Triple record breaker

CRANE CARE
EnCORE goes global

TECHNICAL UPDATE
Modification Center opens

JOB SITE REPORT
Panama Canal
Without the Boom Raising System, we would have been pressed to rent another crane or wouldn’t have been able to bid on the job.

Ron Babb — Crane Operator, Reed & Reed Construction

The Boom Raising System for the 440 USt Manitowoc 16000 WA is designed for customers like Reed & Reed to win more jobs. It allows operators to raise the longer boom lengths needed for 100 m wind turbine projects — without an assist crane.
**Comment**

This month we interview Eric Etchart, talking to him about the challenges facing Manitowoc and the difficult economic conditions that continue to affect the industry. From the start of the downturn in 2008, he was quick to say that Manitowoc would “emerge stronger,” so we asked if he felt the company had achieved that.

He says it has, and that it’s in “good shape,” but he’s honest about the hard work needed to get where we are today. The shift to lean manufacturing and quality-focused initiatives at the factories has not been easy. Changing philosophies and cultures, while also setting higher standards, has been an intense process.

But it’s a price worth paying, says Etchart. What’s more, the strategy is a success, with new cranes such as the Grove GMK6300L taking the market by storm. The crane has raced to 100 deliveries in a little more than two years, while warranty claims are close to record lows. The next stage is to replicate that success with other cranes — a process that is underway.

Moving to lean manufacturing and quality-focused operations has improved other areas of Manitowoc’s factories. For example, the time between lost time accidents is growing all the time — quite a feat considering its facilities are already among the safest in the business.

There’s no doubt the outlook for 2013 is for low-level growth (at best), but Etchart is not overly concerned by that. The company is in good health with a product line that keeps getting better. By sticking to its plan, not overstretching and improving operations, Manitowoc is perfectly placed to “emerge stronger.”

**Looking Up**

Pottain tower cranes working on the world’s longest cable-stayed bridge, the Russky Island Bridge in Russia.

For more see page 8.
Lift Solutions launches for crawler cranes

Manitowoc has created a “Lift Solutions” service for its lattice boom crawler cranes. The program covers a range of services, from quoting projects to engineering and producing cranes, and to providing attachments for unique applications. It utilizes the expertise of Manitowoc’s Engineering, Purchasing, Operations and Sales groups – with representatives from each division comprising a dedicated team to help customers overcome challenging lifts or jobs.

Allen Kadwo, who will manage the new Lift Solutions team, said the service is another way Manitowoc can provide superior customer support for lattice boom crawler cranes. “Here at Manitowoc, we don’t believe the job is finished when customers purchase or rent one of our cranes,” he said. “With Lift Solutions, we can provide customized technical support to assist customers through difficult lifts or projects.”

Lift Solutions services include:
• Customization of existing products
• New applications
• Custom load charts
• Special lift planning procedures

Thai port receives five Groves

The Port Authority of Thailand has added a Grove RT9130-2 rough-terrain crane to its fleet, boosting its Grove fleet to five; all of the cranes have been delivered over the past two years. The cranes range from a 13.6 t (15 USt) YB5515 industrial crane up to the 120 t (130 USt) RT9130-2, and handle a variety of cargos as they are unloaded.

Boonkerd Sabsanguan, chief of the cranes division at PAT, highlighted three key performance advantages of the Groves. “We really like the capacity, stability and smooth movements of the Grove cranes,” he said. “We’ve also had warranty issues resolved really quickly by Manitowoc Crane Care and our local Grove dealer Metro Cranes.”

Cargo arrives from the Americas, Europe and China, and is unloaded from vessels by large dockside cranes. The four Grove RTs and the YardBoss then load them onto trucks for onward shipping. Loads typically weigh between 15 t to 30 t (16.5 USt to 33 USt).

PAT has a long history with Manitowoc cranes and still owns an older mobile crane that dates back more than 20 years.

Manitowoc cranes at Medupi

One of the Southern Hemisphere’s largest power projects is using cranes from across the Manitowoc line up to help it meet its targets. A team of six Manitowoc crawler cranes, three Potain tower cranes and one Grove GTK1100 mobile telescoping crane are working on the Medupi Power Station in South Africa’s province of Limpopo. When complete, the coal-fired power station will have an output of 4,800 MW, making it the largest dry-cooled coal power plant in the world.

The first cranes arrived in 2008 and the last in 2012. It is expected that most will remain on the project until completion, scheduled for 2015. The six crawler cranes were provided by international rental giant Mammoet, the GTK1100 was provided by Vanguard and the tower cranes were provided by Kentz and SA French. The project is run under principal contractor Hitachi.

The crawler cranes, one Manitowoc 21000 and five Manitowoc 16000s, are lifting steel beams and steel assemblies. The two smaller Potain tower cranes, an MDT 98 and an MDT 178, are lifting structural steel elements for the bag filters, while the larger MD 1100 special application crane is placing the air-cooled condenser’s structure, plus associated components. The Grove GTK1100 is working around the clock, placing elements for two of the boilers.
Grove GMK6300L arrives in Indonesia

Indonesian state oil and gas company Pertamina has taken delivery of a Grove GMK6300L all-terrain crane for use in the expansion of its oil refinery in Cilacap, Central Java. The 300 t (350 USt) capacity all-terrain crane is the first Grove in Pertamina’s fleet of equipment. The crane was purchased through PT Altrak 1978, Manitowoc’s dealer for Grove cranes in Indonesia.

Irsan Zamhir, construction equipment sales at PT Altrak 1978, said mobility and reach were the driving forces in Pertamina’s interest. “We have discussed with Pertamina other equipment sales in the past, so when the company explained its current needs, we were able to recommend the GMK6300L,” Zamhir said. “The reach and capacity of this crane are impressive, and the customer also loved its mobility.”

Pertamina will use the crane at its Cilacap refinery, the largest in Indonesia. The refinery is undergoing an $800 million expansion, which began in 2011 and will continue until late 2014. One of the tasks for the new GMK6300L is to place concrete chimneys on newly-constructed towers.

