

A global power transmission solutions provider, with facilities strategically located throughout the world, providing comprehensive products and services in your region.

## PRODUCT SHOWCASE

A COMPREHENSIVE LINEUP OF OUR POWER TRANSMISSION SOLUTIONS

### HEADQUARTERS



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Chesapeake, VA 23323

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- ★ MANUFACTURING HUB & HEADQUARTERS
- ★ MANUFACTURING HUB
- ASSEMBLY & SERVICE
- SERVICE
- ▲ REGIONAL SALES OFFICE



*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.*



#### ■ 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



#### ■ 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



#### ■ 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



#### ■ 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



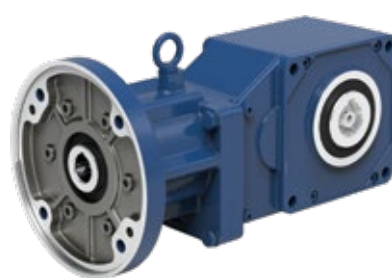
#### ■ HELICAL SHAFT MOUNT

- 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

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



#### ■ 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 (1.72 kW)
- 3/4in to 1-7/16in (Hollow & Solid)
- Up to 2,190 lb-in (247 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



#### ■ 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)



#### ■ PARAMAX® UNIMINER

- Up to 1,250 MHP
- 95mm to 200mm (Solid)
- Up to 1,080,000 lb-in (122 kNm)
- 6.3:1 to 90:1



• "H" Foot



• V-Flange



• F-Flange



## MOUNTING

• Top Mount



• Quill



• Free Shaft



• Shovel Base



• C-Face Motor



• Integral Motor



• Coupled C-Face



## INPUTS

### SEALS

Wear sleeves and pressure-rated to prevent leaks.

### HOUSING

Rugged, shock-resistant cast iron housing. Optional ductile iron housing also available.

### RING GEAR HOUSING

High power density with all reduction integrated into the compact ring gear housing.

### 500% MOMENTARY SHOCK LOAD

The Cyclo® design spreads the load across 2/3 of the reduction components, enabling the units to absorb and dissipate shocks better than typical concentric drives.

### CYCLO® DISC

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

### FAN

### FAN COVER

### OIL LEVEL INDICATOR

### SLOW-SPEED SHAFT

### ECCENTRIC CAM

### HIGH-SPEED SHAFT

## CYCLO® 6000

### 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**.

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

### ■ 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

## OPTIONS



Overhead Drive



Extended Base



Industry Packages

## SPECS



**HP RATING**  
Up to 235 HP  
(175 kW)



**DIAMETER**  
1/2in to 7in  
(Solid Shaft)



**TORQUE**  
Up to 603,000 lb-in  
(68,130 N·m)



**RATIO RANGE**  
3:1 up to 658,503:1



\* Rating applies to specific products.

• Foot Mount • Shaft Mount • Flange



## MOUNTING

• Plug-In-Shaft • Shrink Disc



• Keyed Hollow Bore



• Quill



• Coupled C-Face



• Integral Motor



## INPUTS & OUTPUTS

## QUALITY HOUSING

Aluminum housing is lighter and increases thermal rating.

## SEALS

Multiple lip, harsh duty, and food-grade designs available to prevent leaks.

## DUAL-BEARING SUPPORT



## HYPOID PINION

The single-piece all-steel hypoidal pinion lasts millions of cycles without measurable wear.

## DUAL-BEARING SUPPORT

## ALL-STEEL HYPOID GEARING

Patented Hyponic® all-steel hypoid gears provide up to 93% efficiency across all ratios, ensuring quiet, smooth performance without requiring a cooling fan.

## QUILL O-RING

Prevents water intrusion.

## C-FACE QUILL

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

# HYPONIC®

## REQUIRES NO OIL CHANGES AND UP TO 93% EFFICIENT

The Sumitomo Drive Technologies Hyponic® gearing represents **hypoid gearing excellence**. With millions of Hyponic® units currently in service, the product features a compact, modular housing, maintenance-free grease lubrication and boasts a **gear efficiency of up to 93%** across all ratios.

The **maintenance-free** grease lubrication enables the unit to be mounted in any orientation without custom modifications. In addition to general-purpose solutions, with multiple food grade options, Hyponic® is perfect for **harsh, high-pressure wash-down environments**.

