

Tel: 1-800-SM-CYCLO (762-9256) 01.001.51.07 Product Showcase 2023



Product Showcase



We offer a comprehensive lineup of high quality power transmission products.

For any of your power transmission needs, we have the right product for you.

Robust, Reliable, Efficient



CYCLO® 6000

- Up to **235 HP** (175 kW)
- 1/2in to 7in (Solid Shaft)
- Up to 603,000 lb•in (68,130 N•m)
- 3:1 up to 658,503:1



HYPONIC®

- Up to **15 HP** (11 kW)
- 3/4in to 2in (Hollow & Solid)
- Up to **13,100 lb•in** (1,480 N•m)
- 5:1 up to 1,440:1



B4 CYCLO® BBB 4

- Up to **100 HP** (75 kW)
- 1in to 4-15/16in (Hollow & Solid)
- Up to **159,983 lb•in** (18,076 N•m)
- 11:1 up to 26,000:1 and greater

No Matter the Application



MOTION Control

- Zero mechanical backlash
- Up to 138mm (Hollow Bore)
- Up to **265,522 lb•in** (30,000 N•m)
- 29:1 up to 283:1



HB CYCLO® HBB

- Up to **40 HP** (30 kW)
- 1-3/16in to 6-1/2in (Hollow Bore)
- Up to **75,800 lb•in** (8,564 N•m)
- 11:1 up to 26,492:1



HS HELICAL Shaft Mount

- Up to 300 HP (224 kW)
- **107** to **608** (Hollow Bore)
- Up to **388,884 lb•in** (43,938 N•m)
- 5:1, 9:1, 14:1, 20:1, 25:1



INVERTERS E3 & P2

- Up to 400 HP / 480 A
- 200 to 600V (Single & 3-Phase)
- Up to 200% (From Zero Speed)
- Up to 200% Overload (4 secs)



BH BBB-H

- Up to **15 HP** (11 kW)
- 1in to 2-3/16in (Hollow)
- Up to **9,028 lb•in** (1,020 N•m)
- 5:1 up to 20:1



FORTRESS®

- Up to **2 HP** (1.5 kW)
- 3/4in to 1-7/16in (Hollow & Solid)
- Up to **1,970 lb•in** (223 N•m)
- 7:1 up to 60:1



PARAMAX® 9000

- Up to **5,230 HP** (3,900 kW)
- **58mm** to **360mm** (Hollow & Solid)
- Up to **4.9m lb•in** (552,000 N•m)
- Up to 500:1 Standard



