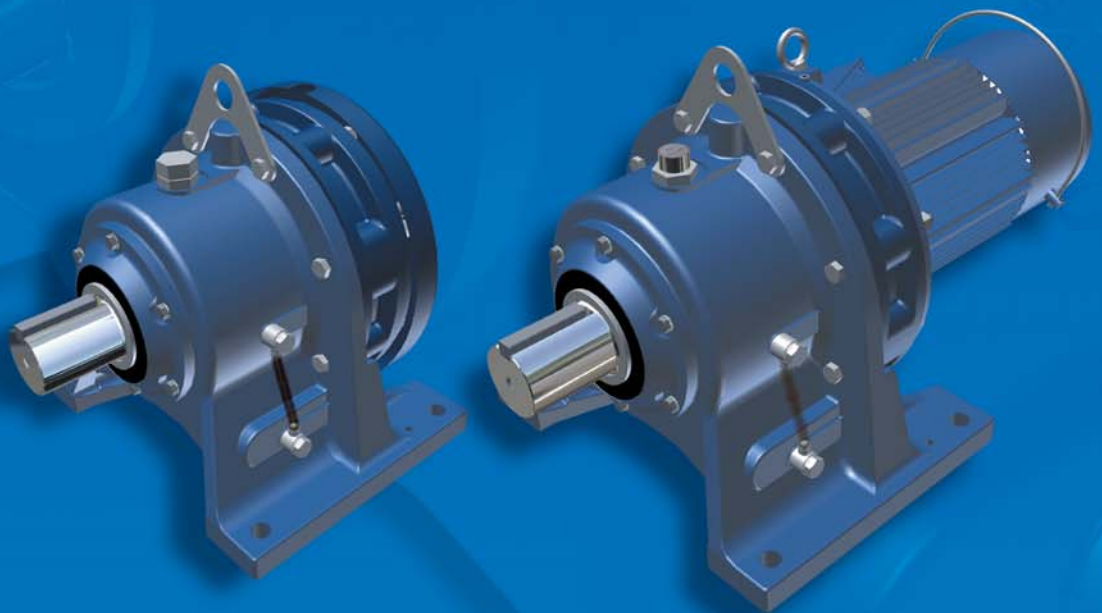


Sumitomo Drive Technologies  
*Always on the Move*

# Cyclo® 6000

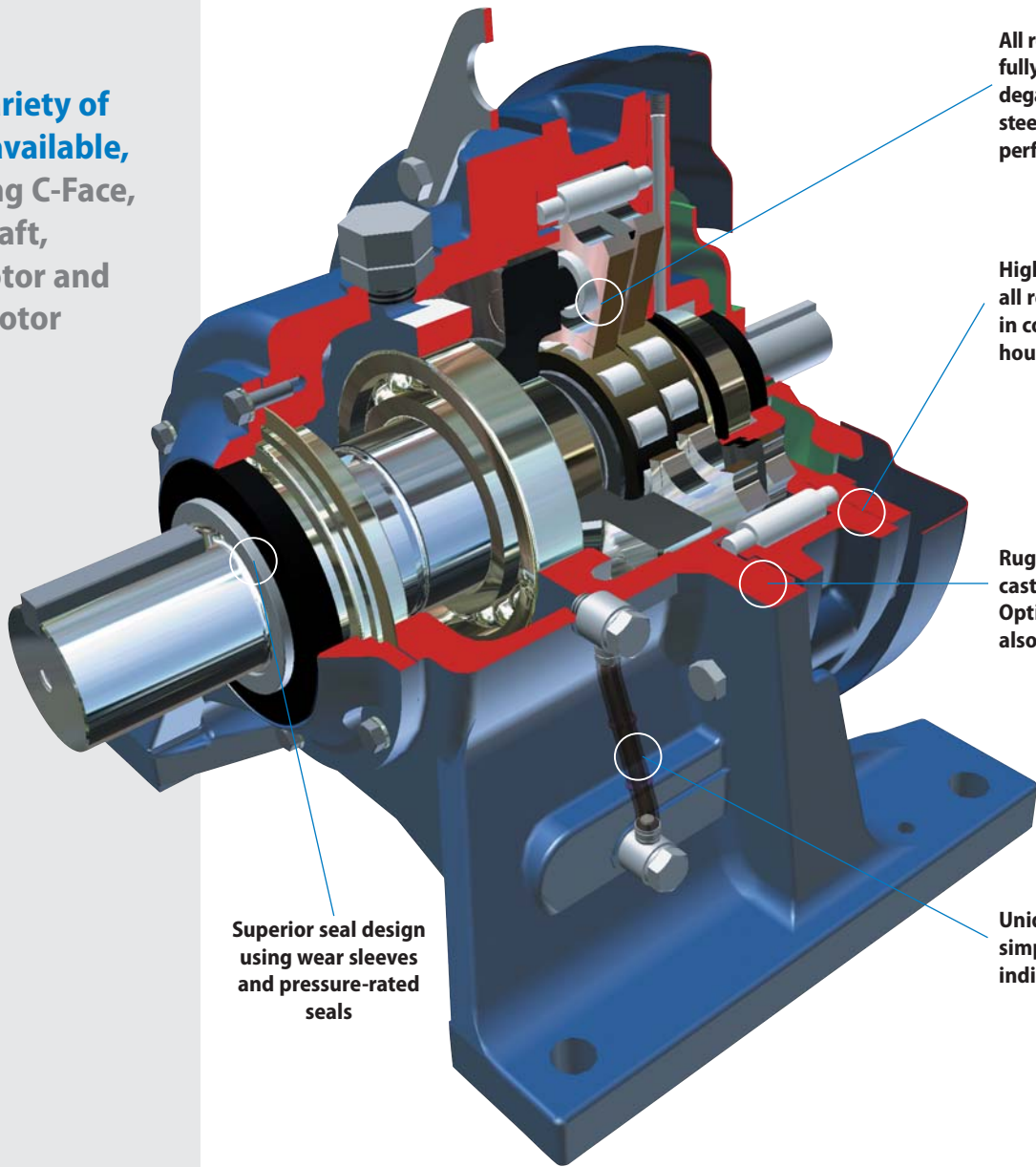


► Highly Reliable, Torque Dense Cycloidal Speed Reducers and Gearmotors

# Cyclo® 6000

Highly Reliable, Torque Dense, Cycloidal Speed Reducers and Gearmotors

► **Wide variety of inputs available, including C-Face, Free-Shaft, Gearmotor and Brakemotor**



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

High power density, all reduction contained in compact ring gear housing

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

Superior seal design using wear sleeves and pressure-rated seals

Unique oil sight gauge for simple, visible lubrication indication



## Unmatched Reliability, Exceptional Performance

► Cyclo® speed reducers and gearmotors are **designed to withstand shock loads exceeding 500%** of their ratings



## Product Description

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. The key to Cyclo®'s matchless performance and reliability is that 67% of the reduction components are in contact at all times, compared to geared designs that use only limited tooth contact. 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 & Benefits

