



Bearing Manufacturing Center

The Elliott Bearing Manufacturing Center is located 25 miles south of Pittsburgh at our Donora, Pennsylvania, service center. It is easily accessible by Interstate 70, railway, and river barge. The world-class facility is fully equipped and staffed to manufacture and service all makes, models, and types of bearings. It is part of Elliott's global network of service centers that are registered to ISO 9001 or have structured quality management systems.

Elliott is an innovative leader in bearing technology. In 1962, we introduced the key seat tilting pad journal bearing, which offers improved rotordynamic stability as compared to traditional fixed geometry designs. Next, we introduced the spherical seat tilting pad journal bearing, which reduces contact stresses and eliminates the fretting wear that sometimes occurs with key seat and other rocker pivot designs after many years of operation. The spherical pivot design also adjusts for misalignment and prevents pad edge loading, which reduces temperature and stress on the bearing, thereby increasing the time between maintenance cycles.

Our updated spherical seat tilting pad journal bearing design is scalable and features pivot mechanical retention and optimized end seal clearance for improved thermal performance. Elliott further enhanced the design to include directed lubrication oil nozzles that deliver oil close to the rotor surface and improve the bearing thermal performance by reducing hot oil

carryover. The center's expert bearing team currently produces genuine Elliott journal bearings, including spherical seat tilting pad, key seat tilting pad, and fixed geometry designs, as well as thrust bearings including self-equalizing tilting pad and fixed geometry designs. Bearings are manufactured from inventory components for rapid response. Some of the reasons operators throughout the world upgrade their rotating machinery with Elliott's innovative bearing technology are:

- Robust five-pad load surface that better handles changing shaft loads
- Proven ability to retrofit a tilting pad bearing into a small envelope
- Self-retaining pads for simple installation and replacement without shaft removal
- Highest quality finishes and precise tolerances
- Integrated instrumentation

Elliott can provide you with a single, comprehensive source for all your turbomachinery service needs, including bearings, regardless of the original equipment manufacturer (OEM). We offer complete OEM engineered services including:

- Rotor dynamics
- Finite element analysis (FEA)
- Computer modeling
- Application understanding



5-Axis CNC machining.

Facility

- Climate-controlled assembly and inspection room
- Fully stocked inventory area with genuine Elliott bearings
- Fully trained staff

Services

- Centrifugal casting with certified ASTM B-23 babbitt
- In-house re-babbitting and bearing repair
- Lead sealing and repair
- Fully certified ultrasonic and dye penetrant testing
- Coordinate measuring machine (CMM) inspection services
- CNC and manual machining of parts up to 120 inches
- OEM procedures that exceed industry specification



Comprehensive inspection services.



5-Axis CNC inventory production.



Centrifugal babbitt casting.



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