tears us down."

He went on to suggest that "...your actions drive results; if you want long-term results, you have to look at your belief system – what do you believe about yourself and your business?"

Two breakout sessions followed Contrera. Knut Buschmann, president,

Marco van Daal presented to a packed room on How to effectively utilise hydraulic platform transporters in the rigging industry



Unirop in Canada presented *Best Practices for Wire Rope Installation* and Joseph Collins, Becht Engineering heavy lift manager presented *The Key to Hiring the Right Lift Director*.

Buschmann's presentation looked at proper shortening and cutting procedures for high-performance wire rope in the field, installing rope onto the drum, block twisting and how to solve it. He also discussed inspection criteria and the common causes of rope damage, among a full list of vital wire rope concerns and issues.

Bill Smith, NBIS vice president, followed the breakout sessions with his *Operating Cranes Around Power Lines* presentation. Equipment contact with power lines remains one of the top concerns of crane and rigging professionals throughout the world, and Smith provided a detailed look into potential impacts of line voltages and working distances.

As an addition to Smith's session, SC&RA provided each attendee a complimentary copy of the Association's booklet: *Operating Cranes Around Power Lines*. The booklet, which can be purchased as part of a training set (comprising the booklet and video), contains an in-depth look at how employers and operators can conform to the OSHA standards now in effect, 29 CFR 1926 Subpart CC. The video provides a visual demonstration of these safe operating procedures in accordance with OSHA's *Cranes & Derricks in Construction* standard for mobile cranes near and around power lines to be used during planning and training processes.

Second round

Day two kicked off with a continental breakfast, followed by Keith Anderson's presentation *Evaluating Sling Stability and Load Equilibrium*.

The breakout sessions followed Anderson. Stuart Sadler, Operating Training & Inspection Services president, delivered his session *Be Prepared for MSHA Inspections, Not Just OSHA* to a packed room, and Brent Wise, Tech Safety Lines chief operations officer, gave his popular *Rescuing Personnel From Heights* presentation to an equally engaged audience.

Wise noted in his session that site personnel must quickly take responsibility for ensuring that an appropriate rescue



With a record 85 booths the Exhibit Center floor provided attendees with ample opportunity to meet and greet, and even try out, some of the latest technology

plan is carried out in tower rescues, including the necessary equipment and trained personnel.

"Tower crane rescues, already inherently challenging because of the one-way-up and down environment, are made even more difficult because of their relative rarity," he said. "Having a safe and simple rescue plan can make the difference between successfully negotiating through the event or dealing with an even more unfortunate and perhaps tragic outcome."

Bookending day two's lineup was Marco van Daal from The Works International (Oranjestad, Aruba), with his afternoon presentation *How to Effectively Utilize Hydraulic Platform Transporters in the Rigging Industry*.

Van Daal started with a history of the World Cup, specifically 1974-2014, to reveal every country that reached high levels of success within that time period.

The lesson was that "...you don't have to be the biggest to be the best, and you may not have to be the best to be among the best."

Football challenges aside, he believes the single biggest challenge in the industry is finding qualified and trained employees. He offered his expertise to the packed room in the form of a case study that demonstrated the important, and sometimes dangerous, differences between proper rigging techniques and common setups.

He explained his reasons for presenting. "My goal is to share and spread knowledge as much as I can. I have noticed that there are many misunderstandings and misconceptions out there. My career has spread over fifty countries and five continents; at some point it dawned on me that I should be giving back what I have gained."

With that realisation in mind, Marco started giving seminars. "I enjoy doing this, as it gives me the opportunity to share knowledge and often throw a different light on seemingly straight-forward situations."

In terms of member benefits, he sees true value in SC&RA events. "It's an opportunity to see what's out there, as we are often too focused on our own little kingdom. We can share experiences, approach or be approached by manufacturers in a 'no strings attached' way, meet old friends and colleagues, and many more benefits."

Mike Parnell's presentation *Advanced Rigging & Critical Lift Planning* set up day three in Dallas, and sent everyone home in collaborative style. Parnell, Industrial Training International president and CEO, delivered a hands-on, two-part, interactive session that allowed attendees to learn through problem solving on various rigging subjects, including sling tension, centre of gravity, and load control.

Start making plans to attend the 2015 Crane & Rigging Workshop. The date and location has already been set, and SC&RA looks forward to seeing you at the Sheraton Denver Downtown Hotel in Denver, Colorado, USA, from 23 to 25 September.

Remember that the January Board Meetings, at the Grand Wailea in Maui, Hawaii, USA, are just around the corner, from 4 to 7 January 2015. The board meetings set the tone for the year to come, and serve as a first step for many in getting involved with the Association. ■

For more information and to register for the January meetings, visit www.scranet.org/january-2015



This year's Workshop boasted 552 attendees, which included 32 internationals and 94 first-timers

KEEP YOUR WORLD TURNING



WITH ORIGINAL LEBUS SPOOLING TECHNOLOGY



The Lebus spooling system comes with a lifetime guarantee that your wire rope spools smoothly onto and off the drum under absolute control – a totally dependable performance every time.

Experts in wire rope spooling



Contact: Cris Seidenather, Lebus International Engineers GmbH
Tel: (+49) 88 06 958 950 info@lebus-germany.com

www.lebus-germany.com

jtagz.com

LIFTING EQUIPMENT INSPECTION TAGZ



175mm & 300mm RigTag®

TAMPER EVIDENT
ROBUST - COST EFFECTIVE
LIFTING GEAR CUSTOM DESIGN



info@jtagz.com

SERVICE · QUALITY · INTEGRITY

**100
Series**



From 3 tm to 23 tm Class

Up to 30% More competitive!



**Best
value for
money!***

103
3 tm Class - 3,5 truck GVW
105
5 tm Class - 5 truck GVW
108
8 tm Class - 8 truck GVW
111
11 tm Class - 12 truck GVW
115
15 tm Class - 15 truck GVW
120
20 tm Class - 17 truck GVW
123
23 tm Class - 17 truck GVW

**AMCO VEBA
GROUP**

Amco Veba s.r.l.
Via Einstein, 4 - 42028 Poggio (RE) - Italy
Tel. +39 0522 40.80.11
Fax +39 0522 40.80.80
commerciale@amcoveba.it
www.amcoveba.com



First And Only

Diepa®

SPECIAL WIRE ROPES



WWW.DIEPA.DE

Make your world move!

