ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *ABB / Baldor / Dodge 26A30L14* at our website: *Click HERE*

TIGEAR–2 REDUCERS

DODGE®



BALDOR®

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Engineering That Raises The Bar

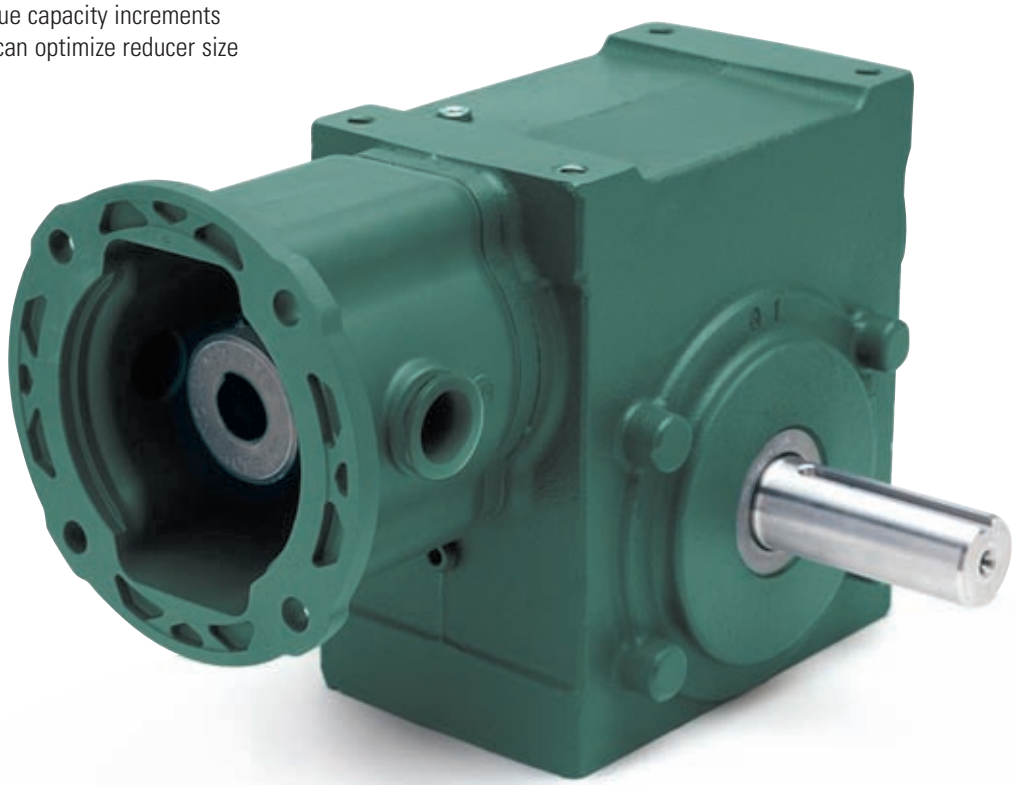
Never before have greater advancements been made in speed reducer technology.

TIGEAR-2 is the only complete line of single-reduction, right-angle worm speed reducers specifically engineered with advanced sealing and bushing system technology that can actually lower your total cost of ownership.

TIGEAR-2 is offered in 10 sizes covering center distances from 1.33" to 4.75". It has a 30% increase on average output torque (up to 6,800 in-lbs.), and because of the consistent torque capacity increments between case sizes, equipment designers can optimize reducer size selections for cost, performance, and life.

The DODGE TIGEAR-2 reducer design has a totally enclosed, ventless sealing system that contains a factory-filled synthetic lubricant that actually runs cooler, as well as eliminates the need for routine oil changes. Its precision-manufactured gear geometry balances multiple gear parameters for dramatic improvements in torque capacity, efficiency, and operating temperatures. TIGEAR-2 is the only worm reducer with the GRIP TIGHT® tapered bushing system.

All combined, TIGEAR-2 raises the bar, offering you innovation and manufacturing expertise that is unmatched in the industry.



TIGEAR–2 Sealing System Operates Effectively With No Pressure Vent, No Compression Chamber

Custom-Formulated HNBR Wave Seal

Hydrogenated Nitrile Butadiene Rubber (HNBR) material has been proven to be a better all-round choice for oil compatibility, wear, and temperature range. Overall, it provides six times the wear resistance of industry-standard nitrile seals.

Special Hydrodynamic Wave Seal Design

The special wave shape (molded into the seal lip) generates a better hydrodynamic film, which is required between the seal and the shaft for long life. This special wave design generates less drag, less heat, and virtually eliminates shaft grooving created by the single-point wear track, which is common with conventional trimmed lip seal designs. The sinusoidal lip of the wave seal effectively pushes external contaminants away and pumps lubricant back into the oil sump.

