Elite KHIA

Suction Bell Rebuild with Belzona 1111 & 1321

ID: 10160

Industry: *Marine*
Application: *PDP-Positive Displacement Pumps*
Customer Location: *Decatur, AL*
Application Date: *December 2025*

Substrate: *Carbon steel*
Products: *Belzona 1111 (Super Metal),Belzona 1321 (Ceramic S-Metal),Salt-Away*

Problem

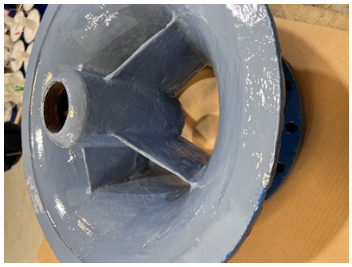
The suction bell had been in service for only two years but had already experienced severe wear due to exposure to brackish water and debris. These harsh operating conditions caused significant deterioration of the component, resulting in major flow rate issues and reduced overall pumping efficiency.



After removing salts and blasting to a 3 mil profile



After making repairs with Belzona 1111



After applying first coat of Belzona 1321



Completed project with two coats of Belzona 1321 applied.

Application Situation

The suction bell had caused major flow rate issues so the customer had to remove the system to inspect and they found major wear issues along with debris. Luckily they had a backup pump they put in its place that kept them running until we were able to return the completed project to the client. There was minimal downtime due tot the backup pump but the cost to replace this pump is well over $150k.

Application Method

We began by removing the salts from the metal by using Salt Away to reduce the PPM below 20. Followed by grit blasting to a 3 mil near white metal profile. We used Belzona 1111 to make the repairs followed by two coats of Belzona 1321.

Belzona Facts

By repairing the suction bell we were able to save the customer upwards of $150k. Luckily they had an alternate plan in place with a backup pump. Once the repaired pump is reinstalled we will make any repairs needed and apply Belzona to the backup pump as well. We were also able to secure an annual inspection for this system and make any repairs necessary.

ISO 9001:2015
FS 695214
ISO 14001:2015
EMS 695213

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