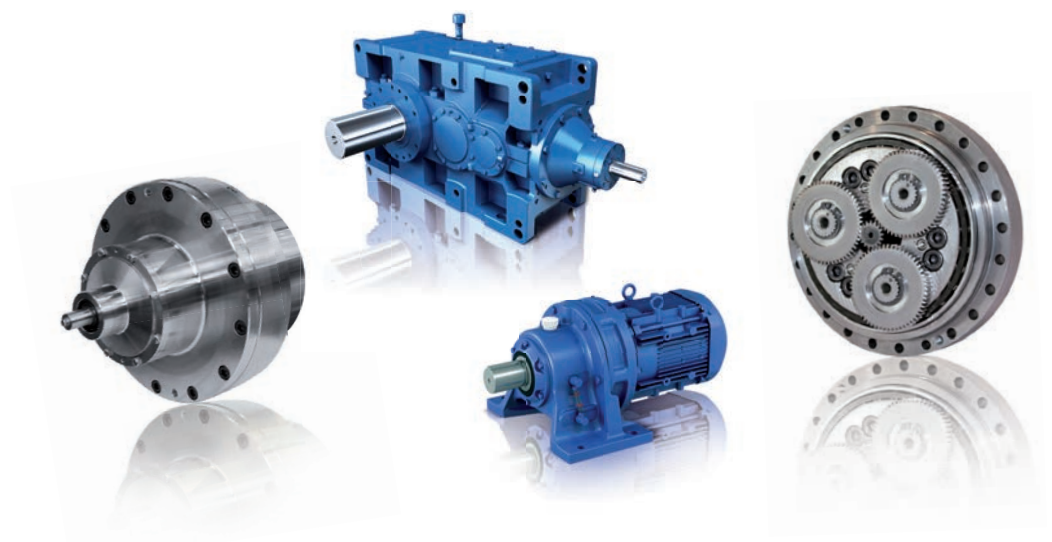


# Product overview

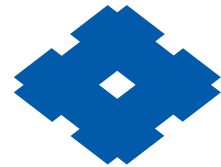


# Sumitomo Drive Technologies

## History

Some 400 ago, Masatomo Sumitomo opened a bookstore and pharmacy in the Japanese city of Kyoto. The Sumitomo family earned themselves a leading position in copper refining and opened a copper mine.

Sumitomo grew continuously over the next centuries, developing and diversifying into numerous separate companies, which today form one of the largest company groups of the world. The Igeta symbol, which represents the lip of a well, now stands for the many values and ideals shared by the different Sumitomo companies.



In Japan, the Igeta symbol represents the lip of a well



## Sumitomo's industrial sectors

Sumitomo's core business is now represented by 20 companies that operate in various areas such as mechanical engineering, shipbuilding, iron and steel, mining, glass, ceramics, nonferrous metals, electro-technical equipment, chemicals, financial services, insurance, warehousing, transport, logistics, trade.



## Sumitomo Heavy Industries

Sumitomo Heavy Industries Ltd. has their headquarters in Tokyo and is part of the group's mechanical engineering sector. Established in 1888, Sumitomo Heavy Industries (SHI) today is a highly innovative company that designs, produces and distributes an extensive product range in this field.



## A drive technology specialist

Sumitomo (SHI) Cyclo Drive Germany is part of the company's Power Transmission and Control (PTC) division and has more than 80 years of drive technology know-how to offer. The European headquarters, based in Markt Indersdorf near Munich, control subsidiaries in France, Spain, Italy, the UK, Scandinavia, and Turkey, and today is a state-of-the-art facility where precision drives, standard drives, and custom drive solutions are developed, manufactured, and assembled.

## At a glance



### Motion Control Drives

Zero backlash speed reducers and reduction kits – The Fine Cyclo series	4
Low backlash gear drives – Servo planetary gear drives	6
Low backlash gear drives – Servo cycloidal gear drives and servomotors	7



### Gearboxes/Geared motors

Cyclo Drive 6000	8
HBB and HSM parallel shaft gearboxes/Geared motors	9
BBB and Neo Hyponic right angle gearboxes/Geared motors	9



### Centrifuge drives

ZS Cyclo Line and ZP Planet Line	10
Basic design for centrifuge drives	11



### Industrial gearboxes

Paramax 9000 and Hansen P4	12
Drive packages	13

Custom solutions	14
------------------	----

Fine Cyclo precision gears for Europe from Germany	15
--	----

Global service network	15
------------------------	----





## Zero backlash speed reducers and reduction kits – The Fine Cyclo series

More and more applications require short cycle times and precision positioning in order to increase the efficiency of machines or to open up new application areas.