Special Lip Construction

Optimized lip-to-shaft static contact pressures ensure maximum life. In addition, special sealing elements operate under pressure without detrimental effect on service life or sealing performance.

Factory-Filled Synthetic Lubricant

The standard synthetic lubricant used in TIGEAR-2 meets H1 food grade requirements and accommodates a wide range of operating temperatures. In extensive laboratory tests, it lowered operating temperatures by 20° F over other popular synthetics. No routine scheduled oil changes are required.

Shaft System Element

Unique low-speed shaft design minimizes concentrations of stress, thereby increasing the overhung load capacity. Its surface finish and hardness characteristics contribute to reduce seal wear and increase life.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Configuration Options

The advanced design concept of the TIGEAR-2 reducer product line provides extreme flexibility for applications that require from 100 to more than 6,500 lb-in of torque. Whether the application requires the compactness of a quill-style input, the durability of a three-piece coupled input, or a separate keyed input shaft for belt-driven equipment, TIGEAR-2 is the answer. With six basic reducer configurations and stock bolt-on accessories, the TIGEAR-2 reducer line is truly a complete line that is full of value.

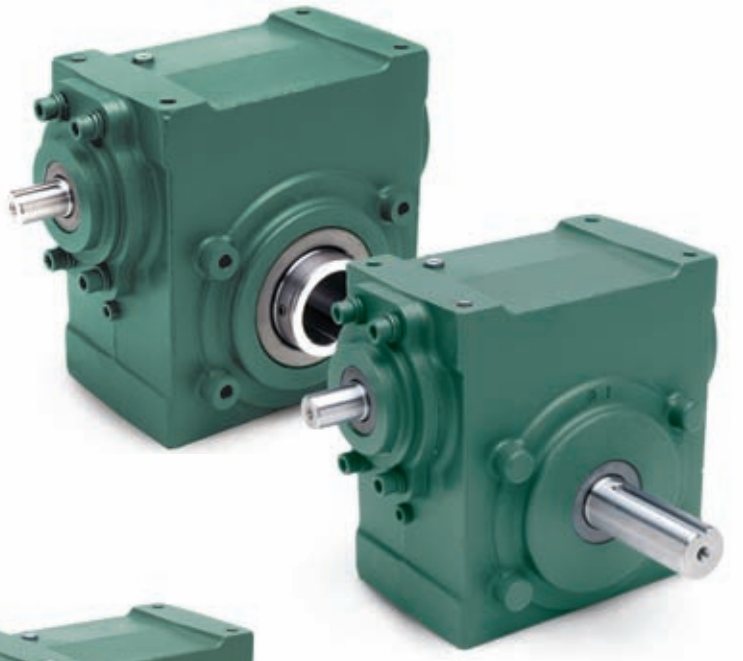


Quill Input

Space-saving quill-style input reducers for NEMA C-face motors in both solid and hollow output designs

Separate Input

Separate style input reducers with solid or hollow output shafts are suitable for either belted or direct-coupled motor connections





