

Aker Kvaerner

Hydrocarbons

New Zealand Refining Company Ltd "A" Block Revamp Project, New Zealand (Platformer, HDS, CDU Revamp)

Project Value: AUD22 Million

- Services:
- Front End Engineering Design
 - Project Management
 - Detailed Engineering
 - Procurement
 - Construction Management

Aker Kvaerner was awarded the Front End Engineering contract for the "A" Block Revamp in August 1995, and was subsequently awarded the contract for EPCM services.

The project consisted of a debottleneck of the existing Whangarei Refinery "A" Block process units to achieve an increased throughput of approximately 20%. The "A" Block comprises a tight knit set of three process units, namely, a crude distillation unit (CDU), naphtha hydrotreater (NHT) and fixed bed naphtha catalytic reformer (Platformer). The crude feed rate to the unit following the revamp is approximately 8,500 tonnes per stream day.



Major features of the revamp included addition of a fourth platformer reactor, addition of new platformer heater convection sections and associated modifications to the existing reactor piping to recover additional heat through the furnaces, replacement of the existing waste heat boiler, plus new and modified exchangers and pipework in the crude preheat train.

Detailed engineering was undertaken both in Melbourne and Whangarei. A piping design team was established on site for preparation of piping arrangements with detailed isometric generation executed in Melbourne using the Aker Kvaerner Process 3D-CAD and material control systems. All procurement was undertaken from Melbourne. The plant shutdown was undertaken for November 1996 to suit the schedule for catalyst regeneration. The shutdown duration was 24 days.

