



Wastewater cooler for refinery treatment plant

Refinery, United States

Case story

A large Texas refinery treatment plant needed to cool their wastewater to achieve critical outlet temperature during the hot summer months in the Gulf Coast area. The high fouling wastewater contained high solids and high chlorides.

A Niagara Wet Surface Air Cooler (WSAC) was custom designed with prime surface 316L stainless steel tube bundles along with redundant standby in service spares to ensure the sustainability of the system for the plant's continued operation.

The WetSurface technology and the closed-loop, evaporative design provides the low wastewater outlet temperature needed during the hot summers. In addition to cooling poor quality wastewater, Flex Water is a unique feature that allows the WSAC to operate using poor quality water for makeup water. In this case, treated wastewater was used as make-up.

Results

- Uninterrupted summer production
- Lowest outlet temperature achieved
- Custom design for ambient conditions
- Stainless materials to handle wastewater composition
- Redundant spare components ensure uptime



WetSurface
Maximum cooling efficiency and lowest possible outlet temperature.



FlexWater
A WSAC can operate on recycled water of low quality such as blowdown water.

Learn more at www.alfalaval.com/wsac



Why Alfa Laval Niagara Wet Surface Air Coolers (WSAC)

Maximize uptime

- High reliability
- Minimal maintenance

Cut costs

- Minimal energy consumption
- Reduced maintenance costs

Increase capacity

- WSAC maximizes cooling performance for increased production

How to contact Alfa Laval

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Alfa Laval reserves the right to change specifications without prior notification.

PEP00179-2-ENUS 1907