



Texaco

Term Services

The Foster Wheeler team at Texaco's refinery in Pembroke, South Wales, is now over a year into the fifth consecutive term of the engineering term services contract. The contract, first awarded to Foster Wheeler in 1993, includes the full range of project management, engineering, procurement and construction services.

Progress is well advanced on the five strategic projects which have formed the core workload of the current term. One of the projects has already been successfully completed when a new reactor installed within an existing hydrotreating unit was brought on-stream at the end of a plant shutdown in March.

Successful lifts
Earlier in the year some of the most complex lifts ever undertaken at the refinery were successfully and safely completed, when three pre-assembled rack (PAR) modules, a dressed column and reactor were installed within the existing ultra-low sulphur gasoline unit.

Laser scanning
With only inches of clearance from the operating facilities, careful pre-planning and execution of the lifts were essential. To be absolutely sure that the items could be safely installed without interfering with the existing facilities, the latest laser scanning surveying

techniques were employed. The digital engineering model of the PARs was merged with a laser scan of the existing plant to highlight potential clashes or "pinch" points.

As a double check, the digital model was subsequently replaced with a laser scan of the completed PARs and the clash check repeated. These checks enabled appropriate measures to be undertaken to ensure that there were no last minute hitches on the day.

Teamwork
Reflecting on the successful outcome of the lifts, Steve Powell, Texaco's manager, technology and I&T, said: *"Ultimately the success of these lifts was the result of teamwork and our thanks go to the Texaco, Foster Wheeler, Sarens, Mammoet, Ledwood and Warner Land Surveys personnel involved. Special mention should also be made of the team's impressive ability to arrange a five-day period of clear and calm weather conditions in the middle of February!"*

2003 Shutdown
The term services team is now involved with new projects and miscellaneous work associated with the planned shutdown in September 2003; the largest shutdown undertaken by Texaco at this refinery for many years.

The term services team is working on the design and procurement of a new crude heater, the replacement of a propane stripper and the replacement of the head and cyclones on the fluid catalytic cracker unit reactor.

These projects are all being driven to aggressive schedules to ensure delivery in advance of the shutdown.

Meticulous planning
For several months a number of Foster Wheeler personnel have been working within an integrated team, with Texaco and contractors' personnel, undertaking planning and preparation for the shutdown. With a number of smaller shutdowns already successfully completed the team is looking forward to the challenges ahead and the successful completion of the main shutdown in September.