

Breathing New Life into Old Equipment, with Innovative Solutions!

Case Study

Propeller Thrust Spin Rig Repair

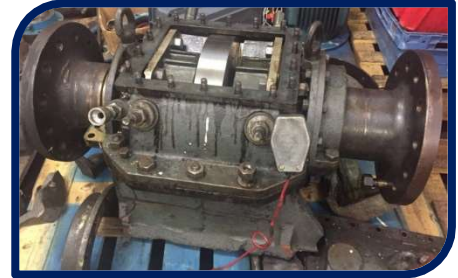


Duty
Thrust Test
Military & Aviation Industries

Materials of Constr.
Cast Steel – Casings
42CrM04 Forging - Shafts

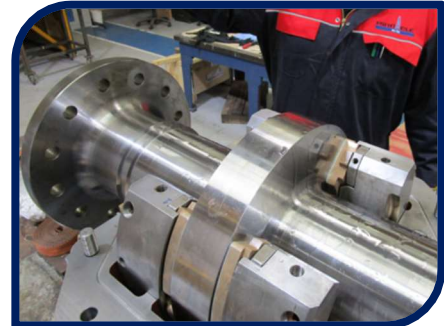
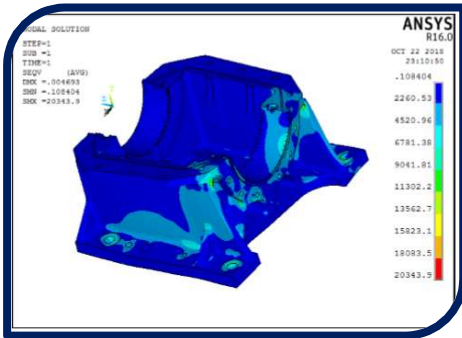
Challenge

Propeller Spin Rig was sent to Pinnacle Re-Tec to be reverse engineered, designed and manufactured following a catastrophic in-service failure. The now obsolete test rig was installed in 1937 and the customer now requires, a new test rig capable of dealing with significantly increased thrust loads in line with current military and civil aviation standards.



Solution

Pinnacle Re-Tec were able to offer a cost-effective repair solution, by reverse engineering and manufacturing in-house all required parts. This included the following new manufactured components; thrust shaft, thrust block casing and associated thrust pad assemblies, main drive shaft, 2 off plummer blocks and associated journal bearing sets. As the Thrust Spin Rig required uprating to deal with higher loads, all new parts were FEA stress analysed, prior to manufacture.



Benefit

By reverse engineering and manufacturing all new parts in-house, Pinnacle Re-Tec were able to provide the customer with a **'one-stop-shop'** for replacement of this obsolete propeller spin rig.

Result

Pinnacle Re-Tec by applying more than 30 years experience of reverse engineering and parts manufacture to this unique engineering challenge, we able to deliver to our customer a completely new, on-time and uprated Propeller Thrust Spin Rig assembly ready for installation and commissioning by our field service team.



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