## OPTIONS



Stainless Steel Motor



SHIELD360® Protection



EasyGrip™

## SPECS



**HP RATING**  
Up to 15 HP  
(11 kW)



**DIAMETER**  
3/4in to 2in



**TORQUE**  
Up to 13,100 lb•in  
(1,480 N•m)



**RATIO RANGE**  
5:1 up to 1,440:1



## NEMA QUILL C-FACE

The quill style motor adapter allows for maximum motor flexibility. Supports NEMA 56C, 143TC, and 145TC.

## OPTIONS



• Shrink Disc

## INDUSTRIES



Produce



Meat



Pharmaceutical



Seafood

## HYPOID PINION

The single-piece all-steel hypoidal pinion lasts millions of cycles without measurable wear.

## COVER PLATE

Precision machined internal surface with seal groove to enhance the maintenance-free sealed-for-life unit.

## ALL-STEEL HYPOIDAL GEARS

These gears provide lasting durability and up to 93% gear efficiency, with consistently smooth, quiet operation

## CONTOURED HOUSING

Its unique design reduces the build-up of bacteria in those hard to reach areas.

## RDH SEAL

Antimicrobial FKM Shaft Isolator seal.

# FORTRESS®

## HIGHLY EFFICIENT, GREASE-LUBRICATED COMPACT DESIGN

With over **25 years of hypoid gearing excellence**, we are experts in efficiency. Fortress® features a compact, modular housing, food grade grease lubrication, and boasts up to **93% gear efficiency**. The IP69K rating also means that it's perfect for harsh, high-pressure wash-down environments.

The **maintenance-free** grease lubrication enables the unit to be mounted in any orientation without custom modifications. Additionally, take advantage of our **flange, foot-mount, and torque arm** options which drop right in, allowing you to conveniently replace those old, inefficient gearboxes.



## PERFECT FOR CAUSTIC ENVIRONMENTS

With our all-new Fortress® gearbox, **never worry about paint chips contaminating your operation again**. The cast 304 stainless steel housing offers resistance to the most caustic environments and the **unique contour design** reduces the build-up of bacteria in those hard to reach areas.

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.