Hose reels • Cable reels • Swivel joints



Bauma
China

SEE US AT
Pav 1 Stand 113



Your reel partner

DEMAG S.r.l.
Via R. Murri, 14 • Magenta (MI) • Italy
Phone +39 02 9784488
Fax +39 02 97003509
info@demac.it • www.demac.it

NDURANCE
FROM HIAB

Hiab, part of Cargtec, has introduced nDurance, a new anti-corrosion treatment process for its cranes. The process is a pre-treatment and paint process based on nanotechnology and e-coating, the manufacturer said. It is being used at the new Hiab multi-assembly unit (MAU) in Stargard Szczecinski, Poland. It offers a three-layer protection against corrosion. The process is 100 % phosphate-free.

Gert Larsson, Hiab Products executive vice president, said, "A crane is constantly exposed to the elements of nature. Therefore, effective surface protection to prevent corrosion is crucial."

■ For more information see: www.hiab.com

TII Energy expands product range

Manufacturer of flywheel energy storage systems TII Energy, part of the TII Group, has expanded its product range to meet green energy requirements. The company, based in Dessau Roßlau, Germany, displayed their new products at InnoTrans, the international trade fair for transport technology, in Berlin. Products on show included a TII Energy flywheel storage system.

Axel Müller, TII Group

managing director, said, "Our flywheel accumulator technology allows energy to be saved and used which otherwise would be lost."

The TII Energy product range is aimed at crane and industrial installations, rail network operators, energy suppliers, wind power plants, and service providers, a spokesperson said.

■ For more information see: www.tii-energy.de



NEW SOLAR SCALES FROM INTERCOMP



Manufacturer of portable scales, Intercomp, has updated its range of wheel load scale models.

New to the models is a built-in solar charger, which allows the scales to operate continuously without requiring direct power charging, the manufacturer said. The solar charging technology will be standard on all PT300, PT300DW, LP600 and LP600-15T Wheel Load Scales. Charging cables will no longer be included, but are still available.

Eric Peterson, Intercomp vice president of sales, marketing and customer service, said, "The ability to operate without having to manually recharge makes weighing that much easier and reliable."

■ For more information see: www.intercompcompany.com

CST launches ContiPressureCheck system

Continental Commercial Specialty Tires (CST) has launched a new tyre pressure monitoring system, the ContiPressureCheck.

The monitoring system can be mounted on almost all types of industrial vehicle. It works with pneumatic tyres from all manufacturers, the manufacturer said. Inside the tyre a sensor monitors the inflation pressure and tyre temperature, which is then collected and processed.

The data is sent by wireless transmission to a central control unit (CCU), which processes the data and sends it directly to the display in the driver's cab. The ContiPressureCheck can be fitted to different specialized vehicles and trailers that work in a range of applications. It is easy to install and due to its automatic monitoring

function, the risks of blowout accidents can be reduced, the manufacturer added.

Michael Maertens, Continental CST managing director, said, "With the ContiPressureCheck for specialty tyres, we offer our customers a cost-effective alternative for measuring the tyre pressure."

■ For more information see: www.continental-specialty-tires.com/

NEW TECHNOLOGY FROM FAIRBANKS

Scale manufacturer Fairbanks Scales has launched the Intalogix system with digital load cell communication (LCC) technology for truck weighing applications.

The Intalogix system digitises analogue load cell signals, letting users track what is happening in each load cell, the manufacturer said. It includes a scale instrument, which is used for operator interface, scale configuration, and technician troubleshooting. It also has a surge volt protector, a scale interface card and grounding rods.

The system also has a powerful signal strength, which means it stays in constant communication with the scale's individual load cells, allowing it to detect any performance problems, the manufacturer said. If a problem was to occur, it alerts users to the location of trouble in a particular load cell or other electronic component, the manufacturer added.

■ For more information see: www.fairbanks.com



The tyre pressure monitoring system ContiPressureCheck from Continental is now available

JOIN SC&RA TODAY

SC&RA has more than 1,300 member companies across the globe in Crane, Rigging, Specialized Transportation, Pilot Car Services, Manufacturing, Safety, Certification, Publishing, Legal, Insurance and Financial Services.

**MORE THAN 63% OF COMPANIES
HAVE BEEN MEMBERS FOR MORE
THAN 5 YEARS.**



JOIN ONLINE AT
WWW.SCRANET.ORG/JOIN OR
CONTACT MEMBERSHIP AT (703) 698-0291



Specialized
Carriers
& Rigging
Association

EDUCATION, TOOLS & RESOURCES AT YOUR FINGERTIPS

Businesses in this specialized industry need advocacy initiatives, targeted education, networking opportunities and industry specific products.

Members receive:

- » Discounted meeting registration
- » Special pricing on industry-specific products, resources and online references
- » Free access to the Monthly Webinar Series
- » Company listing in the SC&RA Membership Directory and on the website
- » Opportunities to participate in SC&RA committees

AFFINITY PROGRAMS SAVE COMPANIES MONEY

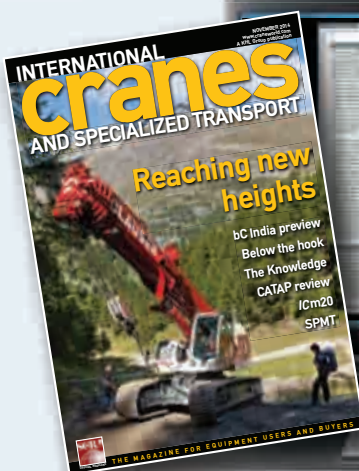
Companies with SC&RA take advantage savings on property/casualty insurance through NBIS, healthcare with United Healthcare, FedEx shipping and car rentals through Enterprise/National.

