HIGH RISERS

AS THE TOWER CRANE SECTOR IN THE MIDDLE EAST CONTINUES TO SEE ACTIVITY AT LOW LEVELS, MANUFACTURERS AND MARKET PLAYERS ARE COMING IN WITH NEW MODELS, SERVICES AND

SAFETY SYSTEMS IN ANTICIPATION OF ACTIVITY PICKING UP

IN THIS CYCLICAL SEGMENT

feature that sets the tower crane market apart from almost all other equipment types is its highly cyclical nature. Unlike other types of machinery, which are subject to daily ageing and wear and tear, tower cranes, once installed, remain on sites for the duration of the project, stretching into years.

A few years ago, CMME found on anecdotal evidence that the boom in high-rise construction in the GCC region had pushed the highest concentration of tower cranes of any region on the planet into our part of the world. Unverified reports even claimed that more than a quarter of all tower cranes then in existence were to be found within the geographical confines of the GCC.

Such heady days are long since passed but the fact that the nature of the tower crane business remains cyclical is something the major market players always take in their stride.

"The market for this product is very difficult to predict and comment on. There can be a lot of construction going on, but this might only 'recycle' existing machines in a given market. Conversely, construction activity could be slow, yet some special buildings - power or transport infrastructure and iconic projects - may require 'special' tower cranes, fueling a great market worldwide reputation and reach has helped us navigate all uncertainties for more than 90 years, and will continue to do so," says David Semple, senior VP, Middle East, India, Russia and Africa, for Manitowoc, which owns Potain, one of the most successful tower crane brands.

The French tower crane specialist is represented in the region by NFT Specialised in Tower Cranes, the biggest Potain dealer in the world, and one of the most important names in the sector in this region. Commenting on the market, Nagham Al Zahlawi, deputy GM of the Abu Dhabi-based tower crane powerhouse says: "The tower crane business in our region has seen better days, but things may be beginning to look up. Since last year, Dubai has been busier for us than the other countries combined but we are noting a slowdown in the Expo 2020-related activities. Kuwait is also a good market for us, with some mega projects that will continue until next year. After a quiet few years, we are seeing a lot of requests for pricing for big projects being tendered in Saudi Arabia."

As a company with a global reach, NFT is offsetting the performance in its home market with gains in others, with its branches in Europe and the Far East busy again. "Korea and France are good markets for us. We've also been exporting tower cranes to new markets such as North and South America, Africa and Western Europe. This year, we also exported to Egypt, which is one of the brightest spots as construction is expected to expand by an





continue to support the GCC market and export to any country that has demand. The good thing about a tower crane is that it fits in a few containers and can be shipped within a week to any destination."

Rental income forms 80% of NFT's revenues and Al Zahlawi explains that clients choose to rent instead of purchase for reasons such as lower investment and no usability for the cranes once a project us over.

"Used cranes are very popular in the GCC now, however, we recommend procuring one from a reputable manufacturer or supplier, only because of the level of refurbishment, the quality of the structure and the availability of parts. At NFT, we refurbish all our used tower cranes to the same standard as any European manufacturer. We have facilities in our yard in Al Dafra Abu Dhabi, dedicated for reconditioning used tower cranes. Similarly, Manitowoc has a dedicated rebuild, repair, remanufacture and exchange programme for all models of Potain cranes, called the EnCORE programme."

Over at Spanish manufacturer Comansa, marketing manager Javier Militino discusses the regional market, saying: "We have very good expectations from Egypt and Saudi Arabia while Iraq is a country to consider in the medium and long term. The Saudi government is planning new infrastructure in the country's north west, and the need for tower cranes will rise. In general, the tower crane market in the region is increasing gradually, with new infrastructure and tourism projects.

"Comansa has come on the regional market in the last two years with sales of between 10 and 15 units per year. We are happy with our



MCS

SAFETY AT HEIGHTS

French crane technology company AMCS has come out with the latest iteration of its anti-collision device for tower cranes, the DCS 61-S safety system. The new device complies with the future European standard EN 17076 for anti-collision systems and is in the process of being certified in accordance with mandated standards and requirements, such as EN 13849-1 and SIL-2 according to EN 61508. The certification is being done by the third party organisation INERIS and

AMCS says this is being done in order to guarantee a serious quality approach.

