



POWERGEAR™

Involute Powergear Pvt. Ltd.

ISO 9001-2015 Certified Systems



POULIGEAR^{fr}



Shaft Mounted Gear Units

POWERGEAR / POULIGEAR Shaft Mounted Gear Units provide 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 to give excellent performance in the toughest working conditions.

Principle Characteristics:

- ⚙ The units are offered with multiple bore sizes
- ⚙ Die-forged components processed on CNC Machines
- ⚙ Case hardened and CNC ground helical gears
- ⚙ The units are guaranteed for silent operation
- ⚙ All components have serial numbers for 100% inspection and traceability.
- ⚙ All units undergo rigorous testing prior to dispatch for noise, vibration and oil leakages.
- ⚙ The units are interchangeable with leading brands



SMGU Series



SMGU Taper Clamp Series

SMGU Series - Shaft Mounted Gear Units

The gear units are manufactured in **12** sizes from **B** to **L** with reduction ratios **5:1, 13:1, 15:1, 20:1** and **25:1**

The gear units are supplied with hollow shafts with keyways in metric or imperial bores.

SMGU TC Series - Taper Clamp Units

The SMGU series is available with Taper Clamp Bushes, which are designed to provide simple keyless mounting on shafts for easy installation and removal.

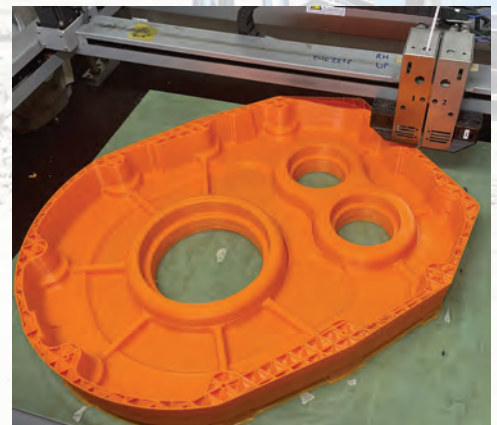
The bushings consist of a taper sleeve and threaded collar, which ensures high gripping torques.

The taper clamp 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.

Accessories

- ⚙ **Backstops** available for inclined conveyors.
- ⚙ **Motor Mounts** are galvanized and precision drilled.
- ⚙ **Labyrinth Seals** protect oilseals against abrasive environments.
- ⚙ **Safety Covers** available for the non-conveyor end.
- ⚙ **Reducing Bushes** in various sizes with appropriate keys.
- ⚙ **Hydraulic Motor Mounts** available for all sizes.



BT Series - Shaft Mounted Gear Units

The gear units are manufactured in **8 sizes from BT35 to BT100**

- ⚙ The units feature multiple bores.
- ⚙ Reduction ratios of 5:1, 13:1, 15:1, 20:1 and 25:1
- ⚙ Units supplied with torque arm kits



XT Series



BT Series

XT Series - Shaft Mounted Gear Units

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

- ⚙ Hubs with Imperial Bores and Twin Taper Bushes
- ⚙ Reduction ratios - 9:1, 15:1, 25:1
- ⚙ Assembled with Inch Size Taper Roller Bearings
- ⚙ Accessories: Backstops, CEMA Adapters & Shafts

HC Series - Shaft Mounted Gear Units

The gear units have been developed for the North American market and are available in **10 sizes**.

- ⚙ Hubs with Imperial Bores or 6B Splines
- ⚙ Adaptable Inputs: Solid, Hollow Keyed or Splined
- ⚙ Several Reduction Ratios
- ⚙ Assembled with Heavy Duty Bearings
- ⚙ Accessories: Torque Arms and Hydraulic Flanges



HC Series

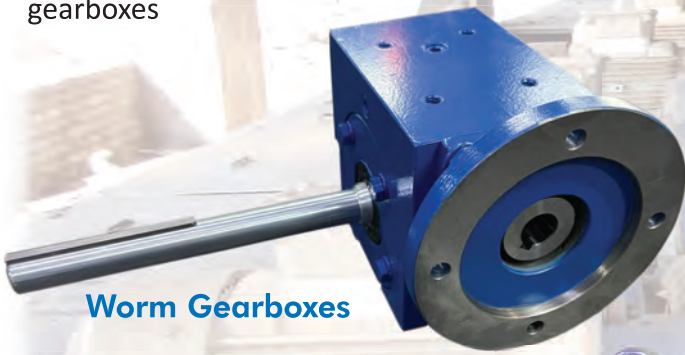
Applications

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 and Agricultural Gear Units

