

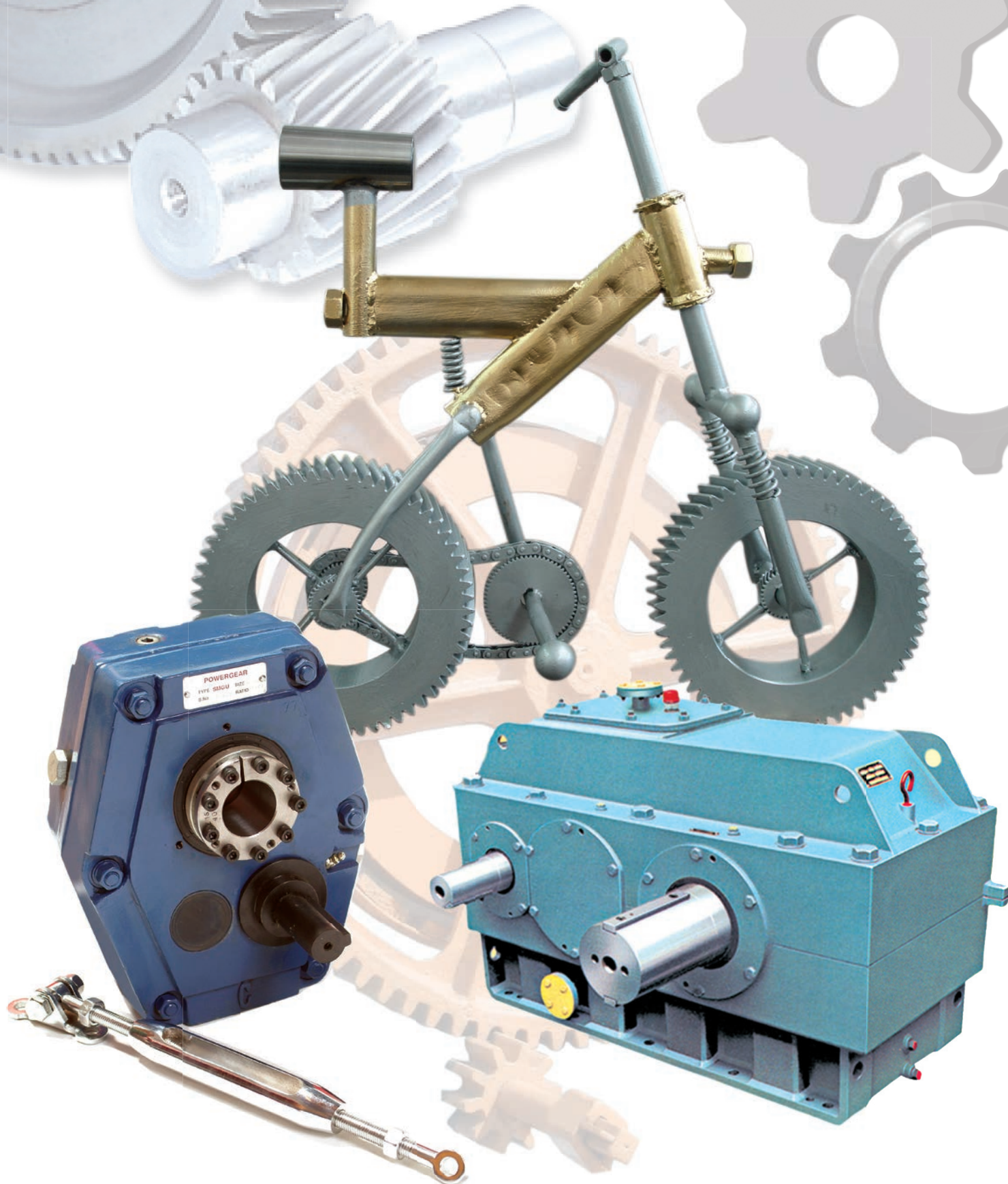


POWERGEAR™



Involute Tooling Corporation

ISO 9001-2008 Certified Systems



Shaft Mounted Gear Units

The Involute Shaft Mounted Gear Unit provides an easy method for speed reduction by mounting onto the driven shaft, eliminating the need of couplings and base plates.