Oil and gas company Pertamina, owned by the Indonesian government, operates six refineries which produce some 1 million barrels of oil per day.

100 percent move to Potain

One of the largest construction companies in Thailand, Syntec Construction, is gradually updating its fleet of 30 tower cranes, turning it 100 percent over to Potain. Currently, 22 of the company’s 30 cranes are Potain cranes, and each year it adds three new units.

Nayot Pisantanankul, assistant managing director of Syntec Construction, said his company’s close relationship with local Potain dealer SB Siam is a major reason for the move to a single brand. “Potain cranes are reliable, so I never lose sleep worrying about them,” he said. “We are happy with their performance and using them allows us to increase productivity. The role SB Siam plays is important, too. Through Manitowoc Crane Care, the company stocks the parts we need and can service the cranes when required.”

Syntec Construction works on 30 or more developments at any one time and is widely regarded as the leading high-rise construction company in Thailand.

Established in 1988, the company is a joint venture between one of Thailand’s leading steel pipe manufacturers and three of Singapore’s largest contractors.

Seven Groves to Scandinavia

Scandinavian rental and transport company Havator has added seven Grove cranes to its growing fleet – including an RT9130E rough-terrain crane. The company bought the cranes from both the GMK range of all-terrain cranes and the RT range of rough-terrain cranes.

Havator operates one of the largest crane fleets in Scandinavia, and has 20 Grove models and a Manitowoc crawler crane. The new additions will enhance the company’s strength in off-road and special application projects, said Erkki Hanhirova, group president.

“Industrial projects, particularly in the mining sector, are very active – there are several under way and others have been announced,” he said. “These projects demand powerful equipment that can reach remote, off-road locations. Our new Grove cranes not only have the capacity, but the build-quality to reach places other cranes cannot.”

The 120 t (130 USt) capacity RT9130E joins Havator’s fleet of four 75 t (80 USt) capacity RT880s. The other cranes in the latest order include four all-terrain cranes from the GMK5095 to the GMK5220 (GMK5115 to GMK5275 in the U.S.).

Havator Group employs around 600 people and operates in Scandinavia, Russia and the Baltic states.
Middle East meeting

Manitowoc attended the Intermat Middle East 2012 exhibition. The event, held in October in the UAE, saw Manitowoc reinforce its commitment to the Middle East and highlight its industry-leading dealer network. Two of Manitowoc’s dealers, Kanoo Machinery, which represents Grove and Manitowoc cranes, and NFT, which represents Potain, were at the show with their own displays.

Dominating Manitowoc’s outdoor space were an MR 295 luffing jib crane from Potain and the Grove RT765E-2 rough-terrain crane. The company also exhibited a YB7725 YardBoss industrial crane. In addition to exhibiting cranes outdoors, Manitowoc also used an indoor stand to highlight its Manitowoc Crane Care operations.

Philippe Cohet, EVP for Manitowoc Cranes EMEA, said the exhibition was a great opportunity to remind customers of the company’s strong presence in the Middle East.

“We are in a good position in the Middle East with a well-established support network and powerful products that suit the demanding projects of this region,” he said. “Our suitability for this region is demonstrated by our involvement in some of the largest developments of recent times in the Middle East.”

Kirby-Smith opens new site

Manitowoc dealer Kirby-Smith Machinery held a Grand Opening Celebration for its newest branch, based in Odessa, Texas, U.S. The branch is Kirby-Smith’s 10th in the U.S. and its 6th in Texas.

“We are very excited about having a branch in Odessa,” said Glen Townsend, VP and general manager of Kirby-Smith Machinery. “The town is thriving and we hope to swiftly integrate into the community.”

One way the company is integrating into Odessa is by joining the Odessa Chamber of Commerce and the Midland Hispanic Chamber of Commerce. Both chambers attended the opening event and performed ribbon cuttings together with more than 300 attendees who enjoyed live music and food, as well as walking through the range of National Crane boom trucks on display.

“The boom truck business is booming in West Texas,” said Ben Graham, VP and crane division manager at Kirby-Smith Machinery. “As the only authorized National Crane distributor in Midland/Odessa, we are very optimistic about our future.”

Kirby-Smith Machinery has been servicing the oil and crane industries for more than 29 years. The company also operates an extensive rental fleet with more than 1,500 pieces of equipment.

Shipyard specials debut in India

Indian engineering and manufacturing giant Larsen & Toubro has added two Potain MD 1100 special application cranes to its new shipbuilding facility near Chennai. The customized cranes were built to L&T’s specifications by Manitowoc’s special application cranes team. They have capacities of 32 t and 40 t (35 USt and 44 USt) and are installed on the jetty, handling loads for ship repair and construction.

P.R. Prabhu, executive vice president for shipbuilding at L&T, said the company was impressed with Manitowoc’s ability to meet its needs.

“We had unique requirements in terms of capacity and size of footprint,” he said. “We were able to tell Manitowoc what we needed and those unique requirements were met.”

The Potain MD 1100 is a modular product, available in different capacity classes depending on customer needs.
Front of the sea

A Potain MD 310 working on the port front in Salerno, Italy.

Three Potain tower cranes will spend the next three years working at an extensive coastal development in Salerno, southern Italy. The cranes were erected in early 2012, and are lifting a variety of materials and equipment to build a seven-story, crescent-shaped building that will define the city’s port.

The three cranes are 12 t (13.2 USt) capacity MD 310 C K12s, two of which are owned by RCM Costruzioni Spa and the other by Ritonnaro Costruzioni Spa. The two main contractors are working together in a joint venture on the project.

The cranes are responsible for a range of activities, including ground preparation and the lifting of reinforced concrete slabs that will form the structure of the modular building. Two of the cranes are working at hook heights of 36 m (118 ft) and the third crane operates at a height of 46 m (151 ft). All are configured with 55 m (180 ft) jibs and provide complete coverage of the site.

The development, dubbed “the front of the sea” project, is located between Salerno harbor and the marina, and includes a large semicircular building called The Crescent.