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



Worm Gearboxes



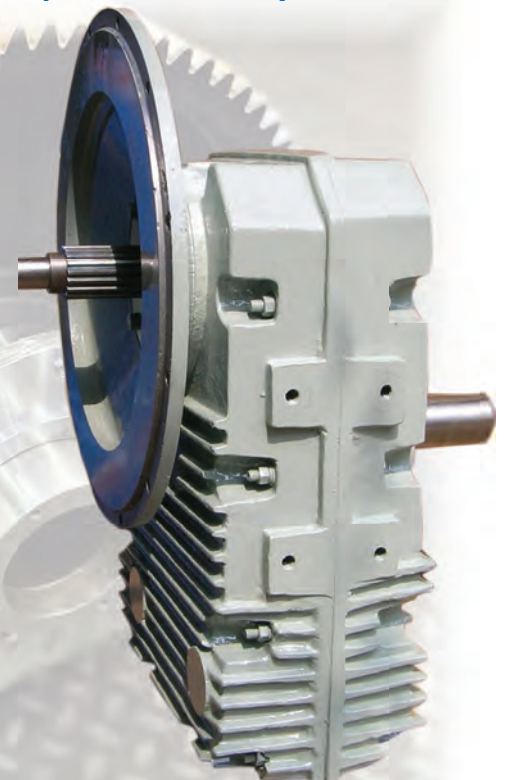
Custom Built Bevel Gearboxes



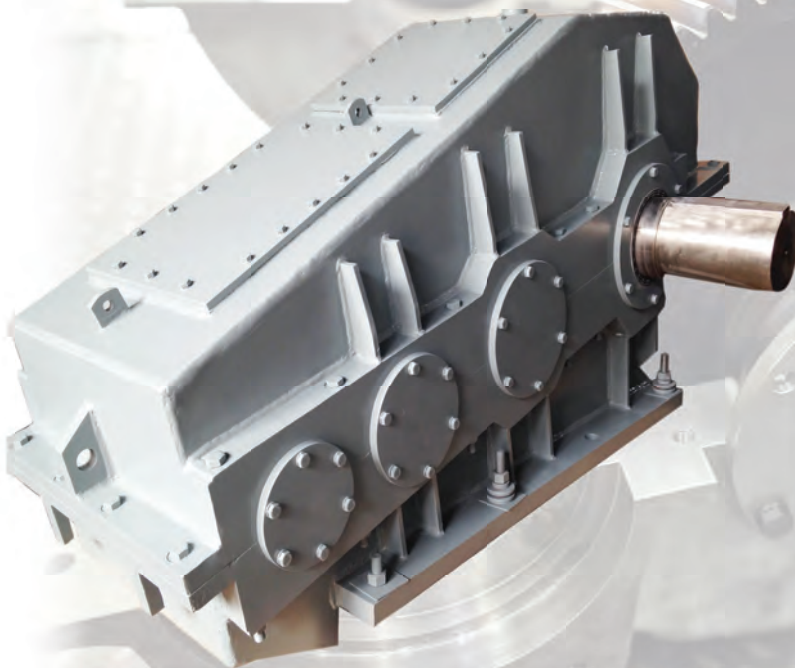
Bespoke Gearboxes



Compound Planetary Gear Units



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



**Hardened Ground Helical Gearboxes for Steel,
Cement, Hydel Power, Fertilizer Plants, EOT Cranes
Fly Shear Gearboxes and Pinion Stands**

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.

In-line Gear Units

- ⚙ Four Sizes upto 7.5 kW
- ⚙ Ratios: 15:1, 20:1 and 25:1
- ⚙ Solid Keyed Output Shaft
- ⚙ IEC/NEMA Motor Inputs



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

POWERGEAR 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.