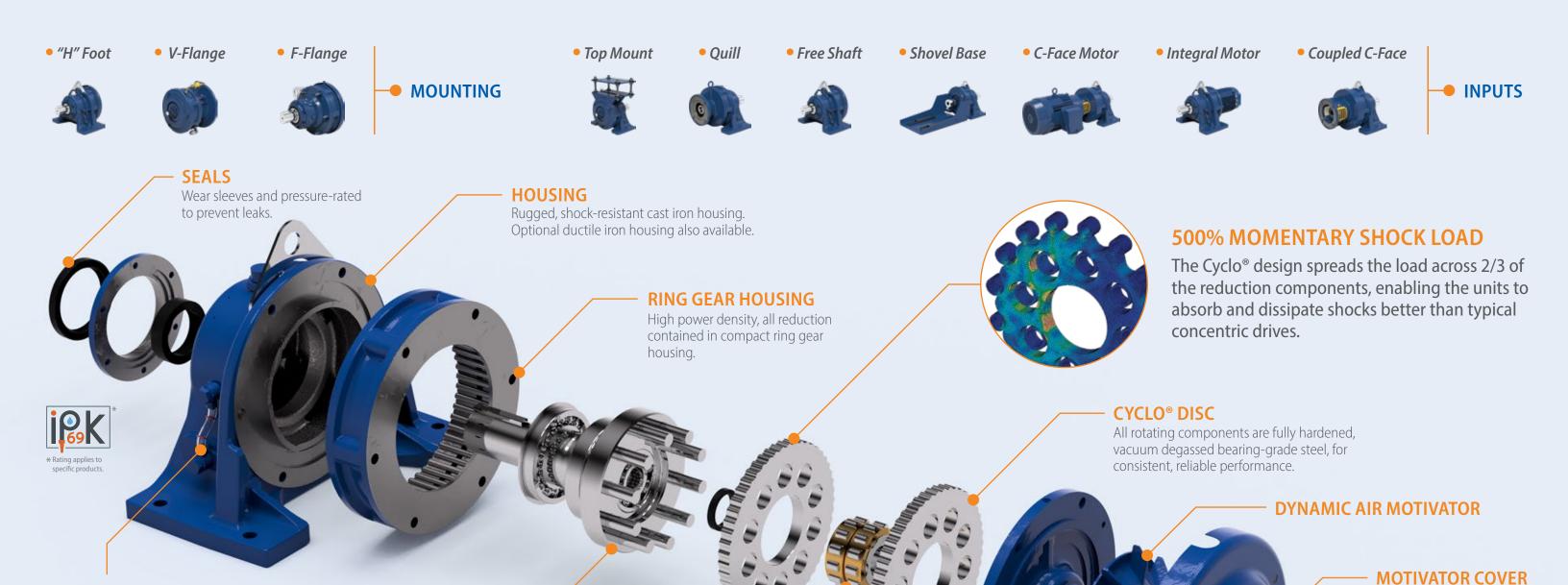
P4 HANSEN P4

- Up to **14,080 HP** (10,500 kW)
- **3.15in** to **15.75in** (Solid Shaft)
- Up to **9.7m lb•in** (1.1m N•m)
- Up to 630:1 (and custom ratios)



U PARAMAX® UniMiner

- Up to **600 MHP** (450 kW)
- 105mm to 190mm (Solid)
- Up to **894,000 lb•in** (101 kNm)
- 10:1 to 35.5:1



UNMATCHED RELIABILITY & EXCEPTIONAL PERFORMANCE

Cyclo® speed reducers and gearmotors are the **premier in-line drives**. The revolutionary Cyclo® design provides quiet, efficient, and reliable performance exceeding that of involute tooth gear designs.

Unlike geared designs, the Cyclo®'s reduction components operate in compression rather than shear, which results in exceptionally rugged and shock resistant performance.

SLOW-SPEED SHAFT

The Cyclo® technology coupled with innovative product options and accessories offer the most extensive range of application solutions available.