New Contact Center opens

Manitowoc is further improving customer support in Australasia with the opening of a new Manitowoc Crane Care Contact Center in Sydney. The free service means expert customer support for Manitowoc dealers and customers in the region is just a phone call away.

The Center, which is staffed by experienced Manitowoc Crane Care engineers and trained technicians, organizes on site support and training, dispatches parts, provides technical assistance and other related services.

The Center is available 24/7, thanks to its link with Manitowoc’s other international Contact Centers in Germany, France, China and the United States. It complements the company’s strong network of three dealers and three Manitowoc Crane Care facilities that operate across the region.

Brad Cooper, country manager for Manitowoc Crane Care, said the new center will promote better crane use while delivering customer support through a new platform.

Boom Raising System starts work

Contractor Reed & Reed is using Manitowoc’s new Boom Raising System in Eastbrook, Maine, U.S., to install 19 wind energy turbines at the Bull Hill wind farm. The project marks the first time the Boom Raising System has been used on a job site.

The Boom Raising System for the 440 USt (400 t) Manitowoc 16000 Wind Attachment is designed to raise longer boom lengths for wind applications without the need of an assist crane. It utilizes a large hydraulic cylinder in a special 10 ft (3.3 m) boom insert section that attaches to the boom butt. The boom raising cylinder works in conjunction with the boom hoist, and once the boom angle is high enough, the boom hoist fully takes over.

The Boom Raising System allows end users to lift up to 351 ft (107 m) of Wind Attachment Boom plus 25 ft (7.6 m) of Extended Upper Boom Point.

Reed & Reed purchased the Boom Raising System from Manchester, CT,-based Shawmut Equipment.
For more than three years, two Potain tower cranes, an MD 1100 special application crane and an MDT 368 topless crane, worked on Russky Island Bridge in Vladivostok. The completed bridge enters the record books on three counts – as the longest cable-stayed bridge in the world; for having the tallest bridge pylons at 324 m (1,063 ft); and the shortest construction time of just 43 months.

The bridge, which spans 1,104 m (3,622 ft), links the city of Vladivostok with Russky Island. It was officially opened on July 2 at a ceremony attended by the Prime Minister of Russia, Dimitry Medvedev, who praised the impressive feat of engineering that the bridge represents.

“This beautiful architectural structure embodies the genius of engineering and creativity of our staff,” he told the crowd that attended the opening.

The two Potain cranes, which were first erected in 2010, were anchored to the pylon on the Vladivostok city side of the bridge. The cranes were used every day until the end of the project. Their final job was to install Freyssinet stay cables on the pylon, and to remove scaffolding platforms and other auxiliary equipment.

The 50 t (55 USt) capacity MD 1100 started at a free standing height of 81 m (266 ft) and climbed to a working height of 335 m (1,099 ft). The 16 t (17.6 USt) capacity MDT 368, meanwhile, eventually reached 324 m (1,063 ft). The cranes were configured with 60 m (197 ft) and 40 m (131 ft) jibs respectively.

During the build, the cranes lifted a variety of equipment and construction materials, including concrete, formwork, steel reinforcement, steel structures and temporary bracing beams in loads up to 30 t (33 USt).

Among the most challenging lifts undertaken by the MD 1100, was placing metallic blocks to connect cable stays to the top of the pylon. Each 22 t (24 USt) block was lifted more than 325 m (1,066 ft) at a radius of 36 m (118 ft).

The cranes were bought directly from Manitowoc for the project by the bridge’s designer and sub-contractor OOO NPO Mostovik. Vladimir Romanov, lead engineer for the Bosfor industrial engineering team at the company, said the two Potain cranes offered the strength and versatility to meet the demanding build schedule.

“The Potains have operated in all conditions and completed a huge variety of heavy lifts. We are delighted to have finished on time,” he said.

A major challenge at the site has been the fluctuating climate. With a temperature range from 33° C to -30° C (95°F to -22°F) and coastal wind variations, operators needed a well-insulated cab and confidence in the cranes’ control to lift up to 30 t (33 USt) loads at such great heights.

Once their work was complete, the cranes self-dismantled until the final stages, when the MDT 368 was dismantled by the MD 1100 and the MD 1100 was dismantled with the help of a mobile crane. The dismantling for the MDT 368 took one month and 20 truckloads, while the MD 1100 took 45 days and 26 truckloads to breakdown.

The ambitious 43-month build schedule, which started in 2008, was set to ensure the bridge opened in time for the 2012 Asia-Pacific Economic Cooperation Summit in Vladivostok this past October. The summit welcomed heads of state from the 21 member countries.

The main contractor on the project was OAO USK-Most, with OOO NPO Mostovik working as sub-contractor and the bridge’s main designer.
Civil working

Latin America’s largest project is the $5 billion expansion of the Panama Canal. Potain and Grove are at the center of the action. Damian Joseph reports.

Considered a “World Wonder,” the Panama Canal’s original construction was an epic undertaking – the expansion to double its size is an international effort. There are 14 Potain tower cranes and four Grove cranes on the job.

Panama City-based distributor CORPINSA is handling the lifting work with Potain MC 205 B tower cranes, along with several models from the Grove mobile crane line to get the job done. GUPC (Grupo Unido Por el Canal) is in charge of the project to expand the 98-year-old canal.

“We recommended Potain tower cranes to CORPINSA and GUPC because of their heavy-lifting capacity and their ability to move laterally on job site railways,” said Alvaro Alanis, tower crane regional sales manager for Manitowoc in Latin America. “This saves the workers from having to constantly assemble and disassemble the cranes as they move up and down the canal.”

At the job site, the 10 t (11 USt) capacity MC 205 Bs are positioned on both the Atlantic and Pacific sides of the canal, helping to construct a third set of locks. With 50 m (164 ft) of height under hook and 50 m of jib, they are working 24/7, installing rebar, formwork and machinery to assist in concrete pouring. Some are moving across the project on job site railways, while others are mounted on fixed bases.

