

BELZONA'S CREATIVE APPROACH SAVES A REFINING COMPANY A LARGE LOSS IN REVENUE

CUSTOMER

Refinery, Texas, USA

APPLICATION DATE

2017

APPLICATION SITUATION

A 30" return line for a cooling tower.

PROBLEM

The water line had a welded patch fail. The line was leaking approx. 20 plus feet in the air and 40 feet across a road. The line was losing so much water that the plant was unable to perform a back flush of the cooling tower. Shutting the line down would result in a plant wide shut down at a cost of 1M dollars a day.

PRODUCTS

Belzona 1161 (Super UW-Metal)

Belzona 1121 (Super XL-Metal)

Belzona 1221 (Super E-Metal)

Belzona 1321 (Ceramic S-Metal)

Belzona 4141 (Magma-Build)

Belzona 9341

SUBSTRATE

Cast steel

APPLICATION METHOD

The pipe was grit blasted in the application area. By use of a mini excavator, a fully assembled half wrap was positioned over the hole. Two chain come-alongs were put around the pipe and half wrap to hold down the half wrap and create a water tight seal around the neoprene seal. The neoprene seal left a 1 and 1/4 gap in-between the half wrap and the pipe. Belzona 1161 was pushed in this gap from all sides until each side was filled. This was left to cure for a couple of days with the chain come-alongs left in place. A hose was connected to the gate valve to direct the lost water back to the cooling tower so that they could perform back flush procedures. Belzona 4141 was used to encapsulate the come-alongs. Belzona 1121 and Belzona 9341 were applied over Belzona 4141. Then, a layer of Belzona 1321 was applied on top of the wrap for added protection.

BELZONA FACTS

The Customer had considered various other options but they all called for a line shut down. The Belzona Technical Consultant provided a solution by creating a live bypass that allowed Belzona to be applied and cure.

PICTURES

1. Half wrap blasted and prepped to have a wrap applied.
2. Belzona 1161 being applied.
3. Belzona 4141 applied to the come-alongs and chain and Belzona 1121 applied over Belzona 4141.
4. Applying the top layer of Belzona 1321 to encapsulate the repair.



1.



2.



3.



4.

For more examples of *Belzona Know-How In Action*, please visit <http://khia.belzona.com>



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