

In service inspection of pressure equipment

Acoustic emission allows global inspections to be carried out and speeds up the qualification of pressure equipment without shutting down the plant.



monitoring of the tanks. Monitoring carried out every two years replaces the old hydraulic test advantageously. Acoustic emission detectors have been fixed on the ethylene oxide tank so that they can be connected for each re-qualification run without damaging the fire-proof coating.

Valuable time savings

It is no longer necessary to drain and clean the tanks, which considerably reduces the downtime and is all the more precious that they feed the production units continuously. The inspection takes

OUR CUSTOMER

Company name:
ICI-C&P France

Activity:
Manufacture of surfactants, synthetic lubricants and products used for gas and water treatment

Turnover:
35 millions euros

Country:
France

Context:
The firm located in Choques near Béthune employs over 300 persons.

UCI-C&P site houses two spherical tanks 11 metres in diameter i.e. a capacity of 735 m³, the first one being fireproofed for the storage of ethylene oxide, and the other used for the storage of propylene oxide.

Yesterday, the hydraulic test

In order to inspect tanks, conventional hydraulic tests required two to three weeks of shutdown, and washings that caused environmental problems. Washing operations required over 3,000 m³ of water that had to be treated before being discharged into

Cetim assets



Cetim has at its disposal

- a multidisciplinary team of EN473-certified CNC specialists qualified to work on any petrochemical sites
- a considerable technological advance linked to the use of innovative techniques (TOFD) and other advanced CNC techniques
- a methodology for inspection of pressure equipment complying with Administration-approved Afiap/GEA guide

the sewage system, not to mention quality problems met on the restart-up of the plant.

Today, the acoustic emission

Since 1993, Cetim has been using the new acoustic emission methods for routine

about seven hours, and the plant is shutdown for one day instead of two to three weeks. Even better the acoustic emission method provides improved monitoring. It allows evolutive defects to be accurately identified and located.

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