“It took us several months and multiple visits with CORPINSA and GUPC to form this partnership,” Alanis said. “In the end, GUPC was convinced that Potain was their best solution.”

GUPC purchased all 14 Potain tower cranes directly from Manitowoc. CORPINSA provided the four Grove cranes on a rental contract, helped install the Potain cranes, established their proper configurations during the planning stage and set the foundations for the fixed base units. In addition, it trained workers at the project in the maintenance and operation of the cranes. All of this work was handled in its role as a Manitowoc Crane Care dealer.

“The biggest challenge of this project is the limited time frame – everything has to be done quickly.”

— Raymond Mizrachi, general manager, CORPINSA

The MC 205 B cranes were manufactured at Manitowoc’s Zhangjiagang, China, factory and their cabs are especially comfortable for operators working at the canal. The average temperature on the job site hovers around 35°C (95°F), so GUPC purchased cabs equipped with air conditioning. The Potain cranes also feature LVF Optima hoist technology, which allows the hoist to adapt its speed to the weight of the load on the hook, improving efficiency.

Complementing the Potain tower cranes, GUPC also rented two Grove all-terrain cranes, a Grove GMK5220, and a GMK5230-2 (the GMK5275 and GMK165-2 in the U.S.), plus a TMS9000E truck-mounted crane and a RT860E rough-terrain crane from CORPINSA. The Grove cranes helped assemble the tower cranes and are now handling formwork and performing other lifting requirements.

“Our work with GUPC is ongoing for the duration of the canal’s expansion, which is scheduled for completion in 2014,” said Raymond Mizrachi, general manager of CORPINSA. “Along with support from Manitowoc Crane Care, we are providing crane maintenance and technical support, and we have set up a spare parts yard on the job site to ensure the cranes can continue to work 24/7.”

More than 150 million m³ (196 million yd³) of soil and rock will be excavated from the site and 5 million m³ (6.5 million yd³) of concrete will be poured for the new locks. When finished, the canal will have the capacity to accommodate larger ships, including supertankers and the largest modern container ships.

“The biggest challenge of this project is the limited time frame – everything has to be done quickly,” Mizrachi said. “The cranes can never stop working, so a responsive and effective support system must be in place. We have been successful in all phases of our involvement and GUPC reports that it is very pleased with the Potain and Grove cranes.”

A variety of Potain and Grove cranes work on the Panama Canal expansion.
Even though it’s been 40 years since Geoffrey Marsh bought his first Grove, he remembers it clearly. Marsh is chairman of the company that bears his name, Marsh Plant Hire Limited, based in Havant, Hampshire, with six depots in the south of England. And although he remains a regular Grove customer, his memory of the first delivery has more to do with his love of cars than a love of cranes.

“I visited the Exacompta show outside Paris in 1972 to receive our first Grove H1564 truck crane,” he says. “I remember it well, because immediately after, I took delivery of a Ferrari Daytona — a car I still own.”

The H1564 was a popular crane in the Marsh Plant fleet, and over the course of the 1970s, the company used 12 of them, along with several other Grove models.

**Cars, trucks and cranes**

The H1564 may be long gone, but the Ferrari is still in Marsh’s possession. Interestingly, there is a link between Marsh’s sports cars and his crane business. Marsh was previously a keen entrant of race cars that used data-logging technology. He took that experience and applied it to the crane industry, many years before other companies followed suit.

Similarly, Marsh Plant was among the first companies in the UK to start lifecycle costing for cranes — something it continues to this day. The company records costs for equipment and sets them against revenues. Where costs are too high (or revenues are too low), changes are made.

Throughout the 1980s Marsh Plant continued its association with Grove, adding the next generation of truck cranes, starting with a TMS250E in 1983. “When the company introduced the trapezoidal boom on this crane, I immediately saw its benefits,” remembers Marsh.

Marsh’s latest Grove purchases are several GMK3055 cranes. Earlier this year, he traveled to the Manitowoc factory in Niella Tanaro, Italy, to see one of them on the test pad. He has taken four GMK3055s in the last few years, bringing the company’s fleet of these to six, while two more units are on order.

**Company man**

Marsh spends less time at the company these days, yet it stays true to his values. The daily management is handled by the managing director, Andy Honeywell, who has more than 25 years’ experience at Marsh Plant. Earlier this year, Ray Cole, who works in the metal shop, celebrated 50 years at the company. Dozens more in the 100-strong staff have 20, 30 or 40 years to their name.

Despite the relationships Marsh cultivated during his many years of buying Grove cranes, he is quick to note his purchases are based on finances, not friendships. “Every crane has to deliver a return,” he says. “We look at its costs and match that against the return.”

As he has done for the past 40 years, Marsh will be eyeing the performance of the latest GMK3055 cranes to ensure they deliver the returns he expects.
National Crane boom trucks are changing the nature of natural gas and oil field work in the U.S., making it simpler, more secure and more cost-effective. Damian Joseph explains why.

Nowhere is the change in natural gas and oil field work more evident than on the Marcellus Shale natural gas fields in Pennsylvania, U.S. There Texas-based Renegade Wireline Services is using two National Crane boom trucks – an NBT45 and an NBT50 – to insert wireline cabling and related tools into several natural gas and oil well sites.

In the past, mast trucks handled a majority of work on gas and oil fields, but the work was cumbersome. Operators were forced to move their mast trucks for every lift, rigging and de-rigging the winch mechanisms each time. Now, crane operators are able to rig a boom truck for several lifts from the same spot, which is much more efficient, saving time and money.

National preference
Rodney Offield, manager of the Pittsburgh, Pa., branch of Renegade, said National Crane boom trucks are not only his “personal preference,” but that they are also essential to the company’s work.

“We need all the cranes we use on the gas and oil field to have at least 125 ft (38 m) of main boom so that we can place tools into multiple wells without having to move the truck,” he said. “The cranes also have to have a high load rating at the boom tip to handle the intense weight of the multi-ton rigging and cable-hoisting operations.”

