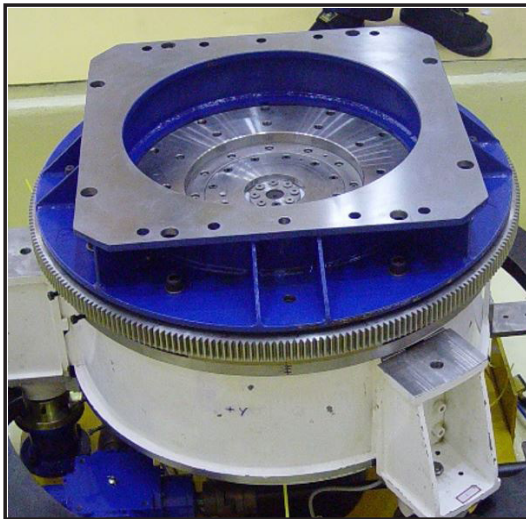


Precision Thrust & Journal Air bearing

U R Rao Satellite Centre (URSC) of Indian Space Research Organization (ISRO) has designed and in-house developed Precision Thrust & Journal Air bearing simulate frictionless motion. They are used to simulate Zero 'g' conditions and are used to support large thrust and radial loads. These bearings are used to provide single degree of freedom, withstanding high thrust and radial loads. They are finished with high form accuracies to obtain desired measurement parameters.



Salient Features

- ✦ Design of thrust and journal bearings based on standard literature and applicable formulae.
 - ✦ In-house design of Orifice Type Air Bearings.
 - ✦ Orifices are designed to maintain required pressure drop to produce bearing effect.
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- ✦ SS-304 material chosen and various heat treatment process are applied to achieve stiffer air bearing.
 - ✦ Interfaces provided on the top face of the thrust bearing for positioning various payload interfaces.

Major Specifications

- ✦ Size of Axial Bearing : OD: 720mm; ID: 220mm
 - ✦ Size of Radial Bearing : OD: 220mm; L: 230mm
- At 6 bar Supply Pressure
- ✦ Axial (Thrust) Load Capacity : 75.0 KN
 - ✦ Radial Load Capacity : 25.0 KN
 - ✦ Air Flow : 250 Lt/Min

Technology Transfer

URSC/ISRO offers to transfer of developed Precision Thrust & Journal Air bearing technology by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

Technology Transfer & Industry Coordination Division (TTID),
Programme Planning and Evaluation Group (PPEG),

📍 U R Rao Satellite Centre (URSC), ISRO, HAL Airport Road,
Vimanapura Post, Bangalore – 560 017.

✉ Email-id: tt-icd@ursc.gov.in

☎ Fax No: 080-25205261

🌐 <https://www.ursc.gov.in/industry/index.jsp>