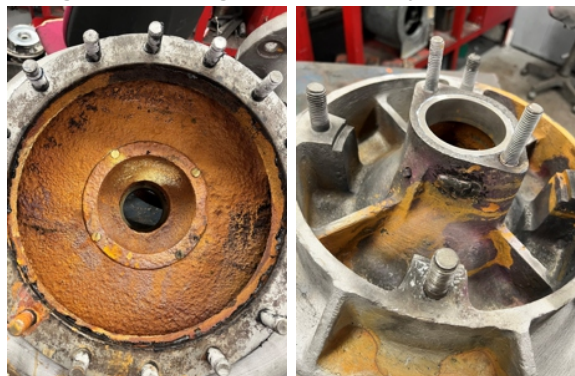


Liquid Metal Epoxy Repair Coating

Case Study

Leaking Worthington Simpson Pump Repair

With spare parts no longer existing for an old Worthington Simpson Pump, an engineering company are asked to repair a corroded and leaking pump head



Heavy corrosion was removed from the inside pump head by the pump repair company via shot-blasting



Once shot-blasting was completed and the pump pressure tested, multiple pinhole leaks were found



Superfast Steel sealed the pinholes in the casing and a 3mm coating of Liquid Metal provided thorough protection against future corrosion

Defect

Worthington Simpson were an independent British pump manufacturer. Between 1785 and 1967, they supplied municipal waterworks, the RAF and Royal Navy until becoming a subsidiary of a US company.

Finding replacement parts for their historic pumps is now virtually impossible, making repair the only way to keep systems operational.

A specialist pump repair company were asked by a client to refurbish a heavily corroded Worthington Simpson pump head. They disassembled and shot-blasted the inside to remove all rust, dirt and grime.

When the pump was tested after repair, it was found to be leaking. Shot-blasting had created pinholes in the casing, through which water could spray out.

Solution

After an attempt to patch weld a pinhole failed, the company used **Superfast Steel Epoxy Putty** to seal the leaks. Small amounts of putty were mixed and pressed flat onto the casing, covering every pinhole.

Superfast Steel hardened within 10 minutes. **Liquid Metal Epoxy Coating** was then used to seal the casing. Three coatings were applied, forming a metallic layer 3mm thick covering the pump interior.

Result

Water inside the pump was now fully contained and the original, weakened metalwork shielded against future degradation thanks to the robust shield provided by Liquid Metal.

It will now be many years before the inside casing shows signs of corrosion and needs refurbishing again - much to the delight of the client.