Certex (UK) used two modified spreader beams from Modulift’s heavy, off-the-shelf range to lift two none identical halves of a helipad onto a vessel from a gas rig in the Dutch Sector of the North Sea recently. The site was approximately 70 miles off the Danish coast.

Certex, a supplier of steel wire ropes, lifting products and services to the oil, gas, industrial and renewable markets, accepted a scope of work to design and supply a below-the-hook solution for loading the helipad using a 300t capacity crane aboard a barge.

The heavier piece of the pad weighed 89t, while the smaller was less than half the weight at 35t; it was hexagonal in shape and measured 44m sq. when assembled. Interestingly, each piece was removed from the site one at a time (the smallest first) along with its corresponding spreader beam and rigging.

Certex used a MOD 110H at 6m (19 ft.) for the heavier section and a MOD 110 at 6.5m (21 ft.) for the other. The former can lift up to 170t at 11.5m (37 ft.) and lower capacities up to 18m (59 ft.), while the latter provides 110t capacity at 14m (46 ft.) and lower capacities up to 18m (59 ft.). The beams combined with other rigging gear, such as wire rope slings and shackles, also supplied by Certex, to lift the pieces onto a separate supply vessel that shipped them back to port.
Different rigging equipment was used with each spreader beam. Above the MOD 110H was a two-leg, 7m-long sling made from 90mm diameter wire rope, while beneath the beam were two two-leg, 16m-long slings made from 64mm diameter wire rope. Above the MOD 110, a two-leg, 8m-long, 64mm sling combined with a pair of two-leg, 16m-long, 56mm slings. All were utilised at 30 degrees.

The beams were sourced from Modulift after modification of the end units. Jason Griffen, technical sales at Certex (UK), explained: “Pad-eyes were required on the side of the end units so they could be connected to winches on the barge crane to control maneuvering of the helideck during positioning into place. We provided calculations in advance of the project so Modulift could weld the modifications accordingly.”

The modifications were required to eliminate the use of guide ropes and the requirement for personnel to work in proximity of the loads as they were landed on the supply vessel. Further, there was not a lot of margin for error and the modified beams simplified the process. Certex was able to utilise permanent lifting fixtures of both halves of the helipad.

Griffen added: “We worked closely with the client’s engineering department to calculate the capacity, type and length of slings required, to complement the spreader beams. We also extracted additional information from the design plans for the helipad, such as center of gravity.”

The rig is among a number of smaller satellite platforms in the area. The rig remains operational but personnel will now access it only by marine transport, not helicopter.