

PolySpray

Market

Power

Challenge

A large coal fired power plant in Pennsylvania required repair to a steel bypass piping that redirected cooling water from the cooling cells directly to the basin. The project to rehabilitate the piping was urgent and only a five day work window could be accommodated within the start-up schedule.

Engineered Solution

PolySpray SS100, in addition to HydraLine, was proposed as a solution.

Scope

The line consisted of 42-ft of 42-in diameter carbon steel piping that had severe erosion and corrosion. Particular concerns to the client included two 90 degree elbows situated within the piping that had severe wall loss and required immediate attention.

To reduce installation time the piping was grit blasted to SSPC 6/NACE 3 commercial blast parameters, surface profile to 3-4 mils. To maintain the 75 psig rating of the system, engineering calculations specified a thickness of greater than 3-mm to line and prevent leakage within the system. Any through wall holes greater than .25-in per weld, were welded.

Solution

A HydraTech manufactured epoxy filler (HydraLine) was used to address severe pitting on the internal radius of the lower 90 degree bend of the pipe fitting. The butterfly valve was masked off to prevent overspray and debris from accumulating on the valve disk and seat. The process took less than a day to complete. The following day the pipe went back in service without any leaks and its operational life was extended.



POLYSPRAY
POLYUREA BASED LININGS

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