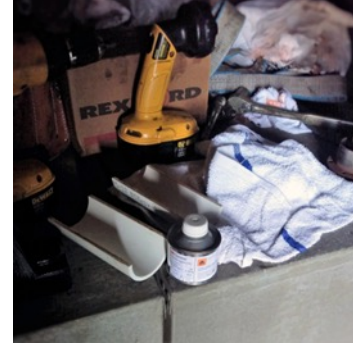


Shaft Repair on Rooftop



PROBLEM

An automotive manufacturing company was hearing heavy vibration of a fan shaft on top of the roof, so they called Unconventional Solutions out for an emergency repair to fix a cracked shaft. The shaft was located in a penthouse HVAC building on the roof of a warehouse used for heating. The shaft was 6ft long, with a wear area 2"- 3" wide, by roughly 1/16"- 1/8" deep, caused from a bad bearing. A new shaft alone costs nearly \$2000 and would take 4 weeks to be delivered. A factor of 4 days of downtime and labor costs of 4 employees working 10+ hour days totaling approximately \$5000 to get the replacement shaft installed ready for service was also an issue.

SUBSTRATE

Metal

PRODUCTS USED

[USI Universal Cleaner](#)

[MBX Bristle Blaster](#)

[RESIMETAL 101 Metal Repair Paste](#)

[USI Release Agent](#)

SOLUTION

As a turnkey project USI recommended using [RESIMETAL 101 Metal Repair Paste](#). The shaft was solvent cleaned with [USI Universal Cleaner](#), prepped with the [MBX Bristle Blaster](#) to achieve an anchor pattern of 2-3mils and SSPC-SP2 or SP3 standard then followed by another application of [USI Universal Cleaner](#) to remove any oil or debris.

[RESIMETAL 101 Metal Repair Paste](#) was properly mixed according to its Technical Data Sheet and formed with PVC pipe, lined with [USI Release Agent](#) and hose clamps to the wear area of the shaft. Heat was applied for a quicker overall cure time.

The project was completed in 6 hours and allowed to finish curing and was back in service within 48 hours.