OIL LEVEL INDICATOR

CYCLO® 6000







ECCENTRIC CAM









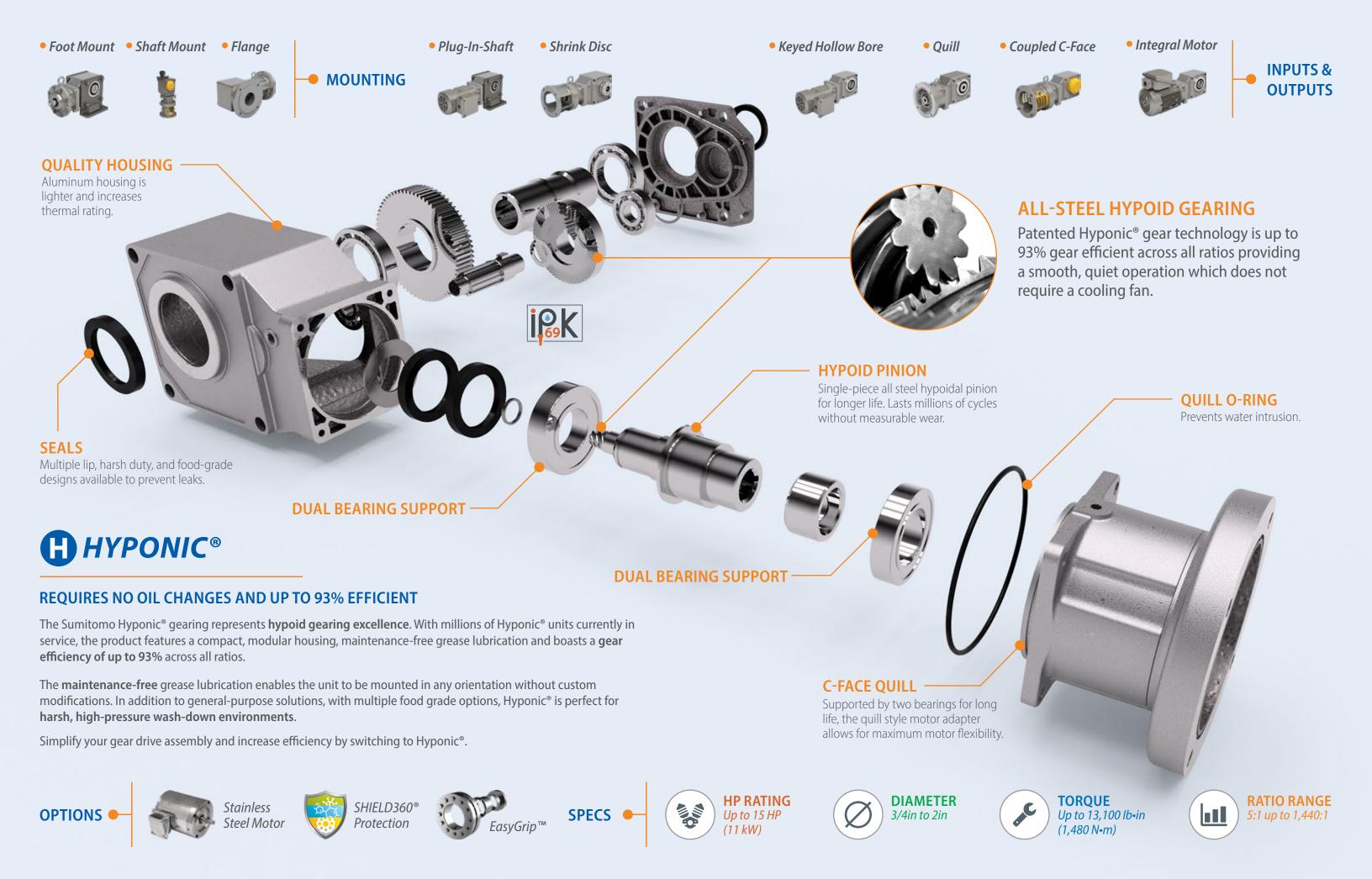


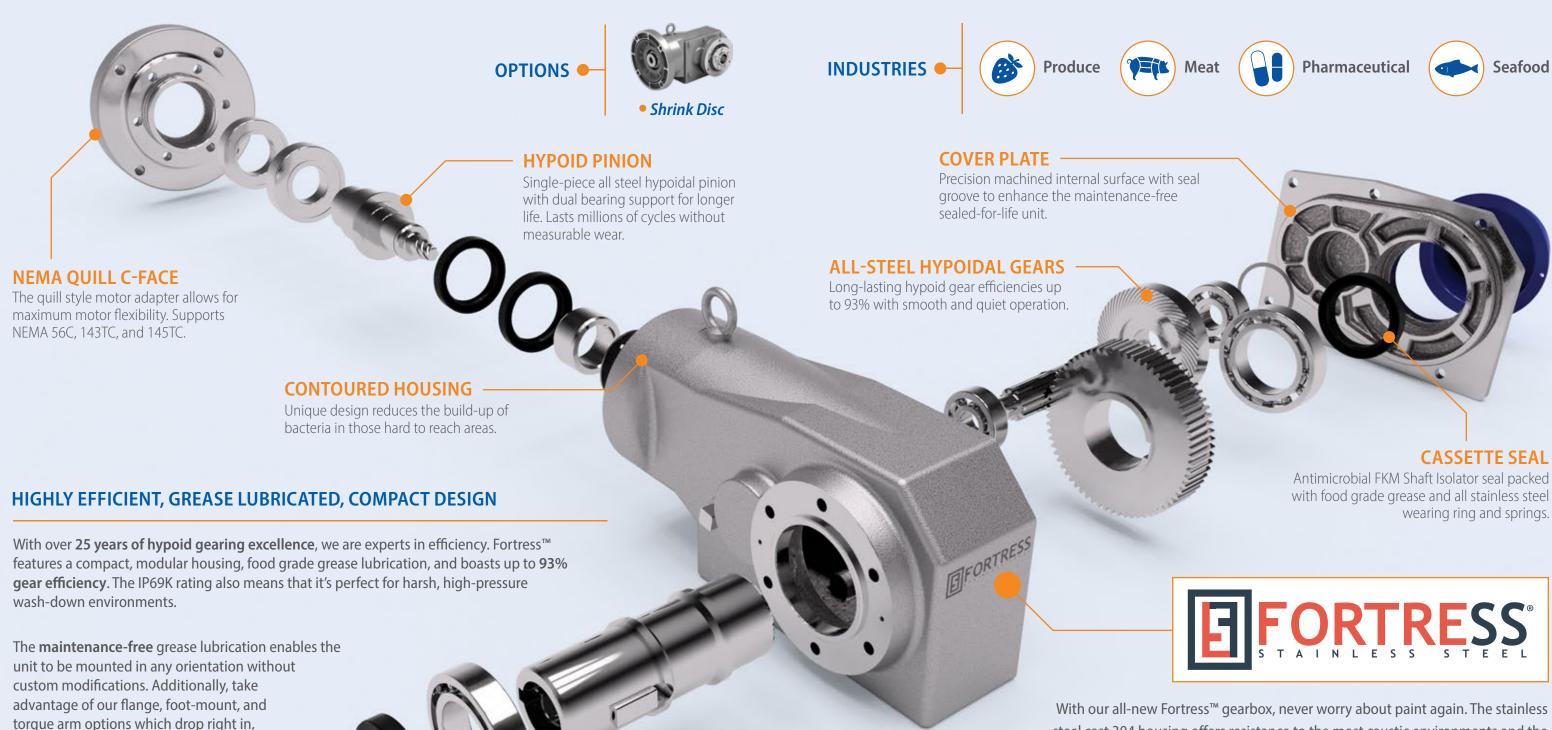
HIGH-SPEED SHAFT





- High-Performance Synthetic Lubricant
- Available for Cyclo® Products
- Extends the Life up to 3 Times
- Available 4-Year Warranty





steel cast 304 housing offers resistance to the most caustic environments and the allowing you to conveniently replace those unique contour design reduces the build-up of bacteria in those hard to reach areas. old, inefficient gearboxes.

> Our cutting-edge in-house laser etching technology ensures a cleaner finish by eliminating the need for an attached nameplate. This, coupled with our patented hypoid gear technology, means you have a cooler operating, more efficient, cleaner, and maintenance-free operation.



switching to Fortress™.



Simplify your gear drive assembly, increase

your efficiency, and protect your operation by











Flange Mount





Foot Mount

Shaft Mount

Shaft Mount













GO E





Solid

Keyed **Hollow Bore**





Shrink





DUCTILE IRON HOUSING

Twice as strong as cast iron, making it one of the most rugged bevel gearboxes on the market.

OPTIONAL TACONITE SEAL ASSEMBLY

Heavy-duty, fortified, grease purgeable system withstands the most demanding applications.



Resist axial and radial loads simultaneously.

TANDEM DUAL LIP SEALS

Prevent leaks and exclude contaminants.



SINGLE-PIECE PINION

Oversized, single-piece pinion provides a robust solution capable of 300% momentary shock-load. Designed and manufactured in the USA.

100% HARDENED STEEL COMPONENTS

Provide long life, smooth operation, and superior strength.

B4 CYCLO® BEVEL BUDDYBOX® 4

RIGHT ANGLE SPIRAL BEVEL WITH CYCLO® OR PLANETARY INPUTS

A robust, state-of-the-art, mid-sized suite of speed reducers and gearmotors. The Cyclo® BBB4 has a unique combination of features that result in a highly reliable, efficient, and durable gearbox. The all-steel internal construction, Cyclo® or planetary gear inputs and the ductile iron housing, provide unmatched ruggedness.

