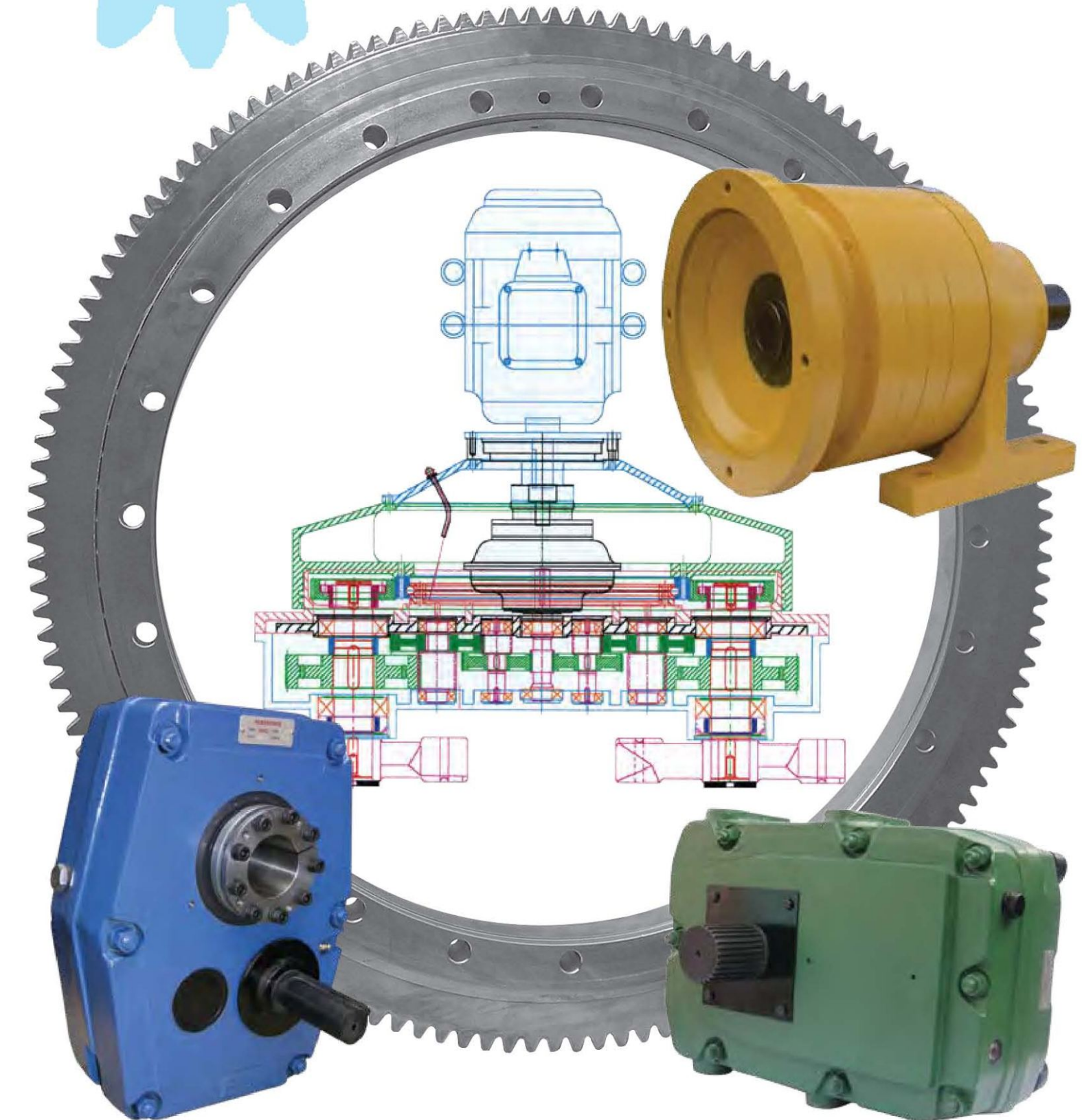


Involute

Tooling Corporation



Shaft Mounted Gear Units

The Involute Shaft Mounted Speed Reducer provides an easy installation and removal method for speed reduction by mounting directly onto the driven shaft.

Involute Taper Clamp unit design provides simple keyless mounting and easy removal.

The gear units features carburized gear teeth with optimal gear geometry, allowing maximum loading and highest efficiency torque output, for higher rating capacity in the most compact design.