The NBT45 has a 40.8 t (45 USt) capacity and a 127 ft (39 m), five-section full power boom. The NBT50 has a 45.3 t (50 USt) capacity and a 128 ft (39 m), five-section full power boom.

Quick reactions
Offield said that in the oil and gas business, jobs come suddenly and his company must react immediately. That means jumping in the boom truck and heading to a job site right away. Renegade doesn’t have to worry about obtaining last-minute highway permits because it uses National Crane boom trucks that are mounted on chassis that comply with federal bridge laws.

National Crane boom truck cranes are also making work on the job site more secure and helping to improve communication among crews. With many other trucks, the control levers are outside of the back window. Operators have to engage the clutch pedal, and then turn their bodies to sit sideways and operate the winch. In boom trucks, the controls are right in front of the operator.

“The boom trucks have made this kind of gas and oil field work much easier, and give the operators a greater sense of security,” Offield said.

Dealer support
Although Renegade already owns two NBT 45s, the company is renting two additional boom trucks from Stephenson Equipment, Inc. Gabe Lash, territory sales manager at Manitowoc dealer Stephenson, said National Crane boom trucks are seeing high levels of demand.

“We do really well with the National Crane and Manitowoc products,” he said. “In addition to sales we offer rental and training, and have invested in more NBT cranes to meet customer demands.”

A National Crane NBT45 boom truck at work on the Marcellus Shale natural gas field in Pennsylvania.

Booming innovation
Building quality

Manitowoc’s president and general manager, Eric Etchart, talks to Ben Shaw about factory improvements, quality initiatives and the outlook for the industry.

As Eric Etchart looks back on a challenging few years for the crane industry, he’s clear on how the current climate is shaping Manitowoc. “We’ve always said we will emerge stronger from this crisis, and with the work we’ve put into our quality initiative, we can actually show customers what we mean by this.”

It’s no secret that Manitowoc has spent the past five years-plus totally re-designing the layout and processes at its factories, streamlining operations, speeding up build times, and most importantly, improving quality. It’s a process that has been painful at times, yet necessary for the greater good.

“We’ve had to work very hard to get our factories into the shape they’re in now,” confirms Etchart. “From a financial standpoint, it’s been a large investment but it’s also been a challenge to change the culture of the factories and the way we work. We’ve also taken some very tough choices and stuck to our principles. In a few cases, we’ve even taken the decision not to ship cranes because we are not happy with the quality. Throughout all of this process we have learned lessons and grown stronger.”

The shift to lean manufacturing and the commitment to quality has forced Manitowoc to put its own business under huge pressure. Yet out of adversity comes greatness. For Etchart, the success of the initiative is perhaps best embodied in the launch of recent cranes such as the Grove GMK6300L.

“We’ve just delivered our 100th GMK6300L, which is a fantastic achievement for a crane of this size,” he says. “But what makes me even happier is the fact that warranty costs on the crane are at very low levels, reflecting how well it’s been developed and engineered.”

To produce such a large capacity crane and sell it at high volumes in the current market while maintaining excellent reliability levels, has convinced Etchart the shift to lean manufacturing has been worthwhile—and that it must continue.

“Our journey into lean is really only just beginning,” he says. “You’re going to see a lot more from us in terms of lean philosophy. And I don’t just mean in terms of manufacturing. We’re speeding up our testing processes, standardizing more designs and sharing components across platforms. Things like this make our cranes easier and cheaper to maintain.”

“We’re speeding up our testing processes, standardizing more designs and sharing components across platforms. Things like this make our cranes easier and cheaper to maintain.”

Eric Etchart, president and general manager of Manitowoc.

Etchart says a good example of how the design and testing element can be sped up is the new Product Verification Center in the Shady Grove factory in the U.S. This facility provides previously unavailable insight into the components that make up many of Manitowoc’s cranes.

The lean manufacturing initiative also has a new head: Josef Matosevic the senior vice president of manufacturing. Matosevic reports directly to Etchart, an indication of the importance of his role at Manitowoc.

Looking ahead

With an eye on the future, Etchart is excited about the coming years and how the business will develop.

“We’re in good shape considering the global market we’re operating in,” he says. “In North America we remain the absolute market leader. A key reason for our strength is our dealer network, which is the best in North America by far. We think next year will be positive; with the U.S. election out the way, people will start to think about projects ahead.”

Elsewhere, the global outlook is mixed. Latin America, for example, is looking very strong, while other markets in Europe remain tough. However, regardless of where customers are located or how well their market is faring, Etchart has a closing message directed at all:

“We want to be closer to customers, wherever they are, and be responsive to their needs. We have a strong pipeline of new products that we’ll be rolling out in 2013 and we’re investing in Manitowoc Crane Care. We’re making it our goal to make our customers more profitable.”

With new cranes such as the GMK6300L rolling off of the production line and recording near perfect uptime, it’s easy to see what he means. ✦

14 | LOOKING UP | DECEMBER 2012
Energy investment pays off

A Malaysian contractor for oil and gas companies has boosted its capabilities by purchasing a series of Grove and Manitowoc cranes. Punitha Govindasamy reports.

Three years ago, SapuraKencana Petroleum finished building a major platform for an oil and gas exploration project in India. It was a huge success, with the project coming in on time and on budget. But SapuraKencana, which specializes in supplying integrated services, including fabrication, to the offshore industries, wanted to know how to improve its operations, and in particular, how it could better leverage its crane usage.

For the job in India, the company rented a 750 t (827 USt) Manitowoc 18000. When reviewing the rental costs for the crane and mapping out the potential for future work, the company realized that if it invested in its own high-capacity cranes, it could expand its business.

En Jamalludin Obeng, vice president of fabrication at SapuraKencana, said once the company had made its decision, speaking to Manitowoc was a natural next step.

“The project for India was a game changer, because we realized that by combining our own cranes with in-house expertise, we could take on much larger projects,” he said. “We talked to several manufacturers but settled on Manitowoc because we know the company well, and we get great support from our dealer UES and Manitowoc Crane Care.”

