

LookingUP

MANITOWOC CRANE GROUP MAGAZINE

Dealer Profile
Tracsa of Mexico

Product Focus
Grove GMK5130-1

Factory Report
National at Shady Grove

On site:
In China



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Manitowoc
Crane Group

contents



5



16



20



10



24

4 EDITORIAL

Editor Ben Shaw looks at growth in the Chinese market.

5 NEWS

A round up of the latest News stories from across Manitowoc Crane Group.

8 PEOPLE NEWS

Including a special report on the appointments of Philippe Cohet and Larry Bryce.

10 NATIONAL CRANE

One year after National Crane production was moved to the Shady Grove facility, *Looking Up* reports on the success of the integration.

12 MANITOWOC Crane CARE

The Manitowoc Crane CARE facility in Décines, France has been expanded and now operates as the sole supplier of spare parts for EMEA. Cristelle Lacourt reports.

13 TECHNICAL UPDATE

With Grove's Taxi-Maxi philosophy, end users get a crane which can work across a number of capacity classes. Malcolm Early explains how.

14 CHINA: SPECIAL REPORT

Eric Etchart, executive vice president of the Asia Pacific Region, introduces our eight-page Special Report on the Chinese market.

16 JOB SITE REPORT

Three of Potain's giant MD Special Application cranes have been ordered for work on the Longtan Dam on the Hong Shui River in China. Ben Shaw reports from site.

18 JOB SITE REPORT

A Grove GMK6300 was called into downtown Shanghai to help change signage at one of the city's largest and busiest malls. *Looking Up* mixed with the shoppers and passers by to watch the action.

20 JOB SITE REPORT

A Model 999 is helping with the construction of a new steel mill to the north of Beijing. *Looking Up* reports.

22 PRODUCT FOCUS

The Model 1015 duty cycle crawler crane from Manitowoc Cranes has been hard at work on both sides of the Atlantic. It has also benefited from some modifications. Tom Cioni reports.

24 PRODUCT FOCUS

Grove's GMK5100 all-terrain has been one of the most successful cranes of recent times. Now the company is looking to build on its success with the introduction of the new GMK5130-1. Malcolm Early reports.

26 DEALER PROFILE

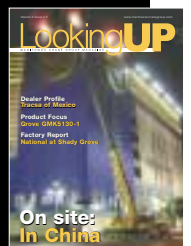
A look at Trasca SA, a Manitowoc Crane Group dealer based in Guadalajara, Mexico.

27 CraneMAN

CraneMAN discusses the benefits of self-erecting tower cranes.

ON THE COVER:

A Grove GMK6300 (GMK6350 in the US) at work on a shopping mall in downtown Shanghai. Our special report on the Chinese market begins on page 14.





This issue we feature an eight-page report on the Chinese market. Eric Etchart opens the feature with a round-up of Manitowoc Crane Group's activities in the country, before we look at three sites in the country where MCG cranes are helping end users complete projects on time and on budget.

One thing that stands out on sites in the country is the rate at which construction is taking place. China is not only a country where infrastructure is changing – but changing fast. Job sites often work 24 hours a day and are usually populated with huge working crews (although the latter is perhaps not as surprising given China's status as one of the world's largest populations).

Working methods are also changing in the country. This is thanks to the increasing number of joint venture projects being undertaken in conjunction with some of the world's largest contractors and project management companies. And also thanks to the increasing amount of sophisticated construction equipment entering the country.

Many of you have been following our story of the Potain MD 3600 units being used for the new bridge at Nanjing. These cranes are currently up and working – and they are the largest ever built by Potain. And there are still two Potain MD 2200 units at work on the Three Gorges dam helping pour concrete on what will become the world's largest dam. Recent months have also seen a variety of other heavyweight equipment enter China including Grove's flagship GMK7450 and Manitowoc's new Model 18000. This kind of sophisticated equipment, matched with up-to-the-minute construction techniques and a frantic work rate make for an interesting combination.

China is now firmly ensconced as one of the premier crane buying (and possibly manufacturing) nations in the world. And we will be seeing plenty more interesting developments from the country not only over the coming months, but over the coming years and coming decades.

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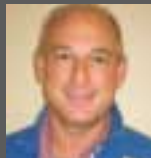
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COMPETITION WINNER!

Congratulations to Steve Freckmann of Dawes Crane & Rigging based in Wisconsin, US who correctly identified the mystery man in our issue 3.2. The man in the pictures was Bob Steiner of Kelley Equipment based in Florida. Mr Freckmann wins a model crane painted in his company's colors. Our thanks to all those readers who entered the competition.



A number of trade and brand names appear in *Looking Up*. For ease of design, these are displayed without their superscript or subscript symbols. The most common names are: MANITOWOC CRANE GROUP®, GROVE®, POTAIN®, TWIN-LOCK™, MEGATRAK®, MEGAFORM™, EPIC®, VISION CAB™, MAX-ERT™ and RINGER®.

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NATIONAL
CRANE

POTAIN

New Model 12000 for Americas



Manitowoc Cranes has launched an additional model in the Americas as part of its continuing manufacturing alliance with Kobelco Cranes Co Ltd. The new 109 t (120 US t) rated Model 12000 is now the largest in the range offered by the manufacturing alliance and will complement the five models already launched under the agreement, a number of which are already at work.

However, the Model 12000 differs from the others in that it is a totally new design – whereas the others are based on cranes in the existing Kobelco line up. The new unit was developed with input from both Manitowoc and Kobelco, and is offered for sale solely through the

Manitowoc Crane Group sales network.

Boom length for the new model is 70 m (230 ft), while maximum boom and jib is 61 m plus 21 m (200 ft plus 70 ft). Maximum boom and luffing jib will be 43 m plus 52 m (140 ft plus 170 ft).

New signage is gradually being introduced at Manitowoc Crane Group's various factories and regional offices around the world. The new signage depicts all of the company's divisions and reflects the enlarged structure following the integration of Grove in 2002 and the subsequent expansion of Manitowoc Crane CARE and Crane CREDIT. Pictured is the new signage at one of MCG's UK offices.



Two 100 t Grove GMK5100 (120 US t GMK5120B in the US) all-terrains were called in to help with a new hangar construction at Exeter International Airport. The units, which belong to Macsalvors Plant Hire and Sparrow Crane, were under the control of Emsley Crane Hire. Sparrow Crane also sent a 50 t (55 US t) GMK3050 to the job to help install the building's exhaust and air conditioning system.

Home builders

Three Potain MC 310 tower cranes, built at the company's factory in Zhangjiagang, China, are currently at work in Seoul, South Korea working on a new apartment development for Hyundai Construction. Two of the units have been erected to a height under hook of 52.5 m (172 ft), while the third is erected at a height under hook of 39.5 m (130 ft).

All three have been fitted with 65 m (213 ft) jibs.

The cranes are helping to build 15 apartment buildings, each of which will be 25

storeys tall. To complete construction the cranes will eventually be climbed to a height under hook of 75 m (246 ft). The cranes are being used to lift steel beams and concrete formwork up to a maximum of 12 t (13.2 US t). Work for the cranes will end in June 2006, while the project itself will be completed in October 2006.



Potain giants get to work

The two MD 3600 units from Potain – the largest cranes the company has ever built – have arrived on site in China and started work on the Nanjing Bridge #3 over the Yangtze River. The cranes took several weeks to erect and will be central to the construction work which will create one of the world's longest cable-stayed bridges and the first metallic cable-stayed bridge in China.

