



# Sumitomo Drive Technologies



## Sumitomo Drive Technologies

Sumitomo, Hansen and Seisa. Three brands, one global power transmission solutions provider. Sumitomo Drive Technologies has facilities strategically located throughout the world, providing comprehensive products and services in your region.



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

Global Headquarters, Tokyo, Japan

Sumitomo Machinery Corporation of America  
[www.SumitomoDrive.com](http://www.SumitomoDrive.com)

For worldwide locations, please visit [www.sumitomodrive.com/worldwide](http://www.sumitomodrive.com/worldwide)  
 Contact your local representative at [www.sumitomodrive.com/representative](http://www.sumitomodrive.com/representative)  
 Tel: 1-800-SM-CYCLO (762-9256) 01.001.51.06 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.

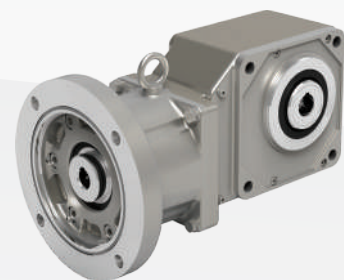
## Robust, Reliable, Efficient

## No Matter the Application



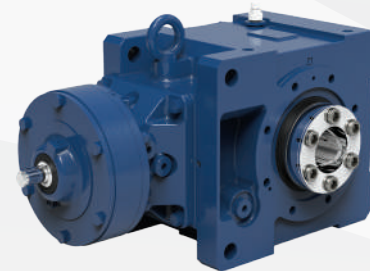
### C CYCLO® 6000

- 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



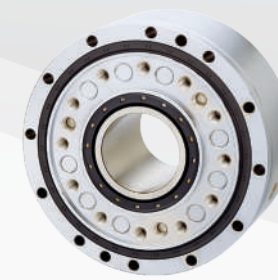
### H HYPONIC®

- 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



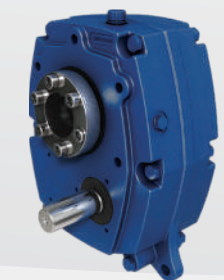
### MC MOTION Control

- 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



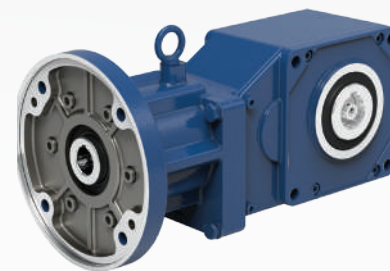
### HS HELICAL Shaft Mount

- 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



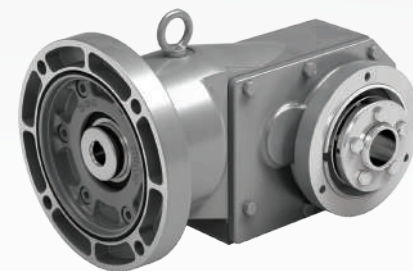
### INVERTERS E3 & P2

- Up to 350 HP (250 kW)
- 200 to 600V (Single & 3-Phase)
- Up to 200% (From Zero Speed)
- Up to 200% Overload (4 secs)



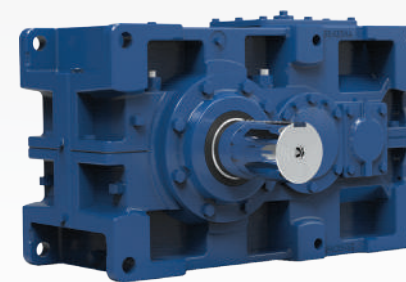
### BH BBB-H

- 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



### F 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



### PX 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 UNIMINER

- Up to 2,300 HP (1,738 kW)
- 4-5/8in to 7-1/2in (Hollow & Solid)
- Up to 889,000 lb·in (100,445 N·m)
- 10:1 to 71:1 (and custom ratios)

- "H" Foot
- V-Flange
- F-Flange



**MOUNTING**

- Top Mount
- Quill
- Free Shaft
- Shovel Base
- C-Face Motor
- Integral Motor
- Coupled C-Face



**INPUTS**

**SEALS**

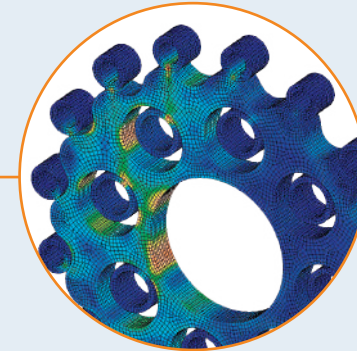
Wear sleeves and pressure-rated to prevent leaks.