The gear units are manufactured in **11** sizes from **A to L** with reduction ratios of **5:1, 13:1 and 20:1** with power ratings of upto 150 kW

Features:

- ☸ Offered with keyed or keyless taper clamp hubs.
- ☸ Multiple bore sizes
- ☸ Carburized gear teeth with optimal gear geometry, allowing maximum loading and highest efficiency torque output, for highest power rating capacity in the most compact design.
- ☸ Metallic double lip oil seals keep in oil and lock out dirt from outside.
- ☸ Inter-changeable with leading brands.



Shaft Mounted Taper Clamp Unit

The Taper Clamp Units are designed to provide simple keyless mounting on shafts for easy installation and removal.

The bushings consist of a taper sleeve and threaded collar, which ensures high gripping power.

The taper clamps and supporting bushes are manufactured in **Stainless Steel** to prevent fretting corrosion and for ease of removal after extended usage.

Various metric and imperial bore sizes are available for mounting on different shaft sizes.

Double taper clamp systems can be offered to specifications.

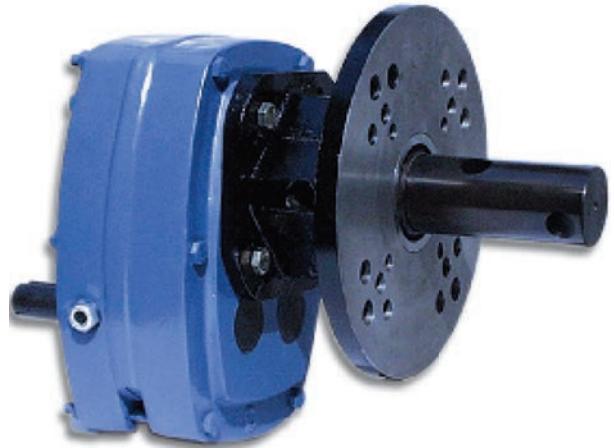
Accessories

- ☸ **Backstops** available for inclined conveyors.
- ☸ Galvanized and precision drilled **Motor Mounts**.
- ☸ **Labyrinth Sealing** protects against abrasive environments and extends oil seal life.
- ☸ **Safety Covers** available for the non-conveyor end.
- ☸ **Reducing Bushes** in various sizes with appropriate keys.
- ☸ Shaft mounted units are available with **Hydraulic Motor Mounts**.

Shaft Mounted Screw Conveyor Units

The gear units are manufactured in 8 sizes and are available with heavy duty taper roller bearings on the output end to counter end thrusts.

- ⚙ The gear units are available in imperial bores and keyways.
- ⚙ CEMA Bolt-on-Adapter Flanges features sealing on the both sides. The adapter center is open for contaminate to drop out for optimized sealing.
- ⚙ Three-hole drilled shafts available in various sizes.
- ⚙ Drop-in replacement for all AGMA style units.



Shaft Mounted Bevel Gear Units

A compact gearbox, which offers right-angled input-output combination with direct motor mounting thereby eliminating the need of a pulley.

- ⚙ Currently being offered in 4 sizes with reduction ratios of 15:1
- ⚙ The output hubs are offered in hollow keyed or taper clamps.
- ⚙ Available with IEC or Hydraulic motor mounts in various sizes.



XT Shaft Mounted Speed Reducers

The gear units have been developed for the North American market and are available in 6 sizes.

- ⚙ Hubs: Imperial Bores & Twin Taper Bushes.
- ⚙ Reduction ratios - 9:1, 15:1, 25:1
- ⚙ Accessories: Backstops, CEMA Adapters & Shafts



T-Series Shaft Mounted Speed Reducers

- ⚙ Manufactured in 4 sizes.
- ⚙ The units feature multiple bores.
- ⚙ Reduction ratios of 5:1, 13:1 and 20:1
- ⚙ Direct electric and hydraulic motor mounts available on request.

