

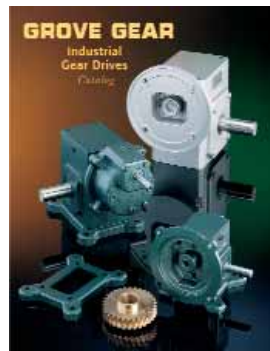


For additional information, reference the LEESON 8050 Catalog



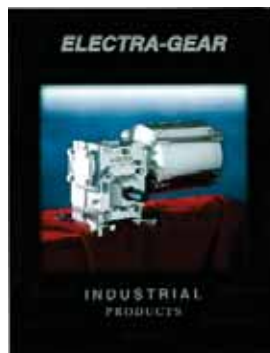
GROVE GEAR

For additional information, reference the Grove Gear Industrial Gear Drives catalog and OE SERIES catalog



ELECTRA-GEAR

For additional information, reference the Electra-Gear Industrial Products Catalog



Two Premium Brands Unite



Combining the premium features of the LEESON IRONMAN with the industry's broadest worm gear product offering of Grove Gear to create the world's most preferred worm gear reducer line.

Available later in 2008

ELECTRA-GEAR

Already pronounced as an industrial leader in aluminum worm reducers, Electra-Gear will announce a new, innovative design later in 2008 utilizing the premium features of the Grove Gear IRONMAN product in a robust, aluminum, single-piece housing. The new design is a direct dimensional interchange to well-know cast iron brands, including Grove Gear, LEESON, Boston and more.

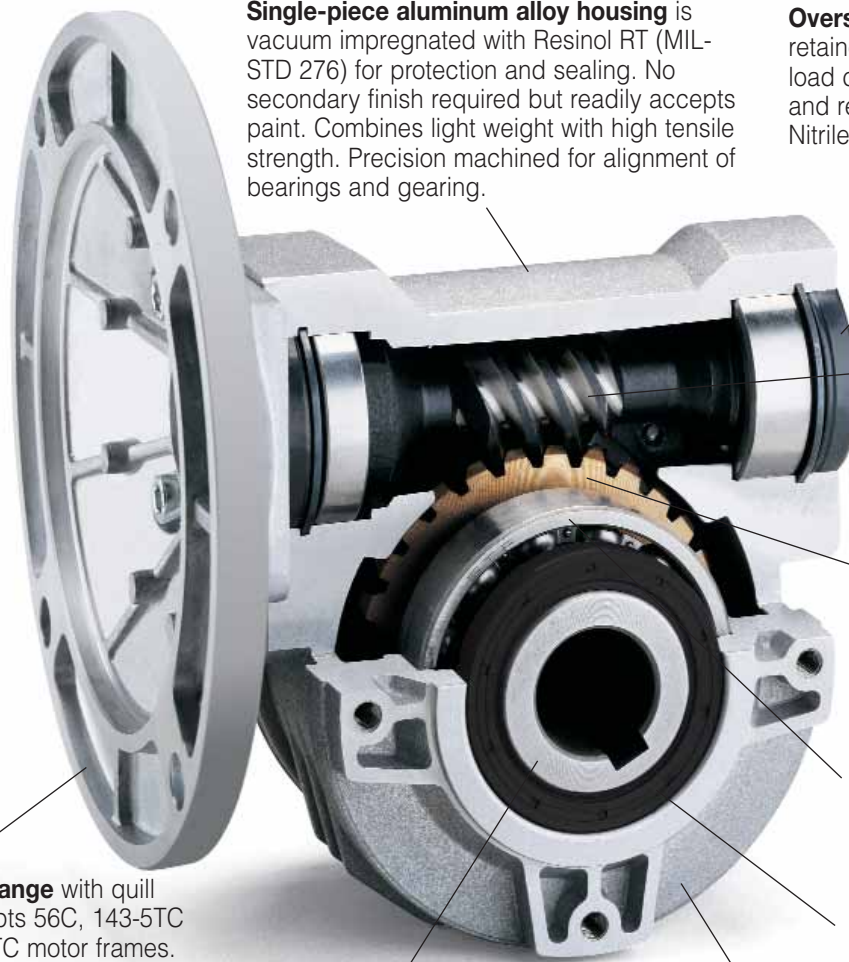


Current Design



Preliminary Design

Lightweight, Aluminum



Single-piece aluminum alloy housing is vacuum impregnated with Resinol RT (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint. Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing.

