

ROTATING EQUIPMENT EXPERTS SERVICE, REPAIR, PARTS AND ENGINEERING



Exploded view of a blower

PILLER TSC IS THE SOURCE FOR ROTATING EQUIPMENT REPAIRS, SERVICE, PARTS, REBUILD AND RE-RATES. SOME OF THE EQUIPMENT WE SERVICE INCLUDES:

- Turbofans
- Centrifugal Compressors
- Gearboxes
- Gas Turbine Atomizing Air Compressors
- LNG Equipment
- Centrifuges
- Turbo-Expanders
- Sliding Vane Compressors
- Inlet Guide Vanes

PILLER TSC IS AN ENGINEERING-DRIVEN COMPANY WITH EXPERTS IN:

- Rotor Dynamics Analysis
- Gear Design
- Metallurgy
- Impeller Design
- Equipment Re-Rate
- Bearing & Seal Design
- Aerodynamics
- Vibration Analysis
- Finite Element Stress Analysis
- Equipment Design

MENU OF SERVICES:

- Repair of Gearboxes & Bearings Boxes
- Repair of Babbitt Bearings
- Vibration Surveys and Analysis
- In Place and Shop Balancing of Rotating Equipment
- Motor alignments
- Field Technicians Servicing North America
- Reverse Engineering & Repair of OEM Parts
- Repair of High Cost Parts
- Manufacture of One-of-a-Kind Parts
- Re-Design of Parts
- Repair of Equipment at PILLER TSC Facility
- Manufacturing Drawings of Parts
- Overspeed Spin Testing
- Compressor Design & Manufacture
- Equipment Re-Rates

ROTOR ASSEMBLIES AND IMPELLERS:

PILLER TSC has the capability to repair your existing components, or design and manufacture new all of the parts that comprise a rotor assembly: impellers, shafts, gears, tie-bolts, polygons, rider rings, etc.

GEAR & GEARBOX DESIGN:

PILLER TSC repairs, designs and manufactures gearboxes of many types.

BEARINGS: REPAIRED / DESIGN OF BABBITTED LINED BEARINGS INCLUDING:

tilt pad, plain/sleeve, Kingsbury, four lobe, tapered land, and pocketed thrust bearings.

BALANCING:

Shop balancing up to 5,000 pounds, 54" diameter, 90" length. In-place field balancing services available.

REVERSE ENGINEERING:

PILLER TSC's designers, in combination with PILLER TSC engineering knowledge, specialize in reverse engineering of mechanical parts. This allows us to generate dimensional drawings and manufacture parts at costs much lower than OEM parts.

FINITE ELEMENT ANALYSIS:

The object of finite element analysis (FEA) is to evaluate the stress levels of components. Using FEA coupled with sound engineering judgment, choices can be made about: material selection, heat treatment, performance characteristics, stress levels and impeller displacement at operating speed.



Rotor, bearings and seals

AERODYNAMIC DESIGN:

PILLER TSC repairs, designs, re-rates, and manufactures single and multi-stage Rotor Assemblies for centrifugal fans and compressors.

INLET GUIDE VANE

Inlet Guide Vanes (IGV) provide an efficient method of turndown for fans and compressors and provide energy savings over inlet throttling by a butterfly valve. The IGV not only provides an inlet pressure drop, it imparts a swirl motion on the gas in the direction of impeller rotation, thereby reducing the amount of work the impeller is required to do on the gas. The higher the degree of throttling, the greater the savings. PILLER manufactures IGV's to fit any make of compressor or turbofan for air or process gas.



Bearing box



Inlet Guide Vane (IGV)

Visit our website to find worldwide Sales & Service contacts

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