For more information visit:
www.scranet.org/affinity

REGISTER FOR THE **FREE** DIGITAL ISSUE

Delivered instantly
anywhere in the
world

- Interactive
- Searchable
- Archiveable



For more details and to register for your own, **FREE**, digital copies go to:
www.khl.com/subscriptions/ic



FIRST FOR GLOBAL CONSTRUCTION INFORMATION

www.khl.com

EVENTS DIARY

INTERNATIONAL RENTAL
CONFERENCE ASIA

24 November 2014
Shanghai, China
www.khl.com/irc

BAUMA CHINA 2014

25 – 28 November 2014
Shanghai, China
www.bauma-china.com

BC INDIA

15 – 18 December 2014
Delhi, India
www.bcindia.com

SC&RA BOARD AND
COMMITTEE MEETINGS

4 – 7 January 2015
Grand Wailea, Maui, Hawaii
www.scranet.org

SC&RA SPECIALIZED
TRANSPORTATION
SYMPOSIUM

4 – 6 March 2015
Atlanta, Georgia, USA
www.scranet.org

DEMOLITION CONFERENCE
TURKEY

12 March 2015
Istanbul, Turkey
www.khl.com/dct

SC&RA ANNUAL
CONFERENCE

14 – 18 April 2015
Carlsbad, California, USA
www.scranet.org

INTERMAT 2015

20 – 25 April 2015
Paris, France
www.intermat.fr

ESTA AWARDS OF
EXCELLENCE

23 April 2015
Paris, France
www.khl.com/esta

VERTIKAL DAYS

13 – 15 May 2015
Haydock Park, UK
www.vertikaldays.net

INTERNATIONAL TOWER
CRANES (ITC) 2015

27 and 28 May 2015
London, UK
www.khl.com/itc

PLANTWORX 2015

2 – 4 June 2015
Bruntingthorpe, UK
www.coneq.org.uk

IN THE KNOW



This issue's Picture of the Month was sent in by IC reader J Huibregtse from Rotterdam Offshore in the Netherlands. The picture is of the *Conquest MB1* at the cruise terminal in Rotterdam. The Rotterdam Erasmus Bridge can be seen in the background.

PEOPLE NEWS



■ Scott Powerline and Utility Equipment in the USA has hired **RYAN HAMMOCK** as

rental co-ordinator. Hammock will assist Kyle Smith, senior rental co-ordinator, in providing customer service as their rental fleet and geographic footprint continues to grow. Hammock joined the US Coast Guard following graduation from Sterlington High School and served as both a machinery technician and law enforcement officer. He currently serves in the Coast Guard Reserve.



■ A-Plant, based in the UK, has appointed **DAVE HARRIS** as commercial director. In his

new role, Harris will develop business with A-Plant's major customers and becoming involved in merger and acquisition activity, a spokesperson said. Prior to

his new role, Harris has held positions including managing director of UCI Cinemas and managing director at travel agency Going Places. He will report to Sat Dhaiwal, A-Plant CEO.



■ Link-Belt Construction Equipment Company has named two new marketing

specialists at the company. **ANDREW SOPER** has been named marketing specialist for lattice and telescopic crawler cranes and **BRIAN ELKINS** (pictured below) has been named marketing specialist for rough terrain cranes. Soper has several years' experience in the heavy moving and crane rental industry. In his new role, Soper will co-ordinate with Link-Belt staff and end user customers and support the Link-Belt lattice and telescopic crawler crane lines, a spokesperson said. Elkins, the new marketing specialist for rough



terrain cranes, joined Link-Belt in 2011 as a cost accountant. Brian Smoot, product manager, rough terrain cranes, said, "Brian's experience will benefit him as a marketing specialist; he will be an important piece of our future growth."



■ Iowa Mold Tooling (IMT) has appointed **TIM GERBUS** as the new director of sales. Gerbus

has 30 years of experience in sales and marketing. In his new role, Gerbus will direct the IMT sales team and work on the IMT distributor network, customer service and aftermarket support, a spokesperson said. He will also be responsible for product management and business development. Jim Hasty, IMT general manager, said, "We are delighted to welcome Tim to the IMT team. His wealth of leadership experience and industry expertise will greatly benefit our distributors and customers."

■ 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, UK or by e-mail to alex.dahm@khl.com. Picture caption entries should include: the month and year taken, the place, type of crane, owner and project, plus any other relevant information.

INTERNATIONAL cranes AND SPECIALIZED TRANSPORT

FREE MAGAZINE SUBSCRIPTION

1 CHOOSE YOUR MAGAZINES AND/OR E-NEWSLETTERS:

MAGAZINES

- International Cranes and Specialized Transport** ☐
- Access International* ☐
- Access, Lift & Handlers* ☐
- American Cranes & Transport* ☐
- Construction Europe* ☐
- Construction Latin America* ☐
- Demolition & Recycling International* ☐
- International Construction* ☐
- International Construction Turkey* ☐
- International Rental News* ☐
- Vinç & Proje Taşımacılığı* ☐
- Yikim* ☐

E-NEWSLETTERS

- World Crane Week e-newsletter** ☐
- Access International e-newsletter* ☐
- Access, Lift & Handlers e-newsletter* ☐
- Construction Latin America e-newsletter* ☐
- Demolition & Recycling International e-newsletter* ☐
- World Construction e-newsletter* ☐
- International Construction China e-newsletter* ☐
- International Rental News e-newsletter* ☐
- KHL's Crane Market e-newsletter* ☐

2 ORGANISATION TYPE

- Construction Contractor/Consultant ☐
- Crane Rental ☐
- Specialized/Heavy Transport ☐
- Industrial Establishment ☐
- Docks/Harbours ☐
- Manufacturer of Lifting Equipment ☐
- Agent/Distributor ☐
- Government/Defence/International Authority ☐
- Utility ☐
- Windpower ☐
- Other ☐



3 YOUR DETAILS

Name:

Job title:

Company:

Address:

Country:

County/State:

Post code/Zip code:

E-mail:

4 FORMAT OF MAGAZINE

PRINT ☐ DIGITAL ☐ BOTH ☐

5 SIGN AND DATE:

Signature:

Date:

11-14

POST TO: KHL Group, Circulation, Southfields,
Southview Road, Wadhurst, East Sussex, TN5 6TP, UK

FAX BACK: +44 (0)1892 786260

REGISTER ONLINE: www.khl.com/subscriptions/ic

E-MAIL: circulation@khl.com





永茂建机
YONGMAO®

CHINA SHANGHAI NEW
INTERNATIONAL
EXPO CENTRE



NOV 25TH - 28TH
VISIT US AT
BOOTH C.49

EXPERIENCE OUR QUALITY & SERVICE

YONGMAO HOLDINGS LIMITED
WWW.YONGMAO.COM.CN

PIPE GRABS

IN STOCK READY TO SHIP

CUSTOM?

Any Size
Any Capacity
Built To Order

Buy Direct From the
Manufacturer and Save!

