

Powers Bros Machine Significantly Reduces Equipment Repair Time with Devcon® EZ-Spray Ceramic Coating

Introduction

Devcon products have been chosen for the repair of metal machinery since 1954 with the development and launch of Plastic Steel Putty®, a revolutionary metal-filled epoxy repair compound. The Devcon product line has grown significantly over the years to meet the expanding maintenance, repair, and overhaul needs of mining, petrochemical, power plants and other heavy industries.

Powers Bros. Machine, Inc. is a third-generation repair shop specializing in industrial rotating equipment. To enhance their core goal of superior quality, Powers Bros personnel have been factory trained in the proper selection and application of Devcon products.

Problem

A Fairbanks Morse Submersible Pump with a 14" discharge functioning in a stormwater management system was found to be leaking, experiencing high cavitation, and operating with poor efficiency. The pump was taken off-line and sent to Powers Bros for refurbishment. Disassembly and inspection revealed significant erosion and corrosion of the volute interior, as well as general corrosion of the entire pump exterior. Power Bros was looking for a high-quality, easy-to-use solution that at the same time was not time-consuming.

Solution

Powers Bros considered potential options and selected Devcon as the best repair solution. Devcon EZ-Spray Ceramic is a solventless epoxy system filled with fine ceramic powder, engineered to protect metal pumps and processing equipment from wear and corrosion.

Devcon EZ-Spray Ceramic has been optimized for efficiency of use. Unlike its predecessors, which are hand mixed and manually applied to the surface by brush, Devcon EZ-Spray Ceramic pneumatic dispensing system mixes the two components and sprays directly onto the repair surface.

Additional benefits of Devcon EZ-Spray Ceramic over brushable epoxies include faster application time, assured ratio accuracy, reliable mixing, and no waste.



Before Application



Application of Devcon EZ-Spray Ceramic



After Application of Devcon EZ-Spray Ceramic

Result

Devcon EZ-Spray Ceramic Red & Devcon EZ-Spray Ceramic Blue were spray applied to the pump volute interior and the entire pump exterior respectively.

“By using the Devcon EZ-Spray Ceramic solution, we were able to complete the mix and apply stage of the repair four times faster than with the previous manual brushable approach.”

**Casey Powers, General Manager,
Powers Bros Machine**

Devcon EZ-Spray Ceramic coating restored the volute to its original dimensions and provided a high gloss surface, leading to increased discharge rates and decreased energy use during operation. Further, its exceptional resistance to wear and corrosion will protect the structural integrity of the underlying steel and extend the pump's service life. The exterior coating will provide long-term corrosion resistance under harsh conditions.

Based on positive end user feedback, Powers Bros now includes a finishing layer of Devcon EZ-Spray Ceramic coating to their scope of work plans for all pump refurbishments.



Pump Refurbished with Devcon EZ-Spray Ceramic

Technical Information: The technical information, recommendations and other statements contained in this document are based upon good faith tests or experience that ITWPP believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond ITWPP's control and uniquely within user's knowledge and control can affect the use and performance of an ITWPP product in an application. Given the variety of factors that can affect the use and performance of our products, the user is solely responsible for evaluating the ITWPP product and determining whether it is fit for a particular purpose and suitable for the user's method of application. ITWPP recommends the User review all Safety Data Sheets, Technical Data Sheets and ITWPP's warranty and limited liabilities, prior to use. These can be found at www.itwpp.com

Limitation of Liability: Except where prohibited by law, ITWPP will not be liable for any loss or damage arising from the ITWPP product or information provided in good faith, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.