SAFETY COMES FIRST

Earlier this year, UAE-based NFT Specialized in Tower Cranes conducted a market research to understand tower crane buying behaviour and NFT and Potain's brand image and consumer perception in the UAE and KSA. Respondents of the quantitative study, which included NFT's customers and other contractors not working with NFT, were asked about their willingness to pay for CE-certified tower cranes, and specifically, if Potain China had CE certification, would they pay more for that range?

Surprisingly, 44% of the respondents said they're not willing to pay a premium price for tower cranes that comply with CE or other standards. The study revealed the main factors driving tower crane purchase in the UAE. In the order of priority, they are price, brand, quality, safety and aftersales service.

According to Nabil Al Zahlawi, CEO, NFT Specialized in Tower Cranes, the main reason for this perception in the region is the short-term vision of contractors, who don't consider tower cranes as assets but a means to an end to deliver projects.

"We understand the challenges faced by our clients; so, we try to offer financial and commercial options to support them. To raise awareness about value versus cost in decision making, NFT has launched several marketing initiatives to highlight that a short-term price advantage is misleading. We encourage contractors to look at tower cranes as long-term investments and assets that can be liquidated in the future, by educating them about Potain's resale value, CE compliance, importance of having a year of manufacturing (YOM) limit, and how Potain, regardless of where it is made, is fundamentally a French engineered tower crane," says Zahlawi.

The most common safety procedures ignored by tower crane contractors in the Middle East are limit on year of manufacturing, adequate planning and operator qualifications."



Nabil Al Zahlawi, CEO, NFT Specialized in Tower Cranes

It is understandable why price remains the main determinant for choosing a tower crane, given the current financial constraints faced by contractors. However, what's alarming is that safety is only the fourth important priority for customers.

To counter this perception, NFT has been running its 'Safety First' campaign in the GCC since November 2017, raising awareness about safe procedures and operations of tower cranes and those working around them.

"Safety is our number one priority at NFT, and we believe the most effective way to spread awareness is through face-to-face demonstrations involving everybody working around Potain tower cranes, including riggers, operators and supervisors. The Safety First campaign covers safe communication, including verbal and nonverbal communication and PPE requirements on sites. We provide a user manual with a step-by-step checklist on what to consider when starting work, procedures for safe installation, out-of-service position, lifting and operation of tower cranes.

We explain the effect of wind on tower cranes and the other hazards around them. Furthermore, we emphasize the importance of regular and preventive maintenance, avoiding counterfeit parts that put tower crane safety at risk, and basic requirements for operator health while working in extreme conditions," explains Zahlawi.

A crucial message that needs to be spread further is that tower crane contractors and operators should strictly follow manufacturer guidelines for tower crane setup and operation. This is more relevant than ever in the Middle East where there seems to be a disregard for manufacturer guidelines about wind speeds, load, preventive maintenance, etc., as evident from the recent crane crashes in the UAE and Saudi Arabia.

Zahlawi points out the common safety procedures ignored by tower crane contractors and operators on construction sites in the Middle East. The top three are limit on year of manufacturing (YOM) of cranes, adequate planning and operator qualifications.

"Some contractors may be too lenient



NFT has been running ts 'Safety First' campaign in the GCC since November 2017, raising awareness about safe procedures and operations of tower cranes.



NFT reminds tower crane contractors and operators to strictly follow manufacturer guidelines.

about the YOM of a tower crane. If a crane is well maintained, it can work for 20-30 years. However, during this period, manufacturers may render certain models obsolete as they look to modernise their technology. As a result, older models will not have the latest safety features such as anti-collision and load indicators. Furthermore, the parts of models out of production will be unavailable. Should a motor break down on a crane made in 1980, it usually has to be made from scratch as the OEMs don't keep such old parts in stock. The contractor would have to pay a fortune, and this creates delay in fixing the crane. A crane that isn't functioning can always be a risk on site," explains Zahlawi.

Another safety concern is in the poor planning of critical lifting operations during tower crane erection, dismantling or telescoping, which arguably is the most sensitive operation involving tower cranes.

"A method statement and risk assessment detailing every step of the operation should always be provided before these operations are allowed to take place. The exact procedure should be studied in advance: where the mobile crane will be located, what capacity is required to dismantle the crane, is the ground solid enough to take the crane, and which slings to use," says Zahlawi.

Finally, training is crucial for tower crane operators and workers in the vicinity of tower cranes. With the release of new models and different brands of cranes, there's a need to upgrade the skills of operators, regularly.

"Verifying whether people are qualified to work on a tower crane is ignored entirely. In certain countries, a letter or certificate from the OEM must be issued in the name of the operator of their tower cranes. In our region, a third party certificate is often accepted. Because tower cranes differ from one manufacturer to another, operators should be trained and familiarised with every brand of tower crane independently before being allowed to handle them," says Zahlawi.

Zahlawi provides some tips for contractors and operators to avoid crane collision, collapse and other accidents.

Crane collision: when out of service, cranes should always be positioned in a way where they are able to weathervane 360 degrees. If there isn't enough space, luffing cranes should be selected, as they have a small out of service radius. To avoid collision while in service, cranes should be equipped with anti-collision systems and operated by qualified operators who are guided by riggers.

Crane collapse: foundations should be designed, checked, and/or approved by the consultant or engineering company. This foundation should be designed based on the actual site situation and soil bearing capacity, and based on the loads provided by the OEM of the crane. The composition of the crane should be as studied and provided by the OEM, which depends on the crane type and the wind speed of the region. The crane should not lift more than its capacity. All the loads should be known beforehand. More importantly, the crane should be equipped with a load cell, indicators and safety devices to prevent overload.