

Ultrasonic cleaning of heat exchanger bundles

AnQore heat exchanger bundles as good as new again.

Partners



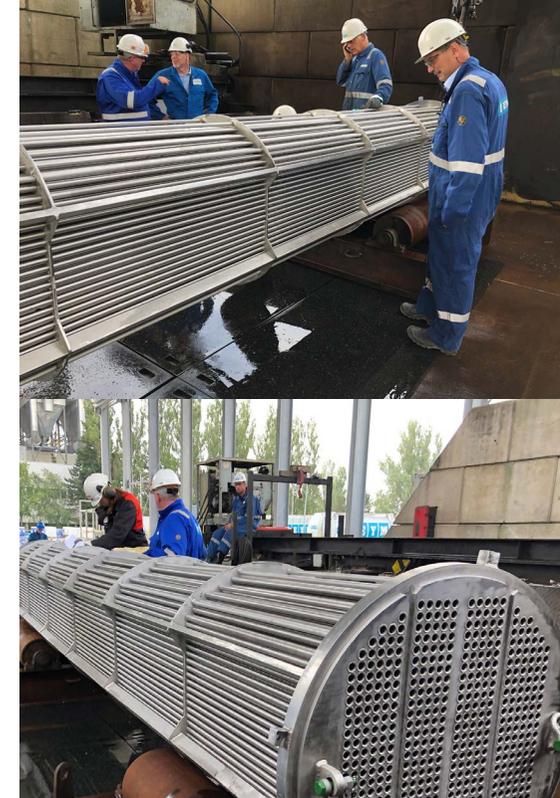
Challenge

The heat exchanger bundles in the purification towers at AnQore had become so polluted that their capacity had fallen considerably. The contamination that had built up meant that cleaning was having less and less impact, even when a spray robot was used. Generally speaking, the bundles have to be extended and cleaned every 150 days. As a result of the contamination that has built up over the years, the capacity of the bundles decreased, meaning that they were only working properly for between 50 and 70 days.

Results

Sitech Services proposed the use of an intensive cleaning technology: ultrasonic cleaning. This involves guiding ultrasonic waves through a tank containing cleaning solvent. These waves cause vacuum bubbles to form, which then implode. This reaction ensures that the contamination comes loose. For safety reasons, the decision was made to clean the heat exchanger bundles at an external location. Reym B.V. was chosen for this, as it had an ultrasonic unit for cleaning heat exchangers and components.

Following an intensive operation, the heat exchanger bundles look like new again, meaning that the system's service life is now significantly longer and it therefore will not have to be taken out of service as often. This process has saved AnQore a considerable amount of money.



Benefits

- Optimal service life of the system (up to 150 days), meaning that it does not have to be taken out of service as often.
- Situations necessitating a return to expensive heating using steam are less frequent.
- Reduced costs of opening, cleaning and closing the system; this results in cost savings of EUR 108.000,- until the next turnaround.
- Safer for employees, with a lower risk of exposure to hazardous substances.