For these types of applications, Sumitomo Drive Technologies has developed a range of finely graded, zero backlash precision drive series. Compared with conventional gear drives, their construction principle provides extremely high torsional rigidity and low moment of inertia – ideal for highly dynamic applications.

High gear ratios per reduction stage allow an extremely compact gear drive design along with long service lives; furthermore, a range of different variants makes for optimal integration with the machine environment.

Whether point-to-point or path controlled motion – drive technology tailored to the drive requirements delivers the required performance.



### Areas of application

- Factory automation
- Robots
- Machine tools
- Medical technology
- Swivel units
- Palette changers
- Tool magazines (disc, chain)
- Turntables
- Milling heads
- Positioners

### Path controlled applications

#### FINE CYCLO SERIES UA



The new UA series offers further improved performance data compared with the FT series with regard to power density, high positioning and path accuracy, high efficiency, even at low speed and improved output bearings for increased moment ratings

Type F4CF-UA  
With integrated angular ball bearings  
Flange housing

Type F2CF-UA  
With integrated tapered roller bearings  
Flange housing

- Multi-stage reduction ratios 66 to 259
- Nominal output torque up to 16,685 Nm
- Acceleration torques up to 30,000 Nm
- Lost Motion < 1 arcmin
- Improved moment stiffness

#### FINE CYCLO SERIES T



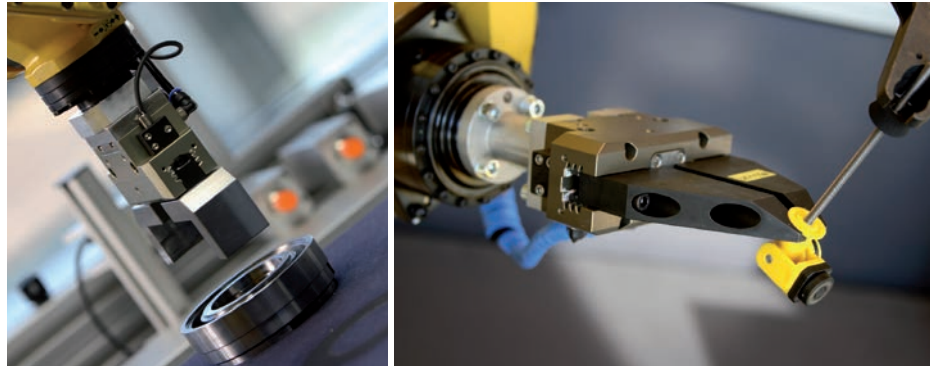
Owing to optimised profile of the disc lobes, this exceptionally low-vibration gearbox reaches a very high transmission precision and provides a high degree of efficiency even in the low speed range

Type F2C-T  
With integrated tapered roller bearings

Variants:  
F2C-T cylindrical housing  
F2CF-T flange housing

- Reduction ratios (double stage) 81/119/141/171
- Nominal output torque up to 6,140 Nm
- Acceleration torque up to 11,000 Nm
- Lost Motion < 0,5 arcmin





Sumitomo Fine Cyclo precision drives for robots, machine tools, and factory automation are robust, low in maintenance and highly efficient and so help reduce life cycle costs considerably.

## Point-to-point motion applications

### FINE CYCLO SERIES C



Precision gearbox with hollow shaft for feeding cables and media

#### Type F4C-C

Sealed gearbox with output flange and integrated angular ball bearings

#### Type F2C-C

Sealed gearbox with output flange and integrated tapered roller bearings

#### Variants:

F2C-C / F4C-C cylindrical housing  
F2CF-C / F4CF-C flange housing

- Reduction ratios (single stage) 59/89/119
- Nominal output torque up to 4,328 Nm
- Acceleration torque up to 6,278 Nm
- Lost Motion < 1 arcmin
- Hollow shaft diameter 49 to 99 mm

### FINE CYCLO SERIES D



Precision gearbox with high moment stiffness and increased moment ratings

#### Type F4C-D

Gearbox with output flange and integrated angular ball bearings

#### Variants:

F4C-D cylindrical housing (on request)  
F4CF-D flange housing

- Reduction ratios (single stage) 59/89/119
- Nominal output torque up to 1,756 Nm
- Acceleration torque up to 3,188 Nm
- Lost Motion < 1 arcmin

### FINE CYCLO SERIES A



Precision gearbox with numerous variants

#### Type FC-A

Reduction kit without output side bearings

#### Type F1C-A

Sealed gearbox with output flange and integrated cross-roller bearing

#### Type F2C-A

Sealed gearbox with output flange and integrated tapered roller bearings

#### Variants:

F2C-A cylindrical housing  
F2CF-A flange housing

#### Type F3C-A

Sealed gearbox with output shaft and rigid tapered roller bearings on output side