The enormous cranes have a maximum lift capacity of 160 t (176 US t) which they can handle out to a distance of 18.7 m (61 ft). Both have been fitted with 40 m (131 ft) jibs and will eventually reach heights up to 200 m (656 ft). When the bridge is completed in 2007 it will carry an estimated 60,000 motorists a day in six lanes of traffic and will span a total length of 1088 m (3570 ft).



Pictured is a Model 1200 RINGER from Manitowoc Cranes positioning what is believed to be the tallest column ever raised by a single crane in the southern hemisphere. The crane, which is owned by chemical and fuel giant Sasol, made the lift at the company's oil-from-coal plant and refinery in Secunda, South Africa. Total length of the column is 111 m (364 ft) and it weighs 555 t (612 US t). It was lifted at a radius of 28 m (92 ft).

High School stars

Manitowoc Cranes' Model 8500 crawler crane and a Grove TMS900E truck crane – both owned by Gravett Erectors – took a starring role in the construction of a new high school in Ashburn, Virginia, US. The duo was paired on a fast-track, 12-week contract to handle roof truss steel erection and other materials needed to build the new facility.

Representing its first outing for Gravett, Manitowoc's 77 t (85 US t) crawler equipped with a 73 m

(240 ft) boom was used to pick and place 42 steel roof trusses onto the concrete and brick structure. Each truss measured up to 39 m (128 ft) long and weighed in at 998 kg (2200 lbs). Gravett worked at a 145° radius while performing this work. "We set the dual trusses together on the ground using the Model 8500," commented company owner, Ben Gravett. "This crane was awesome for setting iron. It really brought a plus to our operation."



WHERE IN THE WORLD



You can find Manitowoc Crane Group at these events

bauma China

November 16 – 19, 2004
Shanghai, China
www.bauma-china.com

World of Concrete

January 18 – 25, 2005
Las Vegas, Nevada, US
www.worldofconcrete.com

AED Annual Meeting

January 27 – 29, 2005
San Antonio, Texas, US
www.aednet.org

SMOPYC

March 1 – 5, 2005
Zaragoza, Spain
www.smopyc.com

CONEXPO 2005

March 15 – 19, 2005
Las Vegas, Nevada, US
www.conexpoconagg.com

SC&RA Annual Conference

April 12 – 16, 2005
Phoenix, Arizona, US
www.scranet.org

Samoter 2005

May 4 – 8, 2005
Verona, Italy
www.samoter.com

New RT from Grove

Grove has introduced a new 68 t (75 USt) rough-terrain crane, the RT875E, which began deliveries in August of this year. The new unit has a four-section MEGAFORM boom which extends from 12.6 m to 39 m (41 ft to 128 ft), offering a maximum tip height of 41.9 m (138 ft). A lattice extension and inserts are available which can boost tip height to a maximum of 70.6 m (232 ft). The cab can be tilted by 20° for better visibility and the crane also features a hydraulic counter-weight removal system.

The public will get its first look at the new unit at the CONEXPO 2005 exhibition in Las Vegas, Nevada, US next year. Dave Birkhauser, senior

vice president sales and marketing, Manitowoc Crane Group – Americas, said of the new crane: “The RT875E brings our range of E-series rough-terrain cranes to seven – all of which have been



introduced over the past five years. It boasts all the features our customers have come to expect from E Series rough-terrains – reliability, ease of operation and high residual value.”

Cranes Down Under



Pictured left to right are David Greentree, David Tye and Jack Kramer, all from Manitowoc Crane Group Australia, at an industry conference and exhibition held in Manly, Sydney. The event was the Crane Industry Council of Australia's National Conference and Exhibition which featured a number of seminars for crane users as

well as a product fair at which MCG exhibited a 75 t Grove GMK4075 all-terrain (90 USt GMK4090 in the US). The keynote speech at the event was given by Jeff Brundell, president of the Crane Industry Association of Australia and also managing director of Manitowoc Crane Group Australia.



Monthly lifting magazine International Cranes and Specialized Transport published this picture as the 'Picture of the month' for their August 2004 issue. It shows a Manitowoc Model 2800T at the Ducharme Quarry in Quebec, Canada. The crane, which is owned and operated by Carriere Ducharme, was built in 1957 and is still in operation! The image was submitted to the magazine by safety inspector Jean-Francois Desmarais who noted that the crane was in good working order and after some repairs was even "as good as new". Manitowoc always says its cranes are built to last – this model would seem to prove it.

OBITUARY Robert Gleason



Robert Gleason, a man known throughout the crane industry worldwide, passed away on August 22. His company, Gleason Cranes, based in Chicago, Illinois, US, represented Grove for 30 years and was regularly among the company's top rated dealers.

During the Second World War Gleason served as an officer in the Navy on a boat in the Philippines. After being discharged he returned to the US where he completed a degree in aeronautical engineering at Purdue University in Indiana. He was employed by a variety of engineering companies before founding Gleason Equipment, together with his wife Alice, in 1953.

The company was later named Gleason Cranes and is largely credited with pioneering leasing in the crane industry. The company began leasing cranes to large contractors which needed equipment they were unable to buy. Gleason was also among the first crane companies from the US to supply cranes to projects overseas. It sent machines to work on oil pipelines in Alaska and also to help with reconstruction work in Kuwait after the first Gulf War in 1991.

He is survived by two daughters and four grandchildren.



Name: Philippe Cohet

Region: EMEA

Location: Ecully, France

Philippe Cohet has joined the executive team of Manitowoc Crane Group as executive vice president of EMEA. He took up the post in late August. Philippe will manage all aspects of EMEA's activities and will report directly to Glen Tellock, president and general manager of Manitowoc Crane Group. He is based at Ecully.

Philippe is an accomplished senior manager with over 20 years experience in the chemical industry. He joins the company from Rhodia, a world leader in specialty chemicals, where he held various roles of increasing responsibility, including process engineer, strategic studies manager, and business director. He was later promoted to vice president and general manager Industrial Specialties North American division, where he increased the group's profitability more than fourfold from 1994 to 1997.

Returning to Europe in 1998, Philippe became head of purchasing at group level before becoming president and general manager of Rhodia Electronics & Catalysis, a French subsidiary of Rhodia. Most recently, as group vice president and member of the executive committee, Philippe set up numerous shared services platforms in a variety of European countries.

Philippe is a civil engineer from the National Superior Mining School of Saint-Etienne in France. He is married with four children and speaks both French and English. Talking about his recent appointment, he said: "I am excited with the opportunity Manitowoc Crane Group presents in EMEA. The company has grown rapidly in recent years, so now is the time to

build on the strengths the expanded company offers. I see great potential in the region to grow all aspects of our market share and develop the company's excellent reputation. My first priority is to get to know as much about the business as I can, so I will be traveling extensively, talking to customers, dealers and employees about how things are working and how we can make them even better." Philippe replaces the outgoing Jean-Yves Bouffault, who has left the company to pursue other opportunities.

I will be talking to customers about making their businesses better



Name: Larry Bryce

Region: Worldwide

Location: Manitowoc, Wisconsin, US

Larry Bryce has joined the executive team of Manitowoc Crane Group as vice president, worldwide marketing. He succeeds Larry Weyers, who is now directing his energies solely towards Manitowoc Crane CARE. Larry Bryce will take over all

responsibility for strategic planning, direction and execution of marketing functions. He reports directly to Glen Tellock, president and general manager of Manitowoc Crane Group, and is based in Manitowoc.

Larry brings extensive international experience to the post having spent three years in China and other Asian countries, integrating US technology to facilities and developing sales, marketing and service infrastructure. He previously served as John Deere's director sales, marketing and service for EMEA, based in Orleans, France.