Metallic double lip seals keeping in oil and locking out dirt from the outside

The speed reducers are manufactured in ten sizes from A to S with ratios of 5:1, 13:1 and 20:1

Modifications to customer specifications , ratios, configurations and width of gear units

An additional "gear-packet" for gear ratios up to 70:1

Drives for hydraulic motors mounts with/without splines available on request



Accessories

Labyrinth sealing for protection against abrasive environment

Extraction collars to extract the gear unit from the shaft

Reducing bushes in various sizes with appropriate keys

Safety covers available at non conveyor end

Motor mounts

Water cooling for higher thermal capacity



Applications

suited for screw conveyers, belt conveyers, bulk handling machinery and process equipment for:

- Baggage Handling
- Mixers & Process Equipment
- Aggregate & Mining
- Grain & Agriculture Machinery

A CD -Disk is available with outline drawing in dxf format for CAD utilisation.

It is also possible to print documents with technical data of the gear unit.

3-D drawings available in IGES format

Shaft Mounted Screw Conveyor Units

Speed Reducers available with heavy duty tapered roller bearings on the output end to take in end thrusts

The gear units are available in Imperial bores and keyways

CEMA bolt on Adaptor flanges features sealing on both sides. The adaptor center is open for contaminate to drop out for optimized sealing

3-hole drilled shafts are available in various sizes

Drop in replacement for all AGMA style units



Shaft Mounted Taper Clamp Unit

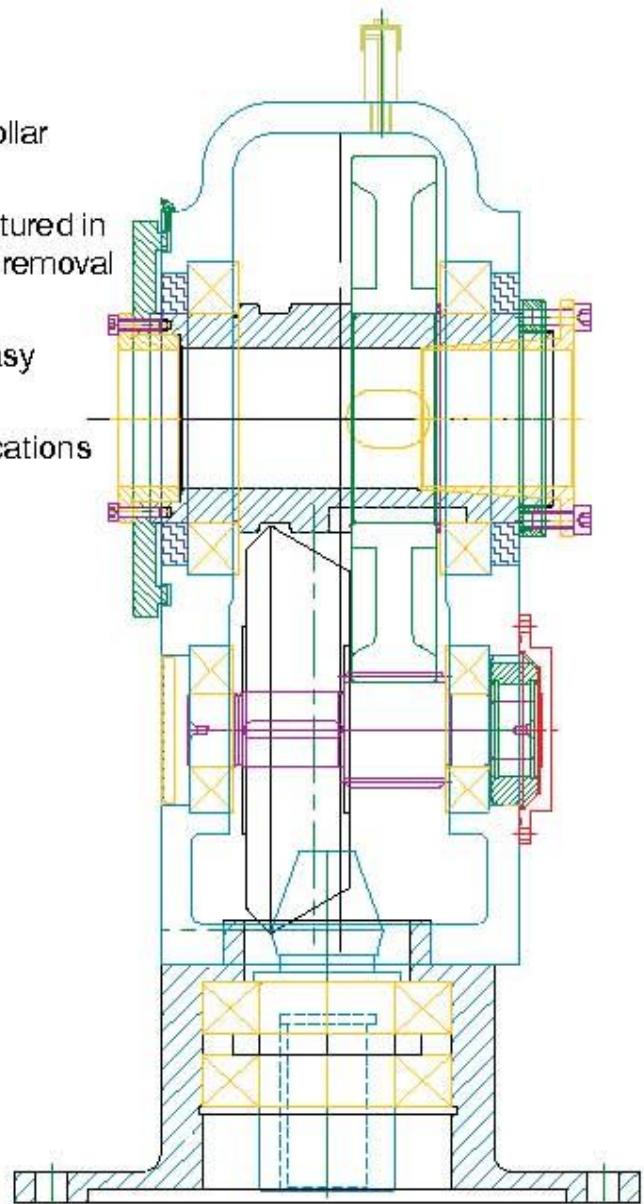
The Taper Clamps unit design provides simple keyless mounting for easy removal

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

The taper clamps and the support bushes are manufactured in **stainless steels** to prevent fretting corrosion and easy removal after extended use .

Various sizes of bores are available providing a very easy method for mounting on different shaft sizes.