**HOUSING**

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

**RING GEAR HOUSING**

High power density, all reduction contained in 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.

**DYNAMIC AIR MOTIVATOR**

**MOTIVATOR COVER**



\* Rating applies to specific products.

**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 3-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)



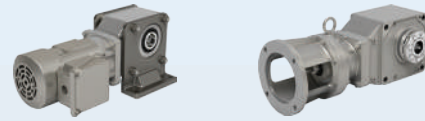
**RATIO RANGE**  
3:1 up to 658,503:1

- Foot Mount
- Torque Arm
- 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.

### ALL-STEEL HYPOID GEARING

Patented Hyponic® gear technology is up to 93% gear efficient across all ratios providing a smooth, quiet operation which does not require a cooling fan.

### SEALS

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

### HYPOID PINION

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

### QUILL O-RING

Prevents water intrusion.

### DUAL BEARING SUPPORT

### DUAL BEARING SUPPORT

### C-FACE QUILL

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



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

The Sumitomo Hyponic® gearing represents over 25 years of 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.

Simplify your gear drive assembly and increase efficiency by switching to Hyponic®.

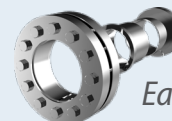
### OPTIONS



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

## OPTIONS



• Shrink Disc



• Stainless Steel Motor

## INDUSTRIES



Produce



Meat



Pharmaceutical



Seafood

## NEMA QUILL C-FACE

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

## HYPOID PINION

Single-piece all steel hypoidal pinion with dual bearing support for longer life. 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

Long-lasting hypoid gear efficiencies up to 93% with smooth and quiet operation.

## CONTOURED HOUSING

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

## CASSETTE SEAL

Antimicrobial FKM Shaft Isolator seal packed with food grade grease and all stainless steel wearing ring and springs.

## 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.

Simplify your gear drive assembly, increase your efficiency, and protect your operation by switching to Fortress™.



With our all-new Fortress™ gearbox, never worry about paint again. The stainless steel cast 304 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  
(1.5 kW)



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



**TORQUE**  
Up to 1,970 lb-in  
(223 N·m)



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

## MOUNTING



• Flange Mount



• Foot Mount



• Torque Arm





**MOUNTING**



**INPUTS & OUTPUTS**

**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.



**ONE 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.

**TAPERED BEARINGS**

Resist axial and radial loads simultaneously.

**TANDEM DUAL LIP SEALS**

Prevent leaks and exclude contaminants.



\* Rating applies to specific products.

**BEARING**

**CYCLO® DISC**

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

**B4 CYCLO® BEVEL BUDDYBOX® 4**

**RIGHT ANGLE SPIRAL BEVEL WITH CYCLO® OR PLANETARY INPUTS**

A robust, state-of-the-art, mid-sized family 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.

**MOBIL SHC™ GEAR HI-SHOCK 150**

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

**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

• Face Mount

• Hollow Shaft



• MOUNTING

• Keyed Hollow Bore



• Taper-Grip® Bushing



• Gearmotor



• Brakemotor



• Quill



• C-Face



• INPUTS & OUTPUTS

LONG LIFE BEARINGS

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

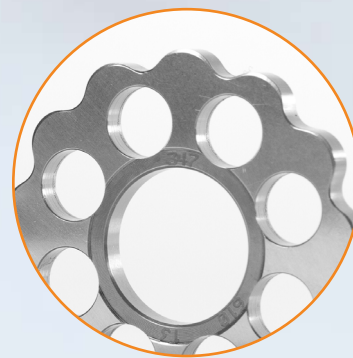


MONOBLOC HOUSING

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.