Most recently, Larry served as worldwide sales manager for the John Deere Power Systems Division in Waterloo, Iowa, US. While there he was responsible for tactical sales activities related to its power train division. In this capacity he dramatically increased sales and market share in North America, EMEA and Asia-Pacific.

Larry is a registered professional civil engineer with a BS from Oklahoma State University. He has also earned an MBA from the Kellogg School of Management, Northwestern University in Evanston, Illinois, US. He is married and has two

children. Speaking about his recent appointment he said: "I am looking forward to the challenges this new position offers. I will be working closely with the marketing teams in each region to set and implement our marketing penetration efforts across all product lines on a worldwide basis. We also have plans for a global new product development team and I am looking forward to taking that project forward."

In his new capacity Larry will also act as Publisher of *Looking Up*.

I am looking forward to the challenges this new position offers.

Name: Kyle Nape
Region: The Americas

Location: Shady Grove, Pennsylvania, US

Kyle Nape has been promoted to vice president of sales – Latin America. Kyle will be responsible for all Manitowoc Crane Group activities within the region, including sales, distribution development and new business.

He has spent over 20 years in the lifting industry and brings a wealth of valuable experience to the position. During his eight years with Grove he has served as district manager for Latin America, rising through the ranks to most recently become director of sales Latin America. Kyle also previously worked in the lifting business serving at different times in roles covering marketing, training and parts at locations in Africa and the Mediterranean.



Name: Michael Lee
Region: Asia Pacific
Location: Singapore

Michael Lee has joined Manitowoc Crane Group Asia as regional service manager. In his position he will report directly to Jack Lee, general manager for Manitowoc Crane CARE in the Asia-Pacific Region, and also indirectly to John Stewart, general manager of Manitowoc Crane Group Asia. Michael will be responsible for all Manitowoc Crane CARE matters relating to mobile and crawler cranes throughout the Asia-Pacific Region.

Michael brings with him a wealth of experience having previously served as marketing and maintenance manager for one of Singapore's largest construction companies. He has an in-depth knowledge of both mobile and crawler cranes and also speaks Chinese, Bahasa Melayu and English. He has a technical diploma from The City and Guilds of London Institute and is also a certified industry trainer.



Name: Malcolm Early
Region: EMEA
Location: Ecully, France

Malcolm Early has been appointed to the position of marketing communication manager for the EMEA region. In his new position Malcolm will be responsible for all external communication activities, including sales collateral, event organization, press relations, advertising,



website management and brand communication management. Also coming under Malcolm's responsibilities is *Looking Up*, which he is a regular contributor to and also a member of the Editorial Board.

Malcolm will report to Manuel Meurant, marketing director for EMEA. Malcolm has 18 years marketing experience and a postgraduate qualification in marketing. He joined Grove in 2000 and since Grove's integration into Manitowoc Crane Group has been in charge of the Grove and Manitowoc Cranes brands in EMEA.

Name: Wolfgang Schattschneider
Region: EMEA
Location: Wilhelmshaven, Germany

Wolfgang Schattschneider has been appointed director of special projects. He has been given particular instruction to look at all-terrain development projects for the Japanese market. He will also be handling customer care and technical advice at the Manitowoc Crane Group – Wilhelmshaven facility covering activities such as factory tours, special requests and detailed technical information.

Wolfgang has an extensive knowledge of the all-terrain industry and also the global crane business. This experience will be of particular use in Asia and will assist in projects undertaken in Japan. He reports directly to Lothar Hahn, vice president engineering and manufacturing mobile cranes, EMEA.



Name: Neil Hollingshead
Region: EMEA
Location: Ecully, France/Wilhelmshaven, Germany

Neil Hollingshead, who was previously a product marketing manager for mobile telescopic cranes, has been named as product manager, all-terrain cranes. In his new role Neil will lead the development process for all new all-terrains on a worldwide basis (with the exception of Japan). This will involve evaluating individual projects, defining specifications and coordinating product launches. He will handle these duties in addition to his current responsibilities, which include market assessment and competitive product analysis.

Neil will report to Manuel Meurant, marketing director for EMEA, and will divide his time between the MCG facilities in Ecully and Wilhelmshaven. He is currently studying for a BA (Honors) in Business and Management and is also learning German. Neil has been with Grove since 1989.





Move it on up

It's been less than a year since US-based National Crane was moved from its Nebraska home to MCG's facility in Shady Grove, Pennsylvania. Chris Bratthauar reports on the integration.



A substantially increased order book and more deliveries than in 2003 are just two of the benefits National Crane experienced since its

Another National Crane model leaves Shady Grove en route to a customer.



National Crane units built at Shady Grove are constructed on a line method which offers greater manufacturing efficiencies.

Chile for a contract with mining producer Codelco.

A key reason why National is exceeding previous delivery targets is the cranes are now constructed by individuals capable of working on multiple different models using a line concept.

Adding further efficiency to National Crane's output is advanced manufacturing technology and newer machine tools that boost throughput capabilities, including some of the best equipment transferred from Waverly. Moreover, the multi-million dollar painting and preparation system at Shady Grove, provides a superior finish to comparable cranes produced elsewhere.

MCG is able to harness manufacturing synergies between the National Crane and Grove lines. Booms and welding processes used within construction of the larger National machines are sim-



National Crane models are now built at the Manitowoc Crane Group facility in Shady Grove, Pennsylvania, US.

manufacturing operations were relocated last year. And those trends look set to continue into 2005 on the back of significant sales such as a 35 machine order to RESLA of

ilar to smaller rough-terrain cranes developed by Grove and so on.

Not everything, however, has changed for National Crane. John Lukow, vice president of sales, tells how more than 30% of the National output are 'specials' – that is cranes which feature some degree of customization and therefore require additional engineering time. "The percentage of products featuring different load charts, specific outriggers, toolboxes, special beds and so forth has not changed," says Lukow. "This service has allowed us to continue to maintain our role as market leader in boom trucks."

Lukow and his staff are candid enough to admit that switching a manufacturing center to another was risky, but say startup glitches are behind them. Ted Bratthauer,

Since production of the National Crane line was moved to Shady Grove, the company has experienced increased sales and a growing order book.

general manager, picks up the story: "There were some issues to begin with, but these were worked through and solved. We've delivered more cranes in 2004 than 2003 on a monthly basis and expect the end of year numbers to be up also."

On the sales front, customers find continuity in dealing with the same individuals as before, while Manitowoc Crane CARE ensures distribution of spare parts is improved. Furthermore, an additional \$1 million (€800,000) has been invested in service parts inventory and investment will continue.

All in all the future looks good for National Crane. Deliveries up, orders up, investment up... John Lukow puts it like this: "There is a very good market in North America for National Crane right now. We are involved with a lot of quoting activity and the rental market is picking up nicely. All of these factors represent very good indicators for new business." ♦





The expanded spare parts facility at Décines, France.



Inside the parts warehouse.

**MANITOWOC
Crane CARE –
DÉCINES
FACILITY**

Location:
Décines, France

**Number of spare parts
ordered per year:**
230 000

Surface area:
6500 m² (7700 yd²)

Staff:
70 personnel

Décines:

a unique place

Manitowoc Crane CARE has integrated its spare parts divisions for EMEA into one central location. Cristelle Lacourt explains.

Manitowoc Crane CARE has reorganized its EMEA division to offer customers a faster, more efficient service. The new spare parts division for the region has been regrouped into one single facility in Décines, France. The relocation project was given the nickname ‘MOVIDA’ – or, Move Venlo Into Décines ASAP! The nickname refers to the fact that a large part of the project required the relocation of the Grove spare parts facility in Venlo, The Netherlands, to Décines, France, where Potain and Manitowoc Cranes spare parts are handled. But the project was not just about moving one facility to another – it also required the construction of additional buildings, the recruitment of more staff and the installation of new information systems.

