

## CASE STUDY

## Aero Engine Component Repair Services



**Accessories and Components (A&C) have comprehensive process and repair development capability, improving yield and minimizing replacement parts cost**

Process Capability	Component Type				
	Housings	Vanes	Seals	Plenums	Elec. Starter
Full Machine Services	•	•	•		
Plasma/Thermal Spray	•	•	•		
Heat Treatment	•	•	•		
Composite Repair				•	
Weld/Braze Repair	•	•		•	
Repair and Overhaul					•



### Repair Overview

Modern aero engines are modular in design and use a variety of complex manufacturing techniques to produce critical rotating and static components including thin wall castings, fabricated assemblies as well as forged and machined parts. Each is designed to deal with both mechanical stress and to cope with sometimes hostile working environments including thermal cycling, contamination and foreign object damage.

### In-service Degradation

These robust components provide many years of reliable service, however over time they can degrade, suffering from mechanical wear, corrosion and erosion, eventually becoming unsuitable for continued service on the engine.

### Repair Solution

Once a part is declared unserviceable, operators face the choice of purchasing new high cost replacement parts or to seek an alternative remedy using a specialist aero engine component repair company. A&C offer tried and tested component repair solutions for a comprehensive range of parts including housings, vanes, seals, plenums and electric starter motors.

- + OEM approved repair schemes
- + Repair of brazed and welded assemblies
- + Dimensional restoration by welding and plasma spray
- + FAA-DER repair development
- + Testing & overhaul electric starter motors
- + Component exchange service/warehouse services

### Repair Development Service

A&C Duncan, South Carolina supports the global aviation industry with repair services is backed by OEM and regulatory approval. Our experienced engineers are capable of fault diagnosis and full repair development, including reverse engineering and DER repairs.

**CASE STUDY****Aero Engine Component Repair Services****EthosEnergy Accessories and Components**

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**EthosEnergy Profile**

**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 power plant engineering, procurement and construction; 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 other high-speed rotating equipment.

**SAFETY****SERVICE EXCELLENCE****PEOPLE****FINANCIAL RESPONSIBILITY****INTEGRITY****EthosEnergy (US Corporate Office)**

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