

BELZONA KNOWS HOW TO REBUILD A DIAPHRAGM PUMP

CUSTOMER

Eastern Washington

APPLICATION DATE

November 2019

APPLICATION SITUATION

Potato processing plant.

PROBLEM

This 30" diaphragm pump was not performing as it should, so Belzona was asked to rebuild it. The pump was originally installed in the 1960's and has been operating pretty much full time since. Once opened, the cause of the lack of performance was revealed as there was quite a bit of erosion and metal loss.

PRODUCTS

Belzona 1111 (Super Metal)

Belzona 5831 (ST Barrier)

SUBSTRATE

Cast steel

APPLICATION METHOD

Due to the location and timing, we were only able to do hand tool prep. The customer was made aware that the proper method would be to grit blast. Every effort was made to remove all contaminants and corrosion using a needle gun to clean, and a grinder to roughen the surface. 2 kg of Belzona 1111 was mixed in several batches and applied to fill the pitting and wear, and to rebuild the edge. Most areas were up to 3/4" deep, and the outer edge averaged 3/4" deep by 1.5" wide in metal loss. 2 coats of Belzona 5831 ST Barrier was then applied by hand and allowed to cure.

BELZONA FACTS

The actual amount of material applied to rebuild this diaphragm pump was under \$700.00 US. The cost to replace the pump is unknown as they are no longer available, and that would require reworking the process line as well as the cost of the pump. The entire application was completed in one day, on-site, using the customers own manpower which shows the ease of use when it comes to Belzona materials. The customer is already looking forward to and planning on rebuilding and coating several older pumps, and coating several new pumps as a preventative measure.

PICTURES

1. The pump opened.
2. The pump cleaned.
3. The pump rebuilt with Belzona 1111.
4. The pump coated with Belzona 5831



1.



2.



3.



4.

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