- 8 Sizes from 3"-14", Capacities to 3,500 lbs.
- Every Unit Proof Tested to 2X Capacity (WLL)
- No Load Blocking, Lift Direct Off Ground or Pile
- Outriggers Stabilize the Load
- Quality Anti-Abrasion Epoxy Paint, Safety Yellow
- ASME B30.20-2010 & BTH-1

Email: info@tandemloc.com

TANDEMLOC INC  Made in
The Lifting Equipment Specialist USA
Toll-Free Tel: 1-800-258-7324
www.tandemloc.com

SHIPS WITH
PROOF TEST
CERTIFICATE



Tel.: +49 (0) 8252 70553 10 - Fax: +49 (0) 8252 70553 11
sales@aca-cranes.com



PPM ATT 340
30 t YOM 1995



Grove GMK 3050
50 t 1996



Demag AC 50-1
50 t YOM 2003



Demag AC 50-1
50 t YOM 1999



Demag AC 205
80 t YOM 1996



Demag AC 100
100 t YOM 2000



Demag HC 360
120 t YOM 1980



Demag AC 200-1
200 t YOM 2003



Liebherr LTM 1300-1
300 t YOM 2000

www.aca-cranes.com

M. Stemick GmbH
Kran- u. Baumaschinenhandel



ALL TERRAIN-CRANES

Make / Type	y. o. m.	Drive	Boom / Fly Jib
20 t Gottwald AMK 31-21	1984	4x4x4	20,50m
25 t Demag AC 75	1998	4x4x4	25,00m + 13,00m
40 t Demag AC 40-1 City	1999	6x4x6	31,20m + 13,00m
40 t Demag AC 40-1 City	2005	6x6x6	31,20m + 13,00m
50 t Terex Demag AC 50-1	2007	6x6x6	40,00m + 17,60m
55 t Liebherr LTC 1055-3.1	2005	6x6x6	36,00m + 7,80m
70 t Grove GMK 4070-1	2000	8x6x8	38,10m + 16,00m
70 t Liebherr LTM 1070-4.1	2006	8x6x8	50,00m + 16,00m
80 t Terex Demag AC 80-2	2001	8x6x6	50,00m + 17,00m
80 t Terex Demag AC 80-2	2003	8x6x6	50,00m + 17,00m
100 t Grove GMK 5100	2002	10x8x10	51,00m + 18,00m
110 t Tadano Faun ATF 110G-5	2008	10x8x8	52,00m + 16,20m
120 t Grove AT 9120 E	1997	10x6x8	48,70m + 17,70m
120 t Terex Demag AC 120-1	2006	10x6x8	60,00m + 17,00m
160 t Terex-Demag AC 160-2	2009	10x8x8	60,00m + 17,00m
200 t Grove GMK 5200	2002	10x8x10	60,00m + 36,00m
300 t Liebherr LTM 1300/1	2000	12x8x12	60,00m + 22,00m 49,00m / 70,00m

TELESCOPIC CRAWLER CRANES

100 t Liebherr LTR 1100	2008		52,00m + 19,00m
-------------------------	------	--	-----------------

RT-TELESCOPIC-MOBILE-CRANES

36 t Grove RT 740	1980	4x4x4	31,70m + 9,75m
-------------------	------	-------	----------------

LATTICE BOOM TRUCK CRANE

115 t Link-Belt HC 238	1982	10x6x6	48,00m/18,00m
------------------------	------	--------	---------------

HARBOR MOBILE CRANES

40 t Sennebogen 640 M	2000	4x2x2	22,00m
-----------------------	------	-------	--------

YARD CRANES

12 t Liebherr LI 1012	1990	4x2x2	12,00m
-----------------------	------	-------	--------

Import - Export

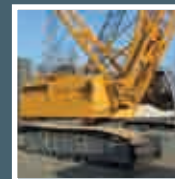
M. STEMICK GMBH
Kran- u. Baumaschinenhandel, Import - Export
D-45721 Haltern / Germany

Tel: +49 2364 108203
Fax: +49 2364 15546
Mobile: +49 172 2332923
e-mail: info@stemick-krane.de
Internet: www.stemick-krane.de

PVE CRANES & SERVICES, WORLDWIDE RENTAL AND SALE OF CRAWLER CRANES



We have a constant stock of 90 cranes
ranging from 50 ton up to 1000 ton



LIEBHERR LR1100,
100 ton capacity



LIEBHERR LR1300,
300 ton capacity



Kobelco CKE2500,
250 ton capacity



Hitachi Sumitomo SCX1500
135 ton capacity



Demag CC2800,
600 ton capacity



Kobelco SL6000,
550 ton capacity

Everdenberg 17 • 4902 TT Oosterhout, The Netherlands
T +31 (0)184 425 949 • F +31 (0)184 424 820
info@pvecranes.com • www.pvecranes.com

+ offices in: Curaçao - Dubai - Jacksonville - Singapore

www.pvecranes.com

BAY CRANE

Lifting & Transportation Solutions
for all your hoisting needs

New Unused Potain MR 615

- One 245LBR 160 hoist winch (245hp) with line speeds up to 787 ft/min Spooling capacity is 2,198m.
- 12 MC67 Mast section KRMT 839A (Monoblock reinforced 16.4')
- Jib length of 196'10"
- Standard 2-part / 4 part hook block reeving
- 215VBR (215hp) Boom Hoist
- Deluxe equipped vision 140S operator cab
- Dialog Visu indicators
- 480 volt, 60Hz 445 kVA electrical requirements
- Anemometer
- 196' of main power cable
- Electric heaters in panels that require heat
- Electrical slipring mounted in turntable
- Tower top mounted maintenance derrick
- 62 ton of cast iron counterweights provided as standard painted grey
- Crane painted in Manitowoc Red
- Power Cable for free standing height
- 8 MC67 Mast section KRMT 839A (Monoblock reinforced 16.4')
- One (1) Climbing unit complete

Price Upon Request

Contact us by emailing: Info@baycrane.com

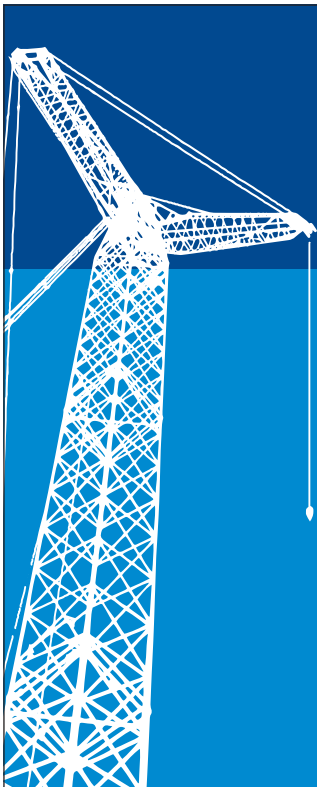
FOR SALE



4 POINT GANTRY MODEL 34PT5400WS

- 500 Ton Capacity.
- Hydraulic Travel.
- Wedge Lock System.
- 200 Lineal Feet of 15' Track.
- 125 Ton Swivel.
- 300 Ton Side Travel Kit.
- Large Variety of Header Beams and Lift Links.