MOBIL SHC™ GEAR HI-SHOCK 150

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

HELICAL GEARING

Hardened-steel gearing.

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



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.

OPTIONS



CEMA Screw Conveyor Drive



Lip Seal

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



**QUALITY 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**

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.

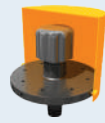
**OPTIONS** | C-Face Motors | EasyGrip™ | SHIELD360® Protection | **SPECS** | **HP RATING** Up to 15 HP (11 kW) | **DIAMETER** 1in to 2-3/16in (Hollow Bore) | **TORQUE** Up to 9,028 lb•in (1,020 N•m) | **RATIO RANGE** 5:1 up to 20:1



• Immersion Heater

• Creep Drive

• Heavy Duty Anti-Dust Breather



ACCESSORIES

• Solid Shaft

• Shrink Disc

• Keyed Hollow Bore



OUTPUTS

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

This option features a dual-layer oil and grease sealing system.

SLOW SPEED SHAFT

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 BEARING

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

PX 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

Swing Base



Baseplate



Motor Lantern



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

- Vertical
- Horizontal
- Single-Stage



**VARIATIONS**

- Hollow Shaft - Shrink Disc
- Normal Solid Shaft
- Hollow Shaft - Keyed
- Oversized Solid Shaft
- Extended Bearing Housing

**VERTICAL SHAFT OPTIONS**

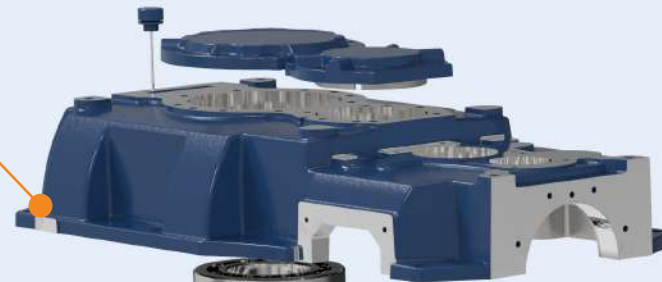
- Extended Bearing
- Pilot or Flange Mount
- Hollow Shaft



**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.



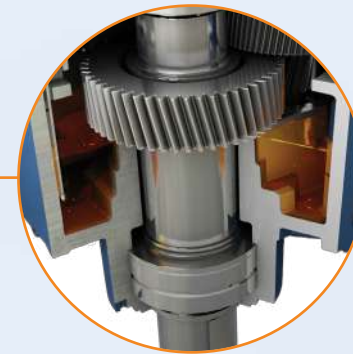
**SLOW-SPEED SHAFT**

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



**INTERNAL HOUSING**

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



**INTEGRATED DRYWELL**

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

**P4 HANSEN P4**

**REMARKABLE POWER AND PERFORMANCE WITH LOW NOISE**

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 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.

