

F23R-A RISER GUARD INSTALLATION

Armacon contacted Conbit to assists with the installation of a new riser guard on the Malaysian F23R-A platform. Due to subsidence, the existing riser guard was partially submerged and needed to be replaced.

The new riser guard was lifted to just above the water level by a crane vessel, then cross-hauled to the platform's temporary outrigger beams, provided by Conbit for installation. Conbit supported the design of the riser guard to benefit the installation, but the structural integrity and welding of the new riser guard were part of the client's scope.



Taking over riser guard from crane vessel

PROJECT

K ENGINEERING

X PROCUREMENT

✓ CONSTRUCTION

Client Armacon

Project Number 31596

Project Name F23R-A Riser Guard Installation

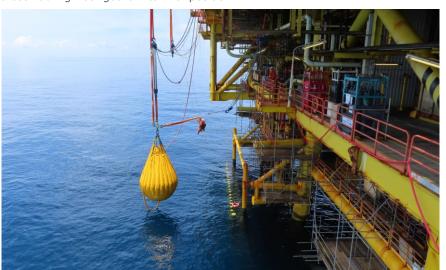








Cross hauling riser guard into final position



Load testing



Rope access technicians at work

SCOPE

Conbit's scope included taking over the Riser Guard from the crane vessel and transferring it into position for installation. To carry out the installation, Conbit designed an outrigger beam system that was fitted to the platform. For the installation of the outrigger beams, Conbit designed multiple pad-eye interfaces which were welded to the platform by Shell.

The final positioning was guided using stabbing cones, which Conbit designed. To ensure the stabbing cones were in line with the buckets on the Riser Guard, Conbit created a template to align these prior to the lifting procedure.

A combination of brace lines ensured the required load transfer to the platform structure. The outrigger assembly contained four 60mT air hoists. These air hoists were used to take over the riser guard from the crane vessel's lift line and transfer the riser guard to its final position for installation.

EQUIPMENT

Four 60 mT air hoists were utilized to transfer the riser guard, which had a net weight of 33 mT. The outriggers used in the operation were fabricated from steel T-struct tubulars to ensure structural stability. Each of the upper pendants, which supported the outriggers in the raised position, had a rated load capacity of 35 mT. To validate the structural integrity and load-bearing capacity of the system, a load test was conducted using water bags to simulate the operational loads applied to each outrigger.