For detailed information contact
Lift Systems, Earl Swan - 216-691-0600



INTERNATIONAL SALES & BARE RENTAL SOLUTIONS

ALL TERRAIN CRANES

130 t	Grove GMK 5130	NEW!
130 t	Liebherr LTM 1130-5.1	2012
170 t	Grove GMK 5170	2011
220 t	Liebherr LTM 1220-5.2	2012
220 t	Grove GMK 5220	NEW!
300 t	Grove GMK 6300L	NEW!
300 t	Grove GMK 6300L	2012

CRAWLER CRANES

250 t	Kobelco CKE 2500G	2013
600 t	Liebherr LR1600-2	2009

650 t	Terex-Demag SL3800	2014
650 t	Terex-Demag SL3800	NEW!
750 t	Liebherr LR 1750	2014
1250 t	Terex-Demag CC6800	2014

ROUGH TERRAIN CRANES

60 t	Grove RT760E	2008
65 t	Grove RT765E	NEW!
65 t	Grove RT765E	2011
90 t	Grove RT890E	NEW!
130 t	Grove RT9130E	NEW!

Galvanistraat 35
NL-3316 GH 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

USED CRANES FOR SALE

Hellmich



Allkran Hellmich GmbH
over 30 years crane experience

Please contact Mr. Hellmich / Mrs. Petri / Mr. Heinrich
Am Schwarzbach a. d. B 44
64560 Riedstadt-Erfelden / Germany
Tel: +49-6158-188413 · Fax: +49-6158-6929
E-Mail: info@allcrane.de

Ask for our sales-list by mail or see on:

www.allcrane.de
www.allkran-hellmich.de

LEADER OF TOWER CRANES IN THE WORLD

T: (+9712) 4037555 or (+9712) 6740778 F: (+9712) 6730434
E-mail: nftuae@emirates.net.ae Web: www.nftcrane.com



MANY POTAIN TOWER CRANE MODELS INCLUDING GIANT CRANES
AVAILABLE FOR SALE OR RENTAL

GIANT CRANES: MD 800/600/900/1100/2200/3200
SELF ERECTING ISO 50 / GTR 386 - MD 238/265/285/345/365 - MD 178/268/368
LUFFING JIB: MR 160/225/235/305/605

OVER 1050 POTAIN TOWER CRANES & 200 CONSTRUCTION HOISTS ARE
AVAILABLE FOR SALE / RENTAL / Hoists Available - PEGA TYPE 27/37-SPEED
90 m/min and many other types, ALIMAX - 650 28/39, SPEED 60m/min - All types
of Orbit Hoists from 1T to 3.2T, Speed: 36,46,63 and 96M/Min.

LARGE STOCK OF SPARE PARTS FOR POTAIN TOWER CRANES, GJJ/ORBIT & PEGA
HOISTS CAN BE DELIVERED TO ANY DESTINATION AND PROJECT SOLE AGENT OF
POTAIN TOWER CRANES, GJJ/ORBIT & PEGA Hoists IN THE MIDDLE EAST



Branches All Over
Middle East and Gulf
IN FAR EAST IS
NOW IN EUROPE

For Inquiries - Please Contact: Sales and Marketing Dept - NFT Cranes
NFT Specialized in Tower Cranes LLC (NFT Cranes)
Head Office: P.O. Box 28037, Abu Dhabi, U.A.E

Mini & Mobile Cranes Körner



used mobile cranes for sale

23 t TADANO TR 230 E, year 1987	65 t TADANO FAUN ATF 65G-4, 2008
25 + 7,0 m, 2. winch, 4x4x4, Mitsubishi	44+16 m, 8x6x8, 2x MB engines, 15t cw
25 t DEMAG AC 25 City, year 2000	80 t GROVE GMK 4080, year 1998
25 +1,2 m, 4x4x4, Perkins Phaser engine	43+13 m, 8x6x8, 2x MB eng., 15,8 t cw
40 t LIEBHERR LTM 1040-3, y. 1990	100 t GROVE GMK 5100, year 2000
30+14,5 m, 6x4x6, MB engine, 8,3 t cw	51+34+1,5 m, 10x8x10, 2 winch, 2x MB engine
40 t FAUN RTF 40-3, year 1991	300 t GROVE GMK 6300 L, Bj. 2011
30+14,5 m, 6x4x6, MB engine, 7 t cw	80+21+29 m, 12x8x8, 1xhoist, 2xMB eng.

Mini & Mobile Cranes Körner GmbH
Alte Kaserne 23, 47249 Duisburg, Germany
www.unic-mobilecranes.de

Tel: 0049(0) 203- 713 68 76- 0
Fax: 0049(0) 203-713 68 76-19
info@unic-mobilecranes.de



LIFT - N - LOCK®

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

Tel: +1 (262) 363-9660
Fax: +1 (262) 363-9620

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

Building success with Tower Cranes.



P.O. Box 3306, Salem, Oregon 97302-0306 U.S.A.
+1 503 585 5721 • Fax +1 503 363 1172
info@morrow.com • www.morrow.com

Offices in the US, Australia, Canada, New Zealand, Brazil and Mexico.