Also available as a mixer drive with an integrated drywell and space-saving footprint.

CYCLO® DISC

All rotating components are manufactured from fully hardened, vacuum degassed bearing-grade steel, for consistent, reliable performance.

MOBIL SHC™ GEAR HI-SHOCK 150

- High-Performance Synthetic Lubricant
- Available for Cyclo® Products
- Extends the Life up to 3 Times
- Available 4-Year Warranty













BEARING







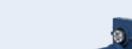
Shaft Mount





MOUNTING





Taper-Grip® Bushing

Gearmotor







C-Face



LONG LIFE BEARINGS

Oversized, heavy-duty bearings for maximum strength and service life.



MOBIL SHC™ GEAR HI-SHOCK 150

- High-Performance Synthetic Lubricant
- Available for Cyclo® Products
- Extends the Life up to 3 Times
- Available 4-Year Warranty

HELICAL GEARING

Hardened-steel gearing.

HB CYCLO® HELICAL BUDDYBOX®

INNOVATIVE SHAFT MOUNTED DRIVE SOLUTIONS FOR DEMANDING APPLICATIONS

The Cyclo® HBB combines the quiet, efficient, and reliable performance of the Cyclo® input with the rugged helical gear output. The modular design provides a compact, efficient product and the most flexible range of output speed and torque combinations available.

The simple splash lubrication system extends the life of the unit and the highly efficient design has no thermal **limitations** which eliminates the need for an external fan.

DOUBLE OUTPUT SEALS

TAPER-GRIP BUSHING®

Our patented Taper-Grip® bushing system offers simple shaft mounting and provides self-aligning, backlash-free torque transmission to the driven shaft.

MONOBLOC HOUSING

Cast iron housing is strong, corrosion resistant, and sound dampening. Monobloc design eliminates leaks at housing split.



Utilizes all Cyclo[®] input modifications to produce high ratios in amazingly small spaces.