Under the guidance of project manager, Jérôme Chanel, EMEA’s spare parts logistics manager, a study into transferring spare parts supply to a single facility began in early 2003. By the end of the year that study was complete. Work began on the transfer at the start of 2004 and just six months later, the theory became reality when the newly expanded Décines facility began distributing spare parts for all MCG products – including Grove. The whole process was completed in July when Venlo officially ceased supplying Grove spare parts, leaving Décines as the sole site for EMEA.

“This project was about so much more than simply incorporating the Venlo facility into Décines,” says Jérôme Chanel. “We’ve built an extension to our warehouse – complete with a mezzanine floor; we extended our office

building; we’ve added 17 staff; and we’ve installed an interface between our two spare parts IT management systems. And we did all that within a period of six months and – most importantly – without any disruption to our customers.”

Anytime, anywhere

In addition to serving Manitowoc Crane Group’s dealers and end users in EMEA, the new location in Décines also supplies the regional MCG offices in Langenfeld, Germany; Sunderland, UK and Cergy, France. Jean-Pierre Zaffiro, spare parts director in EMEA, says the new facility reinforces MCG’s commitment to its customers.

“Any customer can call either their customer service contact, or direct to Décines – depending on where they are based – and we can

organize parts delivery anywhere for any of their Manitowoc Crane Group products,” he says.

Thibaut Le Besnerais, general manager for Manitowoc Crane CARE in EMEA also explains: “it was a very big team project – numerous departments invested time: Crane CARE teams, IT departments, HR, finance, etc, to make this unique center possible. And we did all that to offer a faster, more efficient service. The personnel at Décines now have access to a much larger database of parts and our call center is open longer hours. The expanded facility at Décines marks a significant step forward for Manitowoc Crane CARE in EMEA. But we won’t be sitting back – there will be further developments to ensure Manitowoc Crane CARE stays at the top of the after-sales industry.” ♦

Grove's Taxi-Maxi concept offers end users a stronger crane than was previously available. It gives excellent 12 t (3.2 USt) per axle configuration and inherent strength at heavier axle weights. Malcolm Early explains.

Choice CRANES



The best way to demonstrate Taxi-Maxi is to analyze how it operates on an existing crane in the Grove range. For the purposes of this article, the 75 t rated GMK4075-1 (90 USt rated GMK4090-1 in the US) will be examined. This crane is capable of traveling at 12 t (13.2 USt) per axle (a common restriction in many regions) with 10.1 t (11.1 USt) of counterweight; 16.00 tires; a

hydraulic swingaway and hook block.

In this set-up the crane can travel to the job site without any need of support vehicles. This is called a 'Taxi' set-up and, importantly, it means not only is the crane able to travel to site unaided, but it is also ready for a large number of practical lift jobs, thanks to its ability to transport a significant amount counterweight and a swingaway jib.

Grove is able to offer a lighter-weight base machine

The GMK3055 from Grove is one of the latest models from the company to feature the Taxi-Maxi capability.

with lower axle loadings thanks to a number of innovative weight-saving technologies. MEGATRAK, for instance, is Grove's unique suspension system which is lighter than conventional axles. The system also allows for a deeper carrier cross-section which increases torsional strength without increasing weight. The MEGAFORM boom, mean-

while, with its curved shape is inherently stronger than other boom shapes and reduces the need for stiffeners, therefore reducing weight. And the TWIN-LOCK system, which utilizes boom-pinning technology, means a single hydraulic cylinder can be used to extend all boom sections, again offering a significant weight saving.

The end result is a machine with improved lifting capabilities, but which is lighter than previous models. These weight savings can be 'reinvested' in the crane in the form of increased counterweight and greater carrying capacity for hook blocks, swingaway jibs, tool boxes and other accessories.

For those occasions when the crane is not restricted by axle limits, it is able to travel in its 'Maxi' mode. This allows users to take advantage of the machine's inherent strength to carry counterweight of up to 16.8 t (18.5 USt), boosting its load curve and therefore its lift capabilities. Again, the ability to carry this much counterweight is a direct result of the weight savings offered through the design technologies mentioned earlier.

In short, the Taxi-Maxi concept offers end users two cranes in one – a crane which can travel unaided with lower axle loadings as a 'Taxi' and one which can carry more equipment, as 'Maxi'.

Grove's 100 t (120 USt) GMK5100 (GMK5120B) was the first crane to bear the Taxi-Maxi tag. It has since been followed by the 80 t (90 USt) GMK4075-1 (GMK4090-1 in the US); the 55 t (60 USt) GMK3055; the 50 t (55 USt) GMK3050-1; the 220 t (250 USt) GMK 6220 (GMK6250 in the US); and the 130 t (165 USt) GMK5130-1. ♦

Eastern promise



In a special 8-page feature we report on the market in China. Eric Etchart, executive vice president for the Asia-Pacific Region, introduces the special report with a review of Manitowoc Crane Group's history in the country, its recent activities and its plans for the future.

Manitowoc Crane Group continues to view the Asia-Pacific Region

as a hugely important strategic market. The past years have seen it invest heavily in the region to ensure it continues to build on the momentum it has gained over the past two decades. Mobile cranes from Grove, crawler cranes from Manitowoc Cranes and tower cranes from Potain

can be found throughout the region and enjoy an excellent reputation for quality and reliability. This reputation is enhanced by a dedicated and committed distribution network which

has been steadily developed over the years to ensure the best possible service to the market.

MCG now operates directly from China, South Korea, Singapore, The Philippines and Australia and in 2004 it will deliver several hundred cranes in Asia-Pacific. China is of course the biggest market in the region at present – in fact it continues to be one of the biggest markets in the world.

Manitowoc Crane Group's presence in the country stretches back to the 1980s when Potain tower cranes first began appearing on sites in the country. Since then the popularity of the brand has grown as has market share. For almost a decade now Potain tower cranes have been built in China at the wholly-owned manufacturing facility in



The first Model 18000 to arrive in China.

Zhangjiagang, Jiangsu Province. The factory was certified to ISO 9001 by TÜV CERT Certification in 2002 and is a replication of the Potain factories in Europe. At present it produces eight models ranging from 40 tm to 485 tm which are sold not only in China but throughout the Asia-Pacific Region.

Aside from the



Assembling the Model 18000.





This Grove GMK7450 (GMK7550 in the US) has been delivered to a customer in Tianjin Province.

One of the Potain MD 3600 units at work on Nanjing Bridge #3. The cranes are the largest ever produced by Potain.



Zhangjiagang-built Potains other cranes from the MCG product line have enjoyed sales success in the past few months. Among the more recent deliveries to the country are the two Potain MD 3600 units, the largest tower cranes ever built by the company. As previously reported in *Looking Up* these cranes are capable of lifting 160 t (176 USt) out to 20 m (66 ft). They were erected in July of this year and are

being used for the construction of Nanjing Bridge #3. Meanwhile in Guanxi Province construction on the Longtan Dam is progressing with the help of two Potain MD 2200 units, a model that has established an excellent reputation thanks to its success in projects such as the Three Gorges Dam (also in China) and the Se San 3 Dam in Vietnam.

Crawler cranes from Manitowoc Cranes are selling

crawler cranes from Manitowoc Cranes have been delivered to sites in Guandong, Shandong, Anhui, Beijing and Tianjing.