INTERNATIONAL cranes AND SPECIALIZED TRANSPORT

To advertise in the next issue of
International Cranes and Specialized Transport
please contact Paul Watson on:

Tel: +44 (0)1892 786204

Fax: +44 (0)1892 786258

E-mail: paul.watson@khl.com



Gebrauchte Mobilkrane Used mobile cranes

Tel.: +49 (0)2853 60414 0
Fax: +49 (0)2853 60414 44
Im Heetwinkel 38, D-46514 Schermbeck

e-mail: mail@imc-cranes.com



PLEASE SEE OUR
COMPLETE STOCK

220t



Grove GMK 6220 L, 2003

200t



Demag AC 200, 2000

180t



Sennebogen 5500 Crawler,
2002

160t



Demag AC 160, 2005

130t



Grove GMK 5130, 2005

120t



Demag AC 395 /120, 1996

90t



Tadano Faun ATF 90-4,
1997

80t



Tadano Faun ATF 80-4, 2007

80 t



2 x Liebherr LTM 1080,
2000 / 2001

60t



Faun ATF 60-4, 1999

60t



2x Liebherr LTM 1060-2,
2003&2000

55t



Grove GMK 3055, 2004

55 t



Liebherr LTM 1055-1, 2004

50t



Grove GMK 3050, 1999

35t



Grove GMK 2035, 2003

35t



Faun HK 35 L, 1995

25 t



Demag AC 75/25, 1997

Further cranes / Coming soon

- Terex AC 30 City, 2004
- Liebherr LTM 1055-3.1, 2004
- Grove GMK 5100, 2005
- Terex AC 100/4L, 2011
- Liebherr LTM 1400-7.1, 2004

Prices on request/ Subject to changes and
prior sale/Colour variation possible.

www.imc-cranes.com

Looking to buy or sell a crane?



look no further

khlcranemarket.com

CraneMarket package

Maximise the opportunity to sell your crane, with a combination of, online, digital and print advertising – all wrapped into one simple to use package.

Online

khlcranemarket.com - Unlimited Crane Listings, pictures, detailed descriptions, contact details/ company logo.

Digital

Email Marketing - Latest cranes featured on a monthly e-Newsletter to over 35,000 potential buyers worldwide

Print

Used crane advertisement within the leading crane & heavy lifting publication, *International Cranes & Specialized Transport*

To find out more see the website or contact Paul Watson
email: paul.watson@khl.com tel: +44 (0)1892 786204

**Unlimited crane
listings, with
pictures, descriptions
and contact details**

KHL
**Crane
Market**



The online market place for
buyers and sellers of used cranes

ACT

cranes
AND SPECIALIZED TRANSPORT

khl



Crawler cranes from stock



CKE700



SCX800

1 x Sumitomo LS238	100t	1992
1 x Hitachi-Sumitomo SCX900-2	90t	2007
1 x Hitachi-Sumitomo SCX900-2	90t	2008
2 x Hitachi-Sumitomo SCX800-2HD	80t	2009
1 x Kobelco CKE700	70t	2006



Check out our website for more details:

www.borcherts.com

or contact us at: heiko.koop@borcherts.com

Tel: +31 - 653 652 522 • Fax: +31 - 514 569 186



Eisele AG
Crane & Engineering Group
Güterstraße 5
64673 Alzenau - (069) 4500-1
☎ 069 4500-1000 7941 33
☎ 069 4500-1000 7941 33
☎ 069 4500-1000 7941 33
✉ info@eisele-ag.com
www.eisele-ag.com



LTM 1350-6.1, year 04/2010

- Main telescopic boom 14,9 m up to 70 m
- Fixed fly jib 6 m up to 42 m angled 0°, 20°, 40° and 60°
- Luffing fly jib 12 m up to 78 m
- 140 t counterweight
- Hook-blocks:
160t (7-sheaves double load hook)
80 t (3-sheaves double load hook)
and a 36,2 t (1-sheaves single load hook)



First-class used cranes.

Tried and trusted quality for maximum reliability.

- Mobile cranes of all sizes and makes
- Thorough inspection and repair/maintenance
- Can also be provided with guarantee on request
- International delivery service
- Wide selection of used equipment to choose from at www.liebherr.com



Liebherr-Werk Ehingen GmbH
Postfach 1361, D-89582 Ehingen
Tel.: +49 7391 502-3333
E-Mail: gebrauchtkrane.lwe@liebherr.com
www.facebook.com/LiebherrConstruction
www.liebherr.com

LIEBHERR

The Group



HOMAR B.V.
Import - Export Hydraulic and Lattice Boom Cranes
Tel: +31-341-253982 Fax: +31-341-254207
E-mail: info@homar.nl

TELESCOPIC AT-CRANES						
Capacity	Manufacturer	Type	Year	Drive/Steering	Boom/jib (m)	Delivery
500 t	Demag	AC 500-1 SL	2000	16 x 8 x 14	56 / 90	direct
300 t	Liebherr	LTM 1300/1	2000	12 x 8 x 12	60/22/49/70	direct
300 t	Liebherr	LTM 1300	1996	14 x 8 x 10	60 / 42 / 70	direct
300 t	Demag	HC 810 SL	1984	14 x 6 x 10	52 / 54	direct
250 t	Demag	AC 665 SL	1996	12 x 8 x 8	58 / 22 / 65	direct
200 t	Grove	GMK 5200	2002	10 x 8 x 10	60 / 36	direct
160 t	Liebherr	LTM 1160	1986	12 x 8 x 8	45 / 20	direct
120 t	Terex-Demag	AC 120-1	2006	10 x 6 x 8	60 / 17	direct
120 t	Grove	AT 9120 E	1997	10 x 6 x 8	48,7 / 17,7	direct
110 t	Faun	ATF 110 G-5	2008	10 x 6 x 8	52 / 16,2	direct
100 t	Grove	GMK 5100	2002	10 x 8 x 10	51 / 18	direct
80 t	Demag	AC 80-2	2003	8 x 6 x 6	50 / 17	direct
80 t	Demag	AC 80-1	2001	8 x 6 x 6	50 / 17	direct
70 t	Liebherr	LTM 1070-4.1	2006	8 x 6 x 8	50 / 16	direct
70 t	Grove	GMK 4070-1	2000	8 x 6 x 8	38,1 / 16	direct
60 t	Liebherr	LTM 1060	1983	8 x 8 x 8	35 / 18	direct
55 t	Liebherr	LTC 1055-3.1	2005	6 x 6 x 6	36 / 7,8	direct
50 t	Terex-Demag	AC 50-1	2007	6 x 6 x 6	40 / 17,6	direct
40 t	Demag	AC 40-1 City	1999	6 x 4 x 6	31,2 / 13	direct
35 t	Liebherr	LTM 1035-3	1989	6 x 4 x 6	30 / 14,5	direct
30 t	Luna	AT 30/27	1989	4 x 4 x 4	27 / 7	direct
30 t	Luna	AT 30/27	1989	4 x 4 x 4	27	direct
25 t	Demag	AC 25/75 City	1998	4 x 4 x 4	25 / 13+1,5	direct

LATTICE BOOM TRUCK CRANES			
115 t	Linkbelt	HC 238	1981 10 x 6 x 4 42 / 19 direct

ROUGH TERRAIN CRANES			
36 t	Grove	RT 740	1980 4 x 4 x 4 31,70 / 9,75 direct

CRAWLER CRANES			
100 t	Liebherr	LTR 1100	2008 crawler 52 / 19 direct

MOBILE HARBOUR CRANES			
40 t	Sennebogen	640 M	2000 4 x 2 x 2 22 m / - direct

SPARE PARTS
 Gearboxes, drop boxes, jacks, beams, slewing rings, engines, booms... many more spare parts available.