- Reduction ratios (single stage) 29/59/89/119/179
- Nominal output torque up to 5,140 Nm
- Acceleration torque up to 7,610 Nm
- Lost Motion < 1 arcmin



# Low backlash gear drives – Servo planetary gear drives

Sumitomo Drive Technologies offers scaled ranges of servo planetary gear drives:

The Precision Line: for demanding, highly dynamic applications

Economic Line: economic drive solutions for the medium performance range

Features of these drive series include the ability to install the drives in any position and zero maintenance. Generously dimensioned bearings and optimised tooth meshing help enable long service life and smooth running.

### Areas of application

- Handling and robotics
- Packaging machines
- Materials handling
- Pick and place
- Machine tools
- Medical technology
- Stone and wood working equipment
- Measuring equipment



### PPG



Low backlash precision gearbox with high torsional stiffness and moment rating

Variants with motor mounting flange:

PNGX with smooth output shaft,  
optionally with key or splined  
PNFX with output flange

- Reduction ratios 4 to 10 (single stage)
- Reduction ratios 16 to 100 (double stage)
- Backlash < 6 arcmin (optionally down to < 1)
- Nominal output torque 20 to 320 Nm
- Acceleration torque 50 to 520 Nm

## Low backlash gear drives – Servo cycloidal gear drives and servomotors

Traction drives need to have low mass in order to deliver the required drive dynamics.

Combined, the proven Cyclo principle and light-weight design ensure a low moment of inertia and a low noise level in a small, compact drive unit.

The reduced backlash variant of the Drive 6000 standard drive motor opens up new areas of application for your machines and equipment - without the need to modify machine interfaces.

Three synchronous servomotor ranges cover high drive input speed for low to medium rotational speed, resulting in reliable and space-saving drive solutions.



### SERVO 6000



Standard gearbox with reduced backlash for medium positioner functions

Variants with three configurations:

Output shaft with key, foot optionally smooth or splined  
F and V flange versions  
Hollow shaft and motor adapter on gearbox side enable easy mounting of servomotors

- Reduction ratios 6 to 87 (single stage)
- Backlash < 6 arcmin
- Nominal output and acceleration torque up to 500 Nm

### SERVO MOTORS



Series A:

Standard series with fine torque gradation

Series C:

Compact design for limited spaces

Series D:

Exceptionally low moment of inertia, for highly dynamic drive functions

Variants:

- Output shaft with or without key
- B5 output flange
- Speed categories 2,000/3,000/4,000/4,500
- Nominal output torque 0.2 to 85 Nm
- Stall torque 0.2 to 115 Nm

## Cyclo Drive 6000

Reducer and geared motors used in industrial applications are often subjected to extremely high loads. This is where the Cyclo Drive 6000 gears demonstrate their special advantages in terms of their shock load capacity, efficiency, and reliability.

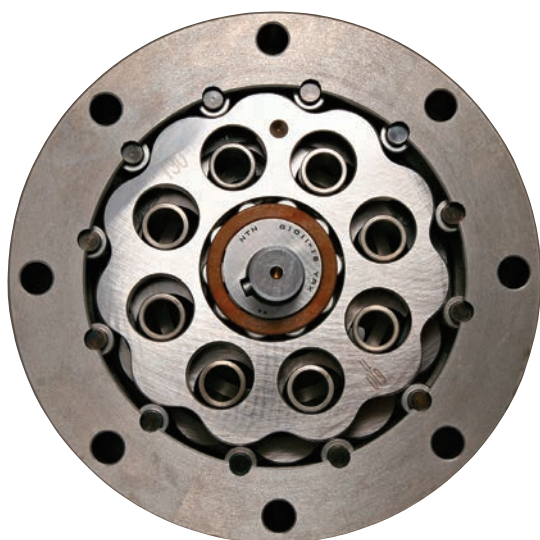
With the Cyclo Drive 6000, Sumitomo Drive Technologies offers both, a high-quality and robust range of high torque drives for virtually every industrial application.

The drive series includes a large number of variants accommodating a wide variety of applications. Whether with a Sumitomo motor or a third party motor, the Cyclo Drive 6000 range with its lifetime grease lubrication, robust housing, and extremely broad range of sizes and mounting options is sure to offer a suitable drive for your industrial application.



