



Mexican Power Plant Turns to Reuse and Exceeds Water Savings Goals



INSIGHT

Caring for natural resources ranks high on the list of priorities for Termoelectrica, a power plant in Mexicali, Baja California, Mexico. At the same time, the power plant must balance its need to reliably respond to power demand fluctuations from heavy agriculture and industry in the area. The cooling tower became the focus for optimizing water and energy savings as well as improved staff safety.

INNOVATION

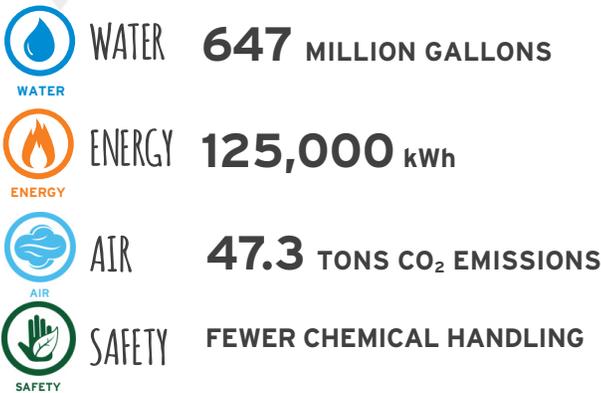
The plant uses grey water in its cooling tower, which reduces the plant's freshwater use. But grey water can carry high concentrations of calcium, sulfate and chloride, which contribute to scaling and performance issues. Nalco Water conducted studies to determine the optimal cycles of chemical concentration in the cooling tower to minimize water use and avoid scaling. The team implemented 3D TRASAR™ Technology for Cooling Water to reduce scaling which included continuous monitoring of performance from a remote control room and the application of cutting-edge chemical products.

“Nalco Water has unique polymers that work via charge reinforcement to carry impurities out of a cooling tower before they settle as scale and deposits,” said Fernando Garcia, district manager, Nalco Water. “We tailor our solutions to the specific conditions and needs of our customers. Our customized approach helped Termoelectrica significantly improve use of grey water in its cooling tower.”

TECHNOLOGY:

3D TRASAR™ Technology for Cooling Water

eROI™ IMPACT



COST SAVINGS
\$60,500
(ANNUAL SAVINGS)

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