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



MICHELSENS trading
 MICHELSENS TRADING NV Bisschoppenhoflaan 275, 2100 Antwerp (Deurne) - Belgium
 Tel: 0032 3 324 40 00 - Fax: 0032 3 888 42 22 - Email: trading@cranes4u.com

NEW XCMG CRANES

CE-tested + Belgian Homologation
Michielsens quality proofed

LIEBHERR
 Liebherr LTM 1040/1 ('00-'01)
 Liebherr LTM 1050-1 (1997)
 Liebherr LTM 1055-3.1 (2007)
 Liebherr LTM 1060-2 (2000)
 Liebherr LTM 1095-5.1 (2006)

GROVE
 GROVE RT540E (2008)

TEREX
 Demag AC40 (1998)

XCMG

- QY25K5
- QY50K
- QY70K (with automatic Allison transmission)
- QUY80E (CE) Crawler Crane






www.cranes4u.com



FOR SALE



Liebherr HS 853 HD
 equipped with 32 mtr boom.
 Safety: Liebherr Litronic

5 units available

ZWAGERMAN MATERIEEL B.V.
 Middenweg 81/1394 AE NEDERHORST DEN BERG (NL)

The Dutch specialist in crawler cranes for Rent and Sale

Tel: +31.(0).294.25.33.77 E-mail: info@zw-cranes.com
WWW.ZW-CRANES.COM



VAN DER HILST INTERNATIONAL B.V.
 INTERNATIONAL CRANE AND EQUIPMENT DEALERS, SPARE PARTS

Looking for equipment parts?
 Try us!

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

Van der Hilst International b.v.
 Amperestraat 21
 8091 XX WEZEP
 The Netherlands
www.vanderhilstinternational.com

Tel. + 31-38-3762856
 Fax + 31-38-3764665
 E-mail info@hilstinter.com



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

Sarilar Group



"Your Reliable Partner in Heavy Lifting & Heavy Transport"



Enerpac SBL 1100 1100 tons



Body of gas turbine, 517 tons



www.sarilar.com.tr
info@sarilar.com.tr

SARILAR Türkiye

SARILAR ULUSLARARASI NAZLIYAT ITM. İHR. LTD. ŞTİ.
İlâç Mh. Güney Yanyol Cd. No:334-336 Çekirge - Kocaeli / TÜRKİYE
Phone : +90 262 641 85 88 (Pbx) / Gsm : +90 532 755 1107
Fax : +90 262 641 13 01

SARILAR Dubai

SARILAR INTERNATIONAL LLC
P.O. Box 39936 Dubai-U.A.E.
Phone : +971 4 320 51 52 Fax : +971 4 320 51 53
info@ardema.uae.net.ae

SARILAR Iraq

Kerkuk Road, 98 km Erbil / IRAQ
Phone : +964 750 186 1203
+964 750 296 1204
info@sarilar.com.tr



SERVICE ENGINEER

Das Otomotiv Tic. A.S. is one of the largest Terex Cranes distributors. Due to rapid expansion, we have a new opening for the following technical position in our After Sales Division.



Responsibilities:

To carry out repair and service jobs, new commissioning and upgrade jobs on crawler and all terrain cranes. Be responsible for ensuring jobs are completed to the satisfaction of our customers. Residency will be Turkey, service territory will include Turkey, Azerbaijan, Kazakhstan and Turkmenistan.

Requirements:

- At least 5 years of field experience in service and repair of electro-hydraulic equipment.
 - Extensive knowledge of working on cranes or heavy construction machinery.
 - Diploma in Mechanical/Electrical Engineering or Mechatronics.
 - Ability to work independently and to troubleshoot electro-hydraulic malfunctions.
 - Hands-on experience with mechanical and hydraulic repair jobs.
 - Willingness to travel overseas on short notice.
 - Fluent in written and spoken English.
 - Experience with Terex crawler cranes and all terrain cranes preferred.
 - Minimum 3 years Driving License.
- Candidates must be able to travel and work independently. Successful candidates will have the opportunity to travel to Germany for product training.

Please apply with detailed resume and state clearly which position (SERVICE ENGINEER) you are applying for to:

Das Otomotiv Tic. A.S., Gardenya Plaza 5 Floor 2, 34758 Atasehir, ISTANBUL, TURKEY
Attn: Aftersales Director
E-mail: orcun.urcan@dasoto.com.tr

DAS



Authorized Terex Cranes Distributor for Turkey, Azerbaijan, Kazakhstan and Turkmenistan

© Terex Cranes 2014 · Terex is a registered trademark of Terex Corporation in the United States of America and many other Countries



BUCKINGHAM
STRUCTURAL MOVING EQUIPMENT

(610) 488-8969
SALES & RENTALS
www.BuckinghamEquipment.com

*Radio Remote
Control System!*

Buckingham Power Units

Engineered for maximum safety and efficiency. Proportional Hydrostatic drive with complete Radio Remote Control of Jacking, Steering and Air Braking Systems. Various models customized to meet your needs, with Diesel Engines from 24 to 173hp, and multiple Jacking and Steering ports.

Buckingham Dolly

Power Drive units are designed to move up to 350 tons per Dolly. Differential lock, Posi-traction, Power Steering or Caster Steering. Heavy-Duty multi-position tongue for towing and steering applications. 45-Ton capacity. Also available as Coaster units without driving capabilities.



SINDORF TRADING HOLLAND B.V.

For sale..! Try us..!