HIGH SPEED SHAFT













Up to 75,800 lb•in



HARDENED STEEL GEARING

















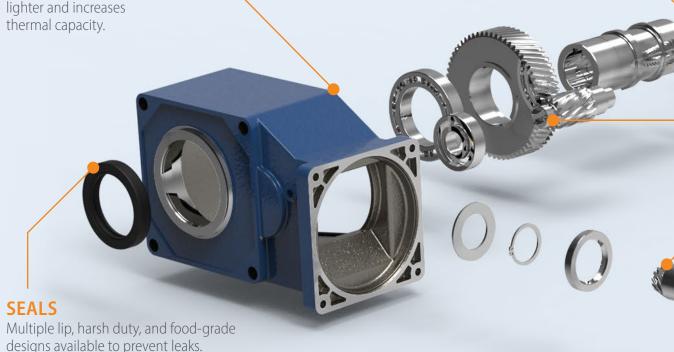






QUALITY HOUSING

Aluminum housing is lighter and increases thermal capacity.





BEVEL PINION & HELICAL GEARING

A combination of power and speed. Up to 97% gear efficient across all ratios providing a smooth, quiet operation which does not require a cooling fan.

BEVEL PINION

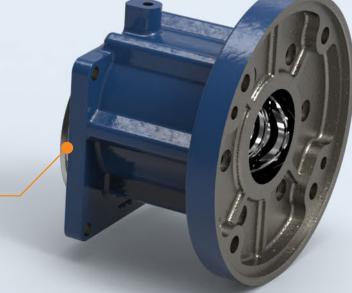
Single-piece all steel bevel pinion for longer life. Lasts millions of cycles without measurable wear.





C-FACE QUILL

Supported by two bearings for long life, the quill style motor adapter allows for maximum motor flexibility.



BH BEVEL BUDDYBOX® H SERIES

EXTREMELY EFFICIENT AND COMPACT WITH LOW REDUCTION RATIOS

The combination of a **Bevel Input** and a **Helical Output** make this unit **extremely efficient** with the capacity for input speeds up to 3,600 rpm. Dependable hardened steel gearing inside a lightweight, compact housing allows for easy installation with less load on the head shaft. Aluminum construction provides high thermal capacity.

The maintenance-free grease lubrication enables the unit to be mounted in any orientation without custom modifications. The **greater efficiency** of the BBB-H allows for use of a **smaller motor**, resulting in the same performance with much lower operating costs. Its power and speed make this unit perfect for airport baggage handling and general conveying applications.















TORQUE Up to 9,028 lb•in (1,020 N·m)









Shrink Disc

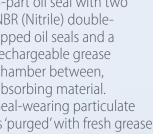




Standard in large frame sizes to allow easy maintenance. A large inspection port provides a window for gear inspection. Available in standard gray cast iron with ductile and fabricated steel options.

TACONITE SEAL

3-part oil seal with two NBR (Nitrile) doublelipped oil seals and a rechargeable grease chamber between, absorbing material. Seal-wearing particulate is 'purged' with fresh grease.



SLOW SPEED SHAFT

JIS SCM440H or AISI 4140H material or equivalent, interfering/fitted keys, and interference fit gears. Suitable for stop/starts and reversing applications.



PARALLEL & RIGHT ANGLE LARGE INDUSTRIAL GEARBOXES

Paramax® parallel and right angle drives are some of the largest and most durable power transmission systems operating in the world. The series features double, triple, quadruple reduction gearboxes, global standardization and availability, and support from our worldwide facilities.

Optional Accessories: Backstops, Motor Mount Options, Seal Upgrades, Heating & Cooling and Lubrication Solutions, Paint Upgrades, Storage and Packaging Options, and Complete Drive Package Solutions.



High capacity bearings increase load capacity without increasing lead-time. Tapered, double-row spherical, or cylindrical roller bearings depending on size and configuration.

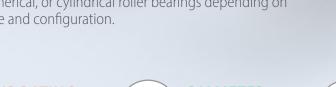
CASE CARBURIZED & GROUND GEARING

High precision carburized gearing with a 25° pressure angle offers a thicker dedendum and higher strength ratings than the typical 20° pressure angle.

HIGH TENSILE SHAFT

Strong shaft material optimized for extended operation in rugged environments.







TORQUE Up to 4.9 million lb•in $(552 kN \cdot m)$

















DIAMETER 58mm to 360mm (Hollow & Solid)

Keyed Hollow Bore



Extended Bearing Housing



Oversized Solid Shaft



Normal Solid

MIXER OPTIONS Extended Bearing



• Pilot or Flange Mount

The Hansen P4 multi-stage gear unit is market leading in quality and technology, excelling in reliability and durability. The rugged housing, along with our commitment to innovating state-of-the-art technology, provides

The unique Oil-Lock™ system offers a maintenance-free seal on high speed shaft extensions, designed to keep

Optional Accessories: Backstops, Motor Mount Options, Multiple Sealing Upgrades, Various Heating, Cooling, and

Lubrication Options, Heavy Duty Paint or Packaging Options, and Complete Drive Package Solutions.