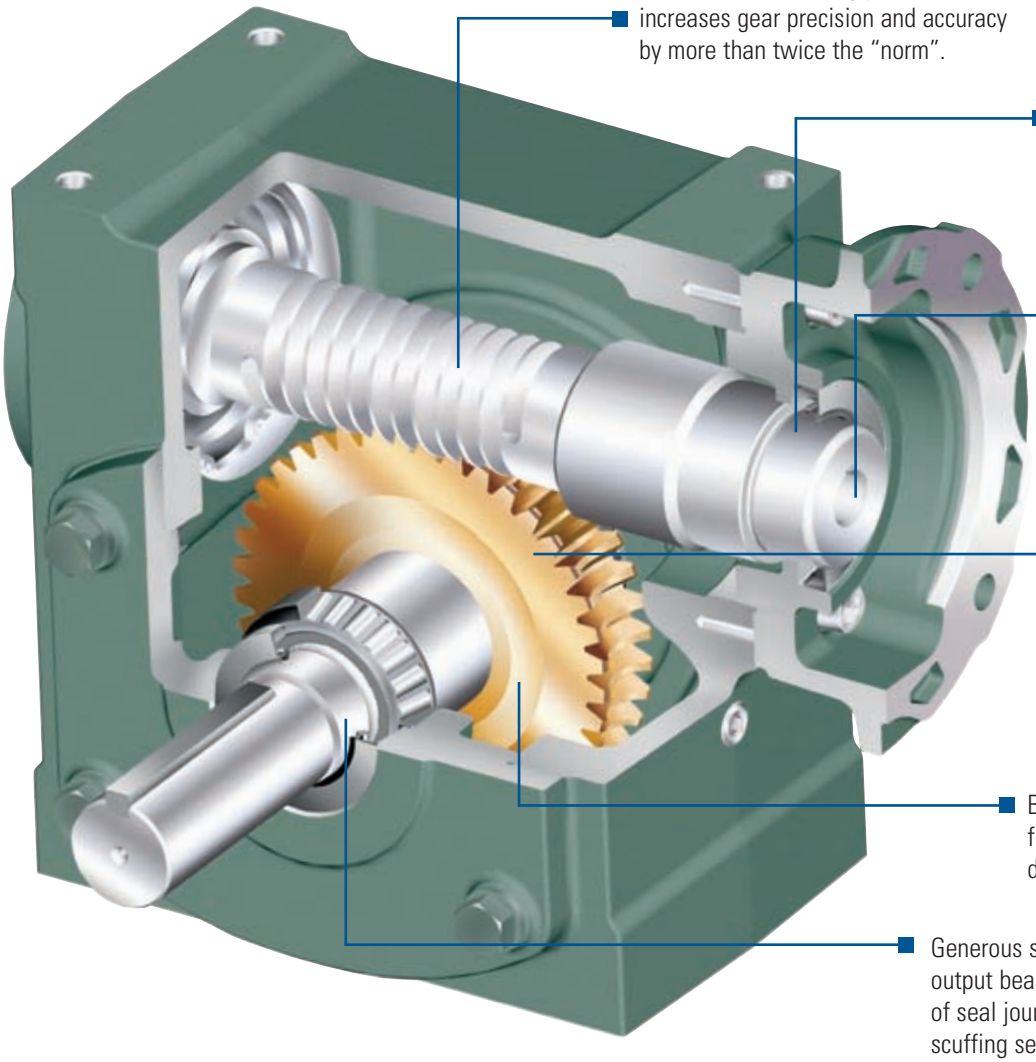
3-Piece Coupled Input

Attaching a stock, 3-piece coupled motor adapter kit to a separate style reducer creates a durable drive package that facilitates easy motor removal and provides protection against shock loads and other unpredictable vibrations.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Maintenance-Free Design

- On average, the gear geometry delivers 30% more torque than competitive, same-sized models. Permits downsizing and helps reduce total cost of ownership.
- TIGEAR-2 reducers are dimensionally interchangeable with most original TIGEAR reducers, as well as many competitive models.



Worm shaft machining process increases gear precision and accuracy by more than twice the "norm".

Seal journals are held to exacting tolerances for diameter and surface finish (8 - 17 Ra). Precise plunge grinding process eliminates invisible lead and assures cool-running, long-life seals.

Unique internal design of input quill, along with a special factory-applied anti-seize compound, helps to reduce chances for fretting corrosion with motor shaft.

State-of-the-art computer modeling and optimization of multiple gear parameters in TIGEAR-2 gear geometry allow higher torque capacity, greater efficiency, and cooler operating temperatures. End result: long life and lower operating costs for user.

Bronze gear material has an extremely fine grain structure for maximum durability and minimum wear.

Generous step between diameter of output bearing journal and diameter of seal journal prevents bearing from scuffing seal journal during assembly.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Washdown Applications

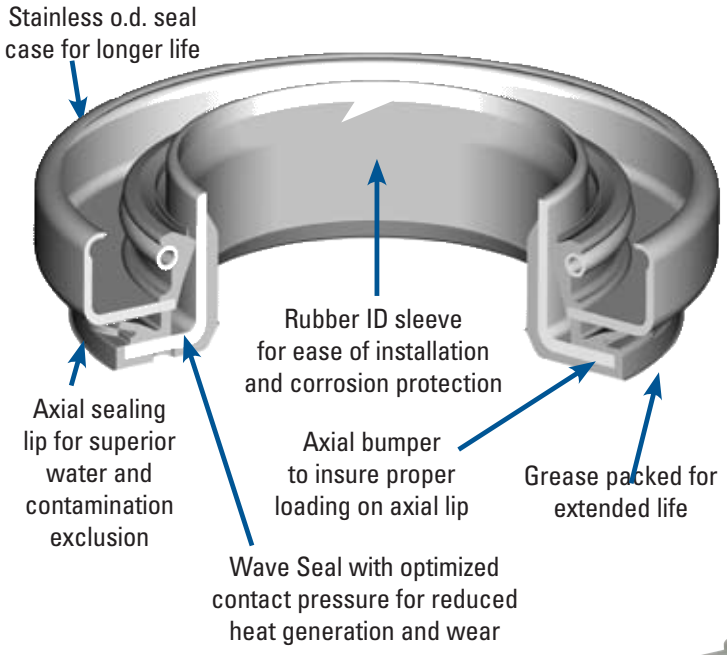
E-Z KLEEN and ULTRA KLEEN reducers are the best choice for food and beverage industries.