Grove's GMK all-terrains, meanwhile, continue to attract customers with one of the flagship 450 t (550 USt) GMK7450 models (GMK7550 in the US) being sold to a customer in Tianjin Province. Steel giant Baosteel has added a 300 t (350 USt) GMK6300 (GMK6350 in the US) to its fleet, while several 100 t (120 USt) GMK5100 units (GMK5120B in the US) and 200 t (250 USt) GMK6200 (GMK6250 in the US) models have been delivered in the country. Both these latter units have established a solid reputation with rental houses, steel mills and

aluminum companies, among others.

Other developments in China have seen Manitowoc Crane CARE firmly established and it has added more qualified engineers in Shanghai, Beijing and Xian to support the

growing demands of the expanding Manitowoc Crane Group fleet in the country. Further growth across the Group is expected in the coming years. The following six pages indicate just a few of the diverse projects the company's cranes have been involved in this year. With further economic growth predicted for China and the Beijing Olympic Games in 2008 drawing nearer, the future is looking very bright. ♦

well with power and electricity companies. The 250 t (275 USt) Model 999 and 450 t (500 USt) Model 2250 with MAXER are popular models at present, many of which are being bought by customers looking to replace older Model 4100 and M-250 units from their fleets. The latest heavy lift unit from Manitowoc Cranes, the 750 t (826 USt) Model 18000 has also arrived in China with two units sold to date. New

growing demands of the expanding Manitowoc Crane Group fleet in the country. Further growth across the Group is expected in the coming years. The following six pages indicate just a few of the diverse projects the company's cranes have been involved in this year. With further economic growth predicted for China and the Beijing Olympic Games in 2008 drawing nearer, the future is looking very bright. ♦



The Longtan dam, once completed, will be the tallest roller compacted concrete dam in the world and the second largest hydro-power station in China – behind the Three Gorges (the largest dam in the world). Like the Three Gorges, the main contractor has called on two of Potain's MD 2200 special application tower cranes to help with construction. An MD 1800 has also been installed on site. Once completed, the dam wall at Longtan will reach 192 m (630 ft) which is expected to be extended to 216.5 m (710 ft) at a later stage.

At Longtan the 60 t (66 US t) MD 1800 has been mounted on rails at a height under hook of 112.8 m (370 ft)

Potain's Special Application cranes are central to construction of the Longtan Dam in China.



Li Xuejiang (left) and She Yangli.



Building Longtan

Three of Potain's Special Application tower cranes have been ordered for work on the Longtan Dam on the Hong Shui River in China. Ben Shaw reports from site.

with a 70 m (230 ft) jib. One of the MD 2200 units, meanwhile, has been erected to a height under hook of 92.8 m (304 ft) with an 80 m (262 ft) jib. The other MD 2200 is currently being erected.

Both the MD 1800 and MD 2200 are being used to pour concrete and handle steel reinforcement. Around 70% of the cranes' lifting duties involve pouring concrete using a 6 m³ (7.8 yd³) bucket. Each bucket of concrete weighs a little less than 20 t (22 USt) and it is estimated that each crane can pour 240 m³ (314 yd³) of concrete in an 8-hour shift.

All the cranes are under the direct control of the main contractor on site, a joint venture of three large Chinese companies. The three companies are: The 7th Bureau of

Hydropower in China; The 8th Bureau of Hydropower in China (both government-owned companies); and The Gezhouba Company (the largest hydropower company in China).

Li Xuejiang, a manager with one of the technical departments for the contracting joint venture, explains the working process at the site: "This jobsite operates 24 hours a day, seven days a week – in common with most working job sites in China," he says. "When we started the groundwork on this project the cranes would work an average of 15 hours a day. But now the project's progressing, they're probably working over 20 hours a day. We have six operators for each crane, with three pairs each working an eight hour shift a day. All of the operators have undergone full training courses from Potain as well as from our own technical bureau."

Construction activity on the project is increasing and the site is already planning for the second MD 2200 unit which will begin work shortly. This crane will be fitted with the under-jib Nippon Topbelt conveyor system and used to pour concrete continuously. With the Topbelt system attached, the MD 2200 is capable of pouring concrete at 360 m³ (470 yd³) per hour. This impressive pouring rate is essential as the total volume

The rail portal on which the MD 1800 is mounted.



Workers position one of the enormous concrete buckets handled by the Potain tower cranes.

of concrete needed in the project is estimated to be over 6,000,000 m³ (7,848,000 yd³).

She Yangli is a consultant engineer with the Changxia Longtan Construction Project Company, one of the engineering firms working closely with the main contractor on the project. He notes that the dam has several record-breaking attributes which make it an impressive project to be involved with.

"It's not just the amount of concrete that needs to be poured here, or the fact it will be the tallest roller compacted concrete dam in the world which make this project stand out," he says. "Once completed the Longtan Dam will feature the largest

underground power plants in the world and also the largest boat lift. To cope with a project of this size it was essential we use some of the biggest tower cranes in the world, which is why there are three of these large tower cranes from Potain on the site. In addition, we've got two cable cranes, three gantry cranes and a Grove GMK5100 all-terrain crane all helping on site." ♦

The two cranes on site are shortly to be joined by a third unit.





Local regulations meant the crane was not allowed downtown until after 10:00 pm.

A Grove GMK6300 made a night time journey into downtown Shanghai for a lifting job on one of the city's most popular shopping malls. Looking Up reports.

The crew from Baosteel worked through the night.



Night shift



The job took place just a short walk from the city's distinctive Oriental Pearl TV Tower.

Maneuvering a mobile crane into a downtown location can be a daunting task at the best of times. And when it's a six-axle all-terrain with a 300 t (350 USt) rating, the task is made a lot harder. But this was a challenge taken on wholeheartedly by Chinese company Baosteel, when asked to provide its GMK6300 (known as the GMK6350 in the US) – plus its lifting expertise – for the removal of signage on a prominent shopping mall in downtown Shanghai.

The Chaitai Plaza shopping mall sits right in the center of Shanghai, just a few hundred metres from the Oriental Pearl TV Tower – one of the city's most distinctive

landmarks. Because of its location, local government regulations stipulate that no heavy machinery may be taken into the city before 10:00 pm. But even at this time the city is busy, and the arrival of the six-axle Grove crane drew a big crowd.

With dozens of on-lookers the crane was carefully sited

and then rigged with full counterweight. Sometime after 11:00 pm (and with most of the on-lookers having since gone) the crane was ready to lift. The crew from Baosteel was ready and with the full 60 m (197 ft) main boom extended, the crane was maneuvered next to the sign. Once in position steelworkers attached the crane's rigging to the sign before cutting it away from the building. The 10 t (11 USt) sign was lifted away from the building at a height of 47 m (154 ft) before being removed from site.

Within hours the company was off site and out of the city center. The only way you'd know they'd been there at all – the missing Lotus Supermarket sign on the side of the Chaitai Plaza. ♦







A Model 4100 on RINGER is also on site.

The city of Beijing's new 'Olympic Clean Air Bill' aims to reduce pollution in the Chinese capital in time for the Olympic Games in 2008. One direct result of the new bill will see the closure of the city's Shougang Steel Mill. The mill is being replaced with a new one some 135 km (83 miles) from Beijing at Qian-An near the city of Tangshan. Helping with the construction of the new mill is a 250 t (275 USt) Model 999 crawler crane from Manitowoc Cranes.

The crane is owned by contractor Shougang No 1 Construction Co which is building large parts of the plant for steel giant Shougang-Qian-An Steel Mill. It is under the charge of its in-house construction equipment division, Shougang No 1 Construction Co Mechanization and Shipping Co, which has also installed a Model 4100 on site mounted on a RINGER capacity enhancing attachment.