### Areas of application

- Conveyor equipment
- Mixers and agitators
- Bending and straightening machines
- Water treatment plants
- Construction machinery
- Recycling plants
- Saw mills and timber processing machines
- Roller mills
- Paper industry
- Food and sugar industry
- Metal working machines, pumps



VARIOUS OPTIONS OF THE CYCLO DRIVE 6000 SERIES



### THE ORIGINAL CYCLO DRIVE



Compact design, high overload capacity, long service life

#### Variants:

- H foot housing, F and V flange housings
- Reduction ratios 6 to 119 (single stage, 34 sizes)
- Reduction ratios 104 to 7,569 and higher (double stage, 56 sizes)
- Nominal output torque 7.5 to 68,200 Nm
- Power rating (geared motors) 0.12 to 55 kW
- Lifetime grease lubrication in any mounting position, sizes 6060 to 6125, oil lubrication starting from size 6130
- Hollow input shaft for mounting IEC standard motors
- Motor mounting by adapter (lantern) and free input shaft with coupling
- Horizontal or vertical mounting position (output upward or downward)



# HBB/HSM parallel shaft gearboxes/Geared motors

## Right angle gearboxes/Geared motors

### BBB and Neo Hyponic

BBB and HBB drives combine the advantages of the Cyclo Drive 6000 with bevel gear (BBB) and helical gear (HBB) drives. This drive concept gives rise to numerous variants and possible applications and results in an extremely robust design with high overload reserves.

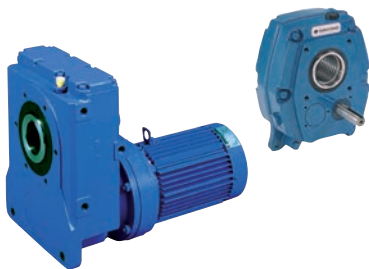
With a 2 year guarantee period irrespective of the number of operating hours, BBB and HBB are an excellent choice for material handling applications, agitators, special machines, conveyor belts and other applications that require either bevel gear or helical gear drives.



#### Areas of application

- Conveyor equipment
- Mixers and agitators
- Water treatment plants
- Construction machinery
- Recycling plants
- Saw mills and timber processing machines
- Roller mills
- Paper industry
- Food and sugar industry
- Metal working machines

#### HBB/HSM



HBB Helical Buddybox series: a Cyclo Drive 6000 and helical gearbox combination. Flat parallel shaft reducers and geared motors in hollow and solid shaft versions

HSM: Hollow shaft helical reducers

- Reduction ratios 21 to 2,559
- Nominal output torque 47 to 11,568 Nm
- Power rating (geared motors) 0.12 to 30 kW
- With Taper Grip bushing/shaft connection without key, keyed hollow shaft or solid shaft with keyway
- Free shaft or IEC motor adapter on gearbox side
- Helical Shaft Mount (HSM): Shaft mount helical reducer with Taper Grip bushing for easy mounting/dismounting or keyed hollow shaft
- Reduction ratios 5/13/20/25
- Power rating 0.18 to 280 kW

#### BBB



BBB Bevel Buddybox series: Combination of Cyclo Drive 6000 and bevel gear drives. Right-angle reducers and geared motors in hollow and solid shaft versions

- Reduction ratios 11 to 2,559
- Nominal output torque 226 to 18,000 Nm
- Power rating (geared motors) 0.12 to 55 kW
- With Taper Grip bushing – clamping ring – shaft connection without key, keyed hollow shaft or solid shaft with keyway
- Free input shaft or IEC motor adapter on gearbox side

#### NEO HYPONIC



Right-angle hypoid gearbox and geared motors in hollow and solid shaft versions

- Reduction ratios 5 to 1,440
- Nominal output torque 5 to 1,480 Nm
- Power rating 15 W to 5.5 kW
- Gear motor or gearbox with free high speed shaft
- Foot and flange housing with solid shaft on output side
- Flange housing with hollow shaft
- Lifetime grease lubrication
- Any mounting position
- High efficiency
- Low noise level
- Vibration arm

## ZS Cyclo Line and ZP Planet Line

Sumitomo centrifuge gearboxes are ideal for all types of decanters and worm/screen type centrifuges using scroll conveyors carrying solid materials.

A large variety of designs and an extensive product range, high gear ratios, high shock load capacity and optional customer adaptations make these drive systems most used in centrifugal applications.