Oversized bearings support positively-retained, high speed shaft for higher shock load capacity — ideal for frequent starting and reversing applications. Premium, Nitrile[®] high temperature seals each end.

Single-piece alloy steel input shaft and worm shaft. High helix angle worm is case-hardened (Rc 58-60), ground, teeth are profiled and radiused, for noise reduction and enhanced efficiency.

Bronze alloy worm gear is centrifugally cast onto an iron hub for maximum strength, lubricity and superior life.

Oversized bearings for radial load capability and maximum hollow output shaft diameters.

Premium, high-temperature Nitrile[®] output seals.

Impregnated and machined bearing caps with exterior machined surfaces mate to a variety of mounting accessories. Extra-deep thread engagement provided for greater support strength. Zinc plated hardware. No need to remove bearing covers to mount/change accessory kits.

** 534 Series is filled with Mobil SHC 634 synthetic oil. Operating temperature range of 534 Series is -25°F to +220°F (-32°C to +104°C)

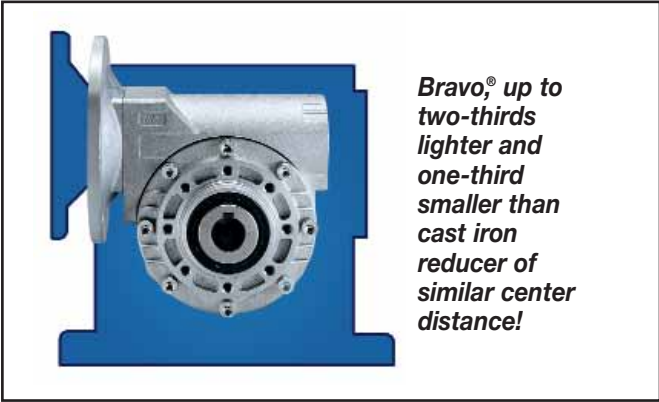
NEMA C flange with quill input accepts 56C, 143-5TC and 182-4TC motor frames.

or

B5 & B14 IEC metric flange options with quill input accepts D56, D63, D71, D80, D90, D100 and D112 motor frames.

Hollow output shaft mounting is standard at no extra cost. Reduces total drive envelope size, weight and cost. Solid shaft single and double output is available.

Gearing Overview



Bravo[®] up to two-thirds lighter and one-third smaller than cast iron reducer of similar center distance!



oil free **
vent free **

Vent Free Design.
No breather or vents to leak! Factory lubricated for life with synthetic, semi-fluid gear lubricant with an operating range of +5°F to +220°F (-15°C to +104°C).

Alternatives for Machine Designers



REMOVABLE INSPECTION COVER allows periodic inspection of gearing during routine maintenance.

RATIOS UP TO 63:1 in two-stage units and up to 278:1 in three-stage units to maximize efficiency and reduce overall case size.

SINGLE-PIECE ALUMINUM ALLOY HOUSING vacuum impregnated with Resinol RT (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint. Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing.

ROBUST OUTPUT SHAFT of high strength steel alloy for superior torque and overhung load capacities.

PREMIUM VITON® SEALS provide extra protection against entry of contaminants or loss of lubricant. Tandem seals available on input and output.

