## New large load lifter

The 'Podlifter' installation cage from Aylesbury, UKbased Cranetech Construction Solutions is designed for lifting and installing a wide variety of large, heavy or awkward items such as prefabricated bathroom pods to any height or position on a high rise structure that can be reached by a mobile or tower crane.

Intended as an alternative to traditional cantilever loading platforms for loading building materials onto the floors of high rise construction projects, the Podlifter is basically an open topped cage that once loaded, is lifted by crane to the required floor then secured to the structure with adjustable straps to prevent the cage from moving whilst the goods are unloaded.



Removable safety bars at each end of the unit enable the cage to be loaded by forklift at ground level so crane time is not wasted. This feature also enables the Podlifter to be unloaded from either end when suspended from the crane, a feature that is particularly useful in 'tight spots' on the building. Lashing points on the deck ensure that the load remains stable during the lift and an 'eye sight' allows the banksman to lower off on the crane during off loading to counteract any deflection in the crane's boom when the weight of the load is transferred from the crane to the floor of the building. This also helps to keep it level during unloading.

A 'flush to floor' landing ramp that extends onto the floor slab allows tall objects to be inserted into the building with no reduction in headroom and also provides a level surface when using pallet trucks to unload. Because the full weight of the Podlifter and the load is always taken by the crane, there is no need for additional propping to the structure as is often required for cantilever platforms, or the need for temporary works calculations to be carried out for different load scenarios.

Cranetech's owner Jason Sudborough said: "We started Cranetech in 1995 to provide a tower crane erection and repair service to crane manufacturers and hirers across the UK, a service that remains a core activity. We used the knowledge gained on a number of high profile crane jobs like Canary Wharf where we were climbing the big Liebherr 500 HCLs to design and manufacture a range of equipment that could improve crane efficiency on site with regards to materials handling."

"The new Podlifter was designed in response to a request from an existing customer who needed to install over a thousand prefabricated bathroom pods each weighing more than five tonnes, into the new Park Plaza hotel being built south of the river in Westminster. They didn't want to use traditional cantilever platforms because of the time it would take to relocate them from floor to floor so asked us to come up with a solution. Not only was a considerable amount of time saved from the pod install program, but the fact that the Podlifter could be unloaded from the safety of the building without having to access the platform meant the safety managers loved it too."



"We quickly realised the potential for the Podlifter as a means of lifting and loading more than just bathroom pods, so incorporated improvements on the original design to make it suitable for plant installation/removal, air handling units, fit out materials etc, in fact anything that is either too heavy or too large to go in a hoist."

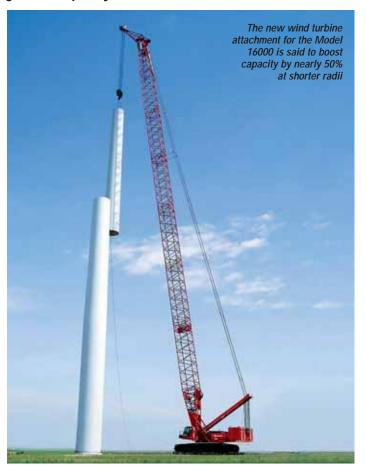
Full production began in September last year and the company says that it can now offer units for sale or rent with three stock sizes as well as a 'bespoke' design and fabrication service for heavier and larger loads. The product can be flat packed for shipment overseas and units are already operating in Holland, China and the Gulf.





## Wind attachment boosts capacity

A new wind turbine attachment for Manitowoc's Model 16000 crawler crane is said to boost the crane's capacity by nearly 50 percent to handle the larger 2.5MW turbine hubs on the latest generation of wind turbines. Using existing hardware in a new configuration, the attachment gives the crane greater capacity and more reach.



In recent years, 1.5MW wind turbines have been common however there has been a recent shift to 2.5MW and larger turbines as wind farm operators aim to maximise the power generated. The wind attachment will fit any 400 tonne Manitowoc 16000. Lifting duties at shorter radii are the most improved and at 18 metres the crane has a 44 percent increase in capacity compared with a standard crane. This allows it to install most 2.5 MW wind turbines on towers of between 80 to 85 metres.

Unlike other cranes targeted at lifting larger wind turbines, the 16000 wind attachment does not require longer fixed or luffing jibs. Often, when working with a longer jib, the cut-off wind speed for safe

operation is significantly reduced compared to working with just a boom and boom tip. As a result the use of longer jibs can often cause delays as by its very nature, this work tends to take place in windy locations.

"Since the launch four years ago,
the Manitowoc 16000 has
become one of the
leading cranes for
wind turbine
erection with
around 85
percent of
them being

used in wind power work," said Mike Wood, product director for Manitowoc's crawler cranes.