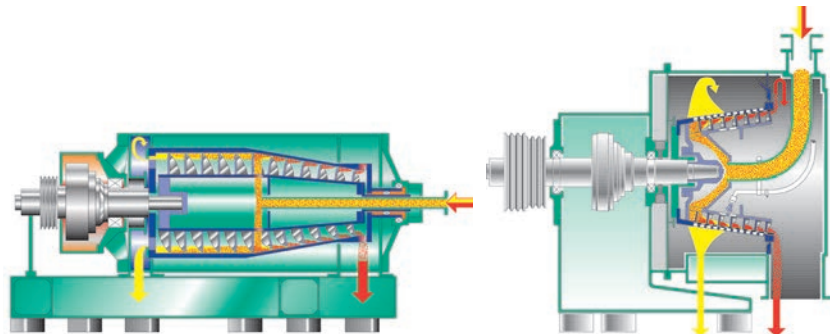
With our centrifuge gearboxes the differential speed between bowl and scroll is generated and the torque from the scroll is transmitted. The precisely balanced housing is connected to the bowl and rotates at the speed of the bowl.

The output shaft on the centrifuge gearbox is connected to the scroll and transmits the torque required for transporting the solids. The high speed shaft can be held with a torque arm or it can be actuated by a backdrive motor so as to achieve the required differential speed.

### Areas of application

- Organic and inorganic chemistry
- Petrochemical and synthetic materials production
- Pharmaceuticals and biotechnology
- Oil and grease extraction
- Industrial bio-engineering
- Fermentation products
- Interacellular products
- Organic products
- Environmental technology

### THE FUNCTION OF THE SUMITOMO CENTRIFUGE GEARBOX



Decanter centrifuge with gearbox type ZS

Screen centrifuge with gearbox type ZS

- Flange housing for fitting to the bowl
- Output shaft with DIN 5480 hub for driving the scroll conveyor without radial load
- Output shaft can be made for radial and axial load by the scroll if the customer requests it
- Input shaft with external bearings for high radial loads
- Grease lubrication for sizes 610 to 619
- Oil bath or circular oil lubrication for all sizes
- The gearboxes can be adapted to meet customer requirements

# Basic design for centrifuge drives

The flexible lubrication system permits both grease lubrication and all types of oil lubrication in accordance with customer requirements.

Design modifications are made to maintain the required interface to the specific centrifuge or decanter.

## The various types of gearbox designs offer installation to all machine arrangements

- ZS as a single-stage CYCLO Drive centrifuge gearbox for most applications in which the scroll rotates faster than the bowl.
- ZSPN, ZSPV and ZSPR are two-stage centrifuge gearboxes with a Cyclo Drive stage and a planetary stage for higher reduction ratios. ZSPN suitable for centrifuges with scroll running slower than the bowl; ZSPV suitable for centrifuges with scroll running faster than the bowl.
- ZSPR is a special double stage centrifuge gearbox with a Cyclo Drive stage and a differential planetary stage. This version allows variable differential speed over the entire speed range of the motor and with a scroll running both slower or faster than the bowl.
- In ZP series, all stages are planetary which are available in both versions - as double and triple stage gearbox. It is designed for machines requiring highest standards in bowl and differential speeds. As double stage it suits for applications with scroll slower than bowl and as triple stage it can be made for scroll faster or slower than bowl.

## Features and advantages

- Circular housing design ideal for centrifuges
- Compact
- Reliable in operation
- High shock overload capacity
- Large range of reduction ratios
- All types of lubrication
- Design to match customer specifications
- Balanced housing
- Version in stainless steel for food applications at customer request

### ZS CYCLO LINE



Single stage Cyclo Drive centrifuge gearboxes for applications with advance scroll (reverse direction of rotation)

- Reduction ratios 6:1 to 87:1
- Max. torque 300 to 46,000 Nm
- Rotational speed difference >0 to 200 rpm

### ZSP CYCLO/PLANET LINE



Double stage centrifuge gearboxes with Cyclo Drive stage and planetary stage for higher gear ratios

- ZSPN for lagging scroll (same direction of rotation)  
Reduction ratios 45:1 to 261:1
- ZSPV for advance scroll (reverse direction of rotation)  
Reduction ratios 60:1 to 348:1
- ZSPR for variable differential speed with either advance or lagging scroll (variable direction of rotation)  
Reduction ratios 45:1 to 261:1
- Max. torque 630 to 46,000 Nm
- Rotational speed difference >0 to 100 rpm

### ZP PLANET LINE



Double and triple stage planetary centrifuge gearbox for very highest bowl and differential rotation speeds. With same direction of rotation as standard, for triple stage also available with reverse direction of rotation

- Reduction ratios  
Double-stage 20:1 to 40:1  
Triple-stage 40:1 to 224:1
- Max. torque 150 to 40,000 Nm
- Rotational speed difference >10 to 200 rpm

## Paramax 9000 and Hansen P4

The helical and bevel helical gearboxes in the Paramax 9000 and Hansen P4 series are characterised by their robust design that also copes with the demands on reliability and service life even under heavy duty operating conditions. Outstanding gear technology, combined with our standards of quality, ensures permanent top performance.

