

Case study - Project Blacktip natural gas platform, WA

The Ausclad Group of Companies (AGC) in Western Australia delivered the biggest rig it has worked on yet, by a factor of two early 2009 to extract natural gas from Australia's northwest shelf.



Fabricated in Australia by AGC as the main contractor, the project used 2800 tonnes of structural steel in total, with 1300 tonnes on the jacket alone, 585 tonnes in the topside section, 800 tonnes for the piles and 115 tonnes for miscellaneous installation aids.

The Blacktip field pipes natural gas from the Timor Sea to Wadeye 250km from Darwin to Weddell power station, the largest electricity generation project in the Northern Territory.

AGC's Project Manager for Blacktip, Carlo Silvera said the company has extensive experience having fabricated six offshore platforms before that, however Blacktip was the biggest by far at more than twice the size of the largest platform previously built by AGC.

AGC's work encompassed fabrication of the jacket, topside, piles and offshore installation manning as well as steel detailing work for the jacket, painting, electrical and instrumentation fit-out and pre-commissioning. AGC also completed the design, fabrication and construction of five storage tanks for the Blacktip onshore gas plant under a separate contract.

"This work is another clear demonstration of how the Australian steel industry has invested significantly in greater capability and capacity in recent years in response to the resources boom," said Chief Executive of the Australian Steel Institute, Don McDonald.

AGC undertook the project for Saipem, a subsidiary of Italian oil and gas industry contractor, ENI which operates in engineering, oilfield services and construction both offshore and onshore.

The pressure was on AGC to deliver the platform infrastructure as quickly as possible after controversy over a lengthy delay in getting the project off the ground due to a major industrial gas customer pulling out in 2005.

The jacket and topside was assembled and completed by AGC at the Australian Marine Complex (AMC) facility in Henderson utilising modern modular construction techniques to deal with the complex nature of the job.

Quality was critical for the structure to withstand the tough corrosive environment off Australia's northern coastline. All work had to comply with rigorous North Sea standards demanded by ENI.

Weld quality and coatings were especially crucial and were subject to rigorous testing. AGC in consultation with their paint supplier's consultants proposed a coating system suitable for Australian water conditions different to North Sea applications.