While the DCS
61-S is much like its
predecessor, the DCS
60, when it comes to
its main functions, its
efficiency is enhanced
by the availability of
more options. The new
system adapts to different
types of machines, such
as tower cranes, luffing
jib cranes, gantries,
placing boom, travelling
cranes and retractable
cranes, among others,



providing operational safety and anti-collision guidance for a range of equipment and uses.

The DCS 61-S allows for

the recording of up to five target positions for easy loading and unloading while using a crane. It has sensors with high levels of security and a CANopen Safety communication network. The DCS 61S system is a universal one which adapts to any configuration, types and brand of cranes, with is 'plug & play' functionality making it compatible with new generations of cranes.

The new system
also supports the
addition of a SIM card
in order to perform real
time diagnosis remotely
through 3G/4G networks
by downloading or viewing
information and events of
the crane on a web page.



COMANSA

INTRODUCING A POWER LIFTER

Comansa's new flat top model, the 21LC1400, which will be available worldwide from next month will come in two versions, with maximum load capacity of 50t or 66t. The main expected application of the 21LC1400 is to work in PPVC and infrastructure projects, but the Spanish company says this new model will also provide the best performance in any other site in which it is necessary to

lift very heavy loads.

The 21LC1400 features a modular design of the counter-jib to greatly reduce the counterradius in constrained jobsites. A new single and compact trolley has also been designed for the 21LC1400 instead of Comansa's double trolley system, standard in other models, as this new crane is intended mainly for projects in which the maximum load capacity is needed in almost every lift. Comansa is also

rolling out Quick Set, an electronic limitation system to reduce the set-up time of the cranes from three hours to 45 minutes, while also reducing the staff required in such operation. The new Quick Set, which was displayed at Bauma, will be available as an option in all flat-top models of the LC range and will be an important benefit for rental companies who have to dismantle their cranes and move them to another jobsite very often.

performance so far and are putting in efforts to improve our sales and market penetration further. A lot depends on the aftersales service and the presence. The market here demands a trusted and agile aftersales and spare parts operation, which we have put in place and are constantly improving."

Comansa offers its entire product portfolio in the region, Militino says, however, each country has its preference. "Models such as the 21LC335 and 21LC550 are the tower cranes most in demand in Saudi Arabia. Egypt tends to have



Terex is upbeat about its prospects in the global tower crane sector and its new models launched at Bauma this year cold also see the company make bigger inroads in the Middle East market.

tower cranes around 8-10t or 12t maximum. While these are general market observations, where there are special projects being executed tower cranes of 18t or 20t might be required."

German tower crane specialist Wolffkran has found great uptake in the region's tower crane sector, according Mohamed Abou el Ezz, senior sales manager responsible for the Middle East, North Africa and Southeast Asia. "We have our cranes at the biggest and the most iconic projects in the UAE and Saudi Arabia. In Dubai you can see our cranes building the Museum

of the Future on Sheikh Zayed Road, whereas in Saudi we had 44 Wolff tower cranes on one of the Kingdom's biggest and most important construction sites around the Masjid Al Haram in Makkah. Meanwhile, in Jeddah we have two Wolff 355B luffers climbing internally on the job-site of the highest tower in the world, while seven more are on the podium. So that's a total of nine."

"If you're working on iconic projects where you have very strict deadlines and schedules, you can't have a machine that continuously

TEREX NEW FŁAT TOP

Terex Cranes launched the new 10t class Terex CTT 202-10 flat top tower crane at Bauma 2019. Delivering increased jobsite versatility, the new Terex crane offers three chassis options, budget to performance, with 3.8m, 4.5m and 6m base selections. the new crane can be configured with H20, TS21 and TS16 masts, offering from 1.6-2.1m widths.

"With this new Terex CTT 202-10 tower crane model, we are launching a very flexible and

competitive crane. Our primary focus is always to develop an efficient and versatile crane that gives our customers the best return on investment," says Nicola Castenetto, Business **Development Manager** for Terex tower cranes. "Beyond outstanding product performance at an attractive price, we also project high residual value to satisfy the future needs of our customers."