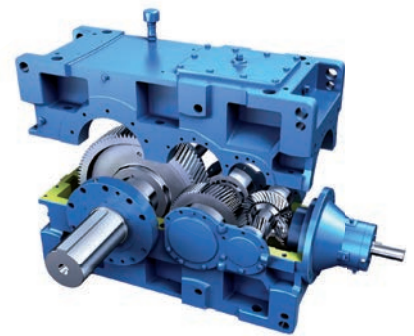
Using the modular design of both series, Sumitomo Drive Technologies can adapt flexibly to your application and is able to provide a high-quality solution matching your requirements. The fine torque grading and precisely matched range of reduction ratios facilitate absolutely pinpoint drive design.

Gearboxes of the Hansen P4 series are particularly optimised in noise, vibration and weight levels. With its univesal housing, the Paramax 9000 series can be used in all-purposes and is economically compact. Both series are characterised by a moderate needs in servicing and maintenance-friendliness.

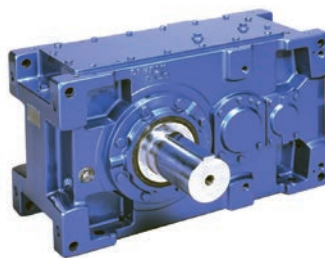
For the operation in conveyors, cooling towers, air cooled condensers and pumps specially adapted product lines are available. Typical applications for our industrial gearsboxes are the mining industry, process technology, plant construction, energy generation and steel manufacturing industries, as well as the raw materials industry and water treatment.

### Applications

- Belt conveyors, travel drives and bucket elevators
- Cooling towers and air cooled condensers
- Rotary furnaces and toasters
- Rolling mills and presses
- Crushers and mills
- Screw pumps and ventilator units
- Cranes and lifting equipment
- Water turbines



### PARAMAX 9000



Robust gearbox series for industrial applications with fine torque grading, for all-purposes in machinery and plant construction

- Reduction ratios 6.3:1 to 500:1
- Nominal output torques from 2.6 to 552 kNm
- Input speed up to 1,800 r.p.m.
- Nominal power rating up to 3,900 kW
- Design of bevel helical and helical gearboxes in double, triple and quadruple stage
- Installation in horizontal, vertical or upright position
- 26 sizes

### HANSEN P4 HORIZONTAL

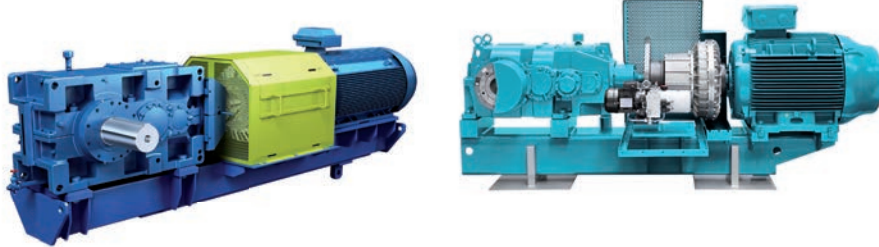


Robust gearbox series with a wide range of torque and power for use in machine- and plant construction

- Reduction ratios 6.3:1 to 630:1
- Nominal output torques from 6 to 1,000 kNm
- Input speed up to 1,800 r.p.m.
- Nominal power rating up to 6,000 kW
- Design of bevel helical and helical gearboxes in double, triple and quadruple stages
- 19 sizes



## Drive packages



High load fluctuations and an environment containing dirt, moisture and chemicals make the highest demands on the drive technology to ensure continuous operation of the belt conveyor system. Paramax and Hansen P4 drive solutions are extremely robust and are characterised by their high levels of thermal resilience, long service life and service-friendly design.

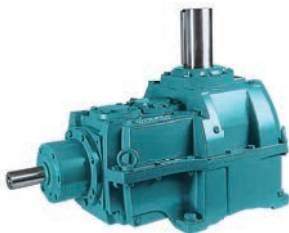
Complete drive solutions can be supplied for deployment in the mining and raw material processing industries. Versatile solutions can be realised to match customer specifications and specific requirements, such as inclined conveyors.

