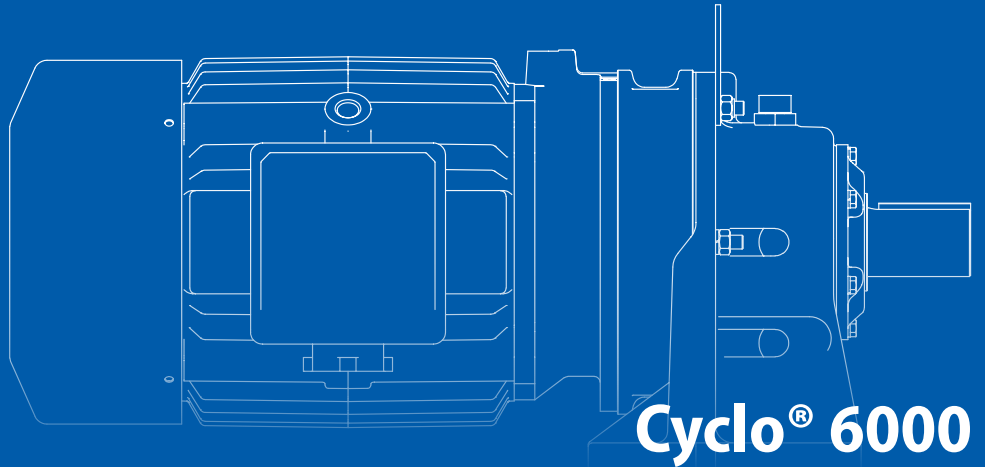


**Sumitomo Drive Technologies**  
*Always on the Move*



*Highly Reliable, Torque Dense Cycloidal  
Speed Reducers and Gearmotors*

*6000 Series*



# Cyclo® 6000 Series

Highly Reliable, Torque Dense Cycloidal Speed Reducers and Gearmotors

Offering unmatched reliability and exceptional performance, Cyclo® 6000 is the **most torque dense** and rugged inline drive available in the market today

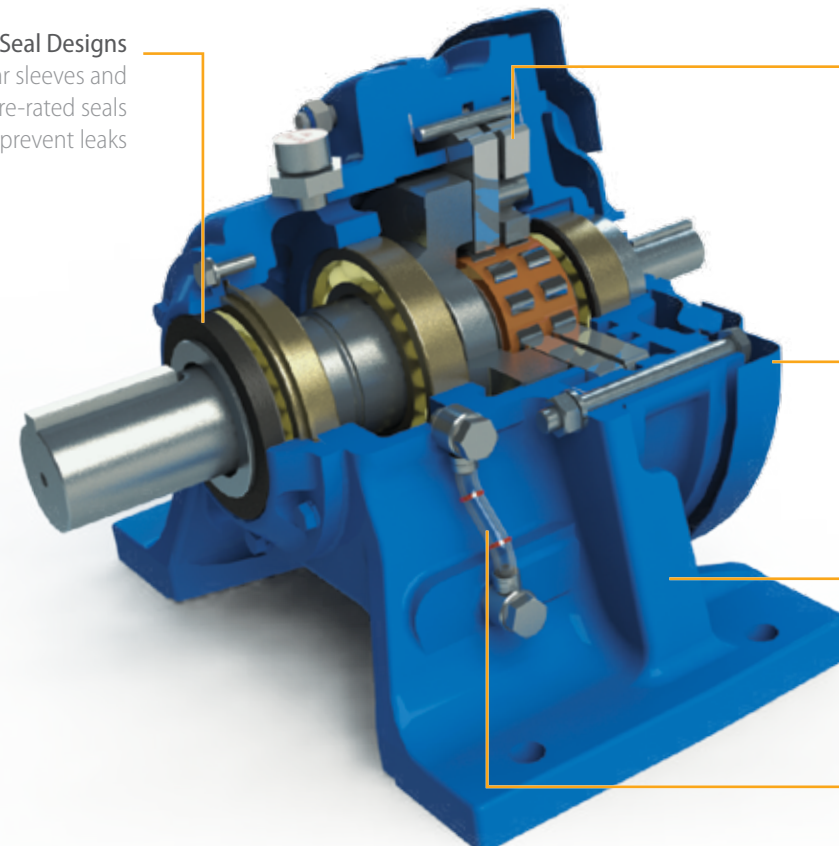
Sumitomo Cyclo® speed reducers and gearmotors are the **premier in-line drives**. The revolutionary Cyclo® design provides **quiet, efficient and reliable performance** exceeding that of involute tooth gear designs. Unlike geared designs, the Cyclo®'s reduction components operate in compression rather 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.

