

**Cost-effective
Pump Repairs,
with Innovative
Solutions!**

Case Study Multi-Stage Axially Split Casing (BB3)



| Duty & Fluid | OEM & Designation | Materials |
|---|---|---------------------------|
| Sea Water Injection De-Aerated Sea Water | David Brown (SPXFlow) 6x8x11B MSD-D 4Stg | Stainless Steel API A8 |

Challenge

SPX Flow heritage pump from late-life operator. Operator was having issues with excessive wear to rotating parts, previous repairs by another pump repair workshop had not offered any reliability improvement suggestions to increase MTBF. There had also been instances of Tungsten Carbide coating failures on shaft sleeves. Pinnacle Re-Tec identified an issue with the coating application previously applied resulting in pitting and chipping on the previously coated surfaces.



Solution

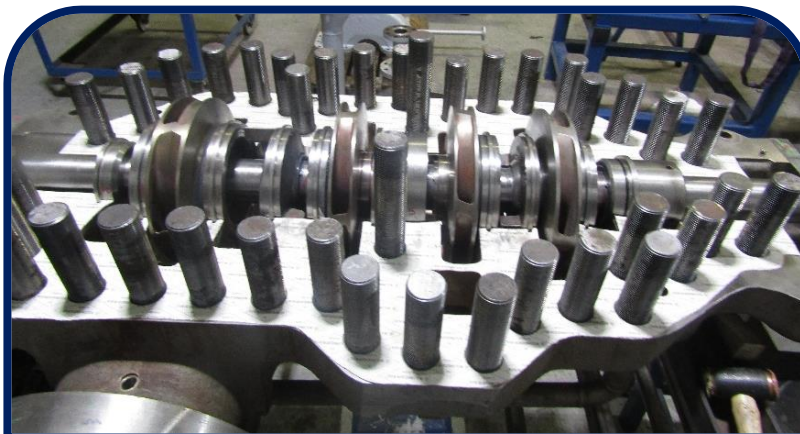
Pinnacle Re-Tec reverse engineered and manufactured in-house the required new rotating and static parts. Our solution to increase MTBF was to coat both static and rotating wear parts with HVOF Tungsten Carbide coating as an improved solution to the wear issue seen on impeller & case wear rings. Additionally to overcome the pitting and chipping on previously coated surfaces we introduced a "well type" machine preparation which is in line with good practice.

Benefit

Pinnacle Re-Tec identified solutions which significantly reduced the cost and lead-time of the Sea Water Injection Pump repair. By introducing HVOF Tungsten Carbide coatings, to both static and rotating parts, we have increased the reliability and the MTBF for the client.

Result

The operator has seen an increased reliability and MTBF of this unit due to the introduction of HVOF Tungsten Carbide coatings on static and rotating parts in a Sea Water Injection application. By reverse engineering and manufacturing in-house the required spare parts, we have given the customer an improved, cheaper and faster repair than an OEM offering whilst offering OEM equivalent quality guarantees.



To see how Pinnacle Re-Tec can help you with cost effective pump repairs and innovative solutions to increase MTBF please call us on 01207 588 731 or email info@pinnacle-re-tec.co.uk