

# Centrifugal Compressor Repair

## Product Sheet

### Quick Turnaround, EthosEnergy Quality

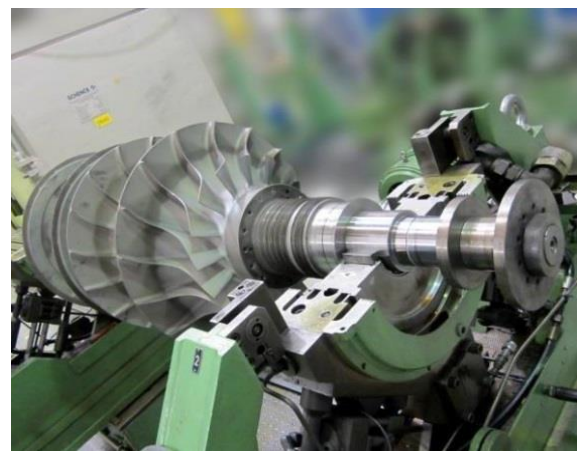
EthosEnergy can inspect, repair, reverse-engineer and rebuild centrifugal compressors from virtually any OEM, including stationary elements, impellers, rotors, bearings, and other parts. We incorporate advanced manufacturing tools like CNC milling machines and advanced welding technologies like submerged arc, MIG and TIG, that meet demanding API, ISO and OEM specifications. We can store your spare compressors in our controlled climate facility, ready to go at a moment's notice.

### Repair Solutions

We can return almost any centrifugal compressor to its original specifications through reverse-engineering, repair and manufacture of replacement parts. Our advanced operating speed bunker ensures that your compressor will run smoothly on the job.

With each and every repair, your compressor rotor receives a complete inspection under the supervision of experienced and skilled EthosEnergy engineers.

Design improvements can be implemented during the repair process, offering solutions to existing problems or needs.



### Our Customer Benefits

- Fast turnarounds for repairs
- Extensive blade manufacturing experience
- Complete repair solutions
- In-kind replacement or upgraded parts
- Responsive service customized to your needs, budget & schedule

### **Advanced Welding**

Besides standard repair methods, such as HVOF metal spraying and Chrome plating, EthosEnergy's sub-arc technology and other advanced welding techniques ensure fast high-integrity repairs for both rotors and impellers.

### **Fast Manufacturing**

We can reverse-engineer and manufacture both new impellers and rotors. With advanced CNC multi-axis milling centers, wire EDM equipment, sinker EDM equipment, and other custom-made equipment, we can turn your job around fast.

### **Repair Example One**

A petrochemical producer approached EthosEnergy for an evaluation of their ethylene compressor train. The train consisted of Elliott centrifugal compressor models 29M, 46M, 60M and 70M. We needed to make a modification of the compressor rotors to accept fluorosint stationary seals. This required de-stacking the rotors, designing and manufacturing both shaft and impeller sleeves, and performing a low-speed and high-speed balance. The result was less leakage with more compressor through put.

### **Repair Example Two**

A chemical plant needed a spare compressor rotor for one of their compressor units. The rotor was a three-stage compressor rotor with an old impeller rivet style. We reverse engineered their impellers and redesigned them to a modern style design. We also manufactured a new shaft with all the required shaft hardware. The result was a more dependable spare rotor for their critical process.



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.