

HydraWrap (Fiber Reinforced Polymer)

Project: Circ Water

Application: Power Generation Pipeline

Product: HydraWrap

Engineer Solution: Repair of the 108" Pre stress Concrete Pipe (PCCP)
-Circulating water cooling Tower Basin.

Substrate / Area: Exterior of 108" ID PCCP has deteriorated to expose tension wires.

Client requested a permanent structural repair of the exterior piping to prevent further corrosion to the area and rebuild the existing pipe back to its original condition.

Engineers walked down the project, reviewed drawings and system operating parameters and provided an engineered solution. This solution utilized the HydraWrap, a system of Carbon Fiber reinforce polymer that was to be applied over the broken pre stressed wires and encase the subject area.

The exterior of the piping was prepared by removing all loose materials, and grit 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 shape. Once this process was completed the HydraWrap System was applied to not only encapsulate concrete pipe and repairs, but to provide assurance that the systems is able to maintain design pressures.

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.



HydraWrap