



Case Study  
10 MW Turbine rebuild

# Status report

- Turbine is a 1940 build unit
- Bought second hand from Europe for refurbishing and to put back into operation

# Further inputs

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- The blades in the rotor and GBC were in packets and brazed with gold and silver
- Complete reblading of rotor and GBC was required besides other improvements



# Challenges

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- To establish the method of brazing
- To establish the blading pattern since the blades were in packets of 10 each
- Ship in 5 months from order
- To organize the requisite raw materials based on our engineering strength

# Confidence building

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- Visit to Bangalore by customer ensured that he gained in confidence
- *Established the process of blade packet manufacturing by brazing and completed pull out tests to check acceptance criteria.*
- Provided adequate confidence in the GANT chart to ensure on time completion with option to inspect process anytime

# Solution

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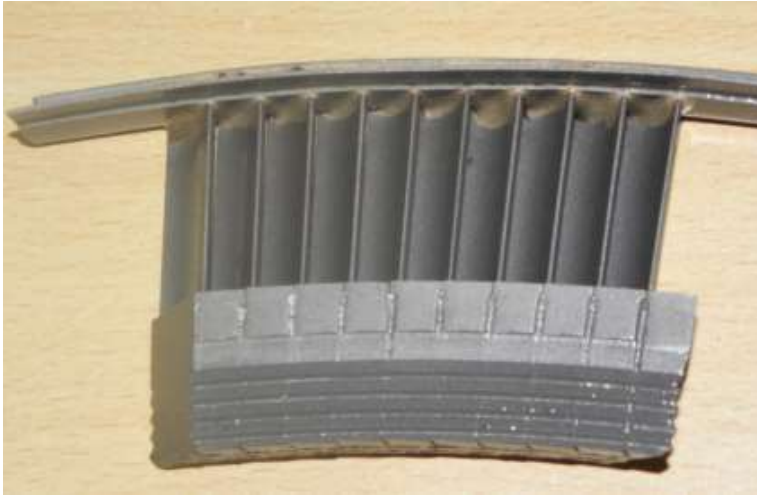
- Detailed engineering study carried out to establish the current best practices
- To carry out a complete reverse engineering to enable provide customer any parts of the rotor at short notice

## Steps

- De-blading
- Alumina cleaning
- Surface inspection
- Reverse engineering
- Blading of rotor and GBC
- Blade locking
- High speed balancing
- MRT
- Commissioning at site

# Project completion process

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# Current Status

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- Operational for the past year.

*WE CARE*