**OPTIONS**



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

**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)

• A-Series



• C-Series



• UA-Series



• SERIES

• Output Shaft



• Hollow Shaft



• Keyed



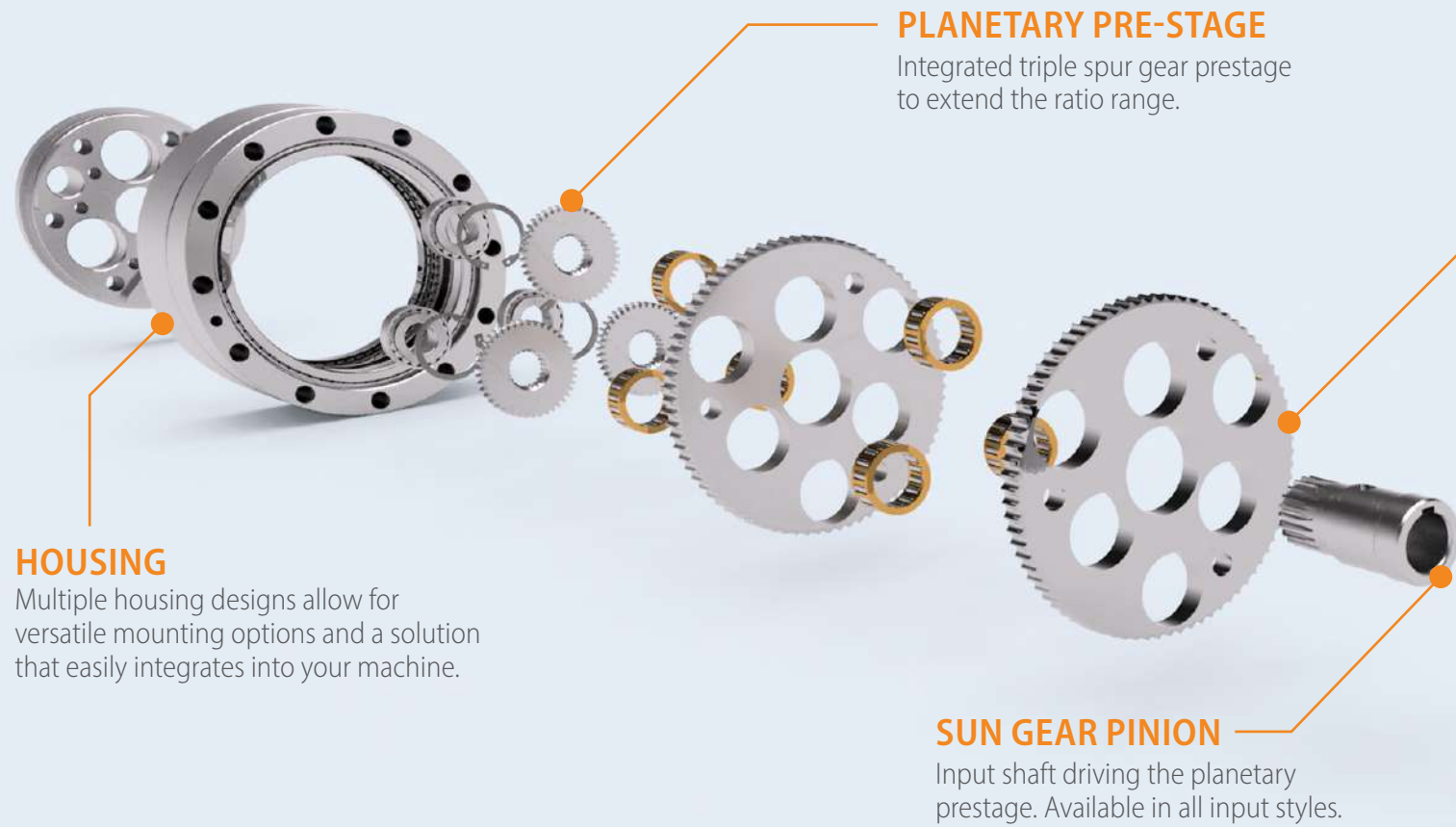
• Coupling



• Clamp Ring



• INPUTS & OUTPUTS



**HOUSING**

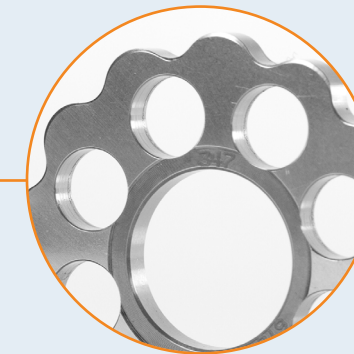
Multiple housing designs allow for versatile mounting options and a solution that easily integrates into your machine.

**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**

# 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.

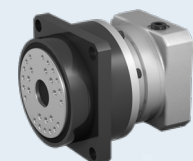
**C Series** - Large hollow shaft with high precision point to point movement. Fully sealed, single stage gearbox.

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

## 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.

**OPTIONS**



IB-Series



Cyclo® Servo 6000

**SPECS**



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



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



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



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

# 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 secs
- 175% Overload for 2.5 secs
- 98% Typical Efficiency


 Compliant with international standards.



## ENCLOSURES

### FAST CONNECTION

5mm rising clamp terminals with captive screws.

