

BALL SCREWS & WATER LUBRICATED BALL BEARINGS



Building Nation with Exceptional Engineering

MTAR BALL SCREWS

Our Ball Screw Capabilities

MTAR is India's renowned and indigenous manufacturer of Ball Screws with high precision spurred by the fact of its R&D efforts and vast sophisticated machining facility.

The most important sectors / establishments where the MTAR Ball Screws being used are:

- 1. Nuclear Power Stations
- 2. BARC
- 3. Aerospace
- 4. Defense
- 5. Actuator Ball Screws
- 6. Machine Tools

To meet Global Standards, MTAR manufacture various types of Ball Screws as per Customer requirement and specifications.

The specifications followed are given below:

- Screw Length up to 7 meters.
- Diameter from 8mm to 100mm, L/D achievable: 20.
- Lead: 4mm to 32mm.
- Accuracy Class C1, C2, C3, C5 & C7.
- Internal and External Circulation.
- > Single and Multi-Start.
- Experience in various types of Materials including 17-4 PH, 13-8 MO, 440 C, 4150, MDN 25x17H2, MDN 18x13H3 Material Grade.

MTAR also design and manufacture Ball Screws based on customer inputs like Load carrying capacities, clearances, mounting details, length of screw and nut, and schematic sketches etc.



MTAR Precision Ball Screws have two kinds of recirculating systems

Roller Screws

- **External Recirculating Type** In which the Balls are recirculated in the Ball return tube setup on the nut.
- ▶ Internal Recirculating Type In which the Balls make only one revolution of the screw shaft and the circuit is closed by a ball return cap/deflector in the nut allowing the ball to cross over adjacent ball tracks.

MTAR has commenced the developmental activity for roller screws that are import substitutes and the company is involved in developing the associated technology.

Typical Application of Roller Screws:

- 1. Satellites
- 2. Electromechanical Actuators
- 3. Telescopes
- 4. High presicion equipment in laboratory, Hospital, Paper Making & Printing Industries.





MTAR WATER LUBRICATED BALL BEARINGS (WLBs)

Water Lubricated Bearings works under chemistry controlled water environment. The water acts as lubricant to reduce friction while Bearings are functioning.

MTAR manufactures WLBs of various sizes and types ie., Deep Groove Bearings, Angular Contact Bearings and Thrust Bearings.

APPLICATIONS:

- WLBs are being used in Fuelling Machine Head of Indian Nuclear Power Plants and BARC developed products.
- WLBs are also used in the areas of Marine Hydraulics and Ocean Exploration.

MTAR Technologies Pvt Ltd, has been manufacturing Ball Screws since 1985 and Water Lubricated Bearings from 2008.

MTAR has indigenized the manufacturing Processes and Quality Assurance of these products and shall provide Quality and Guarantee Certificates.

For more details about MTAR Ball Screws & Water Lubricated Bearings please visit our Website for inquiries.





Manufacturing Engineering, Process Engineering, Precision Machining, Quality Control, Assembly Integration Testing and Qualifications

Defence Aerospace Space Indigenous & Heavy Engineering

Quality Accreditations - ISO 9001:2015 & AS9100D, Policies, Guidelines, Customer Practices, SOPS, Best Engg Practices



INTEGRATED INFRASTRUCTURE UNDER ONE ROOF



MTAR Technologies Limited

Corporate Office:#18, Technocrats Industrial Estate, Balanagar, Hyderabad - 500037, India

TEL: +91 40 44553333, FAX: +91 40 44553322

Website: www.mtar.in, Email: info@mtar.in, marketing@mtar.in