CASE STUDY



Repair & High Speed Balancing of 35 MW Alternator Rotor

INTRODUCTION

Client is a leading **paper & pulp industry**. Their **35 MW** generator rotor experienced heavy vibration during excitation and hence, were unable to load the generator.

CHALLENGE

On inspection, the root cause of the issue was improper brazing of rotor windings. This was leading to contact between winding & end rings during rotation and hence, created faults in rotor and distortion on the magnetic flux resulting **vibration** while exciting the **alternator**

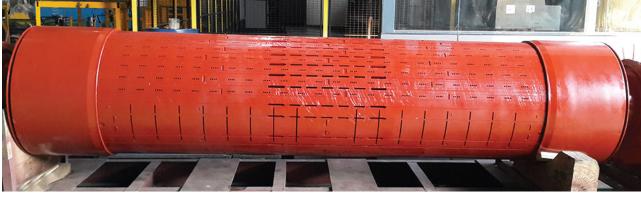




Removing of rotor coils / windings & replacement of faulty windings. Complete **re-insulation**, static tests, before & after **high speed dynamic balancing** in Vacuum tunnel. Rotor has been commissioned and running successfully since May 2016. A series of tests were done in this process which included

- Resistance test,
- High frequency test @ 400HZ,
- Impedance test for the Rotor
- The IR test,
- Resistance test & surge comparision test for the armature
- RSO test was also conducted for the alternator.

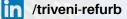






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