

HydraWrap[®] (Fiber Reinforced Polymer)

Market

Power Generation

Challenge

The challenge was to rebuild the circulating water cooling pipe due to deterioration.

Engineered Solution

The solution utilized the HydraWrap Structural Composite Repair System.

Scope

A client requested a structural repair of the exterior of a deteriorating pipe to prevent further corrosion to the area and rebuild the existing pipe back to its original condition. The exterior of the pre-stressed concrete cylinder pipe (PCCP) was prepared by high pressure water blasting the surface to remove any dirt and loose debris. Once this process was completed, a cement grout was used to fill in all voids to bring the pipe back to original condition. The HydraWrap carbon fiber system was applied to encapsulate the concrete pipe, and provide assurance that the system is able to maintain design pressures. A UV stable top coat was applied to increase service life.

Solution

The crew and all materials were staged near the project and were able to complete the system installation safely and within the work window provided by the station. The repair extended the life of the system.