SapuraKencana purchased four 400 t (440 USt) capacity Manitowoc

Several Manitowoc crawler cranes work on an offshore oil exploration structure. Loads can weigh up to 600 t (661 USt).
16000 crawler cranes, instantly giving it the ability to take on bigger projects. Whereas the company previously worked on steel jackets for oil platforms weighing between 1,500 t and 2,000 t (1,653 USt to 2,205 USt), adding the four 16000s allowed it to bid for jackets up to five times that size.

The investment paid off, with the company winning a tender to build an 8,000 t (8,818 USt) steel jacket for ExxonMobil, and a 14,000 t (15,432 USt) jacket for Kebabangan Petroleum Operating Company.

On the ExxonMobil job, the company had to make lifts of up to 400 t (440 USt), while on the KPOC job, the heaviest lifts were 600 t (661 USt). Sam Sim, Manitowoc’s sales director for mobile and crawler cranes in Asia-Pacific, said for the variety of big lifts required, the 16000s were the best choice.

“We discussed a program of major lifts and more regular lifts, and looked at several crane options,” he said. “After seeing the full picture, we decided that four 16000 cranes were the best choice for this facility. Working alone or in tandem, these cranes can handle all the large elements, and for the more “routine” lifts of 50 t to 100 t (55 USt to 110 USt), the cranes have plenty of capacity, and more importantly, reach.”

In addition to the four Manitowoc 16000 cranes, SapuraKencana also added five Grove RT650E rough-terrain cranes for support work.

The company has used Manitowoc products since 2001 (the company’s name was HL Engineering then), when it purchased some used Manitowoc 4100W crawler cranes. It still owns several of those cranes, including a 37 year-old crane that is still working.

SapuraKencana is an integrated services provider which offers engineering, procurement, construction, installation and commissioning to the offshore oil and gas industries, and which has operations in more than 20 countries; it has more than 9,000 employees. Among its current projects are several in-country production-sharing contracts in Malaysia, as well as infrastructure work for Australia’s giant Gorgon gas project.

En Jamalludin Obeng said the latest generation of exploration and extraction equipment for oil and gas industries is getting bigger.

“We’re seeing more modularization in the oil and gas industries, and clients are looking to lift bigger modules, too,” he said. “We really need cranes with good capacities and close control, but we also look for a brand we can trust, and for us that’s Manitowoc.”

As SapuraKencana has grown and taken on bigger projects, it has also strengthened its operations, particularly in site safety. The company puts a lot of emphasis on training and calls on Manitowoc Crane Care to provide regular crane operation and maintenance classes. The most recent saw 35 personnel attend a series of courses. The company is rightly proud of the safety record in its Malaysia facility – it has recorded zero accidents over the past two years.

With a formula for success built around high-quality equipment and talented people, the company’s future looks bright. 

En Jamalludin Obeng, vice president of fabrication at SapuraKencana
Increasing wind speed with attachment

Since its release, Manitowoc’s 16000 Wind Attachment has helped customers speed up operations and take on more work on wind energy job sites across the globe. We catch up with some leading companies to find out how. Chris Bratthauar reports.

Just over two years ago, Manitowoc shipped the first series of 16000 Wind Attachments to customers. The goal was to boost the capacity on Manitowoc 16000 cranes so companies could install the latest generation of wind turbines. Some 85 percent of Manitowoc 16000s were being used for wind work when the Wind Attachment hit the market, and a shift from 1.5 MW turbines to bigger 2.5 MW turbines drove the need for more lifting capacity.

User feedback
For this issue of Looking Up, we checked in with some of the first users of the Wind Attachment and found they’re putting them to good use. The 44 percent capacity advantage the attachment provides over a standard Manitowoc 16000 has helped fuel a boon in wind energy work for many companies, even enabling them to bid on jobs they wouldn’t have otherwise been able to perform.

Recently, Manitowoc released the 16000 Boom Raising System to further improve wind turbine installations. The Boom Raising System can raise longer Wind Attachment boom lengths that are needed to install nacelles on 100 m (328 ft) turbine towers without the aid of an assist crane. Together, the 16000 Wind Attachment and Boom Raise System have made the Manitowoc 16000 the ultimate crane for wind energy applications.

Check out the new Wind Attachment video

Those interested in seeing the new Manitowoc 16000 Wind Attachment in action can check it out on-line. Simply visit YouTube.com and search “16000 Bull Hill wind farm.” There, viewers can see not only how the Wind Attachment looks when fitted to the 16000, but also how the new Boom Raising System works.

The video includes an interview with Rob Babb, an operator with contractor Reed & Reed, who was the first to use the new Boom Raising System on a live site (see News, this issue). The use of time lapse in the video gives a great indication of the huge reach available with the attachment, yet also how easy it is to get in the air.
“The Manitowoc 16000 Wind Attachment has been performing very well for us. It has increased the capability of our crane and given our customers more versatility. The factory-trained technicians that installed our first 16000 Wind Attachment report that this attachment was very user friendly and easy to install.”

Bill Aurelias, president, Cleveland Crane & Shovel Sales, Cleveland, Ohio, U.S.

“For us, the 16000 Wind Attachment has increased the value of the Manitowoc 16000, and the unit itself is performing better than we expected. Our company tailors itself to the wind industry and we’ve seen the 16000 Wind Attachment become very popular for turbine construction. In fact, since we’ve purchased the 16000 Wind Attachment, our Manitowoc 16000 crane has yet to be rented without the attachment. Currently, we’re using the 16000 Wind Attachment on job sites in Idaho and California.”

Steve Wurscher, rental manager, CECO, Shakopee, Minn., U.S.

“We’ve had real good luck with the 16000 Wind Attachment at Mullen Crane and Transport. Without the 16000 Wind Attachment attachment, the Manitowoc 16000 crane would not be able to work on Siemens towers, which is important in the wind industry. We have two 16000 Wind Attachments on job sites now, and we haven’t experienced any issues. The 16000 Wind Attachment is cost effective and gives us a competitive advantage in the industry.”