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

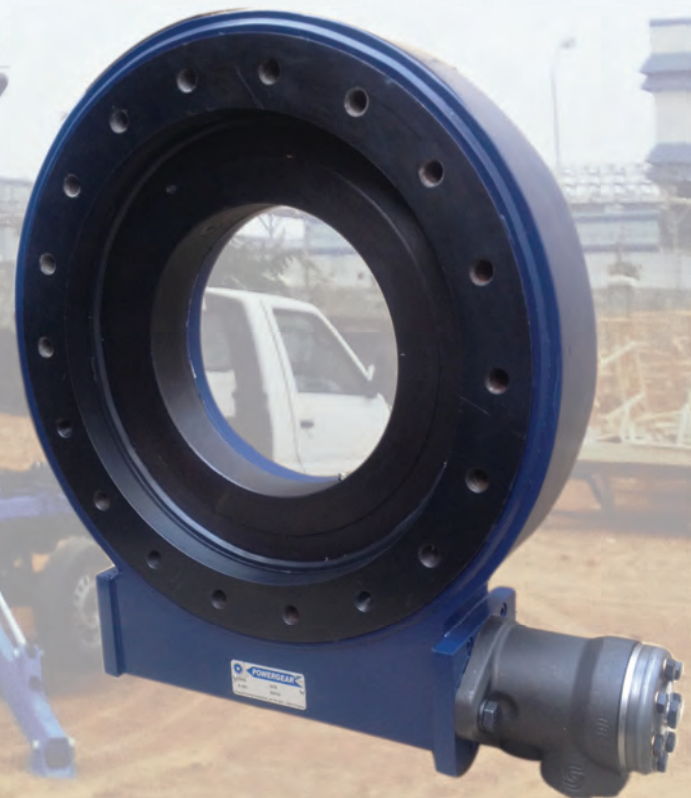
Diameters: 200 mm to 1000 mm.

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 spur & helical gears, ground to close tolerances on REISHAUER CNC gear grinding machines. Gearing tested on a CNC Gear Tester cum CMM machine.

Module: 1-8 / **DP:** 4-25

Diameter: Upto 800 mm

⚙️ Sprockets

Sizes Available

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

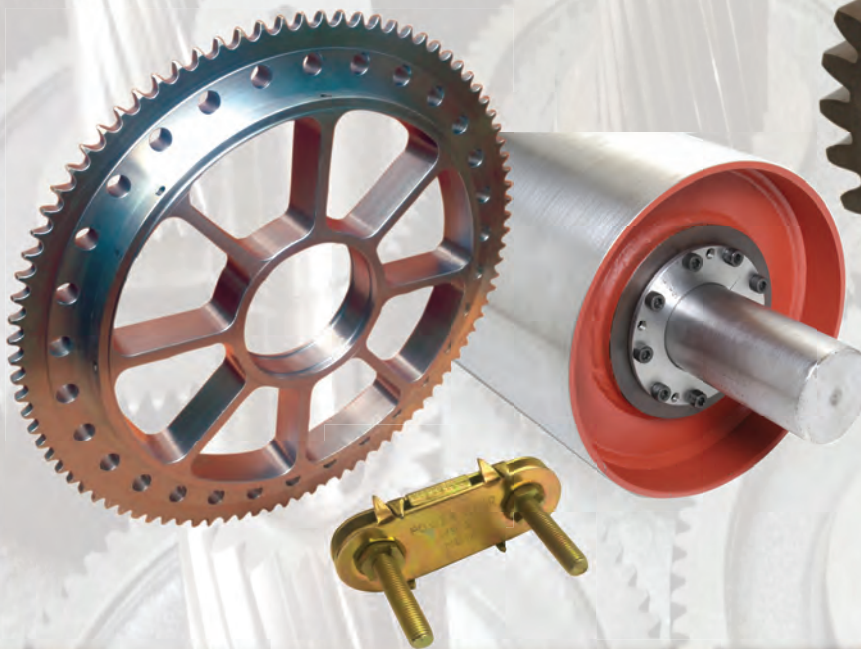
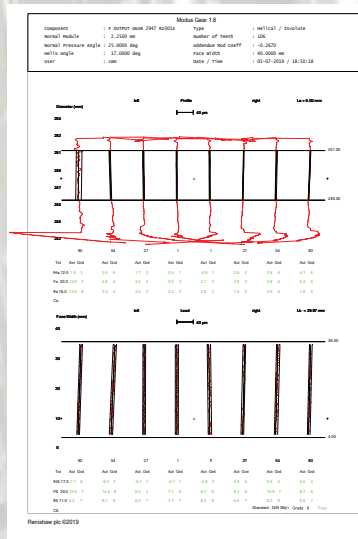
⚙️ Timing Pulleys