Hollow Shaft

OUTPUTS

REMARKABLE POWER AND PERFORMANCE WITH LOW NOISE

P4 HANSEN P4

remarkable power and performance.

the oil in and dirt out.

SPLIT HOUSING

Rugged, split housing for horizontal and vertical applications. Round housing tops help keep the unit free from debris.

GEARS -

High torque geometry in low-speed gears. Low-noise geometry in highspeed gears.

SLOW-SPEED SHAFT

Shaft projections include captured keyways with rounded end key inserts to eliminate stress concentrations.

INTERNAL HOUSING

Exceptional construction ensures bearings are lubricated at start-up to maximize reliability and life.

PINION SHAFTS -

Rigid standardized pinion shafts and housings for better lateral load distribution.

INTEGRATED DRYWELL

Cast into 3 and 4 stage vertical housings mean this option provides a truly leak-proof lowspeed shaft.

HIGH-SPEED SHAFT

Extra long high-speed shaft projections suitable for interference-free coupling connections.

MAINTENANCE-FREE OIL-LOCK®

Standard high-speed seal arrangement.

Vertical









HP RATING Up to 14,080 HP (10,500 kW)



DIAMETER 80mm to 400mm (Solid, Heavy-Duty, and Hollow)



TORQUE Up to 9.7 million lb•in (1.1 million N•m)

















UA-Series



Output Shaft



Keyed

Coupling

Clamp Ring

























PLANETARY PRE-STAGE

Integrated triple spur gear prestage to extend the ratio range.



HOUSING

SERVOS

Multiple housing designs allow for versatile mounting options and a solution that easily integrates into your machine.



Input shaft driving the planetary prestage. Available in all input styles.

MC MOTION CONTROL

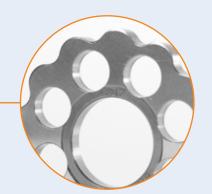
HIGH PRECISION POINT TO POINT AND TRAVERSE MOVEMENT

The Fine Cyclo® product series are high precision cycloidal gearboxes with zero backlash. These single and double stage gearboxes are highly compact in design, provide long life, and can be optimally integrated into your application. High torsion combined with their low moments of inertia, create ideal solutions for highly dynamic tasks.

A Series - High precision point to point movement. Single stage with high acceleration torque and bearing capacity.

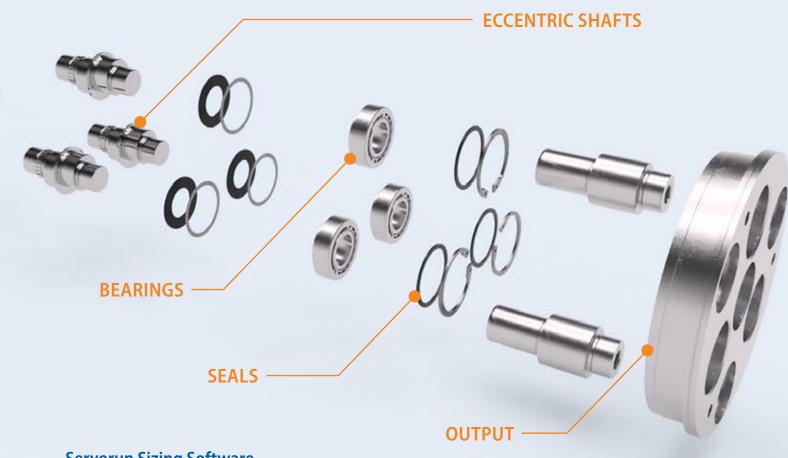
C Series - Large hollow shaft with high precision point to point movement. Fully sealed, single stage gearbox.

UA Series - Highly efficient traverse movement. Double stage gearbox with a planetary 1st stage and cycloidal 2nd.



CYCLO® DISC

The same proven Cyclo® technology found in our industrial reducers, designed and optimized for precision applications where zero backlash is required.



Servorun Sizing Software

As part of our support in the design phase of new applications, our sizing software Servorun verifies the gearbox selection as well as motor suitability.





Bevel BuddyBox®



Hyponic®











OPTIDRIVE E3



C C C Bus EHI Compliant with international standards.



IP20













GENERAL PURPOSE DRIVE

Compact, robust, and reliable general purpose drive.