## Features for the Cyclo® 6000 Series

- ▶ **Cycloidal Speed Reduction Technology**  
Quiet, efficient and reliable operation with high torque density and compact size
- ▶ **Modular Design**  
Interchangeable cast iron housings in foot, flange or face mounting configurations
- ▶ **Universal Mounting Arrangements**  
Available free-shaft, quill hollow shaft, C-face, shovel base, and top-mount inputs
- ▶ **Superior Steel Components**  
Internal components manufactured from hardened, vacuum-degassed, bearing grade steel provide minimal vibration, low noise, low backlash and extended operational life
- ▶ **Exceptional Performance**  
Designed to withstand shock loads exceeding 500% of their ratings, backed by standard 24 month warranty

## Specifications Summary

<b>Sizes:</b>	23 sizes 5 lbs to 5000 lbs (2.2 to 2273 kg)
<b>Torque Capacity:</b>	55 to 603,000 lb-in (6.2 to 68,130 N-m)
<b>HP Rating:</b>	.10 to 235 HP (.075 to 175 kW)
<b>Ratio Range:</b>	3:1 to 119:1 (single) 104:1 to 7569:1 (double) 8041:1 to 658,503:1 (triple)
<b>Mounting:</b>	Foot, Flange, Face Mount
<b>Motor Standards:</b>	NEMA, IEC, JIS, UL, CSA, CE



**Superior Seal Designs**  
Wear sleeves and pressure-rated seals prevent leaks

**Hardened Steel Internal Components**  
All rotating components are fully hardened, vacuum degassed bearing grade steel, for consistent, reliable performance

**Unmatched, Space-Saving Design**  
High power density, all reduction contained in compact ring gear housing

**Dependable Housing Designs**  
Rugged, shock-resistant cast iron housing. Optional ductile iron housing also available

**Dynamic Oil Level Indicator**  
Unique oil sight gauge for simple, visible lubrication indication

## Mounting Options

"H" Foot, V-Flange and F-Flange are available mounting options for the Cyclo® 6000 series.



"H" Foot



V-Flange

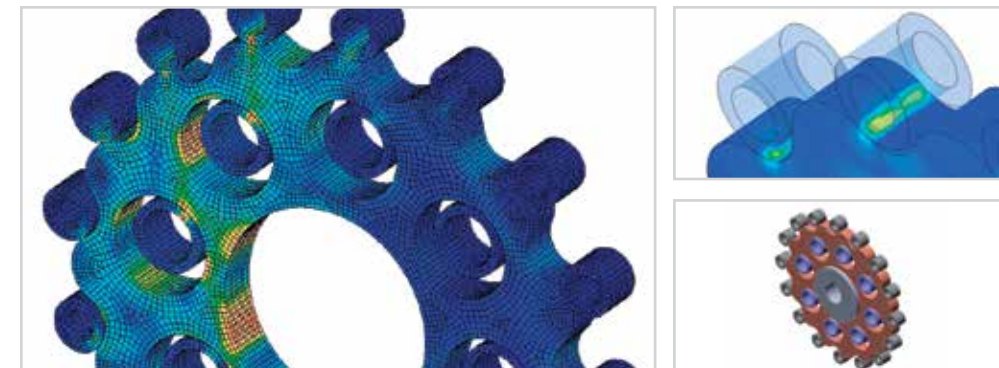


F-Flange

## Exceptional Shock Resistance

### 500% Momentary Shock Load Capability

The Cyclo® design spreads the load across larger areas or to multiple components, enabling the units to absorb and dissipate shocks better than typical concentric drives.



This modeled image illustrates that the internal rotating components of a Cyclo® reducer or gearmotor can withstand high shock loads because the stresses are distributed across a large area. This contrasts with single point concentrations of stresses in a conventional gearbox. The rendering shows Von Mises stress distribution at 500% shock loading in dynamic simulation environments.

## Input Options



Free-Shaft



Gearmotor



C-Face Quill



Shovel Base



C-Face Adapter

## Motor Options

### Integral Motors

Exceptionally compact, low inertia three phase motors. Inverter ready

### Brake Motors

Amazingly durable, fast-acting spring set electrically released brakes

### C-Face Motors

Numerous versions available including:

- NEMA Premium Efficiency
- Inverter Duty
- Severe Duty
- Vector Duty
- Stainless Steel