- **Cycloidal speed reduction technology**
  - ~ Quiet, efficient and reliable operation with high torque density and compact size
- **Modular design**
  - ~ Interchangeable cast iron housings in foot, flanged or face mount configurations
- **Universal mounting arrangements**
  - ~ Available free-shaft, quill hollow shaft, C-face, shovel base, and top-mount inputs
- **Internal components manufactured from hardened, vacuum-degassed, bearing grade steel**
  - ~ Minimal vibration, low noise, low backlash and extended operational life
- **The best product warranty**
  - ~ The 24 month warranty backs up the superb Cyclo® product reputation

## Specifications

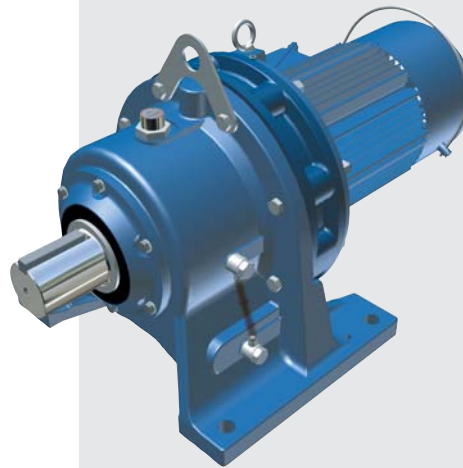
<b>Sizes:</b>	23 sizes (5lbs to 5000lbs)
<b>Torque Rating:</b>	55 to 603,000 lb in
<b>HP Rating:</b>	.10 to 235 HP
<b>Ratio Range:</b>	3:1 to 119:1 (single) 104:1 to 7569:1 (double) 8041:1 to 658,503:1 (triple)
<b>Mounting:</b>	Foot, Flange, Face Mount
<b>Motor Standards:</b>	NEMA, IEC, JIS, UL, CSA,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