 MANITOWOC Model 7000 350/800 ton cap. Crawler Crane	 KOBELCO CKE 2500-2 250 ton Crawler Crane (2010)	 SINDORF	 2 UNITS MANITOWOC 222 S-B 91 ton Crawler Crane (2000)	 MANITOWOC M-85W 90 ton Crawler Crane (1994)
 20 UNITS FV 434 A.R.V. Armoured Repair Vehicle	 3 UNITS NCK NOVA HC65 65 ton Crawler Crane ('94-'97)	MANITOWOC M999 S-3 250 ton Crawler Crane (2000)	 KALMAR DCD 500-12 50 ton Forklift (2000)	 LINDE C4531-TL-5 45 ton Reachstacker (2007)

Please visit our website www.sindorf.nl for more information:

MAIN OFFICE:

Spoorstraat 15 - PO Box 43
8084 ZG 't Harde
Holland
Tel: +31-525-651832
Fax: +31-525-653032
Email: info@sindorf.nl

STORAGE & WORKSHOPS:

Nulweg 1
9561 MA Ter Apel
Holland
Tel: +31-599-589710
Fax: +31-599-589720
Web: www.sindorf.nl



CRANES 4 CRANES

INDEPENDENT OWNER-TO-OWNER CRANE PORTAL

- Time your sale, to achieve the best price.
- Agreed pricing, no surprises.

CRANES 4 CRANES INDEPENDENT OWNER-TO-OWNER CRANE PORTAL

Home About us Service News Contact My Account

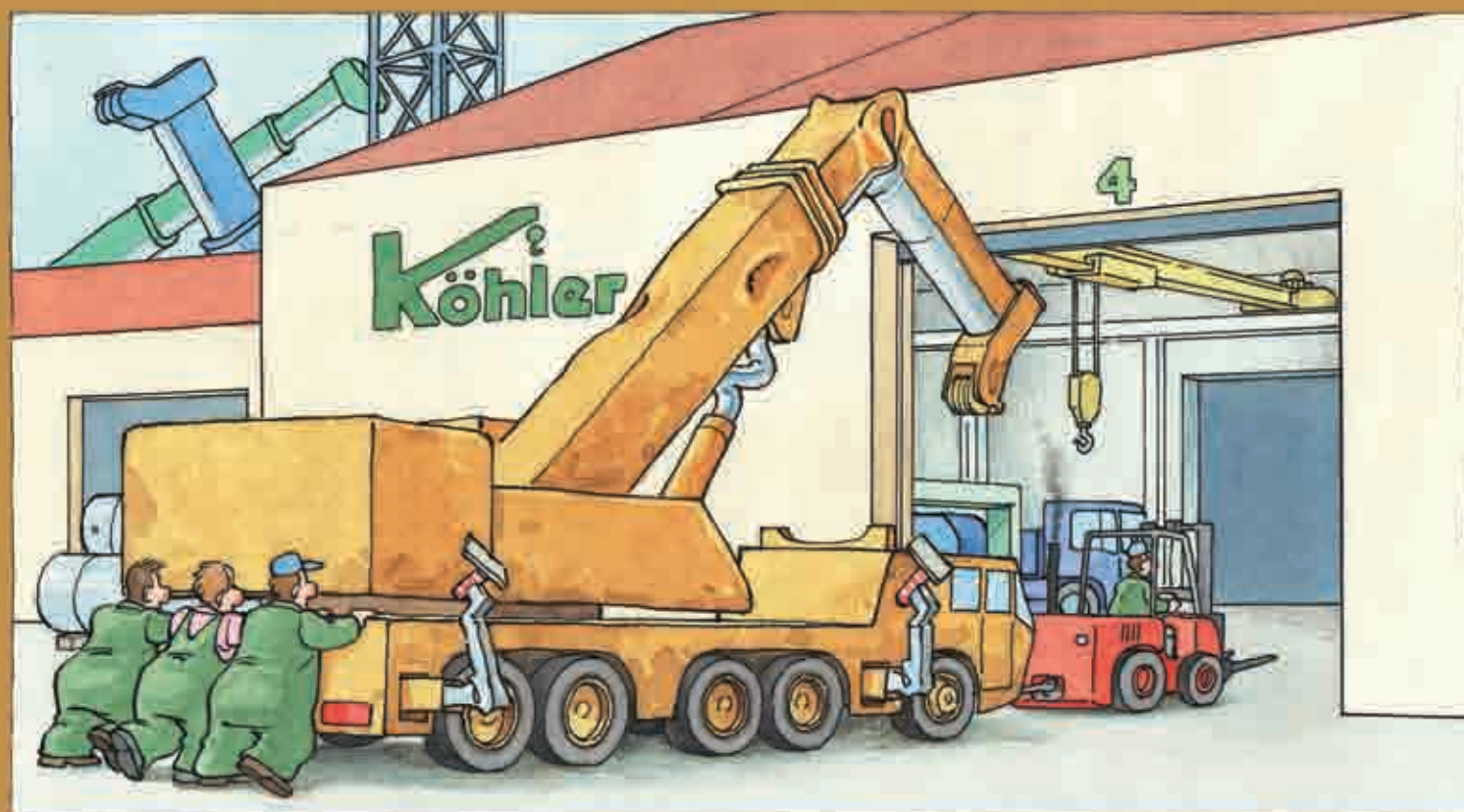
E-mail newsletter: [input field]

Create free account / Log in

- Placed offers
- Selections / Alerts
- Saved cranes

Crawler Mobile Crane Rough Terrain Tower Crane Equipment Trucks&Trailers

 Terex-Demag CC 2500-1 2009 select	 Wumag WT 1000 2009 select	 Liebherr LTM 1250-1 2005 select	 Liebherr LTM 1090-2 1998 select
 Liebherr LTM 1080-1 2001 select	 Sperlings SK 488-AT4 2006 select	 Grove RT 880E 2005 select	 Terex RT 665 2003 select
 MAN TGX 41.540 8x4 2013 select	 Goldhofer THP-SL 2004 select	 Scheuerle Euro Combi 2008 select	 Nooteboom OVB 65-04vzt 2007 select



Crane repairing

Cylinder repairing

Boom repairing

Crane spare parts

We buy damaged cranes

www.k-kran.de

Köhler Kran-Service GmbH
Dieselstrasse 9
64646 Heppenheim
Germany

Tel.	+49 6252 9977 0
Fax	+49 6252 9977 55
E-mail	info@k-kran.de