A team of three operators work constantly with the Model 999, which has been fitted with 79 m (259 ft) of main boom. Zhao Hui is the supervisor for lifting operations: "Our biggest lifts so far have been the 100 t (110 USt) gas storage vessels – we've lifted two of those to date," he says. Other than that explains Hui, the crane has been used to lift 80 t (88 USt) sections of steel frame and 85 t (94 USt) overhead beams. "The work is steady for the crane," continues Hui. "We tend to lift in one spot and then move the crane every 20 days."

It is estimated that the majority of steel production will be moved from Shougang to Qian-An before 2008. ♦

The crane is used mostly for positioning steelwork.

Clearing the air



Zhao Hui, supervisor for lifting operations (right) with Guo Shubin, one of the operators.

A new steel mill is being constructed some 135 km (83 miles) from Beijing in a bid to clear the city's air ahead of the Olympic Games.



Getting down to business

The Model 1015 has been hard at work on job sites in the US and Europe, and has also been updated. Tom Cioni reports.

MODEL 1015

Maximum capacity:
120 t (132 USt)

Maximum main boom:
61 m (200 ft)

Maximum fixed jib:
67.1 m (220 ft)

Standard line pull:
294 kN (66 000 lb)

Optional line pull:
196 kN (44 000 lb)

Optional line pull (third drum):
147 kN (33 000 lb)

Since its launch at the end of 2002, the Model 1015 has been finding favor on on both sides of the Atlantic. At the time of writing, one unit is situated in the rolling hills of southeastern Belgium near the town of Eupen, where it is excavating sections of tunnel for the new high



speed rail line between Brussels and Köln in Germany. The crane arrived on site just a matter of weeks after making its first appearance at a major trade show – bauma 2004 in Munich, Germany – and is working for German foundation contractor Bauer.

For this job the unit has been fitted with 21 m (68 ft) of heavy duty boom and a Stein K-1210 diaphragm wall grab, suitable for digging 1.2 m and 1.5 m (3.9 ft and 4.9 ft) section panels at depths of over 20 m (66 ft). The grab weighs 25 t (27.5 USt) empty

A unit working for German foundation contractor Bauer, excavating sections of tunnel for the new high speed rail line connecting Brussels and Köln in Germany.

and close to 30 t (33 USt) full, making the Model 1015 an excellent choice thanks to its high line pull winches. Delivering 30 t (33 USt) continuous single line pull the Model 1015's winches can operate in powered lowering or free fall modes at the touch of a button.

As with other crane products from Manitowoc Cranes, the line pull rating is not just at the first drum layer but at every drum layer. A high capacity hydraulic cooling system dedicated to the winch brakes ensures high performance under heavy duty cycles.

On a previous foundation job in Portland, Oregon the Model 1015 worked with a Leffer slurry wall grab excavating to depths of up to 60 m



A Model 1015 at work in Portland, Oregon, US using a Leffer slurry wall grab.

facilitate dynamic compaction work. This latest application was finalized during a series of tests at the Manitowoc Crane Group – Manitowoc facility. With the addition of dynamic compaction the Model 1015's number of applications rises to 10 (including general lifting). Full details of the crane's capabilities can be seen in the box opposite.

The second notable change to the crane's specifications is the increase in maximum main boom length, which has risen from 54.6 m (180 ft) to 61 m (200 ft). The amount of jib available on the crane has also been increased to 67.1 m (220 ft).

Needing less than 25 t (27.5 USt) of counterweight, the Model 1015 offers superb structural strength while producing a basic lift crane rating of 120 t (132 USt). Powered by a 447 kW (600 hp) Cummins diesel

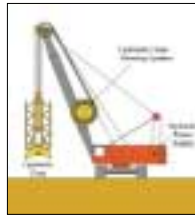
(197 ft) with single line loads over 25 t (27.5 USt). Bencor Corporation of America, based in Dallas, Texas used the combination on a tunneling project for river overflow management. Here again, continuous line pull was a prime factor in selecting the Model 1015 for the job.

Updates and improvements

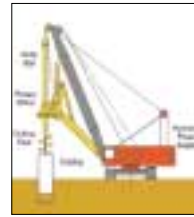
Away from the jobsite there have been a couple of notable changes for the Model 1015. The first is the addition of dynamic compaction capability, where weights are dropped in free fall for soil stabilization work. The Model 1015 control system can be programmed to apply limited slip braking and automatic hoist in single and dual line modes to



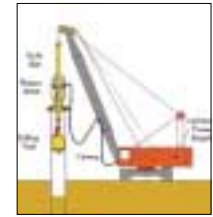
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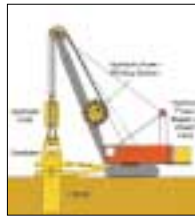
Diaphragm Wall Hydraulic Grab



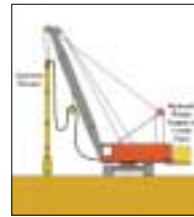
Drill Hanging from Lattice Boom with Spotter



Casing Clamped Fly Drill



Casing Oscillator or Rotator with Hydraulic Grab



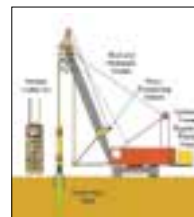
Deep Compaction Vibrator



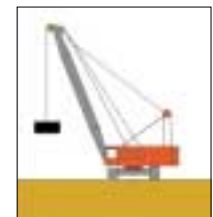
Pile Driving



Drill Rig with Mast Fixed to Lattice Boom



Hydraulic Trench Cutter



Dynamic Compaction

engine the Model 1015 can supply 680 l/min at 300 bar (180 gpm at 4300 psi) hydraulic power to drive external attachments. An optional auxiliary hydraulic power pack is available for high power attachments.

As with other EPIC series Manitowoc cranes, the Model 1015 is designed for ease of transport and assembly. The crawler side-frames can be retracted to 3.9 m (12.8 ft) external width with 1 m (3.3 ft) track pads and a self-erect package is available as an option. This enables the machine to fit into cramped working spaces as is common in metropolitan areas. ♦

Undergoing dynamic compaction tests at the Manitowoc Crane Group – Manitowoc facility in the US.

Strength in the air

The new GMK5130-1 (GMK5165 in the US) means end users now have a choice of three five-axle all-terrain cranes from Grove. Malcolm Early reviews the latest addition to the company's portfolio.

Grove's latest offering on five-axes will be the GMK5130-1.



The EKS 5 (light) load monitoring system and ECOS are both represented on an adjustable display.

Recent years have seen the 100 t (120 US t) all-terrain category increase in popularity. Whereas 10 or 15 years ago this size crane would only be found in large rental fleets, today it is accepted as a fleet staple – a 'must have' crane. And for the past five years, the market leader in this category has been Grove's GMK5100 (known in the US as the GMK5120B). In fact, not only is this crane the most popular in its capacity class, it's also one of the world's most

popular cranes in any capacity class.

Grove is now building on the success of the market-leading GMK5100 with the introduction of the GMK5130-1 (GMK5165 in the US), which will feature in the range alongside the GMK5100. The new unit uses the same five-axle carrier as the GMK5100 but features an all new upper-works offering increased reach and capacity. Maximum capacity of the new unit is 130 t (165 US t), but perhaps more important is the crane's six-section main boom which is able to extend to 60 m (197 ft) – an additional 9 m (30 ft) of main boom compared with the

GMK5100. The MEGAFORM boom also features Grove's patented TWIN-LOCK pinning technology.