- **Sumitomo's Cyclo® is a highly reliable, torque dense, cycloidal speed reducer and gearmotor**



### Reducer

- Simple, Compact Design
- Rugged Forged Output Shaft
- Universal Mounting
- C-Face, Shovel Base & Top Mount Options



### Gearmotor

- Rugged forged output shaft
- Direct acting brake option
- Unmatched durability



## ► Applications

- Conveyors
- Food Machinery
- Mixers
- Automotive Plants
- Recycling Machines
- Poultry Plants
- Sawmills and Wood Mills
- Wastewater Treatment
- Steel Mills
- Construction Equipment
- Paper Mills
- Processing Plants

# Cyclo® 6000

Highly Reliable, Torque Dense, Cycloidal Speed Reducers and Gearmotors

## Product Range Standard Motor and Reducer Combinations



### Single Reduction Ratios 3 – 119

Combinations with 1750 RPM input speed

Ratio	3	5	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119			
Output Speed RPM (60 Hz)	583	350	292	219	159	135	117	103	83.3	70.0	60.3	50.0	40.7	34.3	29.7	24.6	20.1	14.7			
Motor HP	1/8	1/4	1/3	1/2	3/4	1	1.5	2	3	5	7.5	10	15	20	25	30	40	50	60	75	100

### Ratios 11 – 87

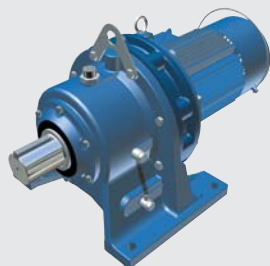
Combinations with  
1165 RPM input speed

Ratio	11	15	21	29	43	59	87				
Output Speed RPM (60 Hz)	106	77.7	55.5	40.2	27.1	19.7	13.4				
Motor HP	20	25	30	40	50	60	75	100	125	150	175

### Double Reduction Ratios 104 – 7569

Combinations with 1750 RPM input speed

Ratio	104	121	143	165	195	231	273	319	377	473	559	649	731	841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569															
Output Speed RPM (60 Hz)	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08	1.74	1.40	1.18	.9946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231															
Motor HP	1/8	1/4	1/3	1/2	3/4	1	1.5	2	3	5	7.5	10	15	20	25	30	40	50	60	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
OUTPUT TORQUE lb•in	min. 212		212		212		212		212		400		212		400		212		1325		212		400		1325		4500														
	max. 65,000		280,000		67,000		390,000		410,000						600,000																										



#### Headquarters & Manufacturing

4200 Holland Boulevard  
Chesapeake, VA 23323  
Tel: 757-485-3355  
Fax: 757-485-7490  
E-mail: [customer care@suminet.com](mailto:customer care@suminet.com)  
[www.smcyco.com](http://www.smcyco.com)

#### North & South America

**USA:** 757-485-3355  
**Canada:** Toronto 905-469-1050  
**Mexico:** Monterrey 011-52-81-8144-5130  
**Brazil:** Sao Paulo 011-55-11-5585-3600  
**Chile:** Santiago 011-562-892-7000  
**Argentina:** Buenos Aires 011-54-11-4765-5332  
For worldwide location details: [www.sumitomodrive.com](http://www.sumitomodrive.com)

#### World Headquarters - Japan

Sumitomo Heavy Industries, Ltd.  
Power Transmission & Controls Group  
ThinkPark Tower, 1-1, Osaki 2-chome,  
Shinagawa-ku, Tokyo 141-6025 Japan  
Tel: 011-813-6737-2511 • Fax: 011-813-6866-5160