### Application areas

- Mining
- Energy
- Palm oil
- Paper industry
- Pumps and compressors



### HANSEN P4 VERTICAL



Robust gearbox series made to measure for vertical applications and with a wide range of torques and powers for use in machinery and plant construction

- Reduction ratios 6.3:1 to 630:1
- Nominal output torques from 6 to 1100 kNm
- Input speed up to 1,800 r.p.m.
- Nominal power rating up to 4,400 kW
- Design of bevel helical and helical gearboxes in double, triple and quadruple stage
- Housing split horizontally above the oil level for ease of inspection and maintenance
- 19 sizes

### HANSEN P4 SINGLE STAGE



Single stage gearbox with flexible center distance, a particularly rigid housing, reinforced bearings and elevated shaft height. Technically balanced between thermal and mechanical performance

- Reduction ratios 1.20:1 to 5.60:1
- Nominal output torques from 5 to 40 kNm
- Input speed up to 1,800 r.p.m.
- Nominal power rating up to 4,000 kW
- Design of helical gearbox: Single stage
- 5 sizes

## From standard to customised

### *Custom solutions*

Machines and equipment are becoming progressively more powerful, individual, and specialised; at the same time, development and market launch times are shrinking. Machinery and plant manufacturers need strong partners to stand up to these challenges.

With our custom solutions, we help our customers gain sustainable competitive advantages through superior products. All over the world, our engineers put their comprehensive drive technology expertise at the disposal of our customers' project teams. With their strong local presence and their European production resources, Sumitomo Drive Technologies is your natural first choice for partnership projects in Europe. There are many successful products that have been created in this way.

And you could take advantage of this opportunity as well: Working on joint projects with our engineers will unburden your development departments and at the same time ensure that all your drive solutions are using the very latest technology. Sumitomo Drive Technologies designs and develops complete, custom drive solutions tailored to your specific requirements. We can combine the greater flexibility and potential of special designs with cost advantages obtained by using standard components since to a large extent, project requirements can be met successfully by modifying existing Sumitomo drives.

#### **Short time to market**

Our customers benefit by minimising development times and risks. Instead of building up and maintaining your own drive technology know-how in a labour-intensive and costly process, you leverage workforce and development resources supplied by Sumitomo Drive Technologies.

#### **Lower development costs**

Whether for an all a new design or for modifying existing standard drives, working with Sumitomo Drive Technologies will lower the cost and effort needed to develop new products. You will have the peace of mind of knowing that your innovations are based on intensively tested drive technology and you will not have to fear unpleasant surprises.

#### **Reliable production**

Not only will we help you design and develop new drives that meet your requirements, we can also take care of the production process. From procurement to production and testing through to shipment. So you can be sure that you are offering your customers the highest-quality drive solutions.