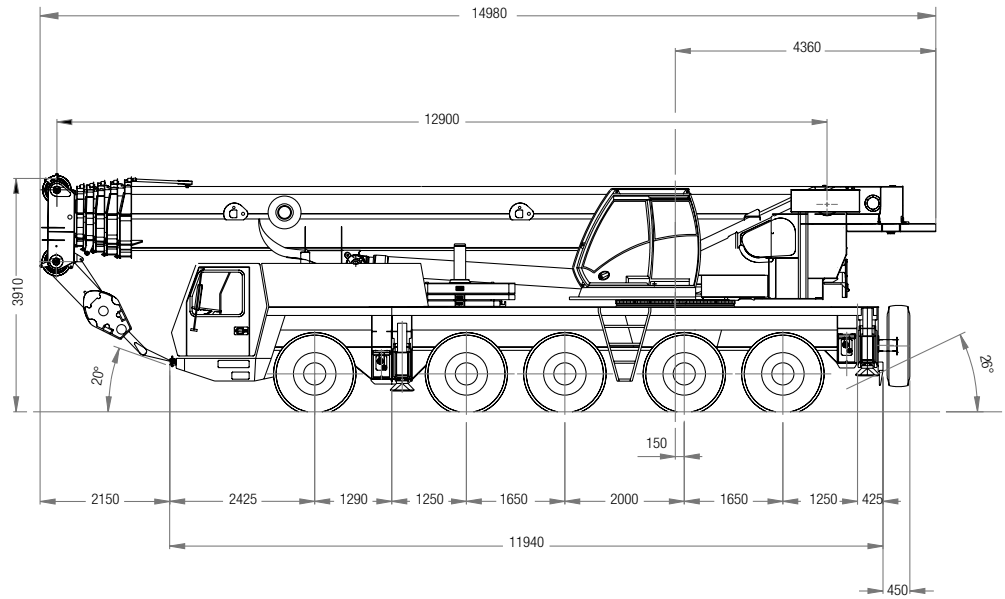
The increased boom length offering is one of the best in this capacity class and the GMK5130-1 also boasts a 10 t (11 US t) maximum capacity with the boom fully extended. This is one of the crane's strongest features and makes it suitable for a wider variety of tasks than other cranes in this class. As with all cranes in Grove's GMK all-terrain range the GMK5130-1

The unit will feature the new GMK cab.





How the new unit will measure up.



GROVE GMK5130-1

Classification:

All-terrain

No. of axles:

Five

Maximum capacity:

130 t (165 US t)

Maximum boom length:

60 m (197 ft)

Maximum jib:

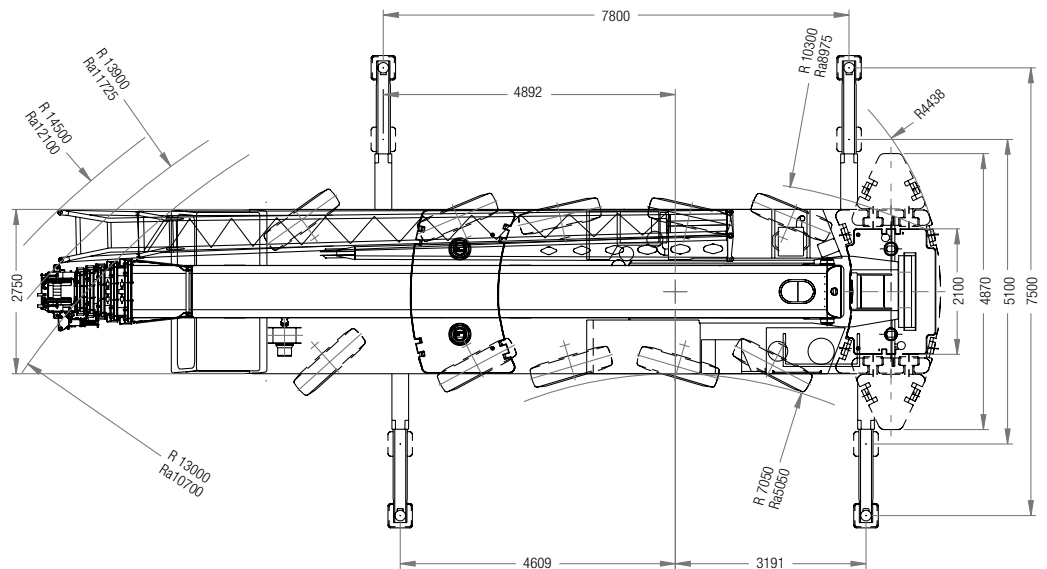
32 m (85 ft)

Maximum tip height:

95 m (312 ft)

Maximum radius:

66 m (217 ft)



features a full-power hydraulic luffing swingaway jib which can provide jib lengths of up to 32 m (85 ft) with inserts. With the jib in place the crane is able to offer tip heights up to 95 m (312 ft).

Grove's new cab (with tilt operation) and controls for its GMK range, which were first unveiled to the public earlier this year at bauma in Germany, also feature on the machine. The company's EKS 5 (light) load-monitoring system is included as standard, as is ECOS (Electronic Crane Operating System), both of which are presented

to the operator on a fully adjustable display. Maneuverability on site is made easier thanks to Grove's unique MEGATRAK suspension system.

In common with all new all-terrains from Grove, the GMK5130-1 is a 'Taxi/Maxi' crane, meaning it can be configured to travel as a single vehicle ready for work, or with support vehicles when it is needed for jobs which require increased counterweight and jib (see page 13). As mentioned earlier, the crane has a number of jib options. Its swingaway can be operated at

either 11 m (36 ft) or 18 m (59 ft), while there are inserts of 8 m (26 ft) and 6 m (20 ft) available. Similarly there are a number of counterweight options. The end user can choose from counterweights varying between 1 t (1.1 US t) and the maximum 40.1 t (44.2 US t).

When traveling in a 'Taxi' configuration the GMK5130-1 has been designed to offer roadability whilst equipped in the most practical manner possible. Therefore the unit is able to travel weighing less than 60 t (66 US t) – or 12 t (13.2 US t) per axle (which is now required by law in many

countries) – when equipped with 8.5 t (9.4 US t) of counterweight; an 18 m (59 ft) jib; 16.00 R25 tires (and a spare); hook block and retarder.

First of the new cranes will begin delivery in November with units scheduled to go to a variety of different European countries as well as the US and the Asia Pacific Region. The GMK5100 will continue to be offered by Grove, with the GMK5130-1 sitting alongside its popular sister model offering end users greater choice in one of the most popular capacity classes. ♦



Reynaldo Tenorio Torres, the man in charge of MCG products at Tracsa.

Down Mexico way

With company roots stretching back 75 years, it's fair to say Tracsa SA has a good handle on what's happening in the Mexican construction market and associated industries. Steve Brown reports.

The Guadalajara-based Tracsa SA handles sales and rental of Manitowoc Crane Group products (and other construction equipment) in the Bajío region of Mexico via 11 facilities and a staff numbering 650. The company has recently celebrated 30 years in business under the Tracsa name, while it traded for a further 45 years under the name Agromecánica before that. It is longevity like this that makes the company among the premier construction equipment dealers in Mexico.

Some of the most popular cranes sold by the dealership are the truck-mounted telescopic and articulating lines built by National Crane. Reynaldo Tenorio Torres, charged with handling the MCG product line at Tracsa, pinpoints the Series 900A, Series 1100 and Series 1300 as the dealership's top sellers. "These agile machines are excellent for quickly traversing

the narrow streets of Guadalajara and Bajío region," he says. "Contractors also like these telescoping products because they represent good value for money and are priced better than comparable products."

Sales represent 90% of

Tracsa's crane business, with the remainder made up by leasing and rental activities. Tenorio tells how many Mexican users still regard cranes as only able to carry out a specific operation instead of the versatile workhorses they actually are. He

adds how "the Bajío region is an agricultural-based economy for the most part, meaning cranes are typically consumed by specialist lifting contractors who prefer to buy than rent or lease".

