



SUCCESS STORY

Shell Refining (Australia) Pty Ltd Geelong Refinery - HDS Plant

Location: Geelong, Victoria, Australia

Order Date: 2002

Completion: 2003

Industry: Oil & Gas



Shell's Geelong refinery has been a major Yokogawa user since 1990, so when they added a new plant unit in 2002, they faced a crucial decision. Should they just add to their existing CENTUM-XL system, or use the latest CENTUM CS 3000 R3 System?

The new HDS(Hydro Desulphuriser) plant removes sulphur from hydrocarbon streams, and is needed to produce the "green fuels" covered by government legislation - down to 50ppm sulphur in diesel in 2005. Engineering began in late 2001, and completion is scheduled for September 2003. The plant will be controlled from an existing operating position in the main CCR (Central Control Room), using new operator screens.

Shell elected to proceed with the latest Yokogawa CENTUM CS 3000 system for the expansion. John McMillan, Shell's Control Systems Project Manager, explained, "CENTUM CS 3000 is the current generation system, and will be supported for many years into the future. It has an enhanced operator interface in a PC-based operator station, which gives a lower total cost of ownership. Looking to the future, it also provides an easy core for the future migration of the entire system. We felt it would have been a backward step to increase our investment in CENTUM-XL for this new project."

Shell are doing all of the configuration for the new system in-house, after attending a 5-day training course. Chris Barrand, Shell's Control Systems Project Engineer, said, "We have extensive expertise on CENTUM-XL, and have found that this transfers very easily to CENTUM CS 3000. Doing the configuration ourselves ensures consistency with the existing system." An operator has been seconded to the project team to work on the graphics displays and operability issues. The project also includes Yokogawa's Exaquantum Plant Information Management system and Exasmoc advanced process control system. The CENTUM CS 3000 control network connects into the CENTUM-XL control bus by means of standard Yokogawa bus converters.

System: CENTUM CS 3000
Total I/O: Approx. 1,100
System Configuration: 3 Dual Screen HIS with LCD screens, 1 Dual Screen ENG, 2 KFCS, Bus Converters to existing HF-Bus
Scope: System, project management, commissioning services