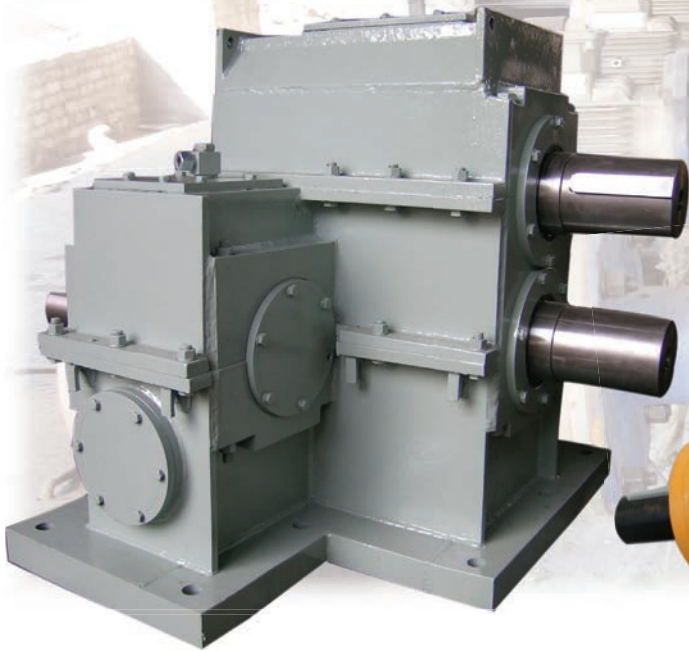
Applications

Suited for the screw conveyor, belt conveyor, bulk material handling and process equipment such as:

- ⚙ Mining and Aggregate
- ⚙ Baggage Handling
- ⚙ Grain and Agriculture Process Industry
- ⚙ Hot Mix & Asphalt Plants
- ⚙ Ready Mix Plants
- ⚙ Waste Water Treatment

Industrial Gear Units

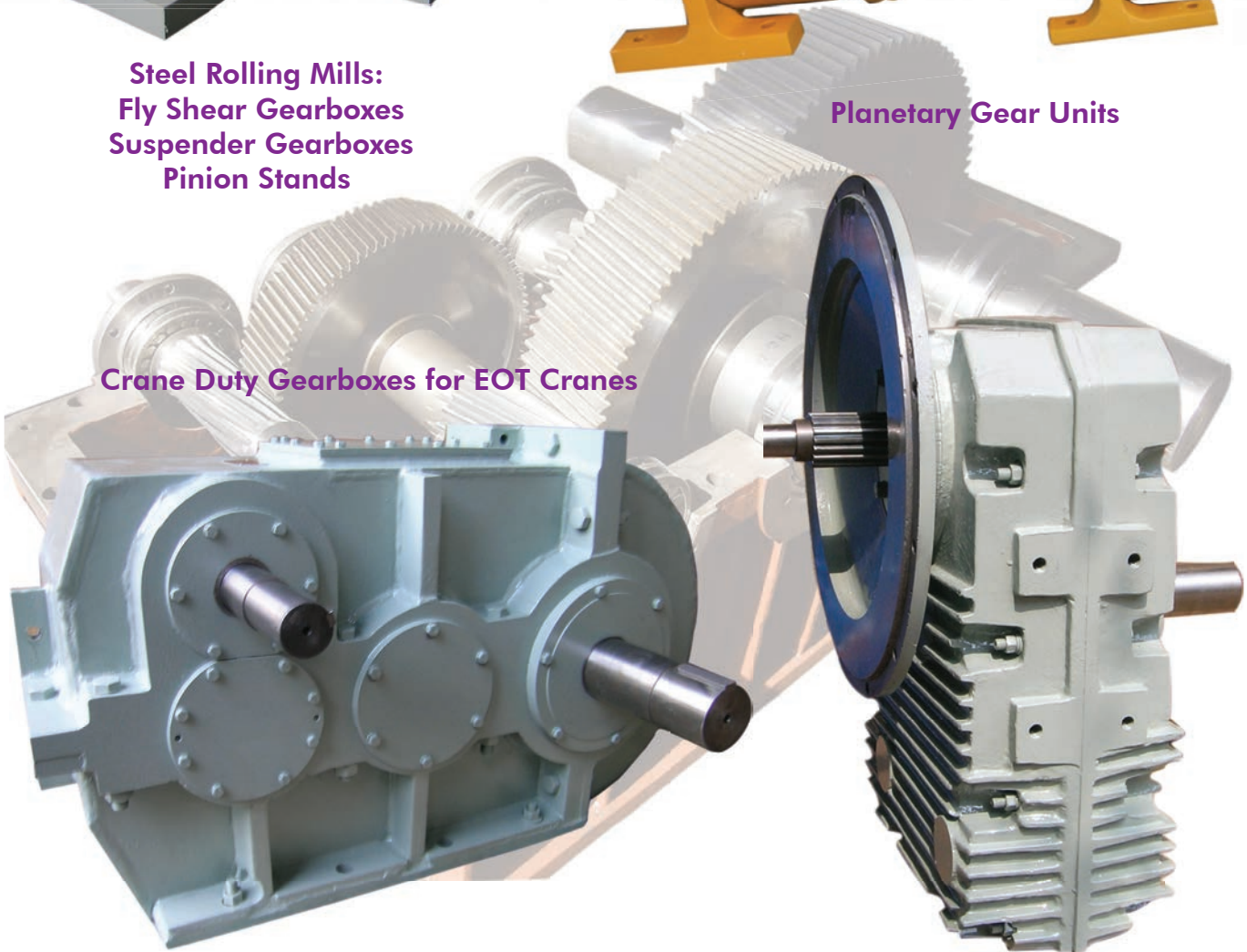
Involute has developed a wide-range of custom-built gearboxes



