CASE STUDY



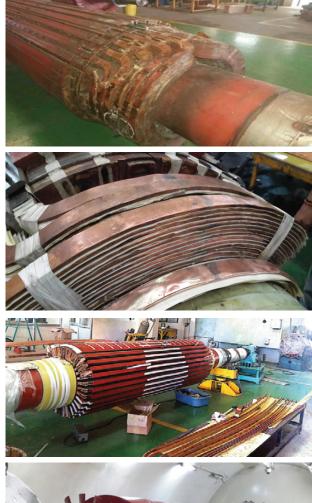
Repair & High Speed Balancing of 35 MW Alternator Rotor

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**

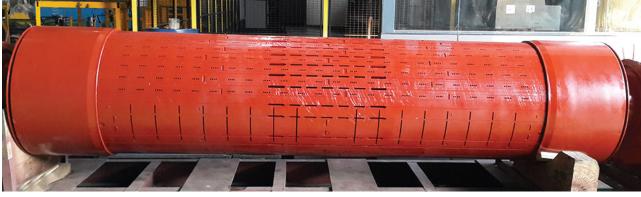




Removing of rotor coils / windings & replacement of faulty windings. Complete **re-insulation**, static tests, before & after **high speed dynamic balancing** in Vacuum tunnel. Rotor has been commissioned and running successfully since May 2016. A series of tests were done in this process which included

- 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.

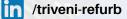






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VISIT WEBSITE



Global Network

INDIA

SALES, SERVICE AND MANUFACTURING FACILITY

Triveni Turbine Limited

12-A, Peenya Industrial Area, Bengaluru-560 058, Karnataka, India. Phone: +91 80 22164000 Fax :+91 80 22164100

UAE

SALES AND SERVICE OFFICE

Triveni Turbines DMCC

4502-14 & 4502-15, 45th Floor, Al Mazaya Business Avenue - Tower BB2, Jumeirah Lake Towers, Dubai, United Arab Emirates, P.O. Box 393509 Phone: +971-4 5670752 Fax :+971-4432 8232

SOUTH AFRICA

SALES, SERVICE AND

Triveni Turbine Limited

Plot No.491, Sompura

Nelamangala Taluk,

Industrial Area

2nd Stage, KIADB Sompura

Bengaluru Rural - 562 123

MANUFACTURING FACILITY

MARKETING AND SERVICE OFFICE

Triveni Turbines Africa (Pty) Ltd.

AMR Building, 3 Concorde East Road, Bedfordview, 2007, South Africa Phone: +27 10 007 5245 / 5246

Email: customercare@triveniturbines.com

www.triveniturbines.com

THAILAND

MARKETING AND SERVICE OFFICE

Triveni Turbines DMCC

571 RSU Tower, Unit 903, 9th Floor, Sukhumvit 31 Road, Klong Ton Nua, Wattana, Bangkok 10110, Thailand Phone: +66 2 117 9575, Fax : +66 2 662 3416

INDONESIA

MARKETING AND SERVICE OFFICE

Triveni Turbines DMCC

Suite No. 56, 23rd Floor, ANZ Tower, Jl. Jend. Sudirman, Jakarta Pusat - 10220, Indonesia Phone : +62-21-29546888 Fax : +62-21-29546889