## SPECS



**HP RATING**  
1/2 HP to 2 HP  
(1.72 kW)



**DIAMETER**  
3/4in to 1-7/16in



**TORQUE**  
Up to 2,190 lb•in  
(247 N•m)



**RATIO RANGE**  
7:1 up to 60:1

## MOUNTING



• Flange Mount



• Foot Mount



• Shaft Mount



### 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.



## ■ 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.

### OPTIONS



Screw Conveyor



Mixer

### SPECS



**HP RATING**  
Up to 100 HP  
(75 kW)



**DIAMETER**  
1in to 4-15/16in  
(Hollow & Solid)



**TORQUE**  
Up to 159,983 lb•in  
(18,076 N•m)



**RATIO RANGE**  
11:1 up to 26,000:1  
and greater



- Flange Mount
- Shaft Mount



## MOUNTING

- Keyed Hollow Bore



- Taper-Grip® Bushing



- Gearmotor



- Quill



- C-Face



## INPUTS & OUTPUTS

### 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.

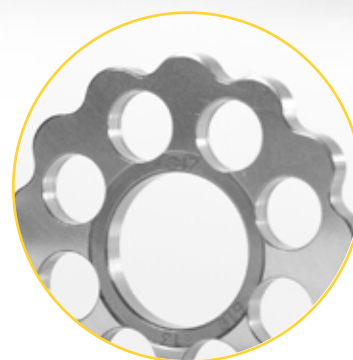


### MONOBLOC HOUSING

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

### CYCLOIDAL TECHNOLOGY

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



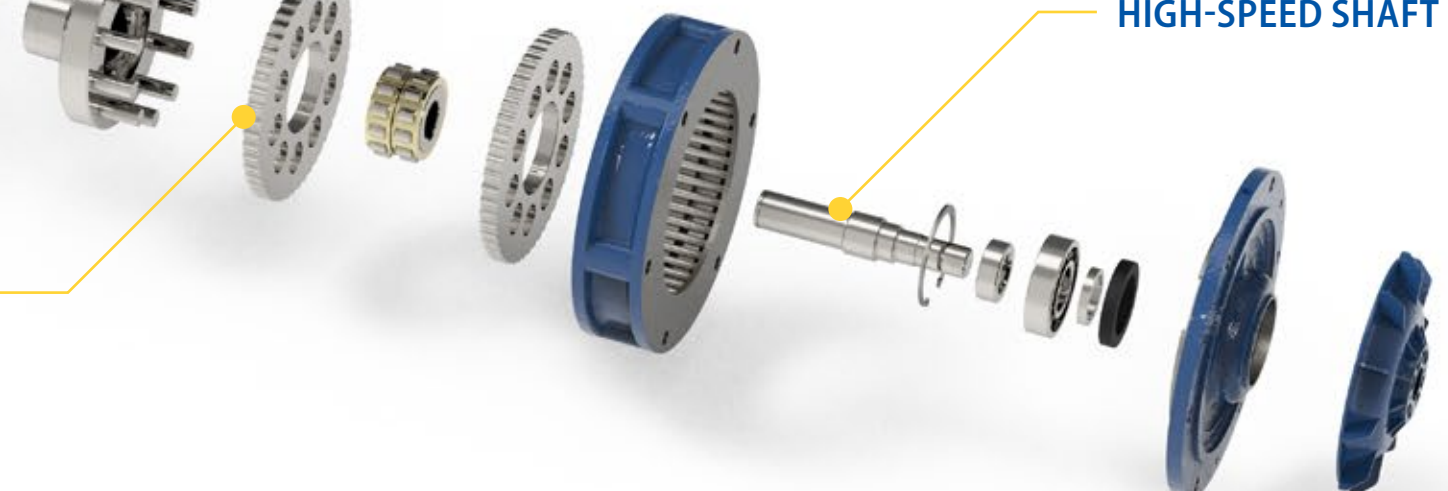
### DOUBLE OUTPUT SEALS



### 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.

### HIGH-SPEED SHAFT



## 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.

### OPTIONS



CEMA Screw  
Conveyor Drive

### SPECS



**HP RATING**  
Up to 40 HP  
(30 kW)



**DIAMETER**  
1-3/16in to 6-1/2in  
(Hollow Bore)



**TORQUE**  
Up to 75,800 lb•in  
(8,564 N•m)



**RATIO RANGE**  
11:1 up to 26,492:1

• **Shaft Mount** • **Flange Mount**



## MOUNTING

• **EasyGrip™**



• **Shrink Disc**



• **Keyed Hollow Bore**



• **Gearmotor**



• **Quill**



• **C-Face**



## INPUTS & OUTPUTS

## ALUMINUM HOUSING

Aluminum housing is lighter and increases thermal capacity.

## HARDENED STEEL GEARING

## SEALS

Multiple lip, harsh duty, and food-grade designs available to prevent leaks.

## BEVEL PINION & HELICAL GEARING

Delivers a powerful blend of torque and speed with up to 97% gear efficiency. Smooth, quiet performance without the need for a cooling fan.

## BEVEL PINION

The single-piece all-steel bevel pinion lasts millions of cycles without measurable wear.

# ■ 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.

## C-FACE QUILL

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

## OPTIONS



C-Face Motors



SHIELD360® Protection

## SPECS



**HP RATING**  
Up to 15 HP  
(11 kW)



**DIAMETER**  
1in to 2-3/16in  
(Hollow Bore)



**TORQUE**  
Up to 9,028 lb•in  
(1,020 N•m)



**RATIO RANGE**  
5:1 up to 20:1



**Paramax® UniMiner**  
Flippable housing and horizontal split line make the ideal alignment-free drive package for mining.



**SPLIT HOUSING**

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 includes two double-lipped seals and a rechargeable grease chamber positioned between them to absorb contaminants. Abrasive particulates are purged using fresh grease. Supplied with NBR (Nitrile) as standard; optional FKM (Viton®) available.

