



CASE STUDY

PROBLEM

A 32" to 20" reducer on a service water line was identified to have a small leak at the 9 o'clock position. The operating pressure of the system was 30 psi. The leak posed a risk of further deterioration and potential failure of the reducer, which could impact the efficiency and safety of the service water system. Immediate action was required to address the leak and reinforce the integrity of the reducer.



BEFORE



AFTER

SOLUTION

The repair was conducted by the RAK crew and involved multiple steps including addressing the leak, sandblasting, applying an epoxy tack coat, and installing a composite wrap. The use of epoxy and carbon fiber materials, combined with thorough surface preparation and coordinated team efforts, resulted in a durable and reliable solution to the problem. The repair was completed successfully, restoring the integrity of the reducer and ensuring the continued safe operation of the service water line.

AT A GLANCE

CHALLENGES

- Maintaining the integrity of the system at 30 psi during the repair process necessitated careful monitoring and control to prevent further issues.
- Variations in temperature and humidity could affect the curing time and effectiveness of the epoxy and composite materials, requiring adjustments in the repair process.

BENEFITS

- From initial assessment to final topcoat application, minimized downtime and ensured a timely repair.
- The crew adhered to safety protocols and procedures, ensuring a safe working environment and reducing the risk of accidents during the repair.

PROJECT PICTURES

BEFORE



AFTER



EPOXY TOP COAT