**The most torque dense and rugged inline drive available in the market today**



Top-Motor Mount

## Cyclo® 6000 Series Frame Size Details

Frame Size	MAXIMUM POWER		BORE DIAMETER
	Output Torque lb-in (N-m)	Input Power HP (kW)	Solid Shaft Inch (mm)
6065	266 (30)	1/3 (.25)	0.5 (14)
6075	531 (60)	1/2 (.4)	0.75 (18)
6085	885 (100)	1 (.75)	0.875 (22)
6095	1,770 (200)	2 (1.5)	1.125 (28)
6105	2,660 (300)	3 (2.2)	1.125 (28)
6115	3,720 (420)	5 (3.7)	1.25 (32)
6125	5,570 (630)	7.5 (5.5)	1.5 (38)
6135	8,320 (940)	15 (11)	1.875 (50)
6145	12,200 (1380)	20 (15)	1.875 (50)
6165	18,600 (2100)	30 (22)	2.25 (60)
6175	27,900 (3150)	40 (30)	2.75 (70)
6185	44,300 (5005)	60 (45)	3.125 (80)
6195	70,400 (8000)	60 (45)	3.625 (95)
6205	82,300 (9300)	75 (55)	3.875 (100)
6215	112,000 (12660)	75 (55)	4.25 (110)
6225	141,000 (15930)	75 (55)	4.625 (120)
6235	161,000 (18195)	75 (55)	5 (130)
6245	228,000 (25765)	75 (55)	5.5 (140)
6255	264,000 (29830)	75 (55)	6.25 (160)
6265	383,000 (43280)	75 (55)	6.625 (170)
6275	536,000 (60570)	60 (45)	7 (180)



## Cyclo® Technology: Unparalleled Performance

Proven in millions of installations worldwide, Sumitomo's unique Cyclo® technology offers quiet, efficient and reliable operation with high torque density and compact size:

### Cycloidal "Gearless" Speed Reduction

Torque transmitting parts roll, rather than grind, providing quiet, efficient and reliable performance

### Superior Materials

52100 bearing grade steel rotating components, hardened to 58 Rockwell C for unmatched durability and reliability

### Long Life and High Shock Load Capacity

The Cyclo® input has two-thirds of its reduction components in contact at all times, resulting in exceptionally rugged, shock resistant performance

### Sumitomo Standard 24-month Warranty

Our standard warranty is unlimited by hours of operation



## Cyclo® 6000 Applications

Conveyors

Sawmills and Wood Mills

Food and Beverage Machinery

Wastewater Treatment

Steel Mills

Automotive Plants

Construction Equipment

Recycling Machines

Paper Mills

Poultry Plants

Processing Plants

Mixers



# Cyclo® 6000 series

[www.smcyclo.com/Cyclo6000](http://www.smcyclo.com/Cyclo6000)



## Product Configurator: [www.sumitomodrive.com/Configurator](http://www.sumitomodrive.com/Configurator)

### Trying to select a drive? Need more technical specifications? Need pricing?

Sumitomo Drive Technologies' online product Configurator streamlines the selection process, enabling you to build our power transmission products for your specific application.

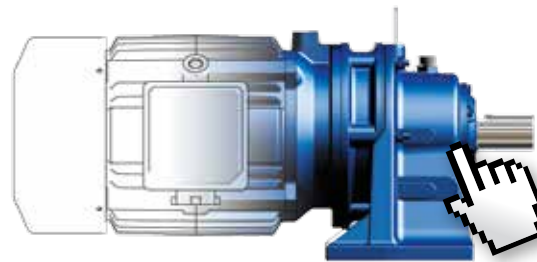


Available 24 hours a day, 7 days a week, registered users quickly receive results that include:

- Downloadable 2D and 3D CAD files
- Product Literature
- Technical Specification Sheet
- Product Ratings
- Request for Quote\*
- Quotations\*

This unique interactive tool is one more reason Sumitomo Drive Technologies is the world's premier power transmission and control solutions provider.

*\*Not available for all markets*



Configure your Cyclo® 6000 today at  
[www.sumitomodrive.com/Configurator](http://www.sumitomodrive.com/Configurator)

## Sumitomo Americas

Sumitomo Machinery Corporation of America (SMA) is a subsidiary of Sumitomo Heavy Industries (SHI), the global leader in power transmission knowledge and innovation.

SMA began its operations in 1966 with a work force of ten people and an assembly facility of 5,000 ft<sup>2</sup> (465 m<sup>2</sup>). Today, our corporate headquarters in Chesapeake, VA (USA), combined with our strategic satellite locations throughout North, Central and South America occupy more than 500,000 ft<sup>2</sup> (46,500 m<sup>2</sup>) of office and manufacturing space. We ship thousands of drive products every month, adding to our North and South American installed base of more than five million units. SMA is committed to providing **Quality at Every Stage.**

### USA - Headquarters & Manufacturing

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