**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.

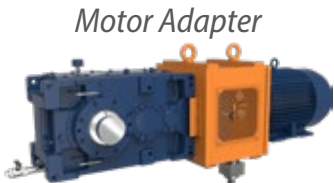
**PARAMAX® 9000**

**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.

**DRIVE PACKAGE**



**SPECS**



**HP RATING**  
Up to 5,230 HP  
(3,900 kW)



**DIAMETER**  
58mm to 360mm  
(Hollow & Solid)



**TORQUE**  
Up to 4.9 million lb•in  
(552 kN•m)



**RATIO RANGE**  
Up to 500:1  
Standard

**SPECIAL DRIVE CONFIGURATION**



**Solid Shaft**



**Shrink Disc**



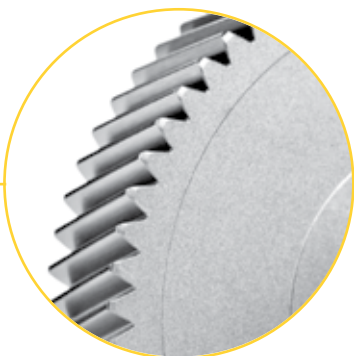
**Keyed Hollow Bore**



**OUTPUTS**

**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.

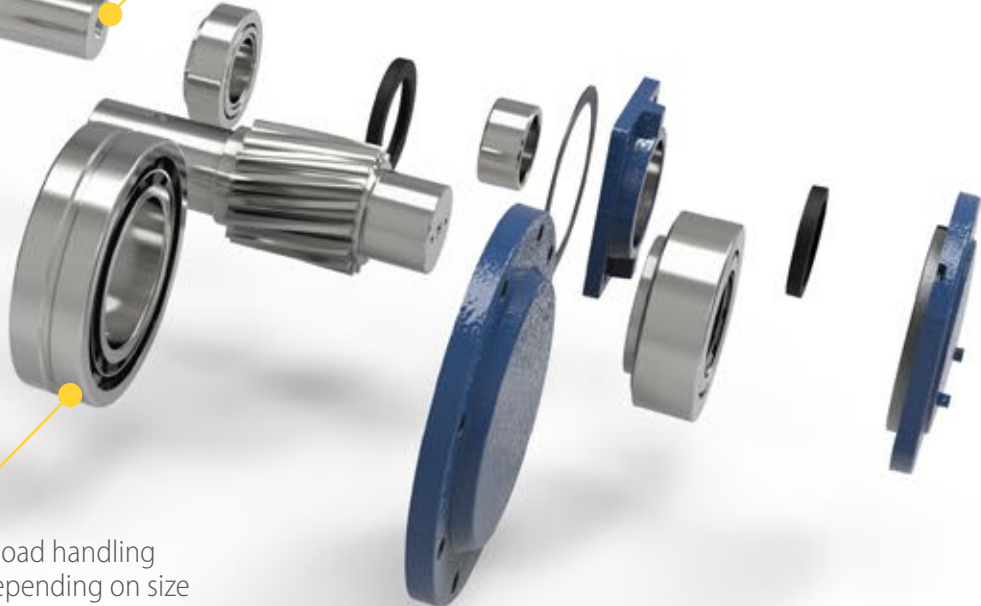


**HIGH-TENSILE SHAFT**

Strong shaft material optimized for extended operation in rugged environments.

**TIER 1 SUPPLIER ROLLER BEARINGS**

High-capacity bearings increase load handling without extending lead times. Depending on size and configuration, units are equipped with tapered, double-row spherical, or cylindrical roller bearings.



- Keyed Hollow Bore
- Extended Bearing Housing
- Oversized Solid Shaft
- Normal Solid Shaft

MIXER OPTIONS

- Extended Bearing
- Pilot or Flange Mount
- Hollow Shaft

OUTPUTS

### 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 high-speed gears.

### PINION SHAFTS

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

### SLOW-SPEED SHAFT

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

### LUBRICATION

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

### VARIATIONS



### SPECS

**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)

**RATIO RANGE**  
Up to 630:1 (Custom ratios available)

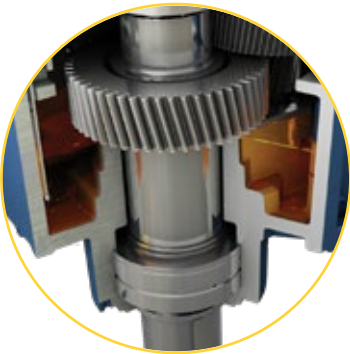
## HANSEN P4

### REMARKABLE POWER AND PERFORMANCE WITH LOW NOISE

The Hansen P4 multi-stage gearbox 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 remarkable **power and performance**.

