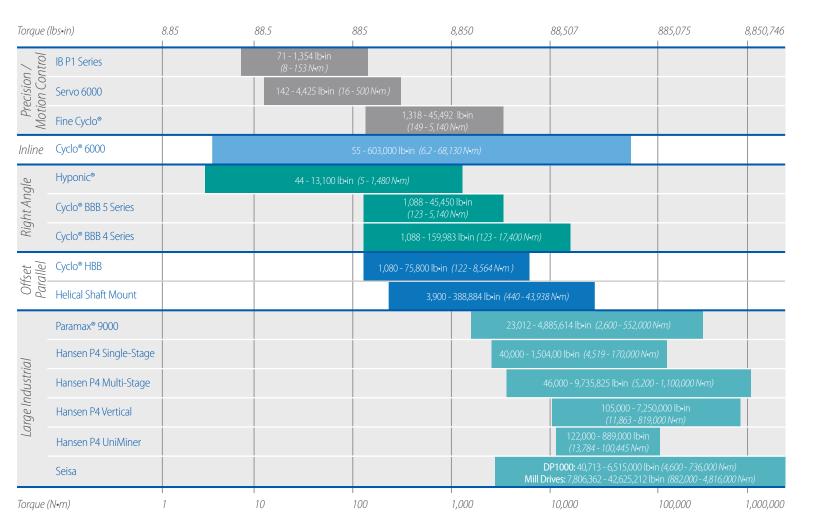
Sumitomo Drive Technologies

Sumitomo Product Showcase

Comprehensive Lineup of Premier Power Transmission Products

For applications ranging from robotics to bulk material handling.

Sumitomo offers a comprehensive lineup of premier power transmission products to keep customers' operations performing at their best. This includes the broadest range of the most reliable and highest quality speed reducers, gearmotors and large industrial gearboxes available in the industry.



Our Products

Inline Cyclo[®] 6000 Sumitomo's Gearless Gearbox: Highly reliable, torque dense

- cycloidal speed reducers with 500% momentary shockload capacity. Cyclo[®] is available 23 standard sizes.
- Torque Capacity: 55 to 603,000 lb•in (6.2 to 68,130 N•m)
- Power: 1/8 to 235 HP (.075 to 175 kW)
- **Ratio Range:** 3:1 to 119:1 (single); 104:1 to 7569:1 (double); 8041:1 to 658,503:1 (triple)

THE CYCLO® STORY

The Cyclo[®] speed reducer is characterized by the rolling action of its torque-transmitting components, the cycloidal discs. Unlike conventional gears with teeth that grind, wear and break, this unique design's rolling action results in high efficiency, quiet operation and shock load capacities of up to 500%. The discs have two-thirds of the components in contact at all times, preventing catastrophic failure in the most demanding applications.

Offset Parallel

Helical Shaft Mount (HSM)



Parallel shaft, helical gearbox with Cyclo® reducer input. Features keyless, steel Taper-Grip® Bushing for easy mounting.

Gearina

Cycloidal

Discs

• Torgue Capacity: 1,080 to 75,800 lb•in (122 to 8,564 N•m)

Cyclo[®] Helical BuddyBox[®] (HBB)

- **Power:** 1/8 to 40 HP (.09 to 30 kW)
- Ratio Range: 11:1 to 26,000:1 and greater



- Torgue Capacity: 3,900 to 388,884 lb•in (440 to 43,938 N•m) • **Power:** 1/4 to 300 HP (.19 to 224 kW)
- Ratio Range: 5:1, 9:1, 15:1, 20:1, 25:1



Product Configurator: www.sumitomodrive.com/Configurator

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

Configure your Sumitomo Drive Technologies products today at www.sumitomodrive.com/Configurator





HSM reducers are available with hollow shaft or CEMA screw conveyor drive shaft options. Features keyless, steel Taper-Grip® Bushing for easy mounting.

Right Angle

Hyponic



Compact right angle gearbox with patented all-steel Hyponic[®] gear technology, maintenancefree grease lubrication,

high efficiency operation and universal mounting.

- Torque Capacity: 44 to 13,100 lb•in (5 to 1,480 N•m)
- **Power:** 1/8 to 15 HP (0.09 to 11.1 kW)
- Ratio Range: 5:1 up to 1440:1

Cyclo[®] Bevel BuddyBox[®] 5 Series (BBB5)



Right angle, hardened steel, spiral bevel speed reducers with Cyclo[®] or planetary reducer inputs. Optimized for shaft mounted applications

- Torque Capacity: 1,088 to 45,450 lb-in (123 to 5,140 N•m)
- **Power:** 1/8 to 60 HP (0.10 to 45 kW)
- Ratio Range: 11:1 to 26,000:1 and greater

Cyclo[®] Bevel BuddyBox[®] 4 Series (BBB4)



Right angle, hardened steel, spiral bevel speed educers with Cyclo® or planetary reducer inputs. Features rugged ductile iron housing with many output styles

- Torque Capacity: 1,088 to 159,983 lb•in (123 to 17.400 N•m)
- **Power:** 1/8 to 100 HP (0.10 to 60 kW)
- Ratio Range: 11:1 to 26,000:1 and greater

Large Industrial

Hansen P4 Multi-Stage



Available in 19 different sizes with two, three, or four-gear stages, the P4 excels in low noise, low vibration and high

torque gear geometry.

- Torque Capacity: 46,000 to 9,735,825 lb•in (5,200 to 1,100,000 N•m)
- **Power:** 58 to 10,080 HP (43 to 7,517 kW)
- Ratio Range: 6.3:1 to 630:1

Hansen P4 Vertical



High radial and axial load with a dedicated vertical options and flexibility on the low speed shaft.