Steel Rolling Mills:
Fly Shear Gearboxes
Suspender Gearboxes
Pinion Stands



Planetary Gear Units



Crane Duty Gearboxes for EOT Cranes

**Hardened Ground Helical Gearboxes for Steel,
Cement, Hydel Power, Fertilizer Plants etc.**

**De-watering Plants:
Engine Coupled Gearboxes**

Parallel Shaft Mounted Speed Reducers

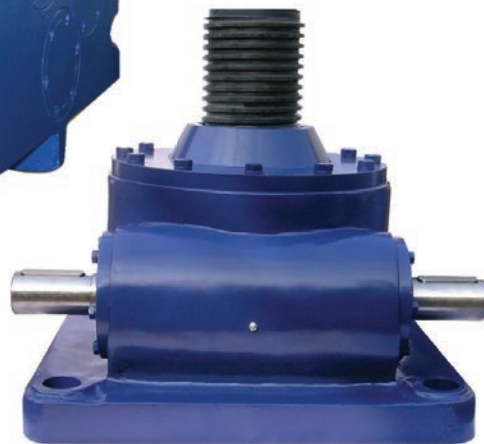


The Parallel Shaft Mounts are offered in 4 sizes with a higher range of reduction ratios and torque ratings of upto 15000 Nm.

The gearboxes are highly compact and offer direct electric or hydraulic motor input flanges.

Applications:

- ⚙ Hoists
- ⚙ Extruders
- ⚙ Conveyors
- ⚙ Geared Motor Drives



Worm Gear Screw Jacks

Mechanical worm gear screw jack with trapezoidal lifting screw available with translating lifting screw or lifting nut.

Configurations: Upright or Inverted.

Capacity: Upto 200 tonnes.

Slewing Rings

Involute slewing bearings are machine elements which absorb axial and radial forces and the resulting tilting moments in a single self retaining and ready to install bearing unit.

Involute manufactures single-row four point ball contact type slewing ring bearings with internal, external gearing or gearless configuration.