The unique **Oil-Lock®** system offers a **maintenance-free** seal on high speed shaft extensions, designed to keep the oil in and dirt out.

**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.



### INTEGRATED DRYWELL

Cast directly into 3- and 4-stage vertical housings, this integrated drywell provides a truly leak-proof, low-speed shaft solution.

### HIGH-SPEED SHAFT

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

### MAINTENANCE-FREE OIL-LOCK®

Standard high-speed seal arrangement.





E-CYCLO®  
Strain Wave

• A-Series



• C-Series



• UA-Series



• DA-Series



FINE CYCLO®  
Cycloidal

Servo Hyponic®



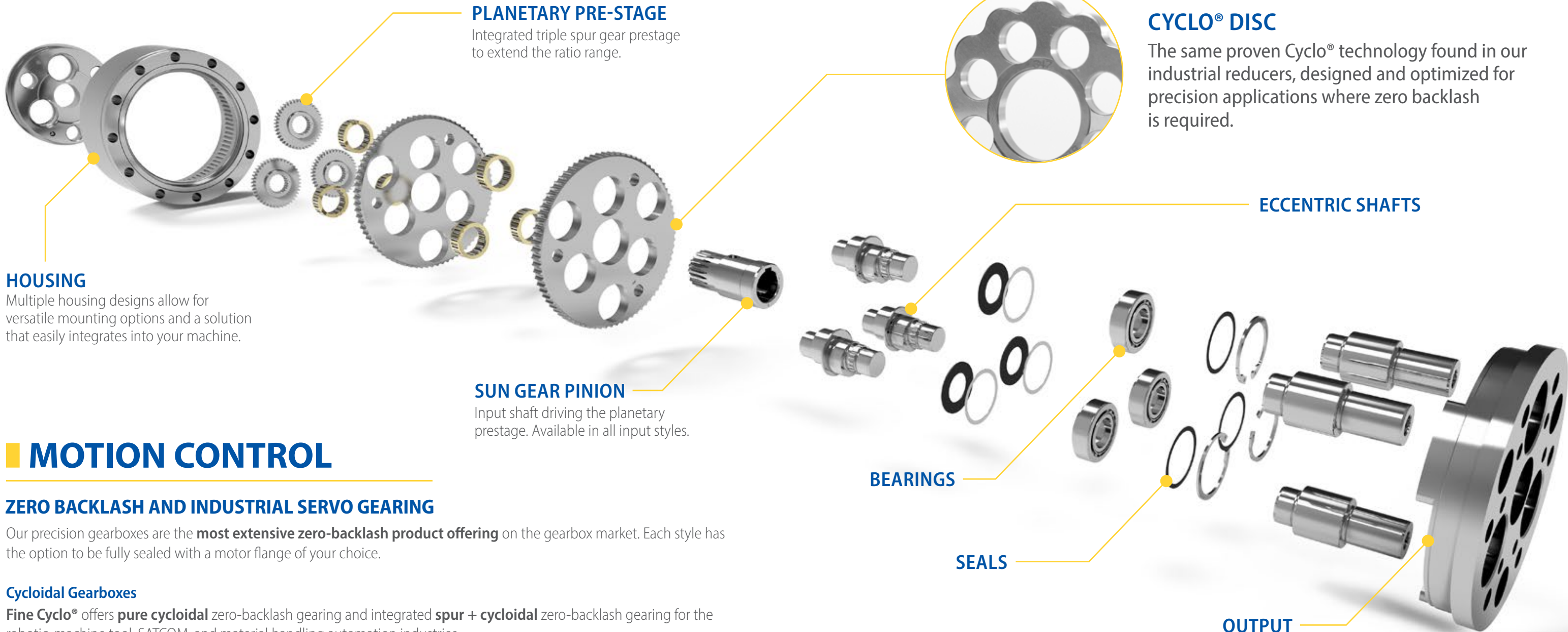
Servo Bevel BuddyBox®



Servo Cyclo®



SERVO  
GEARBOXES



## HOUSING

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

## PLANETARY PRE-STAGE

Integrated triple spur gear prestage to extend the ratio range.