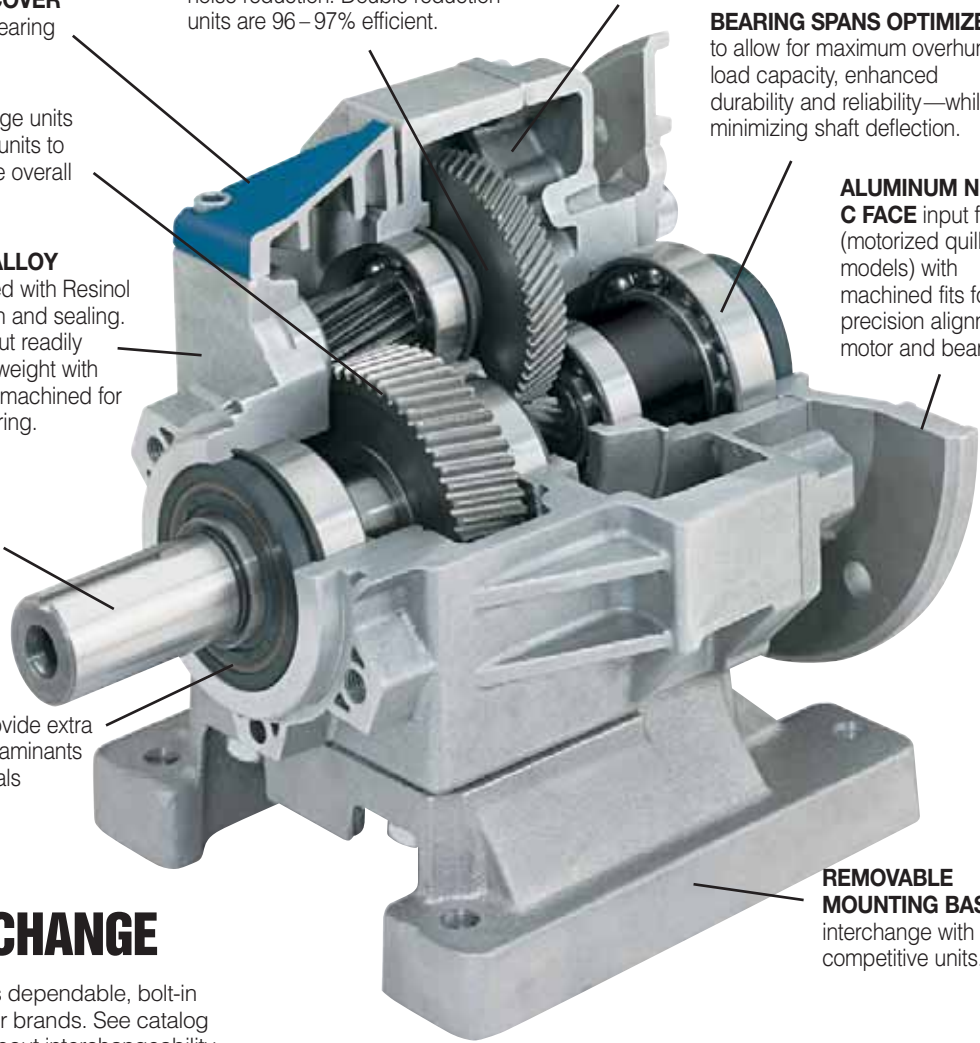
ALL GEARING IS HARDENED AND GROUND (AGMA Class 10 or better), for enhanced efficiency and noise reduction. Double reduction units are 96–97% efficient.

LeCENTRIC REDUCERS ARE FILLED WITH MOBILGEAR SHC 320 SYNTHETIC OIL as standard. All sizes are considered “lubed for life.” Specify mounting position at time of order.

BEARING SPANS OPTIMIZED to allow for maximum overhung load capacity, enhanced durability and reliability—while minimizing shaft deflection.

ALUMINUM NEMA C FACE input flange (motorized quill input models) with machined fits for precision alignment of motor and bearings.

REMOVABLE MOUNTING BASE allows interchange with dozens of competitive units.



DIRECT INTERCHANGE

LeCENTRIC reducers serve as dependable, bolt-in replacements for many popular brands. See catalog 7050 for specific information about interchangeability.

