Modulift Custom Below-the-Hook Solution for Dockside Lift

Modulift supplied a custom below-the-hook solution to lift an 85t load from the dockside onto a vessel at Hyundai Heavy Industries’ shipyard in Mipo Bay, Ulsan, Korea.

The below-the-hook equipment manufacturer supplied the bespoke rig, based on a one-over-two spreader beam configuration, to marine engineering specialist MAATS Tech, which was given a scope of work by the shipbuilder to provide a lifting solution for the piece of deck equipment.

The load was 19m x 7m x 7.5m and included a pipe/cable tensioner; container housing and power cabinets; product guide chutes; and space frame. David Smith, project manager, MAATS Tech Limited, explained that the dimensions presented a challenge to locate the centre of gravity.

He said: “Modulift were contacted after being recommended by a sub-supplier to discuss what was proving to be a difficult lift due to the size and shape of the structure concerned. Modulift provided MAATS with a solution that met and exceeded our expectations based on their spreader beam products. Further to this the final lifting solution was provided with DNV certification as standard.”

He added: “The lifting design and delivery of the rigging was made in a very short lead time enabling MAATS to ship the rigging with existing planned shipments, thus, saving cost on sending it to Korea separately.”
Ian Locke, senior design engineer, Modulift, said: “Weight and centre of gravity are always important considerations and we make sure we get this detail from the outset in addition to as much technical information and illustrations as possible. For example, we needed to know about lug locations, distances between them and the general lifting environment. We also needed to decipher if rigging gear would be hampered by the tensioner’s dimensions, shape and protrusions.”

He added: “Based on the information provided to us about the load and given there were no significant headroom restrictions to speak of, we suggested a cost-effective solution that provided MAATS with a stable, four-point lift. The configuration is common but the length of the spreaders required made it a bespoke job.”

The Hyundai shipyard stretches over 4km along the coast of Mipo Bay, where it has nine large-scale dry docks with seven hulking Goliath gantry cranes, one of which was utilised for this 85t lift.

“Modulift delivered the complete below-the-hook solution to a short lead time” as Smith explained, “taking only 10 days from placement of the order to delivery.”