Belzona Coating Nets an Increase of 700 GPM on Water Municipality Pump

ID: 9729

Industry:Water / WastewaterCustomer Location: Columbus, OHApplication:CEP-Centrifugal PumpsApplication Date: September 2019

Substrate: Cast Iron

Products: Belzona 1311 (Ceramic R-Metal), Belzona 1341N (Supermetalglide), Belzona 9411 (Release Agent)

Problem

Customer was faced with an extremely long lead time for a new pump so decided Belzona was worth a try.



Serious corrosion impacted efficiency. The wear rings were rebuilt also.



Cutwater was severely eroded. Picture shows completed



Picture shows completed application of Belzona 1341 (Supermetalglide) on the top half of the casing.



This picture shows the cutwater and wear rings rebuilt and coated.

Application Situation

Customer was faced with an extremely long lead time for a new pump so decided Belzona was worth a try.

Application Method

This pump was grit blasted to SSPC SP 10 near white finish. The cutwater was rebuilt by tack welding expanded metal and then using Belzona 1311 (Ceramic R-Metal) to reform it. The wear ring seats were rebuilt using Belzona 1311 (Ceramic R-Metal) and using new wear rings that were coated with Belzona 9411 (Release Agent) as formers. After these repairs were properly cured, two 10-mil coats of Belzona 1341N (Supermetalglide) was applied.

Belzona Facts

Test results after the application of Belzona included a gain of 700 gpm and 3% of wire-to-water efficiency. Anytime this municipality orders a new pump they require it to be coated with Belzona at the point of manufacture.

