

Replacement of end of life Compressor



Project Highlights

- + Reduced overhang and weight of compressor
- + Increased rotor stability
- + Extended life of the compressor
- + Redesign, upgrade and manufacture of replacement compressor

Project Overview

A customer in the Netherlands required a failure root cause analysis, engineering, upgrade and replacement of compressor at end of life. EthosEnergy were required to perform vibration measurement on-site followed by a complete rotordynamic analysis.

The EthosEnergy Solution

- + Redesign and upgrade of compressor
- + Manufacture of upgraded design

Key Challenges

- + Replacement of end of life compressor with high vibrations and unusual response to daily water wash cycles.

Key Results

- + Reduced overhang and weight of compressor
- + Increased rotor stability with less requirement for water wash cycles
- + Titanium compressor meaning extended life
- + Other units received same solution



Our Compressor Capabilities:

Inspection and Repairs:

- + Centrifugal compressor rotor inspection
- + Axial compressor rotor inspection
- + Repair of seal areas, shaft journals and tapers
- + Re-staging of re-blading
- + Rotor low and high speed balance
- + Bearing inspection and repair
- + Seal inspection and repair
- + Stationary component repairs

Redesign and Upgrades:

- + Impeller or axial blade redesign
- + Labyrinth seal upgrades
- + Bearing upgrades
- + Seal conversion (i.e. oil to dry gas)
- + Material upgrades
- + Coatings

Field Services

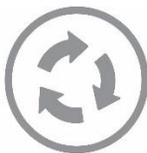
- + Scheduled field inspection
- + Scheduled major overhaul
- + Vibration measurement and analysis
- + Field alignment
- + Rotor trim balancing
- + Troubleshooting

Other Services

- + Failure root cause analysis
- + Reverse engineering
- + Rotor, impeller and diaphragm manufacture
- + Rotor storage containers

Special Features:

- + Advanced shaft weld repairs
- + Rotor OpSpeed™ balance(High-speed)
- + Compressor re-rates
- + Climate controlled rotor storage facility



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EthosEnergy is a leading independent service provider of rotating equipment services and solutions to the power, oil & gas and industrial markets. Globally, these services include facility operations & maintenance; design, manufacture and application of engineered components, upgrades and re-rates; repair, overhaul and optimization of gas and steam turbines, generators, pumps, compressors and transformers; delivery of gas turbines and generators, and supply of overhauled and warranted equipment on a FAST TRACK basis.