Focused on ease of use, Optidrive E3 provides unrivaled simplicity of installation, connection, and commissioning, allowing the user to benefit from precise motor control and energy savings within minutes.

Available in IP66/Nema 4X outdoor rating with tough polycarbonate plastics specifically chosen to withstand degradation by ultraviolet (UV), greases, oils, and acids. Also, robust enough not to be brittle at -20°C (-4°F).





INTEGRATED DISPLAY

Remote Keypads provide real time operating information display and parameter access.

INTEGRATED CABLE MANAGEMENT

PLUGGABLE CONTROL TERMINALS

FANS

High quality long-life fans.

OPTIDRIVE P2

HIGH PERFORMANCE DRIVE

High-performance variable frequency drive for standard induction and permanent magnet motors.

A user-friendly interface and high performance make it perfect for tackling the most demanding applications smoothly.

Extensive I/O and communications interface capabilities ensure the drive can be integrated quickly and efficiently into a wide variety of control systems.

Dedicated Hoist Mode Operation with motor holding brake control make it perfect for marine and elevator applications.









Helical Shaft Mount

Provides a simple and convenient equipment interface by mounting directly on the drive shaft. Uses our patented Taper-Grip® Bushing for quick reducer mounting and removal.

Torque: Up to 388,884 lb•in (43,938 N·m)

Ratio: 5:1, 9:1, 14:1, 20:1, 25:1 HP: Up to 300 HP (224 kW)



Altax®

Using our Cyclo® technology, the exceptionally robust Altax[®] line is compact and low noise. All models are maintenance free with grease lubrication. Altax® caters to a broad range of applications.

Torque: Up to 4,054 lb•in (458 N·m)

Ratio: Up to 1,003:1 HP: Up to 5 HP (3.7 kW)

Custom Gear Drives

Custom Mill, Planetary, and High-Speed Drives available in a wide range of configurations. Tough, compact, and application specific designs for unique applications including API requirements.

Torque: Up to 6,515,000 lb•in (736,000 N·m)

Ratio: Up to 1,400:1 Custom ratios available

Motors

EP.NA motors are high performance, exceptionally cool running long lived motors with corona resistant insulation.

- UL, CSA,DOE Compliant
 Inverter Ready, 10:1 Turndown
- IP55 Ingress Protection
- NEMA Premium Efficient
 Up to 75 HP (55 kW)

Encoders

Two standard incremental types:

- 1) For non-brakemotors: AV32 magnetic type.
- 2) For brakemotors, or other uses: HS25A optical design.

Vibration: 5 to 2,000 Hz Shock: 50G, 11 mS duration Speed: 6,000 RPM Ingress Rating: IP65



Gear Couplings

Torque: Up to 57m lb•in (6.4m N•m)

Bore Size: Up to 35in

Type: Gear





Online product configurator streamlines the selection process, enabling you to build our power transmission products for your specific application. www.SumitomoDrive.com/Configurator



Same day, 1-day, and 2-day shipping on many of our standard products. For more information about Quick Ship, please consult your Sumitomo representative. www.SumitomoDrive.com/QuickShip

Retro-Fit units with transition bases allow us to match your existing footprint.

Custom drop-in units made to match existing unit's critical dimensions.

Retro-Fits and Drop-Ins

Whatever your requirements, we have a solution for you. Sumitomo Drive Technologies offers customized bases which allow our units to match the footprint of an array of existing applications and drop-in gear drives to upgrade and replace competitor units.

With a wide range of options, our engineers can replace your unit with minimum impact while delivering a premier product with performance and reliability.

Retro-Fit

Match existing footprint

A custom transition base will position the new low-speed shaft to be in the EXACT same position as the original low-speed shaft. Our retrofits provide an excellent balance between the cost savings of a standard gearbox and the benefits of minimal on-site modifications.

Typically, only relocating the motor mount is required for this option. We offer motor mounting options to help minimize the impact of relocating the motor mount, such as flanged motor adapter for c-face or d-flange motors.

Options might include a special low-speed shaft diameter or length and motor lantern.

The red circles in the diagram represent the existing bolt pattern of a customer's unit. The transition base is fabricated to match the height, ensuring alignment of the low-speed shaft to the machine shaft.

Drop-In

Match existing unit's critical dimensions

With downtime being such a critical factor in your operation, let us install one of our custom drop-in units.