Adam Hulse, branch manager, Mullen Crane & Transport, Soda Springs, Idaho, U.S.

“We just finished a large project in New York with three Manitowoc 16000 Wind Attachments and they all worked great. The capacity and higher-lifting range have impressed us the most. The 16000 Wind Attachment gives us the capacity of a 600 t crane without the added cost.”

Dave Schwalm, executive vice president, JPW Riggers, Syracuse, New York, U.S.
Local option for rebuilds

By certifying dealers to carry out rebuild work, Manitowoc will bring refurbishments closer to the customer base than ever before. John Bittner reports.

With strong residual values and a history of world-class engineering, it’s no wonder so many owners want to rebuild or refurbish their Manitowoc cranes. But one of the biggest obstacles to getting the work done is the time and cost involved in sending a crane away. However, Manitowoc is removing that obstacle by rolling out its EnCORE dealer-partner program on a global basis. Under the program, local Manitowoc dealers can carry out certified Manitowoc refurbishment work.

The program started in the U.S. in 2011, when Manitowoc dealers were invited to apply for certification to become EnCORE partners. Applicants were audited by Manitowoc to ensure their facilities were sufficient, and the successful ones had their staff trained by Manitowoc Crane Care to ensure their skill levels were acceptable. After this, EnCORE dealers were given access to a database of engineering designs and methodology, detailing Manitowoc-approved repairs and refurbishments.

There are now 11 EnCORE dealers in North America supplying Manitowoc-approved refurbishments to customers across the U.S. and Canada. Following the initial success of the program, the time is now right to roll it out globally, said Gilberto Ferreira, global general manager for EnCORE.

“We’re excited to make EnCORE services accessible to customers worldwide,” he said. “The program has had great success in North America, so we will use the same formula internationally but refine it for local markets. Customers who use EnCORE say the great thing about it is it not only maintains the capabilities of the cranes, but actually improves them.”

In Greater Asia-Pacific there are now three new EnCORE-partners. The first to be appointed was TTL, the dealer for Manitowoc and Grove cranes in India, and also a manufacturer of Grove RT cranes under license. Refurbishment work will be carried out at the company’s new state-of-the-art manufacturing facility in Kharagpur.

The next two EnCORE partners in Asia-Pacific were wATM in Perth, Australia, which will work on Grove and Manitowoc cranes; and TRT in Auckland, New Zealand, which can handle the full line of Manitowoc products. In addition to the Manitowoc-owned EnCORE facilities in Singapore, plus the soon-to-open workshop in Brisbane, Australia, there are now five EnCORE locations in Asia-Pacific.

In EMEA, the first EnCORE-partner is UN Mobilkraner, which will handle Grove and Manitowoc rebuilds in Denmark and Sweden. Combined with the Manitowoc-owned EnCORE facilities in Portugal, UAE, Germany, UK and the Netherlands, the company expects to offer a region-wide network by the end of 2013.

Elsewhere in Latin America, the Manitowoc factory in Passo Fundo has been approved for EnCORE work. Also in the region, Sigdo Koppers has been approved as an EnCORE-partner for Grove and Manitowoc cranes in Peru.

Manitowoc Crane Care’s dealer network undoubtedly plays a crucial role in the industry-leading parts and service function it provides. Now it will take things to the next level and bring support even closer to the customer. ✦
Two luffing jib cranes from Potain are at the heart of construction on the tallest building in Europe.

Ronan Cloud reports.

Potain cranes have been working up to 20 hours a day for four years to create Mercury City Tower, the $12 billion future centerpiece of Moscow, Russia’s financial district. The skyscraper will stand at a staggering 339 m (1,112 ft) when finished.

The main contractor on the project is Istanbul, Turkey-based Rasen. It broke ground on Mercury City Tower in 2007 and is set to complete the project by the end of 2012. The project manager at Rasen said Potain cranes were chosen for the landmark project because of the long-term partnership between the two companies.

“We have used Potain cranes for more than 20 years,” he explains. “We know they can deliver efficient lifting at almost any job site, especially when the project is a major new landmark in the heart of a huge city. As the Mercury City Tower project approaches its end, we are happy to report we remain on schedule.”

During the initial stages of construction, two Potain tower cranes, a MD 208 and a MD 175 B, were placed on the site. The 10 t (11 USt) capacity and 8 t (8.8 USt) capacity cranes helped with ground preparation. Once this work was complete, the cranes were dismantled and replaced with two MR 295 H16 luffing jib cranes, erected within the tower’s concrete structure.

The 16 t (17.6 USt) capacity cranes climbed with the building, which at its fastest, grew at a rate of four stories every four weeks. Loads have varied in size with the largest weighing around 6 t (6.6 USt). Both cranes operate with 45 m (148 ft) jibs. To create a compact counterjib on the MR 295 H16s, the counterweights were fixed, reducing the number of moving parts on the crane and helping them work in even tighter quarters.

The MR 295 H16s have been used for a wide variety of tasks, including lifting formwork, structural components, scaffolding, façade materials, electrical and mechanical units, cooling towers, maintenance equipment and elevator components. When the tower reached 281 m (922 ft), one of the cranes was removed, as the building’s geometry did not allow enough space for both cranes to work together.

Sub-contractors from Russia, Turkey, China, Germany and Australia have all been involved in the project, bringing together experts in the field of high-rise construction. At its peak, more than 1,200 people have been working at the site.

The building’s façade is a combination of steel, glass and aluminum cladding. This striking design, requested by the owner, includes copper-coloring for the cladding to ensure the building stands out from the more common black or blue exterior of the surrounding buildings. It has also given rise to the nickname for the as yet unfinished building, “The Golden Tower.”

The new financial district taking shape is known as Moscow City and is located near the banks of the Moscow River. The Mercury City Tower at its center is a significant development for Russia as it is among the first skyscrapers to be built in the country. The building is currently the largest of 10 new skyscrapers that are either under construction or recently completed in the area.