## SUN GEAR PINION

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

## CYCLO® DISC

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

## ECCENTRIC SHAFTS

## BEARINGS

## SEALS

## OUTPUT

# MOTION CONTROL

## ZERO BACKLASH AND INDUSTRIAL SERVO GEARING

Our precision gearboxes are the **most extensive zero-backlash product offering** on the gearbox market. Each style has the option to be fully sealed with a motor flange of your choice.

### Cycloidal Gearboxes

**Fine Cyclo®** offers **pure cycloidal** zero-backlash gearing and integrated **spur + cycloidal** zero-backlash gearing for the robotic, machine tool, SATCOM, and material handling automation industries.

### Strain Wave Gearboxes

The **E-Cyclo®** blends strain wave reduction and cycloidal engagement technologies to provide zero-backlash performance with **exceptionally high torsion** and **low moments of inertia**.

### Advanced Servo Gearboxes

The **sturdiness** and **reliability** of our premium industrial gearboxes **modified** for inclusion into **servo systems**.

## 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.

## SPECS



**NOM TORQUE**  
Up to 12,000 N•m  
(106,209 lb•in)



**DIAMETER**  
Up to 138 mm  
(Hollow Bore)



**ACCEL TORQUE**  
Up to 30,000 N•m  
(265,522 lb•in)



**RATIO RANGE**  
29:1 to 283:1



**INPUT SPEED**  
Up to 10,260 RPM

# OPTIDRIVE E3

## 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).

- 150% Overload for 60 Seconds
- 175% Overload for 2.5 Seconds
- 98% Efficiency

### FAST CONNECTION

5mm rising clamp terminals with captive screws.

### KEYHOLE MOUNTS

### QUICK REFERENCE

Integrated help card.

### OPTISTICK SMART

This rapid Commissioning Tool allows copying, backup, and the restoring of drive parameters.



### DUAL ANALOG INPUTS

## SPECS



**HP RATING**  
Up to 400 HP  
(250 kW)



**POWER OPTIONS**  
Single-Phase: 200-240V  
3-Phase: 200-600V



**TORQUE**  
Up to 200%  
(From Zero Speed)



Compliant with international standards.

IP20



IP66



Non-Switched

IP66



Switched

IP20



IP55



IP66



## ENCLOSURES



## 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.

- 200% Overload for 4 Seconds
- 98% Efficiency
- Integral Brake Transistor



# Tailored gearbox solutions for every industrial need.

# Industrial motor options built to drive operational success.

## ■ 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)



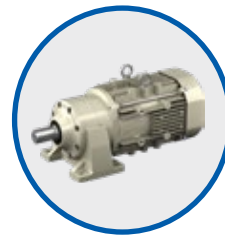
## ■ ALTAX®

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*



## ■ GEAR COUPLINGS

Compensates for **eccentricity** and **deflection** angle between the shafts, and transmits the torque **smoothly** from the driving side.

**Torque:** Up to 57m lb•in  
(6.4m N•m)

**Bore Size:** Up to 35in

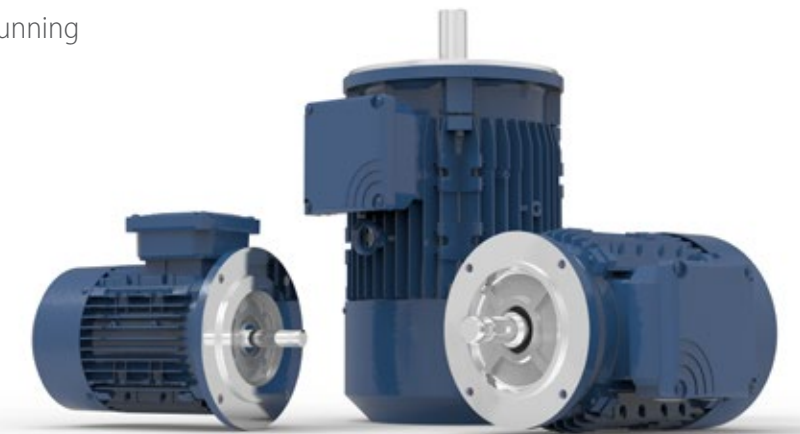
**Type:** Gear



## ■ MOTORS

EPNA motors are **high** performance, exceptionally **cool** running **long-lived** motors with **corona-resistant** insulation.