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

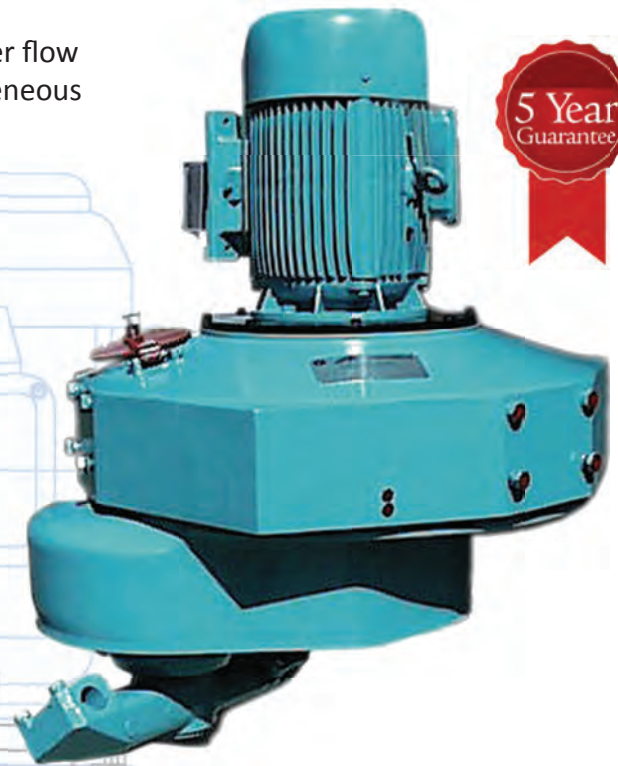
⚙️ Bespoke Parts

Drives for Construction, Mining, Recycling and Aggregate Industry

Counterflow Mixer Gearboxes

The gear units work on the principle of planetary counter flow mixing, which mix aggregates to produce highly homogeneous materials.

- ⚙ Available in 7 Sizes
- ⚙ Ease of Assembly on the Mixing Pan
- ⚙ Heavy Duty Design with Triple Layer Sealing
- ⚙ Unique Five Year Guarantee
- ⚙ Suitable for Mixing All Grades of Concrete
- ⚙ Option: High Speed Stirrer for Lump Breakage



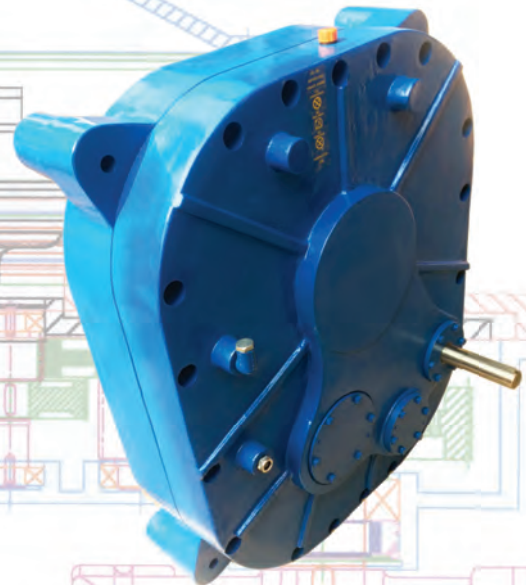
Counter-flow Mixer Gearboxes



Transit Mixer Gearboxes



Directional Force Geared Exciters



Screw Washer Gearboxes



Log-Washer Gears



Twin-mix Planetary Drives

Company Profile

Involute Powergear has over 43 years of experience in manufacturing mechanical power drives and transmission products. Our products are exported to over 60 nations and we are recognized as a Star Export House and an Authorized Economic Operator (AEO T1) by the Government of India.

Our product range 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, mortar mixing, meat marination, textile, agriculture, hoisting, material handling etc.

Our **ISO 9001-2015** certified systems ensure a stringent quality control regime with all components serial marked for record keeping, inspection and trace-ability.

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.

We have in-house design and development capabilities to manufacture customer specific products.

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

Metallurgical testing of raw material composition and final testing after heat treatment by NDT and microstructure analysis ensures trouble free gearings of high standards.

To maintain high quality standards, we constantly invest in installing world-class CNC machinery to keep upto date with benchmark manufacturing practices.

Involute in Images



CNC Cylindrical Grinders



CNC - Vertical Turning Lathe



CNC HMC/VMC Machining Centres

Worldwide Exports



Regd. Office:

13, JORBAGH,
NEW DELHI - 110 003, INDIA
TEL.: +91-9818835363
E-mail: info@involutetools.com

Plant I:

PLOT 65, SEC. 27C,
FARIDABAD – 121003, INDIA
TEL.: +91-9717933304
URL: www.involutetools.com

Plant II:

PLOT 69, SEC. 27A,
FARIDABAD – 121003, INDIA
 facebook.com/involute.powergear
 instagram.com/involute.powergear