Tilting-Pad Bearings
Elliott bearing upgrades improve operating efficiency and reliability, so operators benefit from lower operating costs, extended operating life, and fewer unplanned outages.

Bearings are serious business at Elliott because they are critical components of your rotating equipment. For more than 50 years, Elliott has proven its ability to design and manufacture top quality spherical pivot, and tilting-pad journal bearings. Our best-in-class bearing manufacturing center produces exceptional steel- and copper-backed bearings for rapid shipment, backed by 24/7 support and on-demand emergency response.

Our proven bearing design eliminates tilting-key fretting, which extends runtime and reliability of your rotating equipment. Our design also helps maintain optimum operating temperature, increasing time between maintenance cycles.

Some of the reasons operators throughout the world upgrade their rotating machinery with Elliott’s innovative bearing technology are:

- Latest long-life spherical designs
- Tilting-key & thrust designs
- Extended volume pivoting bearing pads better handle changing shaft loads
- A robust five-pad load surface
- Self-retaining pads for simple installation and replacement without shaft removal
- Highest quality finishes and precise tolerances
- Integrated instrumentation
- In-house rebabbitting capability

Elliott Thrust Bearing (copper-backed design)

1 to 2 weeks for standardized bearings

Complete OEM Engineered Services:

- Rotor dynamics
- Finite element analysis (FEA)
- Computer modeling
- Application understanding
Since 1962, Elliott has been an innovative leader in bearing technology and design.

**Elliott Bearing Innovations Timeline**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>1962</td>
<td>Key seat tilting-pad bearing design</td>
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<tr>
<td>1989</td>
<td>Elliott introduces spherical seat tilting-pad bearing</td>
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<tr>
<td>1999</td>
<td>Continuous improvement plan adopted</td>
</tr>
<tr>
<td>2010</td>
<td>World-class custom bearing manufacturing facility constructed</td>
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</tbody>
</table>

Elliott has now increased its capacity in-house to manufacture and repair all Elliott designed bearings (tilting-key, spherical and thrust) offering:

- Rapid availability for unique parts
- Smooth spherical sockets with uninterrupted surface for simple installation/retrofit
- Roll-in replacement of the key set bearing with steel- or copper-backed backed shoes for long wear life and even load distribution

Elliott knows what it takes to keep equipment performance high and maintenance costs low, regardless of the original manufacturer. Turn to Elliott for the benefit of more than 50 years of experience in leading innovative design, manufacture, upgrade and repair of turbomachinery bearings. Call today to discuss your planned turnaround and emergency needs and get a quote for your projects.
Elliott Group is a global leader in the design, manufacture and service of technically advanced centrifugal compressors, steam turbines, power recovery expanders and axial compressors used in the petrochemical, refining, oil & gas and process industries, as well as in power applications. Elliott Group is a wholly owned subsidiary of Ebara Corporation, a major industrial conglomerate headquartered in Tokyo, Japan.