

FIBRWRAP HELPS STRENGTHEN A LAS VEGAS POWER PLANT

Overview

A power producing company in Nevada recently required strengthening for a majority of its circulating cooling water piping system at its natural gas power plant. The client has approached this work since 2017 by releasing scope in phases as required to have minimal plant disruption. For this particular scope, the client needed repair of their Unit 3 cooling water lines. Working together with Fyfe Co. to provide a complete solution, engineers determined that the use of the Tyfo® SCH-41-2X uni-directional carbon fiber wrap system met all the performance and longevity needs for the client to have a new fully structural pipe for the subject cooling water piping system. The Tyfo® system is a carbon fiber-reinforced polymer product that can provide added strength to various structures.

The scope of work included conducting the internal surface preparation by media blasting and internal installation of the Tyfo® carbon fiber material on 440 ft of 36-inch diameter steel pipe and 310 ft of 32-inch diameter steel pipe including numerous eight tees, five 90° elbows, two reducers and one dead head.

Awarded in early 2018 and starting on site in April, the team was able to address challenges at the onset of the project and implement changes to better prepare the pipe for FRP. After extensive research, the operations team found a better methodology which, upon implementation, immediately made the preparatory production significantly more efficient. This dramatic improvement allowed the team to perform the FRP installation more efficiently and helped compress an already tight schedule, resulting in a 20 percent improvement in the installation rate.

This project was the second successful implementation by Fibrwrap Construction for the repair of cooling water systems at the facility following similar repairs in 2017. The company has been awarded subsequent projects as well.



“Our labor efficiency, coupled with improved engineering designs, demonstrate our team’s drive to achieve results on pipe projects”

Mark Brand
Fyfe General Manager



Fyfe Co., LLC
858.642.0694
www.fyfeco.com