

Belzona 1111 & 1321 Rebuild Underwater Generator Housing

ID: 9898

Industry: General Industry

Customer Location: Birmingham, AL

Application: VPF-Valves, Pipes and Fittings

Application Date: July 2025

Substrate: Other

Products: Belzona 1111 (Super Metal), Belzona 1321 (Ceramic S-Metal)

Problem

Our client is a motor manufacturer & repair shop that is industry wide. They received a fiberglass lined steel generator housing that is used submerged to process water through a hydro dam. The housing (1 of several) had been in service 25+ years and had started to see a leak into the motor area from the fiberglass internal ring. The design was no longer manufactured and could not be sourced, Belzona offered an option rebuild it.



Generator Housing - Before

After removing the original fiberglass liner, it was re-seated into the housing. To machine to fit the fan blades that place within, Belzona 1111 was used to build up the housing to spec, and then was machined to fit.

First coat of Belzona 1321 applied on top of the machined 1111.

Final Coat of Belzona 1321 applied.

Application Situation

The hydro-dam was unable to source or rebuild the underwater generator housing due to its age and design. Belzona offered an option to rebuild and restore the existing housing for the future. The fiberglass ring was cut out and all the wiring was replaced prior to Belzona. Once completed, a fiberglass ring was re-seated and glued in. There was still a minimum clearance that needed to be met, so we applied Belzona 1111 thick on the surface of the entire housing. A local machine shop turned the housing and machined down the Belzona 1111 to spec. Once finished, we applied two coats of Belzona 1321.

Application Method

Belzona 1111 applied with Applicator

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

ISO 9001:2015

Belzona products are

FS 695214

manufactured under an ISO

ISO 14001:2015

9000 Registered Quality

EMS 695213

Management System.

www.belzona.com



Belzona 1321 applied with Brush
Dremmel/Sander was used for any fine tuning

Belzona Facts

Belzona offered the customer an option. There was no replacement equipment but we along side our customer were able to provide a solution that will work well and offer the customer a longer life cycle.

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