



REFURBISHMENT OF TURBOMACHINERY COMPONENTS

Different types of Rotors are taken up Refurbishment and Reconditioning activities like Reblading, Rotor Bend Removal, Rotor Refining, Burnishing of Journals, Residual life evaluation and Replacement of Rotor Shafts for Turbomachines of different Brands with the proven track Record of 20 years of expertise.

Our engineering personnel with decades of experience in Designs, Strength and Thermodynamic calculations of Turbines, Compressors are equipped with latest computer software packages, replica techniques, 3D co-ordinate measurement systems & profile magnification systems for accurate Reverse Engineering of components and technologies.

Refurbishment of different activities at a glance



Reblading of Turbine Rotor



Refurbishment of Compressor Impeller



Reblading of Axial Compressor rotor



Refurbishment of Screw Compressor

Casing Repairs:

Different types of casing are undertaken for refurbishment and reconditioning activities towards **i)** arresting of steam / gas leakages at parting plane (vertical & horizontal), **ii)** removal of twist or crack in the casing by building-up material suitable to casing followed by stress relieving, scraping the parting plane, NDT tests, hydraulic pressure testing, Re-blading, evaluation of residual life etc., on Casings of different Makes.



Casing Parting plane clearance checking

We provide innovative, effective time and money saving solutions to most difficult cleaning problems in industry, using dry or wet method

Cleaning is done by dry method using grit blasting with the help of Aluminium oxide crystals.



Grit Blasting of Compressor Rotor – Dry Method

In the wet method, High Pressure water jet mixed with fine quartz sand is an ideal cleaning system for Turbine Blades, Heat Exchangers, Condensers and Pressure vessels.



High Pressure water - jet cleaning of Turbine Rotor

Governing Testing Facility :

We have full-fledged test facility for Testing and Calibration of Governing components after Repair or Manufacturing.

Checking the time constants of different regulation assemblies, response time by simulating working conditions.



Redefining Value of Old Turbines

One of our customers wanted a TG set for their plant and identified an old marine turbine almost in a condition of scrap. We have carried out internal inspection and condition assessment, identification of missing items of the turbine and recommended for procurement of missing items. There was one major problem: This unit has a 730 KW, 60 Hz turbine but it is not suitable for Indian grid system where the grid frequency is 50 Hz. We have carried out upgradation and modification in Governing System, Gear box, Steam path components like Nozzles and Blading, bearings and seals. The turbine renovation process involved every group within Turbomachinery - and now the customer has a working unit for 1/4th cost of a new machine and running with 50 Hz



BEFORE



AFTER