

HydraWrap[®] (Fiber Reinforced Polymer)

Market

Power

Challenge

A newly constructed hydroelectric dam with three water turbines had several issues with welds on the auxiliary cooling water and lube oil lines.

Engineered Solution

The general contractor had two options. They could reweld all the defective welds or reinforce these welds using HydraWrap, a carbon fiber reinforcement system.

Scope

All defective welds were identified and the substrate abraded. Once the substrate was prepared the HydraWrap system was installed. The HydraWrap system consists of a two part epoxy system of primer (substrate), wet out epoxy (fabric), and carbon fabric.

Solution

The entire project consisted of reinforcing nearly 1000 welds. The project was completed with a minimal crew in a confined space with a duration of six weeks. This process saved the client more than 75% in cost and time compared to traditional repairs.









STRUCTURAL COMPOSITE REPAIR SYSTEM