

Belzona Salvages an Aquarium Pump Intake

ID: 9449

Industry: Not Specified Customer Location: Washington
Application: PDP-Positive Displacement Pumps Application Date: October 2015

Substrate: Cast Iron

Products: Belzona 1111 (Super Metal), Belzona 1341N (Supermetalglide)

Problem

This salt water intake pump had heavy erosion, suspected to be caused by galvanic corrosion.







Grit blasted and ready for Belzona 1111.



Belzona 1111 applied.



Protected with two coats of Belzona 1341N.

Application Situation

Due to the severe erosion on this salt water pump intake, the aquarium was debating on replacing this pump. After carefully researching to verify that Belzona 1111 and Belzona 1341N would not impact the marine life in the aquarium, the decision was made to rebuild the pump, and protect it with Belzona 1341N.

Application Method

Grit blasting was used to remove all surface contamination and prepare the surface according to the Instructions For Use for both Belzona 1111 and Belzona 1341N. The Belzona 1111 was applied with Belzona applicators and allowed to cure, then hand sanded to achieve a smooth profile. The piece was then lightly grit blasted again prior to the application of the Belzona 1341N by brush.

Belzona Facts

The cost to repair this pump was considerably less expensive than replacing it, plus the with the operating condition of the pump, the lengthy lead time for a new pump was unacceptable. Even with the amount of Belzona 1111 needed to rebuild the damage, the repair was still roughly half the cost of replacement, and the replacement would not have had an efficiency enhancing protective coating applied to it. Upon completion, the aquarium repeated the application on the other two intake pumps as well. An inspection of the pump three years later showed no erosion or damage, and less than usual marine life attached to the pump as Belzona 1341N is very smooth and made it difficult for the usual barnacles and mussels to attach themselves.