For maximum washdown protection, E-Z KLEEN and ULTRA KLEEN reducers include premium features the competition doesn't offer.

E-Z KLEEN reducers are manufactured with a 13-step coating system that provides more than three times the corrosion resistance of standard epoxy-painted units. For "paint free" specifications, ULTRA KLEEN stainless steel reducers provide ultimate washdown protection.

And, to ensure that their interior is as protected as their exterior, E-Z KLEEN and ULTRA KLEEN reducers have a two-piece, harsh-duty sealing system that protects against high-pressure sprays and sanitizing solutions. The totally enclosed ventless sealing system contains a factory filled H1 Food Grade synthetic lubricant that eliminates the need for routine oil changes.

XT Harsh Duty Seal



E-Z KLEEN ACCESSORIES

- Stainless steel Straight Bore bushings
- Stainless steel GRIP TIGHT® bushings (as available)
- E-Z KLEEN bolt-on base kit
- E-Z KLEEN riser block kit
- E-Z KLEEN J-mount kit
- E-Z KLEEN output flange kit

ULTRA KLEEN STANDARD FEATURES

- Premium 316 stainless steel housings
- Available in solid and hollow output shafts
- 300 series Stainless Steel solid and hollow output shafts and stainless hardware
- Two-piece harsh duty output seals
- Factory filled H1 food grade synthetic lubrication
- Input/Output Configurations:
  - Quill input and solid or hollow output configurations in sizes 17, 21, 23, 26 and 30
  - 3-piece coupled input available in sizes 17, 23, and 30

ULTRA KLEEN ACCESSORIES

- Stainless-steel Straight Bore bushings
- Stainless steel GRIP TIGHT® bushings (as available)
- Stainless steel bolt-on base kit
- Stainless steel output flange kit



E-Z KLEEN STANDARD FEATURES

- A 13-step coating system
- Stainless color top coat – White finish also available
- 300 series Stainless Steel solid and hollow output shafts and stainless hardware
- Two-piece harsh duty output seals
- Factory filled H1 food grade synthetic lubrication
- Offered in sizes 13 through 35 in Quill and 3-Piece Coupled input with solid or hollow output configurations

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Grip Tight Tapered Bushing System

Locking System

The GRIP TIGHT® tapered bushing system in TIGEAR-2 uses concepts that have proven to be effective in the locking mechanism of the DODGE IMPERIAL™ bearing to simplify installation and removal and prevent fretting corrosion problems. There are no loose fasteners to misplace during installation, and the locking nut creates a positive means for easy removal.



Minimum Shaft Length

The system's tapered bushings allow for mounting in some of the tightest places on almost any size shaft. (Driven shafts need not protrude completely through the reducer bore.)

Bushing Options

When used in pairs, the tapered bushings can be used without output keys. Stainless options are available for severe washdown applications.

Easy Bushing Installation



Slide bushing and reducer onto shaft.



Tighten locking nut by hand to remove clearances.



Complete locking procedure with hammer and drift

Additional Optional Accessories

- Bolt-on base kit
- Riser block kit
- J-mount base kit
- Output flange kit
- Tie rod kit
- Tapered bushing kit
- Straight bore bushing kit
- Output bracket kit
- Plug-in output shaft kit
- Special paint options for washdown applications
- Low temperature lubrication
- Output shaft reversal kit
- Hollow output safety covers

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

TIGEAR–2 Helical Attachment

A double NEMA 56 and 140 C-face helical gear attachment for TIGEAR-2 reducers expands the ratio range from 75:1 to 300:1 The helical attachment has a quill input coupling for quick and easy motor attachment. It easily attaches to a TIGEAR-2 reducer with 56C and 140TC quill or 3-piece coupled input.

- Available with NEMA 56 and 140 C-face input and output
- Available in 4:1 and 5:1 ratios
- Factory filled with food grade synthetic lubricant
- Lubed for life
- No breather
- Suitable for all mounting positions right out of the box
- Cast iron construction



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

World Headquarters
P.O. Box 2400, Fort Smith, AR 72902-2400 U.S.A., Ph: (1) 479.646.4711, Fax (1) 479.648.5792, International Fax (1) 479.648.5895

Baldor - Dodge
6040 Ponders Court, Greenville, SC 29615-4617 U.S.A., Ph: (1) 864.297.4800, Fax: (1) 864.281.2433

www.baldor.com

© Baldor Electric Company
All Rights Reserved. Printed in USA.

BR1611
10/09 TCP 25,000

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP