



A Yokogawa Commitment to Industry

**vigilance**<sup>™</sup>

## SUCCESS STORY

# Gas to Liquids Venture Coogee Chemicals, Australia

**Location:** Melbourne, Victoria, Australia

**Order Date:** 1993

**Completion:** 1994

**Industry:** Chemical



Since its founding in 1971, Coogee Chemicals has established a significant place for itself in the Southeast Asian region as a chemical manufacturer and tank terminal operator. While its principal base is in the Kwinana Industrial zone in Western Australia, steady growth has seen Coogee Chemicals establish manufacturing and tank terminal sites throughout Australia in Queensland, Victoria, New South Wales, and the Northern Territory as well as in Malaysia.

More recently, the company has positioned itself to enter "gas to liquids" manufacturing and research through the purchase of a methanol manufacturing facility in Victoria, in a joint venture with Mogal Marine Pty Ltd. In addition to this, the purchase of off-shore manufacturing technology and an oil / gas field in the Timor Sea has provided the building blocks needed to pursue the development of a world-scale methanol floating production storage and off-loading vessel (MFPSO) that will be used to process stranded natural gas. Coogee Chemical and Mogal Marine (in conjunction with Mitsubishi Corporation) hold the intellectual property rights for this methanol production technology. Apart from the significant growth expected from this project, Coogee Chemicals is also pursuing growth prospects in its traditional businesses.

### The Melbourne Methanol Plant

In 1994, BHP Petroleum completed construction of the Melbourne Methanol Plant. Although originally classified as a pilot plant for a larger facility that was to be built in northwestern Australia, this larger facility was never built and the Melbourne plant remains Australia's sole domestic source of methanol. In 1999, this plant was sold to Coogee Chemicals. Using ICI's advanced gas heated reformer technology, it is capable of producing 60,000 tons of methanol each year. This represents approximately 70% of the nation's methanol requirements and significantly reduces the country's dependence on overseas imports. The chemical industry accounts for approximately 80% of the country's methanol consumption, with this being used in the manufacture of formaldehyde, which in turn is used to produce urea and melamine formaldehyde adhesive resins.

For the Melbourne Methanol Plant, Yokogawa Australia provided the CENTUM-XL system, configuration engineering, customer training services, and commissioning assistance. Also included was a configured interface to an advanced trending system and to a Pepperl & Fuchs emergency shutdown system.

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<b>System:</b>	<b>CENTUM-XL</b>
<b>Total I/O:</b>	<b>approximately 1,500</b>
<b>System Configuration:</b>	<b>2 EOPS operator stations with dual-stacked CRT screens, one additional EOPC dual-stacked CRT operator console, 1 ENGS engineering station</b>
<b>Other:</b>	<b>Includes integration of GE Multilin intelligent motor protection relays</b>
<b>Scope:</b>	<b>System, project mgt, configuration eng, training, commissioning assistance</b>