

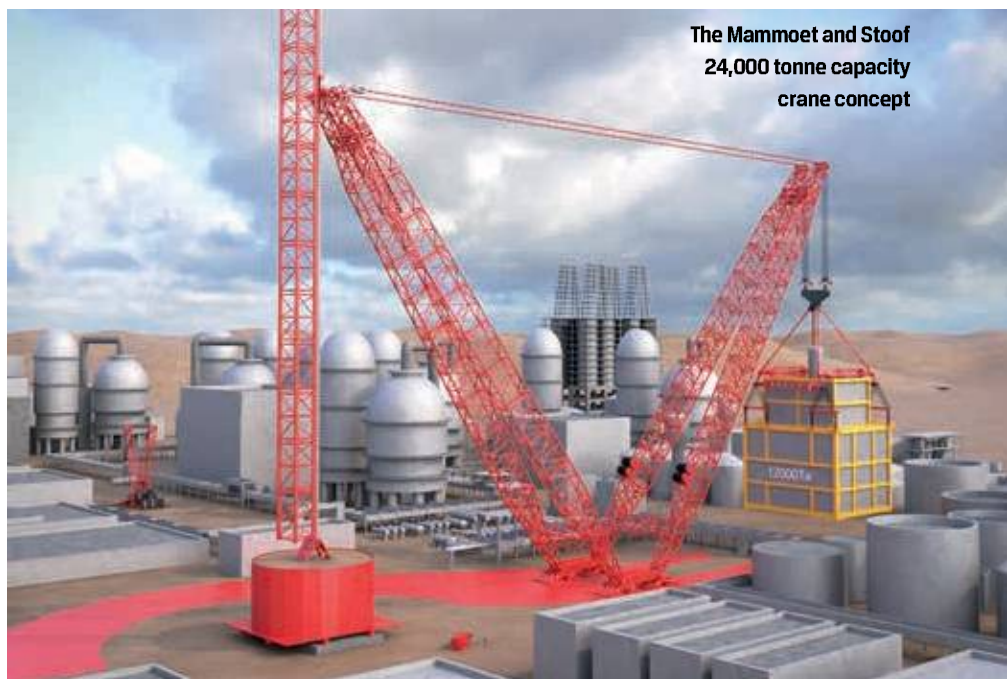
Weight watchers

Heavy lifting is changing as new technologies are developed and new applications are found. IC asked some of the largest companies in the sector to peep over the horizon and forecast future trends

All the numbers surrounding the onshore heavy lifting sector are staggeringly large. As an example, the strongest crane in the world – the Taisun gantry crane, albeit confined to a yard in Shandong Province, China – can raise a breath-taking 20,000 tonnes, equivalent to 2,850 elephants, 167 blue whales, or two Eiffel Towers.

If its impressive 24,000 tonne capacity crane design ever escapes the drawing board, however, Mammoet will take the ultra-heavy lifting crown. Proposed jointly by the Dutch lifting giant and Stoof Engineering and Innovation, also of the Netherlands, this monster will be called Focus and boast an remarkable maximum load moment rating of 1,500,000 tonne-metres.

Target applications include work in heavy industrial plants and refineries. It's ability to lift significantly bigger and heavier loads than



The Mammoet and Stoof 24,000 tonne capacity crane concept

currently possible will, says Mammoet, make projects far more efficient, in particular by reducing construction time, a primary aim on these projects with super heavy lifters.

Focus can be assembled vertically on a minimal ground area and without support cranes. It is designed to be self-erecting, even with a boom 200 metres long.

More from less

If it gets built, Focus will be well placed to tackle a paradox that lies at the heart of the heavy lifting sector – the pressing need to lift larger and heavier loads versus the relentless demand for smaller lifting systems that can

operate in more confined spaces.

Enerpac claims to have solved this dilemma by developing multipoint, synchronised lifting systems such as its EVO-Series synchronous lifting systems, JS-Series jack-up systems and SHS – Series synchronous hoisting systems.

Yannick Sel, ALE senior sales manager – global projects division, agrees that size matters when it comes to working area: the more compact the better: “As ALE are increasingly working in smaller spaces, we are always looking for solutions to suit this set-up.”

For Sel, however, the biggest trend in the heavy lifting sector is an increase in the number of questions from customers about health, safety, quality and the environment, as well as maintenance: “Particularly in the nuclear industry, our clients are looking at the design of the crane – confirming it is safe and that we are maintaining it. They look at not just what equipment we are using, but also how we are mobilising and setting it up.”

Enerpac sees a trend towards modular construction methods which, it says, facilitates the need for specialized heavy lifting equipment. An example is accelerated bridge construction where the bridge is

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Sarens transported a 103 tonne, 50 metre long flue component with a diameter of 9.4 metres inside the cooling tower at Elektrownia Opole power station in Poland