	FOOT MOUNT	OUTPUT FLANGE MOUNT
SEW	✓	✓
Bonfiglioli	✓	✓
Brook Hansen	✓	✓
Browning	✓	✓
David Brown	✓	✓
Dodge Quantis	✓	✓
Falk	✓	✓
Flender/Motox	✓	✓
Grove	✓	✓
Hansen	✓	✓
Lenze	✓	✓
Leroy Somer	✓	✓
Motovario	✓	✓
Nord	✓	✓
Stober	✓	✓
Sumitomo	✓	✓

Bravo® and LeCENTRIC™ aluminum reducers offer thousands of stock power transmission solution.

LeCENTRIC™ aluminum inline gear reducers, available in 1/4 through 7-1/2 HP, offer unsurpassed advantages in terms of weight, efficiency and interchangeability. The reducers are loaded with long life features that industrial equipment users have come to expect. LEESON also offers Bravo® reducers, a compact and lightweight alternative to traditional cast iron units. The reducers are available with hollow output shafts as standard for easy to achieve, cost effective drive solutions. By combining a LeCENTRIC™ or Bravo® reducer with any of our hundreds of in-stock c-face motors, a performance-matched GEAR+MOTOR™ is created instantly with single source responsibility.



Grove Gear Hi Efficiency Gear Drives - Designed Grove Tough!

Shafts

Robust output shaft of high strength steel alloy for superior torque and overhung load capacities.

Housing

Precision machined rugged cast iron housings give you the industrial strength and durability you've come to expect from Grove Gear.

Bearings

Bearing spans optimized to allow for maximum overhung load capacity, enhanced durability and reliability – while minimizing shaft deflection.

Gearing

All gearing is hardened and ground (AGMA Class 10 or better), for enhanced efficiency and noise reduction. Double reduction units are 96-97% efficient.

Modular Design

Innovative design includes double reduction, triple reduction and quad reduction reducers assembled from standard components.