The tower itself is a multi-use development offering more than 180,000 m² (1.9 million ft²) of floor space. The building will house offices, apartments, retail outlets, restaurants, bars, a leisure facility and a hotel. Its architect, Frank Williams & Partners, says the tower is one of the first environmentally conscious buildings to be constructed in Moscow and that it will seek LEED certification from the U.S. Green Building Council. ◆
Making Chernobyl safer

Several Manitowoc cranes are helping secure the area around the Chernobyl nuclear power plant. Ronan Cloud reports.

Four Potain luffing jib cranes, a Potain saddle jib crane and a Manitowoc crawler crane will spend the next four years working in a contaminated zone to build a huge containment shelter at the Chernobyl nuclear power plant.

The luffing jib cranes are all MR 605 B H32 cranes; the saddle jib crane is an MD 345 and the crawler crane is a Manitowoc 2250. All are lifting steel sections and pouring concrete to create the 29,000 t (32,000 USt) arch-shaped structure.

Novarka, a joint venture between French contracting giants Bouygues TP and Vinci Grands Projets, owns all the cranes. Because the immediate vicinity of Reactor Number 4 still has high levels of radioactivity, the giant NSC structure is being built 180 m (591 ft) away – then it will slide on tracks into its final position.

Understandably, safety is a huge priority on the job site, particularly with regard to the welfare of the workforce. There are strict time limits on how long workers can spend on the job site. These restrictions mean that just assembling the four luffing jib cranes and single crawler crane took six months.

Before entering the job site, all workers must complete a comprehensive training program and pass strict health checks. Once on site, they must wear a full-body suit and breathing apparatus, plus a dosimeter, which measures exposure to radioactivity. If a person reaches 14 millisieverts of radiation in a year, they are prevented from further work at the site.

Protecting personnel naturally extends to the cranes and all the cabs have been fitted with additional lead insulation for work on the project. Also, operators work shorter shifts to minimize time spent in the danger area.

With time limits on shifts, yet pressure to build the structure as quickly as possible, Novarka opted for luffing jib cranes as it allows several to work in close proximity. Additionally, the JV elected to have four cranes of the same model to ensure consistency in operations and familiarity among the operators.

The MR 605 B H32 is Potain’s largest luffing-jib crane. It offers a 31 t (35 USt) maximum capacity and 60 m (197 ft) working radius. The MD 345 has a 12 t (13.2 USt) maximum capacity. Manitowoc’s 2250 is a 272 t (300 USt) capacity crawler crane.

This is not the first time that Manitowoc cranes have worked on the Chernobyl site. Back in 2005, a Potain MD 3200 special application crane was used to reinforce the roof of Reactor Number 4. For that project, work finished in December 2006.

Ground preparation on the latest project began in 2011 and the New Safe Confinement structure is expected to be in position over Reactor Number 4 by 2015. It should contain radiation at the site for the next 100 years.

The four Potain cranes and one Manitowoc crawler crane at the Chernobyl site in Ukraine.
The National Crane Modification Center

National Crane’s new boom truck Modification Center reinvents the modification process. Damian Joseph reports.

Now, National Crane customers have a one-stop shop for boom truck and crane knowledge, expertise and modification: the Modification Center. They’ll have one point-person to speak to that can handle an entire job. That contact will have a deep knowledge of trucks, cranes, supplies, legal issues and unique modifications. The turnaround time for a modification will be much faster. Customers will have options.

It’s expertise that makes the Modification Center a needed innovation in the boom truck industry, not just mechanical knowhow. The Modification Center is a response to dealer input, via Manitowoc’s Dealer Council, and will allow National Crane to remain a market leader in boom trucks. A team of applied engineers make up the Center’s core team. Every job is documented for the future, creating a trove of data and solutions that will further refine modification processes and speed up turnaround times for customers. Soon, customers will have a menu filled with truck, crane and modification options to choose from.

Large investment
“The Modification Center really takes the guesswork out of modifying boom trucks,” says Brian Peretin, vice president of sales, National Crane. “We can get involved so much earlier in the process, which helps us provide expertise and options for customers. They can bring us a goal or a challenge, and our engineers can come up with solutions long before the machines are purchased or the wrenches have started turning.”

Multiple tasks
The Modification Center is the product of an 18-month, multi-million dollar investment from Manitowoc. The physical location is state-of-the-art, with the latest improvements in safety, ventilation and lean processes. Among the Center’s features are truck modification bays, inspection bays, hydraulic installation bays, a jib crane, jib welder, Huck hydraulic fastener tools and a Flowtron air cleaning system, among others.

“A decade ago, this type of center wasn’t really needed. But trucks are becoming more complex, cranes are getting bigger, emissions laws are evolving and each state has its own legal requirements,” Peretin said. “The Modification Center will save customers time and money, and will streamline the specification process.”

John Brockway, senior vice president of H&E Equipment, took a tour of the new Modification Center and was impressed.

“The Modification Center is truly cutting-edge and a reflection of where the industry is going,” he said. “It shows that National Crane and Manitowoc are effectively pushing the boundaries of innovation in our field.”

Single contact
Standard work at the Modification Center will include wheelbase changes, lift axle installation, racks and cribbing, hook block stowage, customer trailer hitches, trailer brake controls, customer vehicle programming and specialty beds.

Matthew Knoll, truck modification manager at the facility, says, “The guys with torches and wrenches have always been able to perform these types of modifications. The real difference with the Modification Center is our expertise — now customers can liaise with engineering, sales, marketing, purchasing, design and modification professionals through a single contact.”

In front of the National Crane Modification Center. Left to right are: Craig Neff, James Brindle, Andrew Hershey, Galen Covert, John Crookshanks, Mark Faircloth, Brice Endy.
Elevate your productivity

Exceptional lift capacities and fast setup time make the Grove GMK6300L ideal for a wide range of applications. Easy to operate and extremely productive, the GMK6300L provides superior reach without compromising lifting strength — and it’s backed by Manitowoc Crane Care, the lifting industry’s most comprehensive and advanced parts, service and support network.

To learn more about the Grove GMK6300L, visit www.manitowoccranes.com