Double taper clamp systems can be offered to specifications



Helical Bevel Shaft Mounts:

A new range of shaft mounts are now available with helical bevel input gears

The helical bevels permits the use of direct motor mounting on to the gearbox

Available with standard IEC motor mounts in various sizes.

The output hubs are available with either bore and key or with taper clamps

Shaft Mount Single Stage

Shaft Mounts with stage reduction are now available
The gearboxes are available with IEC motor and hydraulic motor mounts

Slewing Rings

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

The single-row four point contact ball slewing ring bearing is composed of 2 seat rings.

It is compact in design, and light in weight. The balls contact with the circular race at four points, via which the axial force, radial force and resultant moment may be borne simultaneously.

Involute manufactures ball type slewing ring bearing in single-row and multi-row designs with internal , external gearing or gearless.

Diameters : From 200mm to 1500mm.

Materials : A wide range of capacities, materials and seals.

It may be used for slewing conveyors, welding arm and positioners, light and medium duty cranes, excavators and other engineering machines.



Worm Drive Slewing Rings

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

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



Worm Gear Screw Jack

Mechanical worm gear screw jack with trapezoidal lifting screw available with translating lifting screw or lifting nut. configurations available in upright, inverted.

Capacity up to 200 tonnes.

Planetary Gear Units



Involute offers planetary gearboxes as a co-axial drive unit.

A wide range of reduction ratios are possible 5 sizes are available which cover a wide range of torque ratings.

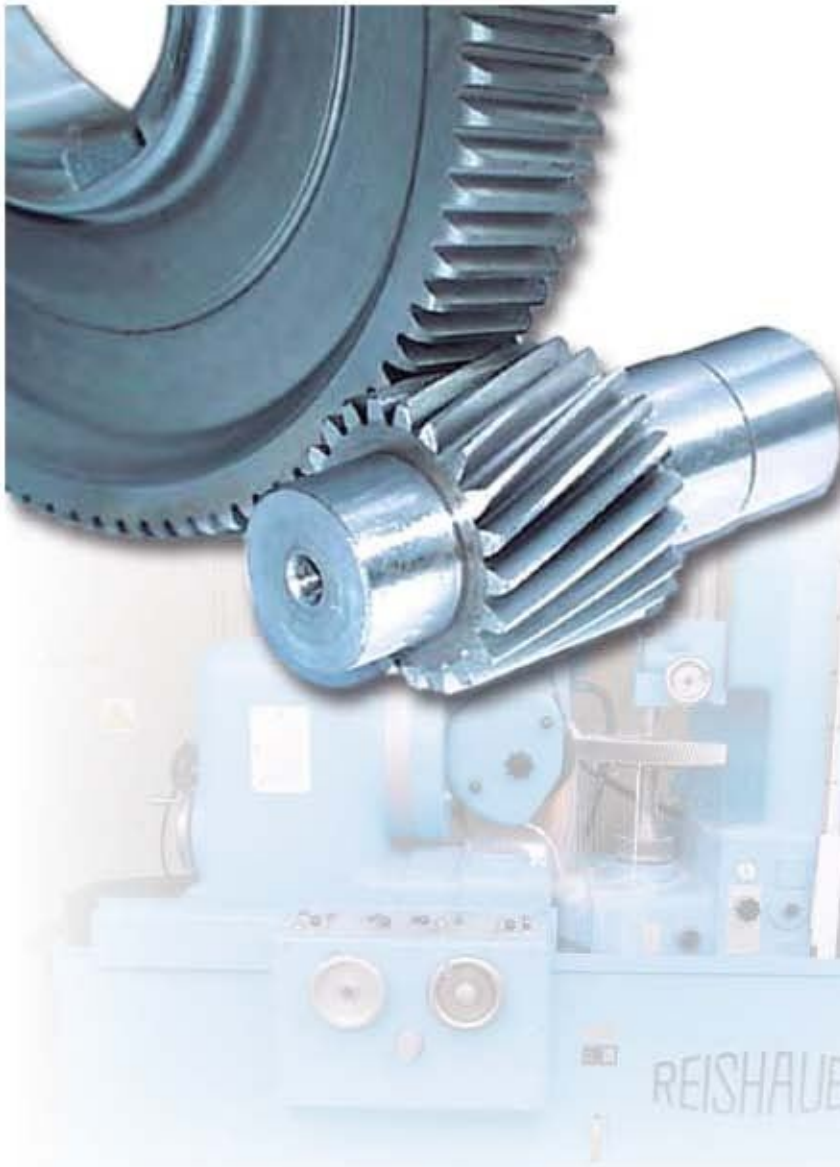
Their compactness combined with high transmittable power is ideal for the high specific power that can be transmitted from electric or hydraulic units mounted directly onto the gearbox.

