

Devcon[®] Plastic Steel[®] Putty (A) Used on River Vessel Bearings & Housings Outperforms Competitors

Problem

A customer repairs shaft bearings into the permanent housing units on its river vessels. Unfortunately, the housing interiors themselves were also in disrepair and nonconcentric, needing to be corrected prior to the new shaft bearing installations. Suffering from corrosion, wear and other damage, the housing units needed to be corrected as close to their original state as possible for the shaft bearings to be effective.

Housing repairs and corrections are made with Devcon Plastic Steel Putty (A) to fit the new bearings. Devcon Plastic Steel Putty (A) is applied to fill all gaps between the bearing and housing, allowing the bearings to align and function as needed.

When the customer tried two different competitors' products, the adhesive became loose before the bearings wore out, ending with "not so great results." With Devcon metal repair epoxy putty, the bearings now wear out before the adhesive becomes loose. For the performance required, they changed to the premium Devcon Plastic Steel Putty (A).

Solution

Devcon Plastic Steel Putty (A) was applied to create a bond between the shaft bearings and housing and used to fill in the gaps between the nonconcentric shapes. For optimal performance:

- The surface was cleaned and the substrate material roughened for the best possible adhesion. After abrading the surface, the epoxy putty could be applied for a high quality bond.
- The Devcon Plastic Steel Putty (A) filled the gaps between the housing and the bearing, did not sag out of place, and supported the full circumference of the bearing inside the housing.
- Devcon Plastic Steel Putty (A) fully cures in 16 hours.

Outcome

Though Devcon Plastic Steel Putty (A) is a metal surface repair putty, it can also be used successfully as an epoxy adhesive. It was applied without sagging or running out of the shaft housings and it provided industrial strength bonding that outperformed two different competitor's products. The bearings were successfully mounted and performed for their expected hours of use. Not only were the customer's needs fulfilled, they also realized the value and reliability the Devcon epoxy adhesive provided, "Devcon is truly some great stuff."



Bearing installed in housing with Devcon Plastic Steel Putty (A)



Devcon Plastic Steel Putty applied to shaft bearing housing



The technical information, recommendations and other statements contained in this sheet are based upon good faith tests or experience that ITW Performance Polymers believes are reliable, but the accuracy and completeness of such information is not guaranteed. This information is not intended to substitute for the customers' own testing. ©ITW Performance Polymers, June 2024.