## ***Fine Cyclo precision gears for Europe from Germany***

- Development
- Construction
- Production
- Assembly
- Customer service

### ***Benefits for our customers***

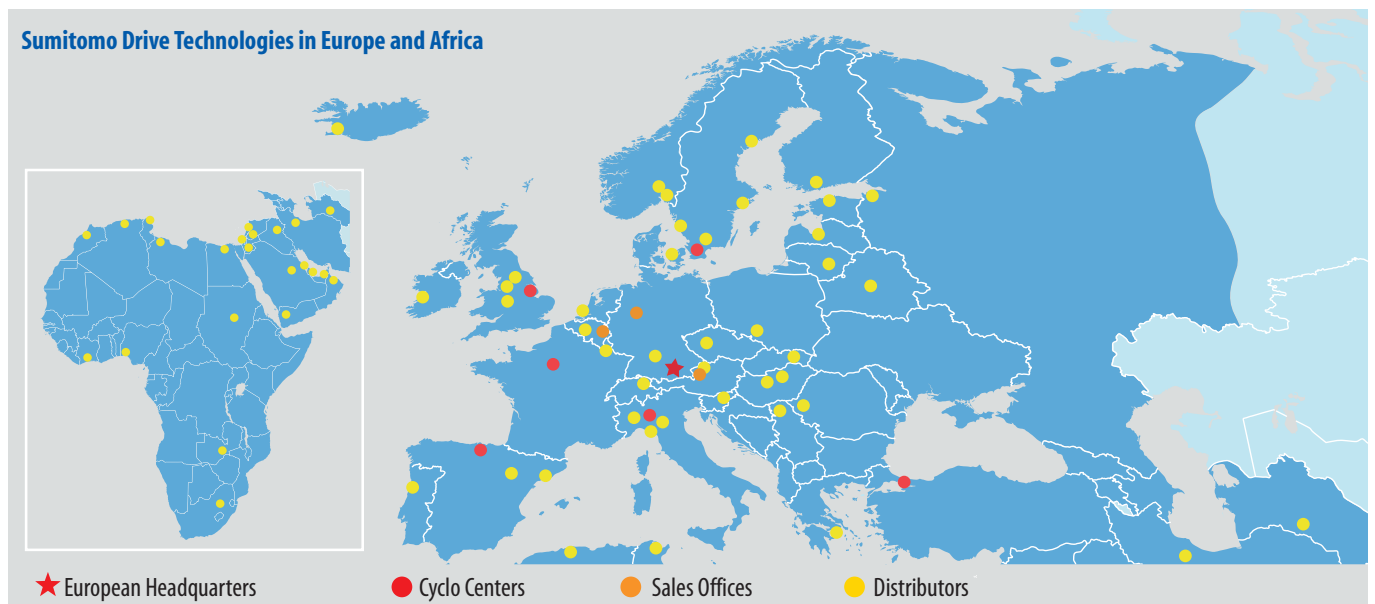
Optimal customer focus by

- Close collaboration right from the earliest development phase
- A highly qualified team of engineers with the ability to develop the best solution for your application
- Production processes meeting the latest technical standards and ensuring highest quality
- Short paths
- Short lead times



### ***Global service network***

With our worldwide network of offices and factories, we can also provide maintenance and services for modified and customer-specific solutions. So we can get to the site quickly when problems arise, saving our customers the need to set up their own service infrastructure, and ensure a long service life for machines and installations with our first-class maintenance service.



# Worldwide locations

## World Headquarters JAPAN

Sumitomo Heavy Industries Ltd.  
PTC Group  
Think Park Tower, 1-1,  
Osaki 2-chome,  
Shinagawa-ku, Tokyo 141-6025  
[www.cyclo.shi.co.jp](http://www.cyclo.shi.co.jp)  
[www.sumitomodrive.com](http://www.sumitomodrive.com)

## Headquarters & Manufacturing USA

Sumitomo Drive Technologies  
Sumitomo Machinery Corp. of America  
4200 Holland Boulevard  
Chesapeake, VA 23323  
[www.sumitomodrive.com](http://www.sumitomodrive.com)

## Headquarters & Manufacturing EUROPE

### Germany

Sumitomo (SHI) Cyclo Drive Germany GmbH  
European Headquarters  
Cyclostraße 92  
85229 Markt Indersdorf  
Germany  
Tel. +49 8136 66-0  
Fax +49 8136 5771  
E-Mail: [marktind@sce-cyclo.com](mailto:marktind@sce-cyclo.com)  
[www.sumitomodrive.com](http://www.sumitomodrive.com)

## Subsidiaries & Sales Offices in Europe

### Austria

Sales Office Austria  
Gruentalerstraße 30 A  
4020 Linz  
Austria  
Tel. +43 732 330958  
Fax +43 732 331978

### Benelux

Sales Office Benelux  
Kortenhoekstraat 140  
9308 Hofstade  
Belgium  
Tel. +32 16 608311  
Fax +32 16 571639

### Finland

Sales Office Finland  
Haiharankatu 22C 18  
33710 Tampere  
Finland  
Tel. +358 400834819  
Fax +46 22 0030 (Head Office Sweden)

### France

SM-Cyclo France S.A.S.  
8 Avenue Christian Doppler  
77700 Serris  
France  
Tél. +33 1 64171717  
Fax +33 1 64171718

### Italy

SM-Cyclo Italy S.R.L.  
Via dell'Artigianato 23  
20010 Cornaredo (MI)  
Italy  
Tel. +39 2 93481101  
Fax +39 2 93481103

### Spain

SM-Cyclo Iberia, S.L.U.  
Edificio Gobelas  
C/Landabbarri Nº 3, 6º B  
48940 Leioa-Vizcaya  
Spain  
Tel. +34 944 805389  
Fax +34 944 801550

### Sweden

SM-Cyclo Scandinavia AB  
Industrigatan 21B  
234 35 Lomma  
Sweden  
Tel. +46 40 220030

### Turkey

SM-Cyclo Turkey  
Güç Aktarım Sis. Tic. Ltd.  
Büyükdere Çayırbaşı Cd.  
Dede Yusuf Sk. No: 11  
34453 Sarıyer Istanbul  
Istanbul – Turkey  
Tel/Fax +90 216 3844482

### United Kingdom

SM-Cyclo UK, Ltd.  
Unit 29, Bergen Way,  
Sutton Fields Industrial Estate  
Kingston upon Hull  
HU7 0YQ, East Yorkshire  
United Kingdom  
Tel. +44 1482 790340  
Fax +44 1482 790321