This is an ideal choice for all severe duty applications where shock loads and impacts are high and also because they offer several options for mounting, gear layout, output shaft and motor interface.

The planetary gear units can be supplied with inputs and outputs to suit customers application.

Involute also offers planetary gearboxes for the mobile machinery market.

The product range includes gearboxes for transit mixers and track units.



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

Worm Reduction Gear Units

The unit comprises of hardened ground worms
with phosphor bronze gears

If combined with an additional helical gear unit
a heli-worm unit can be supplied to
give particularly low output speeds

The gear unit can be supplied
in various configurations

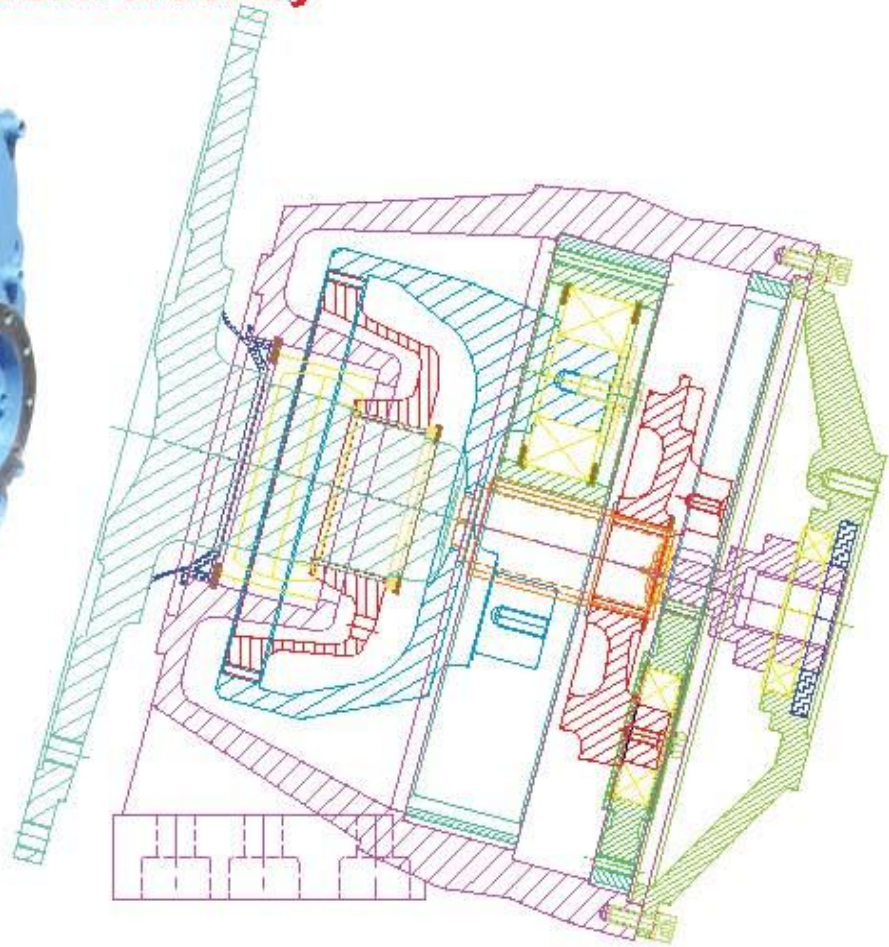
Gear units are also available in stainless steel
bodies suitable for the food, pharmaceutical
and chemical industry