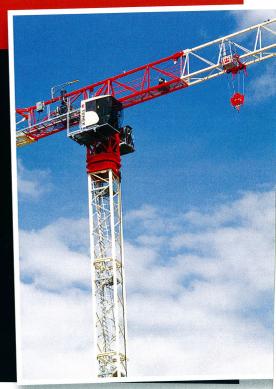
The new crane offers nine different jib configurations from

25-65m to meet varying jobsite needs. The maximum capacity is 10t at a length reaching 24.2m, depending on jib set-up, and it can hoist up to a 2.3t load at the maximum 65m jib length. The Terex Power Plus feature temporarily allows for an increase of the maximum load moment under specific and controlled conditions by 10%, giving the operator extra lifting capacity during those conditions.

Inside the crane's cab
a fully adjustable comfort

seat and joystick
controls with short
stroke length provide
a comfortable work
experience throughout
long shifts, with a large,
full-colour 7-inch
display with anti-glare
screen. Built-in heating
and air conditioning
maintain consistent
cabin temperatures,
regardless of working in
freezing temperatures
or in the desert summer.

Based on how it's configured, the crane delivers a max under hook height of 76.7m.



breaks down and has problems with service. So Wolffkran is a natural fit in such projects. Through Wolffkran Arabia, we have a very special team, doing a fantastic job when it comes to service and maintenance, erection and dismantling - and this is making customers more interested to work with Wolffkran."

Safety is a prime concern for all stakeholders in the tower crane sector and this brings us to AMCS, a French technology company that makes safety and anti-collision systems for tower cranes and other equipment. Emmeline Grosjean, marketing manager, EMEA, tells CMME: "Avoiding collisions between cranes and other elements is a vital part of any construction site, especially on multi-crane sites. By ensuring the supply of materials, tower cranes play a crucial role in the functioning of the jobsite. In the Middle East, there are a lot of ambitious projects and some job sites have more than 50 cranes grouped mostly in tight spaces

"These cranes can be at different heights or jibs at the same level. Sometimes, the construction sites are close to sensitive areas such as schools, railways, roads with pedestrians. The risk of collisions between tower cranes can be multipronged, such as rope to jib or counter-jib, jib to jib, jib or counter-jib to tower. Any incident with cranes can generate accidents, death, delays and financial loss. Accidents can be a simple material losses or serious accidents that may result in loss of life. The image of the construction company, the future project and the country will be impacted. In the Middle East, it is not mandatory, unlike in countries like France, to install anti-collision systems. However, construction site safety companies and construction groups are becoming more and more aware of the risks. They are asking us to secure their cranes and therefore job-sites. The Middle East region is one of the most demanding places for anti-collision technologies in the world."

AMCS is meeting this challenge by listening to the market and its customers. Grosjean adds. "Thanks to our engineering centre we develop custom-made options or functions to adapt to different job site configurations or machines. For example, for the Hinkley Point nuclear plant in the UK, we developed an option in order to manage the two jibs and ropes simultaneously or separately of the Favelle Favco M2480D in order to ensure the interference with the cranes around it. We did one project last month including a 1200t crawler crane that was a special requirement from the customer. We installed our DCS 60 on the crawler and every tower crane. It was also equipped with an alarm and a flashing light to warn operators and the job-site when it entered an interference zone with a tower crane."

"We can replicate these things in the Middle East as well. We have technical partnerships with the main cranes manufacturers and dedicated international teams of technicians to ensure continuous monitoring of project."





GOING FOR BIG

The pride of place at Manitowoc's stand in Bauma this year went to the new Potain MDT 809, the largest topless crane ever built by the manufacturer.

Thibaut Le Besnerais, Manitowoc's global product director for tower cranes, said: "The MDT 809 is one of the most significant Potain tower crane launches of recent times. Over the past 10 years we've seen consistent growth in demand for topless cranes, with customers benefiting from their fast assembly and compact design, which makes it easier to get more cranes onto a job site to complete work quicker. Alongside this we've seen an increase in modular construction, with contractors needing to lift heavier loads. It's clear to us that there is strong demand for bigger topless cranes. But we wanted to be sure that any new model we launch not only satisfied demand for greater capacity, but also preserved the easy transport, fast assembly and industry-leading performance our other topless cranes deliver. The MDT 809 provides all that and more."