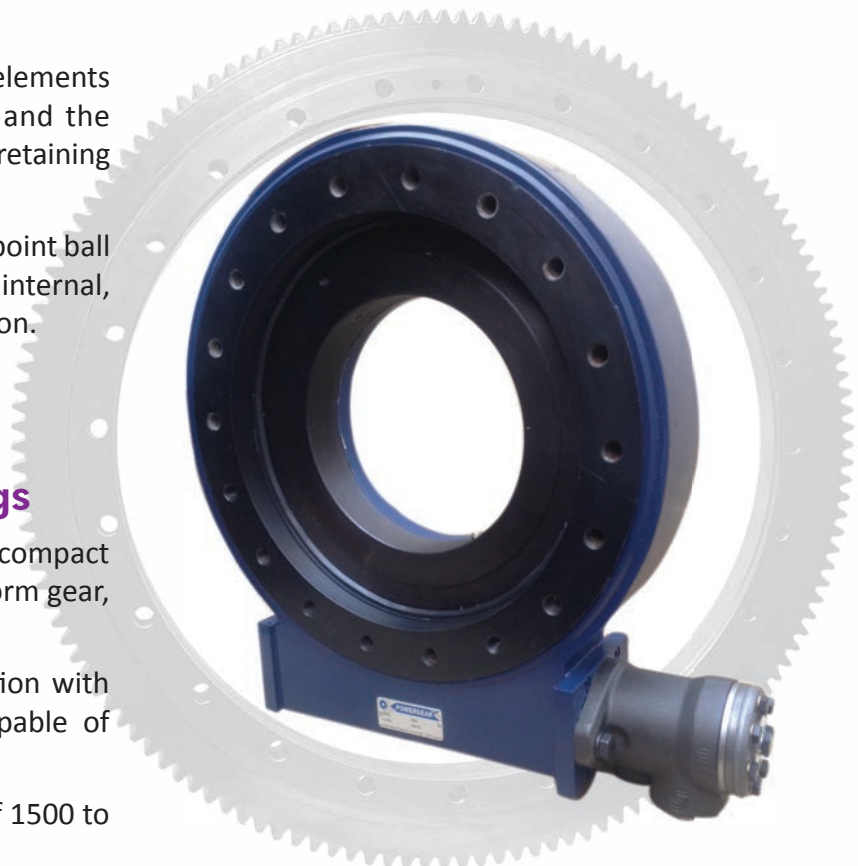
Diameters: 200 mm to 1000 mm.

Worm Drive Slewing Rings

The Involute worm drive system is a compact unit which consists of a slewing ring worm gear, worm drive and housing.

The design is suitable for a slow rotation with continuous or cyclical movements capable of handling combined loads.

Offered in 4 sizes with torque ratings of 1500 to 15000 Nm.



⚙️ Hardened Ground Gears

High precision gears to close tolerances Grinding on WMW, MAAG, REISHAUER machines.

⚙️ Sprockets

Sizes Available

ASA 25, 35, 40, 50, 60, 80, 100, 120
04, 05, 06B, 081, 08B, 10B.