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



## ■ ENCODERS

Two standard incremental types:

- **For non-brakemotors:** AV32 magnetic type.
- **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



Online product configurator **streamlines the selection process**, enabling **you** to build our power transmission products for **your** specific application.

[US.SumitomoDrive.com/Configurator](https://US.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 Drive Technologies representative.

[US.SumitomoDrive.com/QuickShip](https://US.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 & 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

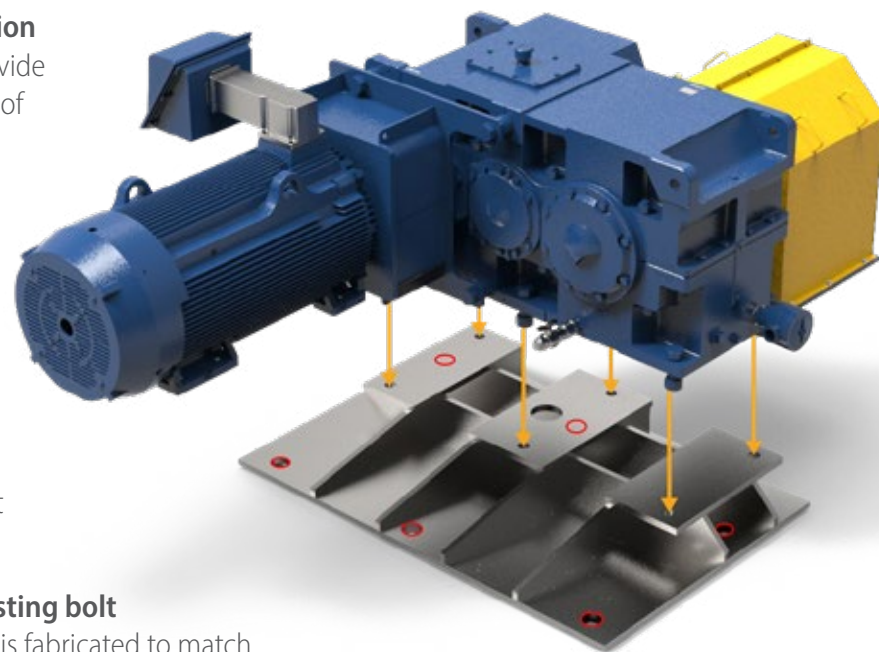
#### Match Existing Footprint

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 retro-fits 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

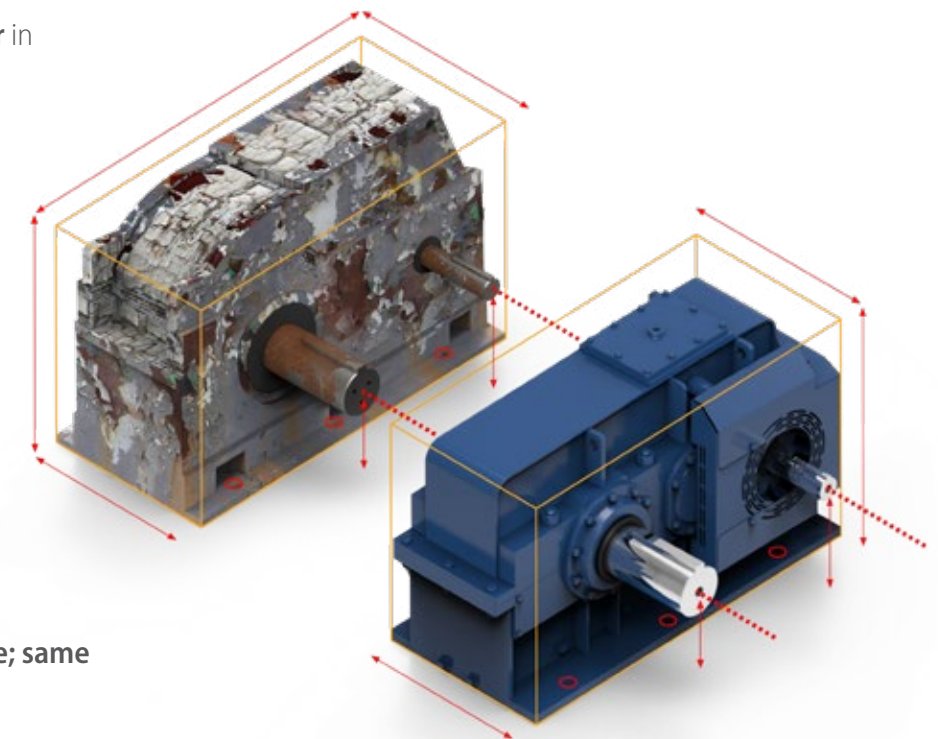
#### Match Existing Unit's Critical Dimensions