Another MCG winner for Tracsa has been its 27 t (30 US t) Grove RT530E rough-terrain, a model being used by contractors Arco, Casas Beta and GIG to build government-funded housing projects that will help reduce Mexico's housing shortage. Ten cranes are being leased between the three companies. In addition a Potain HDT 80 self-erecting tower crane is on site, a model which is marketed as the Manitowoc HDT 80 in the US.

Each machine is often found in the middle of the road, picking and placing concrete molds on both sides of the street. Mr. Tenorio explains that each concrete mold is comprised of six sections, the lightest weighing 1 t (1.1 US t) and the heaviest being 4 t (4.4 US t). These molds are lifted in at a radius up to 21 m (68.8 ft). The houses are around 60 m² (646 ft²) and extend up to three storeys high. It takes about 20 days to construct a house from start to finish.

In addition to the molds, the three contractors use the Grove cranes – models that have a boom length range between 7.6 m and 29 m (25 ft to 95 ft) at their disposal – to handle tools, timber, welders, buckets and more besides. In short, these cranes act like a Swiss army knife on the jobsite.

It's applications like these that have helped Tracsa celebrate 30 years in business under its current name and a further 45 years as Agromecánica before that. Long may it continue. ♦



Grove and Potain products from Tracsa work side-by-side on a housing development site in Mexico.

Manitowoc Crane Group Presents **CRANEMAN**



CraneMAN'S TOP PICK

A selection from the Maniowoc Crane Group's extensive stock of used equipment



Model:
Grove TMS870
Year: 2000
Hours: 4493



Maximum capacity: 63.5 t (70 USt)
Main boom: 42 m (138 ft)
Jib: 17 m (57 ft) folding offsetable swingaway
Engine: Cummins diesel M11-400E

Notes: This unit is fitted with brand new tires and has a number of optional extras available. It is currently located in Wisconsin, US.

For more information contact:

Tom McCallum
Tel: +1 717-593-5032
Email: tmccallum@grovetworldwide.com



Maniowoc Crane CARE CORNER

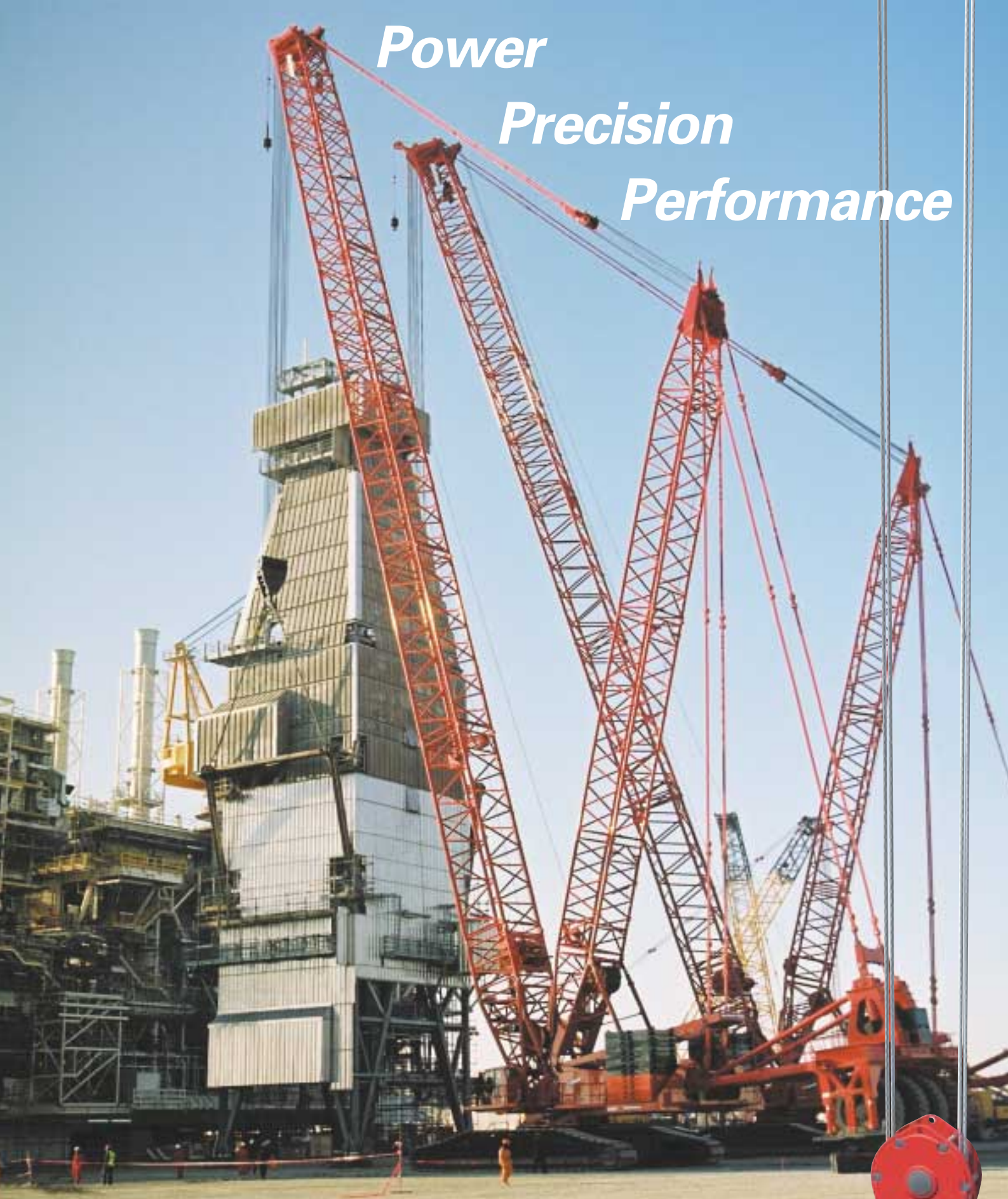
THIS ISSUE: PREVENTATIVE MAINTENANCE FOR MOBILE CRANES

- 1 Ignoring preventative maintenance can result in costly downtime or even a serious accident. To run a successful and modern crane fleet it is essential you invest in the skills and equipment required to run a preventative maintenance program.
- 2 Refer to the manufacturer's maintenance manual and use a planning chart or proprietary software to schedule your maintenance program.
- 3 Make sure the preventative maintenance and service schedule is explained to all employees. This will help alleviate any potential conflicts between the sales team and the service department.
- 4 Always employ trained technicians. Specialist knowledge will pay dividends.
- 5 Investing in the correct specialist machinery will save you time and money. Ensure your technicians have suitable laptop computers, lubrication systems, diagnostic tools etc.
- 6 Always follow the OEM's maintenance instructions when attending to the powerpack and powertrain. And don't forget the transfer case!
- 7 Regular brake maintenance is essential for safety and cost control. Remember that braking generates kinetic energy (or heat) which will always cause deterioration in components.
- 8 Are you pressure washing your crane? Cleaning is necessary, but pressure washing can have a detrimental effect on electric, hydraulic and pneumatic components.



This list is non-exhaustive and is intended as a short guide to some of the factors that should be considered when establishing and running a preventative maintenance schedule. For more detailed information contact your local Maniowoc Crane CARE representative.

*Power
Precision
Performance*



Manitowoc Model 18000

Two Model 18000 cranes each with a MAX-ER attachment lift a 400t (440USt) tower to be placed on an oil rig in Baku, Azerbaijan. Manitowoc helps make the world's most important lifts – yours.

www.manitowoccrane.com

 **Manitowoc**
Crane Group

Above. Beyond. Everywhere.