Sizes available

40, 51, 63, 85, 101, 130, 152



Drives for the Construction Industry



Drilling Rigs

Transit Mixers

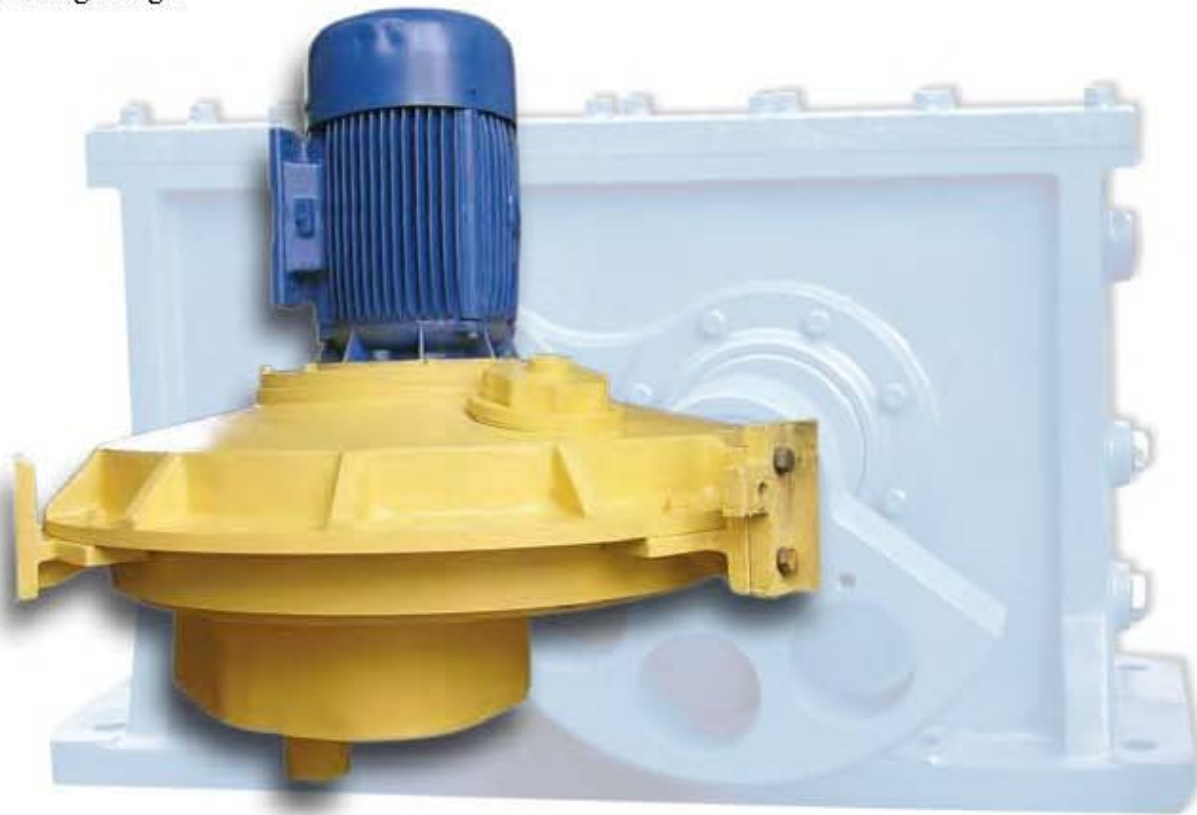
Track Drives

Twin-mix Planetary Drives

Pre-mix Concrete Mixers

Vibratory Feeders

Slewing Rings



Involute Tooling Corporation

Involute has a long experience in mechanical power drives and transmissions products.

The product range comprises of Shaft mounted speed reducers, Planetary gear units, Worm reduction units, Custom built gearboxes, Slewing rings, Gearings, Timing pulleys, Sprockets and allied engineering goods.

The products are compact, sturdy and economical to suit most engineering applications. Proper materials with good engineering practices ensure 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 for composition and final testing after heat treatment by NDT and micro structure analysis ensures trouble free gearings of the highest standards.

A total management system assures excellence from customer contact to delivery of the product under an ISO 9001:2000 accreditation.

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

Materials:

Steels, Medium carbon steels, case carburizing steels, stainless steels in forged or cast conditions Gray iron, SG iron and steel castings.

Aluminum, Bronze, Nylons, Bakelite.

Applications:

Speed reducers for the aggregate, mining, construction, printing, textile, baggage handling, paper, agricultural and other allied industries.

Exports Worldwide:

Australia, Belgium, Brazil, Canada, Cyprus, Egypt, Germany, Israel, Jordon, Korea, Netherlands, Nigeria, Norway, Oman, Saudi Arabia, South Africa, Switzerland, UAE, UK, and USA.



Involute Tooling Corporation

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