

Shell Refinery Projects Demonstrate Full Range of Skills, Geelong, Australia

Uhde's capability from conceptual design and refinery-wide optimisation studies through to complete EPCM project delivery is demonstrated through Uhde's recent project experience with Shell Australia, with whom the company has a 20+ year association.

Shell operates refineries at Geelong (Victoria) and Clyde (NSW). In 2003, Uhde was awarded the contract for EP services for the hydrodesulphurisation unit (HDS2) at Shell's Geelong refinery. The project involved a 6000 tpd hydrodesulphurisation unit based on Shell global solutions international (SGSI) technology and designed to meet a 50ppm sulphur limit. Since startup the unit has been operating well and is capable of achieving the 2009 sulphur limit of 10ppm without modification.

In 2006 Shell awarded Uhde the FEED and EP contracts for the fluid catalytic cracking unit (FCCU) particulates reduction project at the Geelong refinery and in 2007 the

FEED and EPCM contracts for the revamp of the diesel 3500 tpd HDS unit at its Clyde refinery to meet the 2009 sulphur limit of 10ppm.

The progression from project delivery into front-end assignments has continued with Shell, in 2007, engaging Uhde to develop their margin improvement projects for the Geelong refinery. This assignment initially involved a team of engineers scoping projects to improve refinery margins. Uhde performed the process design and assisted Shell in preparing documentation for its scouting and concept selection phase. As well as equipment and hydraulic checks, the work included full process simulations (including the crude unit), calibration against test runs, thermal pinch analysis of preheat trains in the crude and fractionation units and some new heat integration between units. At the completion of the concept phase, Uhde's role progressed through to the FEED and EP phases of the work.



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