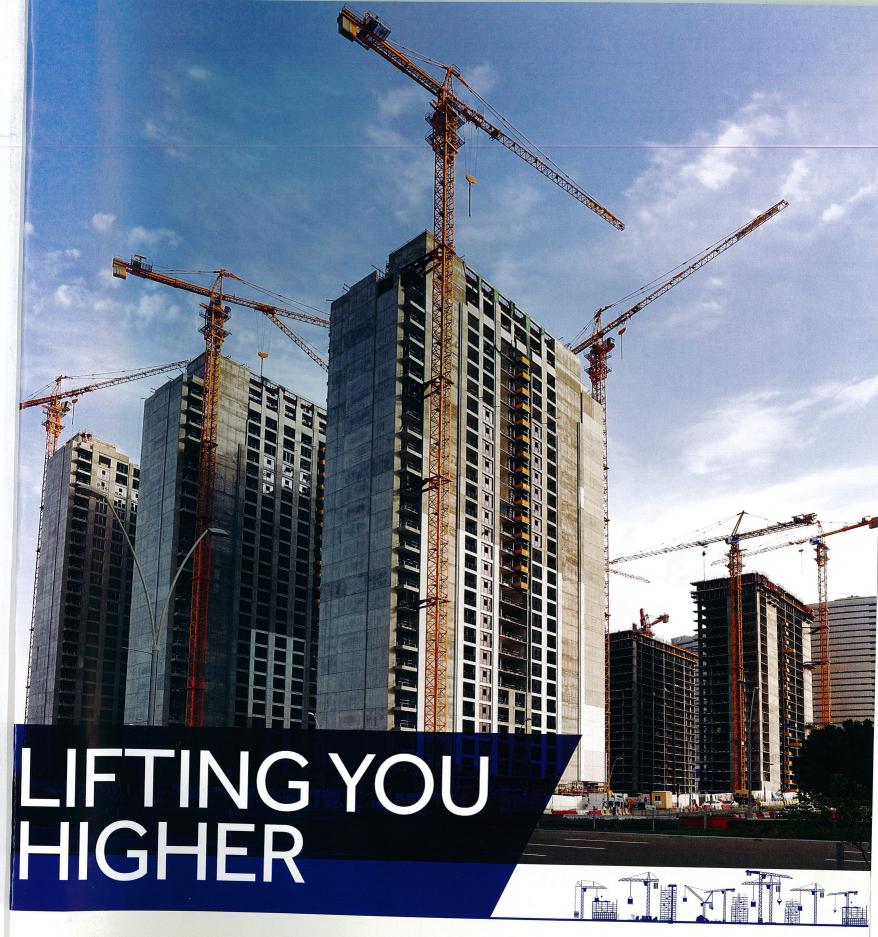
With its highly optimised assembly and disassembly, owners can install the crane on site in the shortest possible time and move it

off site rapidly once work is completed. Alongside that, the crane offers up to 40t of lift capacity and can accommodate up to 80m of jib. For transport, the crane is especially compact, with everything but the slewing mechanism capable of traveling in a standard container.

The whole crane transports in either 10 or 11 containers, depending on the winch option selected, which is four to five fewer containers than is typically required for a crane of this size. The crane also has a new 8m cross base that offers the performance characteristics of a 10m chassis, but which requires only one container for transport.

The Potain MDT 809 is not only fast to transport, but also fast to assemble once on site: typically, around twice as fast as other 40t cranes and also requiring less space. With its full complement of jib, the crane can be assembled at a 50m working height in less than three days.

Hoist options span from the 100LVF to the 270LVF. An optional 150HPL is also offered. These give the crane a maximum available capacity of 25t, 32t or 40t. Tip loads of up to 9t are available at the 80m max, freestanding height



- Named #1 tower crane supplier worldwide for 3 years consecutively
- 2,000 tower cranes available in stock mixed between used and brand new
- All tower crane types available ranging from 1T to 80T
- 500 construction hoists available immediately
- Shipping to any destination worldwide