- Torque Capacity: 105,000 to 7,250,000 lb•in (11,863 to 819,000 N•m)
- **Power:** 166 to 5,500 HP (124 to 4,101 kW)
- Ratio Range: 6.3:1 to 500:1

SEISA Custom Gear Drives



Seisa custom mill and gear drive products are fit for the most unique and challenging applications. The DP 1000 Planetary Drives offer tough,

compact and application specific designs.

- Torque Capacity: DP1000: 40,713 to 6,515,000 lb•in (4,600 *to 736,000 N•m);* Mill Drives: 7,806,362 to 42,625,212 lb•in (882,000 to 4,816,000 N•m)
- Ratio Range: 5:1 to 1,400:1; Custom ratios available upon request

Precision / Motion Control

IB P1 Series



Precision planetary gear heads designed for maximum mounting flexibility and easy installation in demanding servomotor applications.

- Torque Capacity: 71 to 1,354 lb•in (8 to 153 N•m)
- Backlash: 3 minutes or 15 minutes
- Ratio Range: 3.7:1 to 81:1

Cyclo[®] Servo 6000



These low backlash servomotor speed reducers are based on the Cyclo[®] technology. They offer an excellent combination of extreme compactness, low

inertia, low noise and high reduction ratios.

- Torque Capacity: 142 to 4,425 lb•in (16 to 500 N•m)
- Ratio Range: 6:1 to 87:1



Featuring zero backlash, minimal lost motion and high torsional stiffness. Excels in applications that demand accurate positioning, such as

industrial robotics and medical imaging devices.

- Torgue Capacity: 1,318 to 45,492 lb•in (149 to 5,140 N•m)
- Backlash: Zero, .5 to 1.0 arc minutes of lost motion
- Ratio Range: 29:1 to 179:1



Paramax[®] 9000

The Paramax[®] product line features double. triple and quadruple reduction gearboxes, global standardization and 26 frame sizes.

Premier performance in a powerful and rugged universal housing.

- Torgue Capacity: 23,012 to 4,885,614 lb•in (2.600 to 552.000 N•m)
- **Power:** 5 to 5,000 HP (3.7 to 3729 kW)
- Ratio Range: 6.3:1 to 500:1

Hansen P4 Single-Stage



Optimal balance between mechanical, thermal and bearing ratings. These single stage drives are designed for multimegawatt power ranges.

- Torque Capacity: 40,000 to 1,504,000 lb•in (4,519 to 170,000 N•m)
- Power: 360 to 14,080 HP (270 to 10,500 kW)
- Ratio Range: 1.2:1 to 5.6:1; Custom ratios within 1% of requested value

Hansen P4 UniMiner



Robust design that offers versatility for different mounting positions. With a 'flippable' housing and split line, it is the ideal solution for alignment-free drive packages.

- Torque Capacity: 122,000 to 889,000 lb•in (13,784 to 100,445 N•m)
- **Power:** 227 to 2,330 HP (170 to 1,738 kW)
- Ratio Range: 8:1 to 71:1



- Backlash: < 3 arc minutes

Fine Cyclo[®]



Strength in One

Three companies, one global provider - Sumitomo Drive Technologies

Sumitomo Drive Technologies brings the products and service expertise of three companies together as one to provide engineered solutions to our industrial power transmission customers.

With installations worldwide, our products are the preferred choice by many of the largest and most recognized global companies. We understand your drive requirements, and through the synergies of our three organizations, we are confident we can provide you with the best solutions available today.

Sumitomo Drive Technologies

Sumitomo Heavy Industries, Ltd.

At the core of Sumitomo's product line is our Cyclo[®] Drive, a unique "gearless" gearbox that provides a superior torque dense design for the harshest environments. Over the years, this product evolved into right angle and offset parallel designs that make up the BuddyBox[®] series of gearmotors. Sumitomo Heavy Industries, Ltd. (SHI) has positioned these power transmission products as one of its core business areas and has worked over the years to enhance its capabilities in the industrial gearbox market. Beginning in 1973, SHI had a licensing agreement in place with Hansen Transmissions for almost 20 years. With this history of collaboration and partnership, the integration of Hansen's expertise and mastery of the large industrial market will allow Sumitomo Drive Technologies to expand our global offerings of engineered solutions and total drive packages.



Hansen Industrial Transmissions, NV (HIT) has a rich background dating back to the 1950's when David Hansen revolutionized the design and manufacturing of standard gear units. HIT is experienced in providing complete engineered solutions for their customers with packages including gearboxes, couplings, motors, brakes and base plates. HIT's product lines are customizable for unique market requirements, making them the ideal choice in heavy industrial applications. Sumitomo Heavy Industries, Ltd. acquired HIT in 2011 to expand on our large industrial gearbox product lines.



Seisa has nearly a century of manufacturing experience in highly customized gear drives, highspeed acceleration and reduction gears for compressors and turbine generators, mill drives for cement and coal, and gear couplings. The most demanding and carefully engineered products in the world are made by Seisa Gear. Seisa became a wholly owned subsidiary of Sumitomo Heavy Industries, Ltd. in 2006.

Industries Served

Automotive Baggage Handling Chemical Manufacturing Construction Machinery Crane & Hoist Food & Beverage Forest Products Industrial Equipment Material Handling Metals Processing Minerals & Cement Mining & Extraction Power Generation Transportation & Logistics Water & Wastewater Treatment

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Sumitomo Drive Technologies

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



Sumitomo Machinery Corporation of America WWW.SUMITOMODIFICE.COM

For worldwide locations, please visit www.sumitomodrive.com/worldwide Contact your local representative at www.sumitomodrive.com/representative Tel: 1-800-SM-CYCLO