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 replacements** can have your application back up and running in **no time**. We offer fabricated steel housings, custom baseplates, custom gearing and shafting, and more!

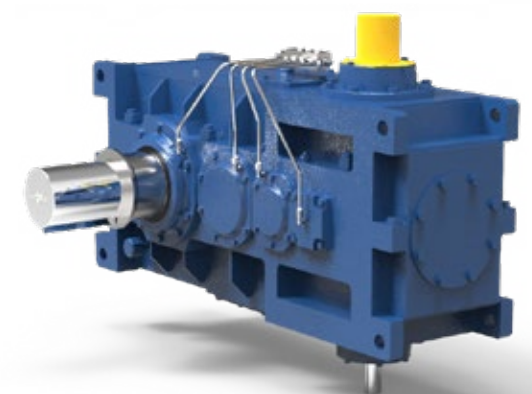
**This product will literally drop-in to place; same footprint, same shaft positions!**



## 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

**WE THINK!**



### 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.
- **Expandable**  
Multi-reducer monitoring.
- **Reliable**  
Schedule machine downtime to avoid lost production.
- **Cost-Effective**  
Lower overall ownership cost.

the **CHECK**   
**ENGINE LIGHT** for  
**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:**  
[US.SumitomoDrive.com/CycloSmart](http://US.SumitomoDrive.com/CycloSmart)



# Our factory capabilities support all of your gearbox needs.



## AFTERMARKET

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

### 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 Sumitomo Drive Technologies-manufactured 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.

### ON-SITE INSPECTIONS & MAINTENANCE

**For Your Convenience**

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

## EXPERTS IN SERVICE

**Global Support, Local Service**

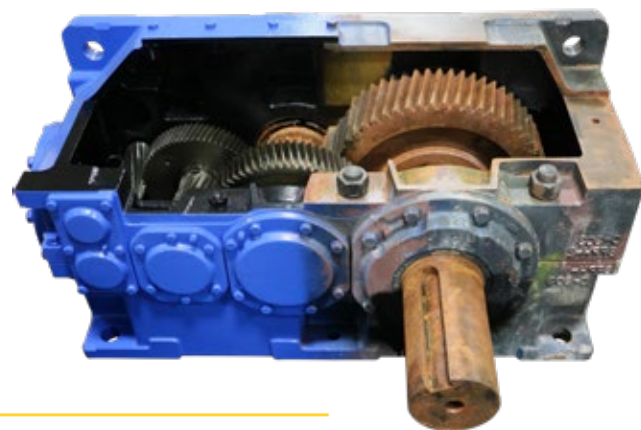
With a **vast network** of engineers and gearing experts, there's **no challenge** we can't tackle.

Our **Luftex facility**, a core part of our operation, brings **unmatched capabilities** and deep **expertise** in **custom** gearbox repair and service. Equipped with state-of-the-art technology, we're built to handle even the **largest** and most **complex** gearboxes.

**Sumitomo Drive Technologies**

**LUFTEX**

From custom gear manufacturing to on-site gearbox repair, count on the team at our **Luftex facility** to keep your operation **running smoothly**.



## 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 **360,000 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**

Purpose-built facility specifically designed to handle the assembly of our **large industrial gearboxes**.



### GLENDALE HEIGHTS, IL

**Gearmotor Assembly and Support**

Our Midwest facility is optimized for high volume solutions focusing on **small to medium gearmotors**.



### LUFKIN, TX

**Manufacturing and Services**

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

email: [SMA.Service@shi-g.com](mailto:SMA.Service@shi-g.com)

phone: **757-485-3355**

web: [US.SumitomoDrive.com](http://US.SumitomoDrive.com)