### KEYHOLE MOUNTS

### QUICK REFERENCE

Integrated help card.

### OPTISTICK SMART

Rapid Commissioning Tool that allows copying, backup, and the restoring of drive parameters.



### DUAL ANALOG INPUTS



### INTEGRATED DISPLAY

LED or multi-language text display.

### 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.

## SPECS



**HP RATING**  
Up to 350 HP  
(250 kW)



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



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

- 200% Overload for 4 secs

- 98% Typical Efficiency

- Integral Brake Transistor



## 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)

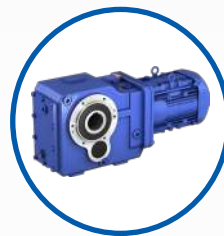


## Rhytax®

Right-angle shaft speed reducer. Helical gearing provides low noise and high efficiency in a compact body. It has enhanced optional installation methods: foot, flange, and hollow shaft.

**Torque:** Up to 74,789 lb•in  
(8,450 N•m)

**Ratio:** Up to 545:1  
**HP:** Up to 60 HP (45 kW)



## 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)



## 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*



## Variators

Beier® Variator offers mechanical stepless speed control with high capacity and long life. Ideal for low horsepower, high torque applications requiring variable speed such as packaging machines.

**Torque:** Up to 603,620 lb•in  
(68,200 N•m)

**Ratio:** Up to 10:1  
**HP:** Up to 200 HP (150 kW)



## Motors

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

- UL, CSA, DOE Compliant
- Inverter Ready, 10:1 Turndown
- NEMA Premium Efficient
- Up to 74 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

**Speed:** 6,000 RPM

**Shock:** 50G, 11 mS duration

**Ingress Rating:** IP65



## Couplings

Complete line of couplings for a wide range of applications. All couplings are manufactured to the highest specifications, and meet the most rigorous material specifications.