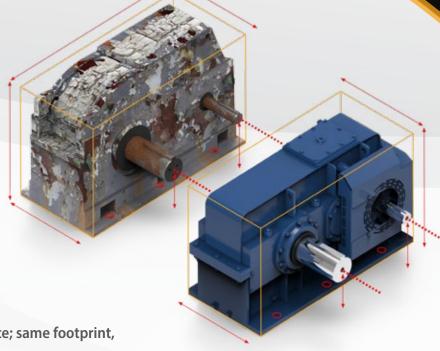
Installation-ready units are designed specifically to drop-in to existing applications with ease. Our expert engineers understand that on-site modifications or re-engineering your system is not always an option.

These stress-free units can have your application back up and running in no time. We offer fabricated steel housings, custom baseplates, custom gearing and shafting and more!

This product will literally drop-in to place; same footprint, same shaft positions!

Specialty Units

For non-standard gearing and custom ratios, we offer special customized units to fit in any application. From custom paint to intricate gearbox lubrication systems, our team of engineers will make sure all of your custom gearbox needs are met.





We take asset management seriously, because we know you do.

Avoid catastrophic failure, minimize risk and increase machine uptime.

System Management And Reliability Technology (SMART)

SMART is a range of products and reducer options that were developed to help end users in their reliability and asset management initiatives within their plant's daily operations.



Condition Monitoring

Fully customizable systems provide real time condition data of any piece of rotating equipment. Providing an accurate condition signal without the need for further analysis

All Gearboxes

OPTIONS **

Vibration + Temperature Input

Vibration + Oil Level Input

Vibration + Oil Condition

WETHINK!



Reliability Monitoring

These reducer option packages will help in the consistent collection of data. For Vibration analysis, as well as oil condition and cleanliness testing

Large Industrial Gearboxes

OPTIONS*

Opt 1: Machined Accelerometer Mounting Pads Only

Opt 2: Opt 1 + Accelerometers Wired to Junction Box

Opt 3: Opt 2 + Outputs to Customer PLC or DCS

YOU THINK!

CycloSMART® Benefits

Safe

Monitor assets from the safety of your desk via networked connections

Predictive

Machine diagnostics for early warning and detection to avoid failure

Optimization

Customizable systems to meet many different application needs

a CHECK ENGINE LIGHT & SPEED REDUCERS

- * All DriveSMART options include: Hydroscopic breather with 3mm filter, drain/fill connection for on-line filtration, and oil sample pitot tube port.
- ** All CycloSMART® systems are customizable with many different options for data monitoring. Examples are shown.

Learn more at: SumitomoDrive.com/CycloSmart

Expandable

Multi-reducer monitoring

Reliable

Schedule machine downtime to avoid lost production

Cost-Effective

Lower overall ownership cost



Our factory capabilities support all of your gearbox needs.



Repairs 🔗

Scheduled & Emergency Repair

Repair services for all your related gearbox needs and 24-72 hour turnaround to the original factory specifications and warranty using Sumitomomanufactured parts.

Extended warranty programs are available upon request.

Root Cause Investigation

Product Support

Apply a wide range of approaches, tools and techniques to uncover the causes of your problems.

Field Services (4)

For Your Convenience

Most of the services offered and customized training can be performed on location.

phone: 757-485-3355

Aftermarket

Our personnel are the industry's most versed gearbox problem solvers. We provide both standard and tailored services, for maximum gearbox life.

Experts in Service

Global Support, Local Service

With a vast network of engineers and gearing experts, there is no problem we can't handle.

In addition to our extensive network, LUFTEX Gears Manufacturing and Services provides unmatched capabilities and expertise in the area of custom gearbox repair and service. With state-of-the-art equipment, no gearbox is too big for us to handle.

Whether custom gear manufacturing or on-site gearbox repair, let our team at LUFTEX keep your operation running.



Centers of Excellence

Our Centers of Excellence offer customers a nationwide support network. From inventory distribution to manufacturing to assembly, we have the team to ensure high quality, responsiveness, on-time delivery, and quick lead times.



Chesapeake, VA

Manufacturing, Support, Inventory, and Training

Our Western Hemisphere headquarters has 250,000 sq ft of manufacturing space, and cutting-edge technology. Centralized inventory distribution with a Foreign trade zone (FTZ), focused on inventory optimization, motor assembly, and hands-on training at our Power Institute.

















Verona, VA

Industrial Gearbox Production
This purpose-built facility is specifically designed to handle the assembly of our large industrial gearboxes.





Lufkin, TX

Manufacturing and Services
This 32,000 sq ft facility handles
gear manufacturing, gearbox repairs,
and reverse engineering.



Glendale Heights, IL

Gearmotor Assembly and Support Our Mid-West facility is optimized for high volume solutions focusing on small to medium gearmotors.











Corona, CA

Gearmotor Assembly and Support
Our West Coast facility offers dynamic
product and service solutions timely
for the Pacific coast region.











