



Rotating Equipment Specialists

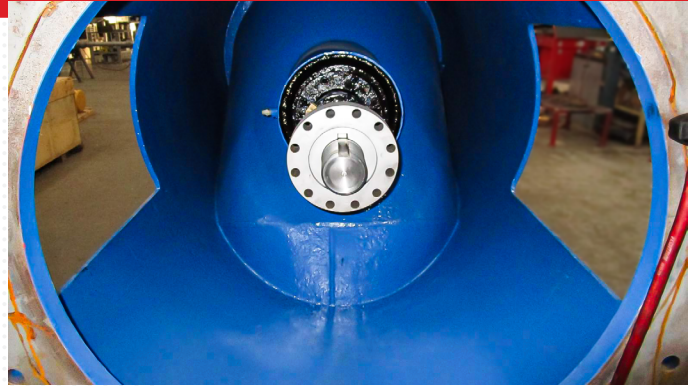
AN OVATION HOLDINGS COMPANY

## CASE STUDY

Industry: Power Generation

# Comprehensive Overhaul of Cooling Tower Water Pump

Conhagen's West Coast Division recently completed a critical project for a Northern California energy plant operated by a renowned independent power producer. The project involved the extensive overhaul of a major cooling tower water pump, showcasing Conhagen's ability to handle complex and demanding equipment repairs.



## Objective

The primary objective was to restore the cooling tower water pump to optimal operating condition, ensuring minimal downtime for the energy plant. This required addressing the immediate issue of the snapped line coupling, which caused the pump shaft and impeller to drop onto the suction bell, resulting in significant damage. Additionally, the project focused on enhancing the pump's durability and performance while implementing long-term improvements to reduce future maintenance needs and costs.

## Solution

Our team executed a comprehensive, in-shop repair service employing advanced techniques, which included:

- 3D Scanning, Reverse Engineering and Casting of a New Impeller.
- Manufacturing Shafts.
- Replacing Critical Bushings.
- Manufacturing and Installing a New Line Coupling.
- Applying a Two-Part Epoxy Coating.

## Results

The overhaul was completed successfully, restoring the cooling tower pump to optimal operating condition and ensuring reliable performance. These improvements are expected to lower future maintenance costs and enhance efficiency. This project highlights Conhagen's commitment to quality craftsmanship and innovative solutions, ensuring the longevity and reliable operation of essential equipment in critical industrial settings.