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

**Bore Size:** Up to 35in  
**Type:** Flexible, Grid and Disc



## Additional Services



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

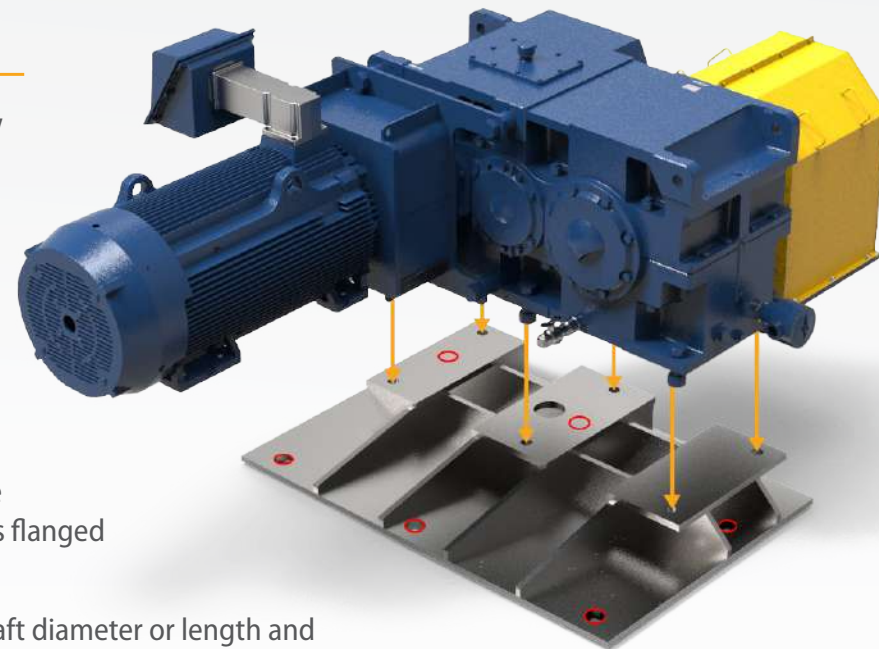
*Match existing footprint*

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

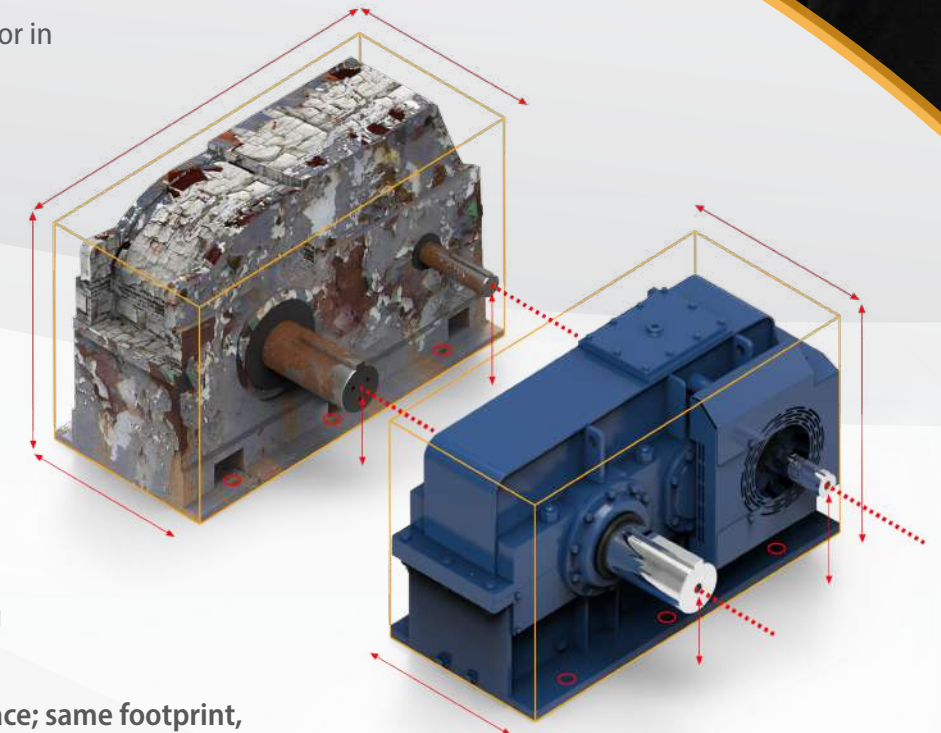
*Match existing unit's critical dimensions*

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.

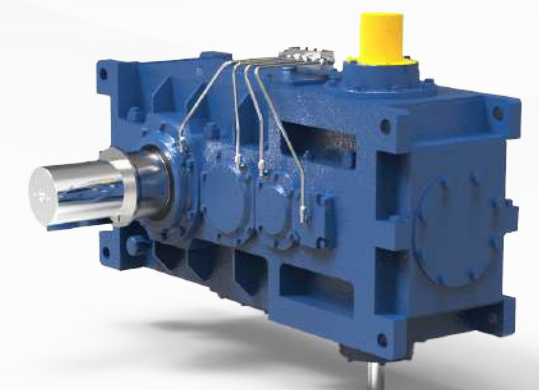
These stress-free units can have your application back up and running in no time. We offer fabricated steel housings, custom baseplates, custom gearing and shafting and more!

**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.



### 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!**



### 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!**

## 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: Hydrosopic 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](http://SumitomoDrive.com/CycloSmart)



Our factory capabilities support all of your gearbox needs.



**LUFTEX**

A Sumitomo Drive Technologies Company

## 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 a 60-ton crane capacity and 41 ft hook height, 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.

C H B4 B5 HB HS F    



### Verona, VA

#### Industrial Gearbox Production

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

PX P4



### Glendale Heights, IL

#### Gearmotor Assembly and Support

Houses our state-of-the-art paint system for our SHIELD360® packages for Cyclo®, BuddyBox®, and Hyponic®.

C H B4 B5 HB 



### Lufkin, TX

#### Manufacturing and Services

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





### Corona, CA

#### Gearmotor Assembly and Support

Our West Coast location offers repairs and supplies gearmotor products to U.S. customers.

C H B4 B5 HB 

### 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-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.

### Field Services

*For Your Convenience*

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

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

phone: 757-485-3355

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