

# In-kind Replacement of Centrifugal Compressor Rotor

## 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.

### Repair Solutions

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

### 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 compressor rotors.

### Fast Manufacturing

We can reverse-engineer and manufacture both blades 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.



### Our Customer Benefits

- Fast turnarounds for repairs
- Extensive manufacturing capabilities available
- Complete repair solutions
- In-kind replacement or upgraded parts
- Responsive service customized to your need, budget and schedule

### **New compressor rotor**

A petrochemical company approached EthosEnergy for the supply of a centrifugal compressor rotor of one of their ethylene compressors (Elliott 29M6-5).

### **Scope of Work**

- Reverse Engineering;
- Complete rotor with 5 impellers;
- Speed: 10,620 rpm
- Material impeller: X3CrNiMo13.4
- Material shaft: 30CrNi8
- Construction: Slot Welded
- Impeller vanes design: 2D
- Diameter: 420mm (16.5")
- Upgraded design from riveted to welded impellers
- High speed balanced



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 warrantied equipment on a FAST TRACK basis.