

RECORD-BREAKING HEATER for Australia

Reading's Fired Heater Division has recently designed, supplied and delivered its latest heater to Caltex's Kurnell Refinery, near Sydney, Australia. Foster Wheeler built the original refinery in 1952.

Now we are pleased to report that Caltex has successfully completed site construction of the crude heater. This is one of the largest vertical cylindrical heaters ever supplied by Foster Wheeler, measuring 11 metres in diameter and 68 metres to the top of the stack.



First two radiant panels in place.



Stack being lifted onto the convection section.

The radiant section was supplied in full-height panels, which were 'topped and tailed' and lifted onto the foundations one by one, until the complete radiant cell was in place.

Next, the radiant refractories were installed by gunning and when set, the radiant coil in banjo sections was lowered into the cell so that the pre-assembled convection sections could be lifted into place above the radiant section.

Once these modules were secured, the stack was erected and the heater was ready for commissioning. The heater is fitted with 12 of the largest-available natural draught, ultra-low NOx burners to minimise emissions into the atmosphere.

Fired Heater Division has supplied over fifty heaters and gas turbine exhaust heat recovery units to Australian clients and has been involved in several revamp projects, extending the working life of existing heaters.

Other recent Australian achievements include:

- Design and fabrication of another gas turbine exhaust waste heat recovery unit, this time for Train 4 of the Woodside LNG project at Karatha on the Burrup Peninsula, an environmentally-sensitive site. This is the seventh heat recovery unit supplied for the Woodside facility by Foster Wheeler.
- Design, engineering and procurement management for a flue gas furnace delivered to ExxonMobil's Altona Refinery.
- Replacement of the vacuum heater at BP's Kwinana site. The new 650-tonne heater was fully constructed, the burners commissioned and refractory dried out before the unit was pushed into place on rails: all achieved during a record shutdown lasting only 22 days!