Mounting Dimensions

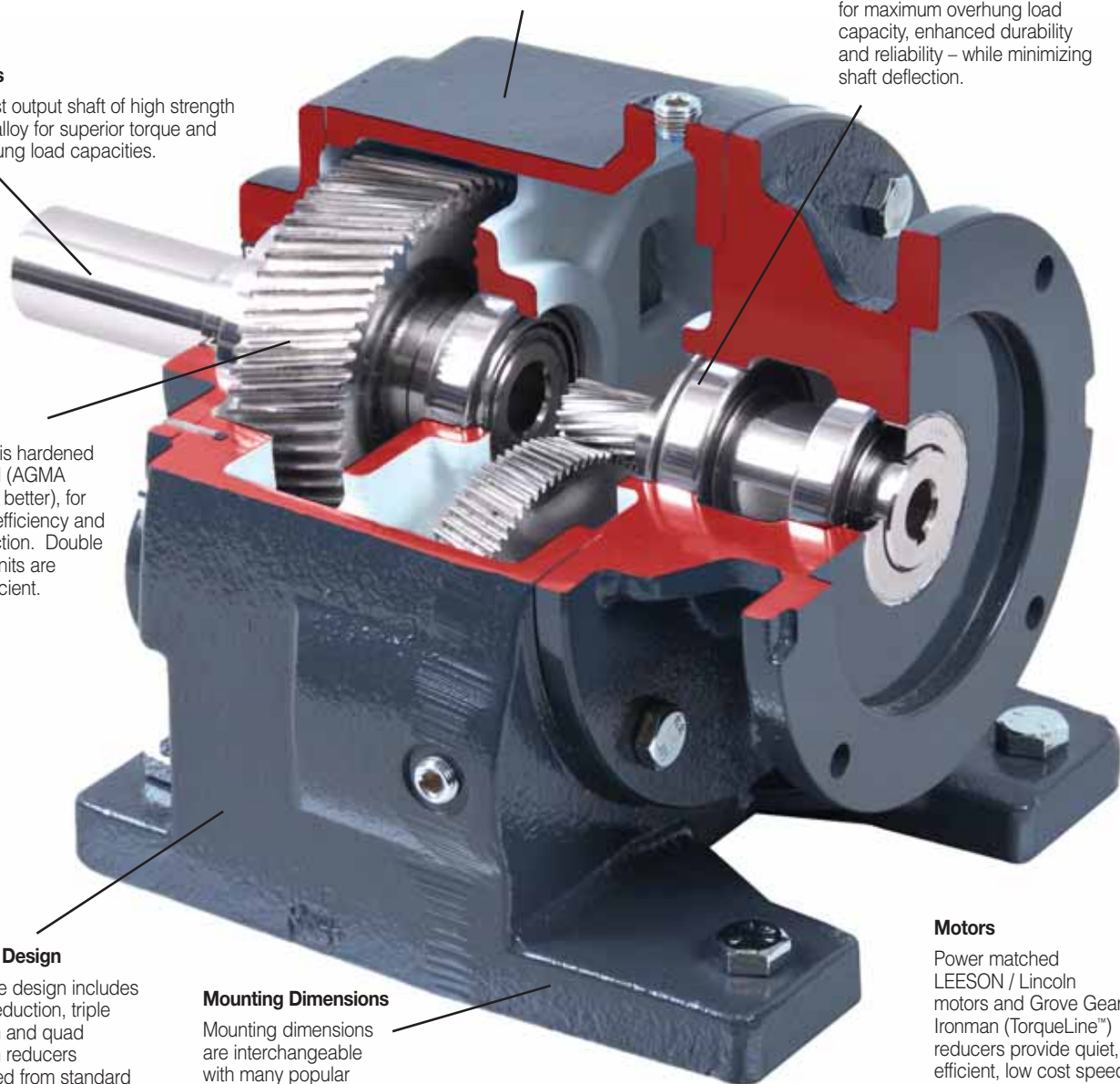
Mounting dimensions are interchangeable with many popular reducers, including SEW, David Brown, Nord and Dodge.

Motors

Power matched LEESON / Lincoln motors and Grove Gear Ironman (TorqueLine™) reducers provide quiet, efficient, low cost speed reduction.

Available Options

Washguard™, paint and special shaft options are available.



Product Selection:



Helical Inline

- 9 sizes available in reducer and gearmotor designs
- Reducer selections up to 125 HP
- Gearmotor selections up to 5 HP
- Available in double, triple and quadruple reduction with ratios from 2.2:1 to 3700:1
- Output flange and foot mounted designs available in all sizes
- An industry leader in power density per unit size



Helical Bevel

- 6 sizes available in reducer and gearmotor designs
- Reducer selections up to 15 HP
- Gearmotor selections up to 5 HP
- Available in triple and quintuple reduction with ratios from 6.2:1 to 3400:1
- Solid output shaft and hollow output shaft available in all sizes
- Precision carburized and hardened spiral bevel gearing for quiet, efficient, right angle speed reduction



Helical Worm

- 4 sizes available in reducer and gearmotor designs
- Reducer selections up to 17 HP
- Available in double, triple and quadruple reduction with ratios from 7:1 to 3400:1
- Solid and hollow output shaft options available
- Hardened and ground steel worm shaft and high capacity bronze alloy worm gear give you the advantages of worm gearing with the efficiency of helical gearing

Hi-Efficiency Gear Reducer Quick Shipment Program

- Order Quantities up to 5 pcs (mixed)
- Over 10,000 Standard Catalog numbers in program!
- Double and Triple Reduction
- **3 Day** Assembly on Helical Inline Models thru R887 Foot and Flange Mount Styles
- **5 Day** Assembly on All Sizes of Helical Worm
- **5 Day** Assembly on Helical bevel Models thru K887
- If we don't ship it when we say we will, ground freight is free!*
- 3 to 4 week delivery on all other standard models and catalog configurations not listed above

*Certain limitations apply