INFRASTRUCTURE PROJECTS DRIVE CRANE FLEET EXPANSION

The global cranes market is expected to reach $43.417 billion by the end of 2023, increasing from $31.478 billion in 2017, growing at a CAGR of 5.51% during the forecast period. Market intelligence firm Future Market Insights estimates the tower crane market to record a moderate CAGR of 4.5% from 2017 to 2027. The hammerhead crane segment is the most lucrative in the tower crane market and is expected to witness the highest CAGR of 5.2% for the forecast period. The mobile tower segment has the second largest revenue share in the tower crane market.

Among end users, the construction industry continues to dominate the crane market. This is evident in the Middle East as transportation and rental companies expand their crane fleets for deployment on large-scale infrastructure projects.

This year, UAE-based NFT Specialized in Tower Cranes signed a contract to supply 30 tower cranes for the construction of Samsung's factory in South Korea. The job requires the tower cranes to lift heavy steel structures of around 28 tonnes. NFT recommended a mix of 20 Potain MR 608s and 10 Terex Comedil CTL 630s cranes to operate at heights of 150m.The cranes will be in operation for 14 months on a rental agreement. NFT started delivery of the cranes in January 2018 and will continue until June 2018.

In Kuwait, heavy lifting and transport specialist Mammoet has been contracted to carry out the transportation and installation works for the new $4.3bn terminal construction project at Kuwait International Airport. Mammoet will install all precast sections of the terminal's main structure, which consists of 804 concrete elements each weighing between 200 and 360 tonnes. To complete the project, Mammoet will deploy nine crawler cranes ranging in capacity from 600 to 1600 tonnes and 72 axle lines of self-propelled modular transporters. NFT has supplied 26 cranes including six Potain MD 1100 cranes, 18 Potain MD 365 cranes and two Potain MC 125 cranes, for the project.

Another large-scale infrastructure project in Kuwait is the Sheikh Jaber Al Ahmad Al Sabah Causeway. The 36-km-long road connection includes a 27-km bridge over Kuwait Bay. The construction work required lifting precast concrete components from a hydraulic dolly-type trailer with a turn table system and placing them at their pre-planned positions. A tandem lift was required because the steel-reinforced concrete elements weighed 105 tonnes each, were approximately 37m long, 1m wide, and 2.3m tall. Kuwait-based Integrated Logistics Company (ILC) employed two Demag AC 300-6 cranes for a tandem lift of two 105-tonne concrete beams from a lowbed trailer in two steps. In 2017, the company signed an order for 12 Demag cranes including two AC 130-5, four AC 160-5 and six AC 300-6 all-terrain cranes.

In Oman, Mammoet completed the transport and installation of four 1180-ton NGL bullet tanks for Oman's biggest petrochemical project, Liwa Plastics Industries Complex (LPIC), in April 2018. The bullet tanks, each measuring 60m in length and 7.8m in diameter, were positioned on sand beds in a synchronized tandem lift utilising a 1600-ton PTC ring crane and a 1200-ton crawler crane.

Mammoet crane installing precast sections of the new terminal at Kuwait International Airport.

Mammoet crawler crane at the Dubai Mall extension site.

In UAE, Mammoet used a LR1750 crawler crane to erect the new Dubai Mall extension bridge in January this year. The company also added 35 telescopic and crawler cranes to its existing fleet in the Middle East to meet strong market demand and grow its crane rental services.

UAE-based Al Faris Group recently introduced the first Liebherr LRT 1100-2.1 and LRT 1090-2.1 rough terrain cranes in the Middle East. One of the largest Liebherr customers in the world with around 400 Liebherr cranes in its fleet, Al Faris Group placed an order for 25 Liebherr mobile cranes earlier this year.

Kuwait-based company Jassim Transport & Stevedoring Co. (JTC) placed an order for six new Demag all terrain cranes, including one

Tandem lift of concrete beam by Demag cranes.

AC 100-4 model, three AC 130-5 models and two AC 160-5 models. These new units, along with the six other Demag all terrain cranes that JTC purchased within the last two years, expand the company's Terex and Demag crane fleet to more than 50 units.

With regard to manufacturers, the Manitowoc Company and Kobelco Construction Machinery have announced they will end their OEM supply agreement in November 2018. Currently, Kobelco supplies Manitowoc-branded lattice-boom crawler crane models with lift capacities under 150 tons to the worldwide Manitowoc distribution network, and Manitowoc supplies Kobelco-branded all-terrain crane models for marketing in Japan. The global alliance began in November 2003 and will end on November 9, 2018. Kobelco will continue to support Manitowoc and its customers, and Manitowoc will continue to support Kobelco and its customers, with service parts for a period of 10 years.

In the beginning of 2018, Scania and Kobelco Construction Machinery signed a partnership to use Scania's engines in Kobelco's hydraulic crawler cranes.

Scania will supply 13-litre low-emission industrial engines to Kobelco for use in its latest crawler cranes with a lifting capacity of 300 metric tons. The first Kobelco product to be fitted with a Scania industrial engine will be launched in the US. Scania's 13-litre 331kW industrial engine meets the Stage IV/ Tier 4 final/Japan H26 emission standards without the need for a particulate filter. Kobelco's Scania-powered products include the CK3300G-2 model (for North America), as well as the CKE3000G (for Europe) and CKS3000 (for other markets). PMV