⚙️ Timing Pulleys

Sizes Available

0.08", 0.20", MXL, 3/8" L, 1/2" H,

3mm HTD, 5mm HTD, 8mm HTD, 14mm HTD, 8mm SHTD, 14mm SHTD,

T 5, T 10, AT 5, AT 10



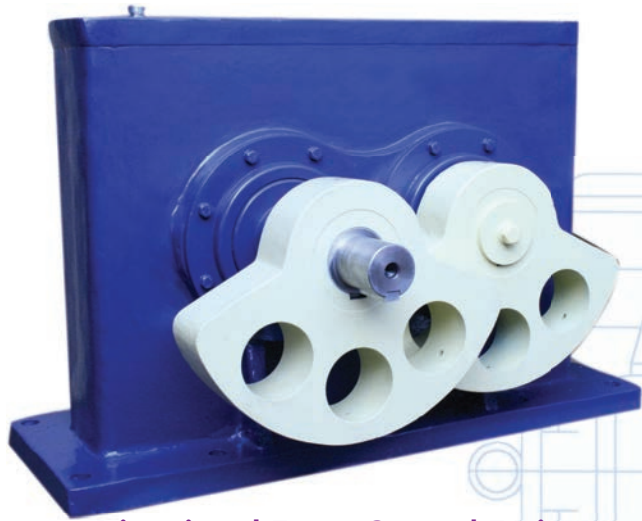
⚙️ Taper Bushes

⚙️ Couplings

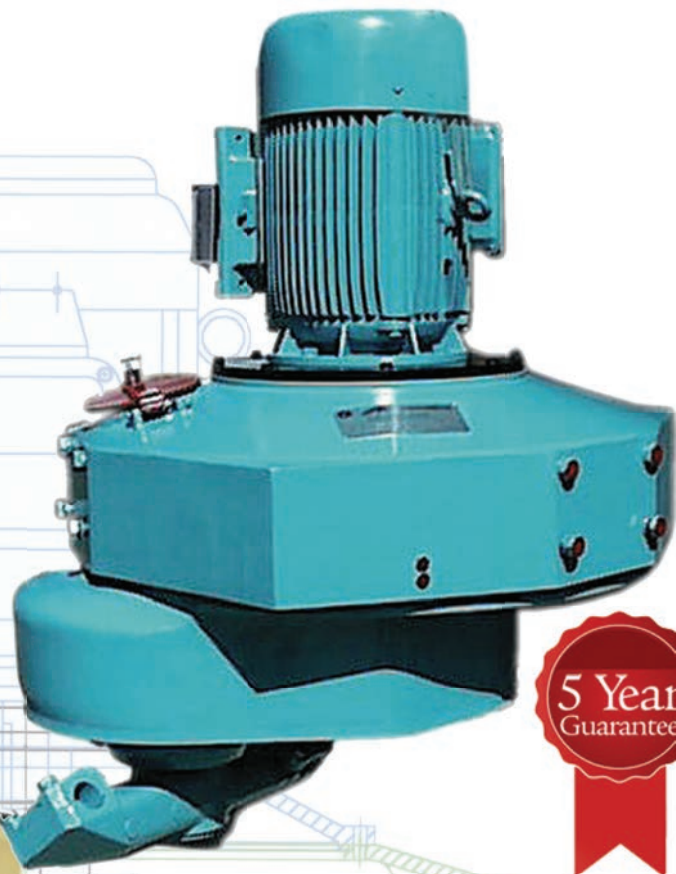
⚙️ Taper Lock Pulleys

⚙️ Belt Fasteners

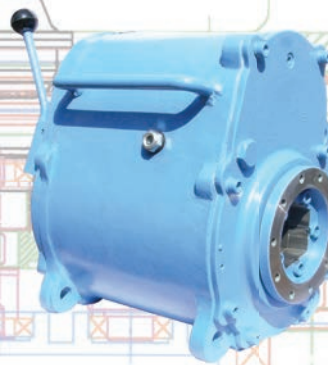
Drives for the Construction, Mining and Aggregate Industry



Directional Force Geared Exciters



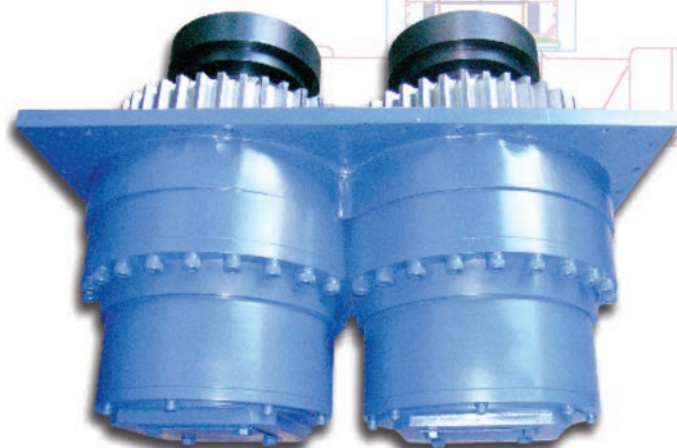
Counter-flow Mixer Gearboxes



Gearboxes
for
Drilling
Rigs



Log-Washer Gears



Twin-mix Planetary Drives

Involute Tooling Corporation

Involute has over 30 years of experience in manufacturing mechanical power drives and transmission products.

Our product ranges comprises of various products which complement the needs of various industries such as quarrying, mining, animal feed, steel rolling, de-watering, solar power, ready mix concrete batching, aircraft de-icing, textile, agriculture, hoisting, material handling etc.

Our **ISO 9001-2008** certified systems ensure 100% record keeping, inspection and trace-ability of all components thus guaranteeing excellence from customer contact to delivery of the product.

The products are designed to be compact, sturdy and economical to suit most engineering applications. Proper material selection with good engineering practices ensures smooth and safe power transmission.

Gearings are of optimized geometry and manufactured from high alloy steels, hardened for strength and ground for efficient and silent functioning.

Metallurgical testing of raw materials composition and final testing after heat treatment by NDT and micro-structure analysis ensures trouble free gearings of high standards.

Special gear units are manufactured as per customer specifications and standards.

Materials:

Steels: Medium carbon steels, case carburizing steels, stainless steel in forged or cast conditions.

Housings: Gray cast iron, SG Iron, steel castings and steel fabricated.

Other Materials: Aluminum, Bronze, Nylons, Bakelite.

Exports Worldwide:



Involute Powergear Pvt. Ltd.

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