Gas Turbine Life Assessment

Gas turbine manufacturers specify that the rotating element of the gas turbine has limited life, based on the number of fired hours run, and the number of starts. It is recommended, depending on the make and model of the gas turbine, that a complete “life assessment” inspection be performed on the rotor. This inspection normally is called for at 100,000 or 200,000 hours depending on the machine.

Sulzer Turbo Services Engineers have developed a complete “Rotor Life Assessment Inspection” that is equal to or surpasses the inspection process of the OEM’s. The rotor is unstacked, restacked, and balanced as part of the procedure.

The inspections preformed include:
- Traverse hardness of rotor disks
- Magnetic particle testing of disassembled rotor
- Ultrasonic inspection
- Boresonic inspection of disk bores
- Phased array ultrasonics of compressor disks
- Eddy current testing of turbine and compressor disks
- Array eddy current inspection of FA class turbine disks
- Dye penetrant inspection of FA class turbine disks
- In-situ metallography and replication of turbine and compressor disks
- Chemical analysis of turbine and compressor disks

Upon completion of the inspections, our Engineers prepare a report of the condition of all component parts and offer our recommendation as to any repairs or replacement parts that may be needed. Then the rotor is restacked and balanced for return to service for the next recommended interval.

All of these services are preformed on-site. We invite you to call or visit and discuss the “Rotor Life Assessment Inspection” in more detail and tour our facility. Please contact your Sales Representative for more information on our services.