



**Sumitomo Drive Technologies**

**PRODUCT OVERVIEW**

# HISTORY – WHERE THE STORY BEGAN...



1922

Lorenz Braren invented an ingenious Cyclo reduction gear mechanism inspired by a camera shutter and a basic patent was granted worldwide in 1928.



1630

In 1630, 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 in the world.



1923

Since 1923 Hansen Industrial Transmissions NV has been at the forefront of power transmission technology and has grown to become a world leading manufacturer of industrial gear units and of complete and reliable drive package solutions. David Hansen invented the unique 'Hansen Patent' standardization concept and continuously invested in new technologies throughout the different gearbox generations



# Sumitomo Drive Technologies



## OUR SOLUTION FOR ANY APPLICATION



### Actuators

6

Compact. Precise. Dynamic.



### Drive Solutions for AGV/AMR

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Integrated. Intelligent. Safe.



### Motion Control Drives

10

Precise. Compact. Durable.



### Gears and Gearmotors

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Versatile. Proven. Unique.



### Industrial Gearboxes

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Powerful. Reliable. Versatile.



### Centrifuge Drives

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High Performance. High Quality. Robust.



### Service

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Original. Experienced. Connected.



### Worldwide Locations

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# ACTUATORS

Compact. Precise. Dynamic.

The TUAKE actuator product family redefines the highest standard for safety and resilience. This allows our new technology to unfold its full potential, as the symbiosis between man and machine always remains optimally controllable.

Design variants:

- TUAKE with cylindrical housing
- 2 sizes

Visit the TUAKE product page:



  
visit us



## TUAKE - ACTIVE

### BASIC OPTIONS

- Integrated disc brake

### ACCESSORIES

- Internal protection of hollow shaft for cable installation
- Housing protection according IP class 50 or 62 or 66
- Standard connector set (all industrial types)
- Additional heat sink
- External driver



## TUAKE - SERVO

### BASIC OPTIONS

- Integrated disc brake
- Variety of encoders

### ACCESSORIES

- Internal protection of hollow shaft for cable installation
- Housing protection according IP class 50 or 62 or 66
- Standard connector set (all industrial types)
- Additional heat sink
- External Driver



## TUAKE - DRIVE

### BASIC OPTIONS

- Integrated disc brake
- Integrated torque sensor
- Second encoder at gear output
- Advanced safety functions

### ACCESSORIES

- Internal protection of hollow shaft for cable installation
- Housing protection according IP class 50 or 62 or 66
- Standard connector set (all industrial types)
- Additional heat sink



# DRIVE SOLUTIONS FOR AGV/AMR

## Integrated. Intelligent. Safe.

A compact, integrated, and intelligent solution of: Gear + Servo Motor + Servo Drive.

Perfectly matched to each other, the three key components gearbox, servo motor and drive controller provide the complete solution for various types of AGV and AMR applications - SMARTRIS.

SMARTRIS is an extremely integrated and reliable product line that combines industry-typical requirements such as driving speed, robustness, dynamics and compatibility with common bus interfaces.

Complete Package Solution of Gear, Servo Motor and Servo Drive:

- Best fit for AGV or AMR driving
- Compact size achieved by in-wheel structure
- Easy installation and commissioning
- Filled with long-life grease
- Maintenance free
- Customization available on request
- Up to 2.0m/s max speed
- Various options and features

Visit the drive solutions product page:



### ECO Line

- Gear output shaft rotation design
- Cost efficient
- Ideal for light payloads and high-speed AGV
- 2 sizes, various reduction ratios



### PRO Line

- Ring gear housing rotation design
- High radial loads
- Reduced overall dimension
- 2 sizes, various reduction ratios



### Servo Drive

- Easy installation without additional PID tuning
- Easy to install with state machine profile suitable for all AGVs
- Specifically designed for prompt reaction in case of AGV emergency quick stop
- Safety feature STO
- Operating modes: torque - speed - position



# MOTION CONTROL DRIVES

Precise. Compact. Durable.

Our world would be very different without automation and robotic applications. Wherever there is a need to move something be it mechanically, automatically or by machine there is a need for a drive.

Differing duty requirements dictate that a drive must have a number of performance characteristics to meet the application. Our range of high precision gear drives allow solutions for the smallest of installation spaces to high torque drives for large systems. The requirements can however be particularly demanding and diverse in the field of factory automation and robotics.

As the inventor of the cycloidal principle, allowing the highest precision, we offer solutions for each and every application with its versatile (Fine Cyclo) zero backlash precision gear drive units.

Visit the Motion Control Drives product page and configure the product to your needs:



visit us



E Cyclo (ECY)

- 3 sizes
- Ratio 50/80/100
- Lost motion < 1 arcmin
- Acceleration torque up to 284 Nm



A-Series

- 6 sizes
- Ratio 29/59/89/119/179
- Lost motion < 1 arcmin
- Acceleration torque up to 7,610 Nm



C-Series

- 6 sizes
- Ratio 29/59/89/119
- Lost motion < 1 arcmin
- Acceleration torque up to 6,278 Nm



DA-Series

- 6 sizes
- Ratio 29/41/59/89/119
- Lost motion < 1 arcmin
- Acceleration torque up to 4,000 Nm



UA-Series

- 8 sizes
- Ratio 60-283:1
- Lost motion < 0.5 arcmin
- Acceleration torque up to 30,000 Nm



W-Series

- 2 sizes
- Ratio depending on pre-stage
- Lost motion < 1 arcmin
- Acceleration torque up to 10,000 Nm



IB-Series P1 Type

- 3 sizes
- Ratio 3.7-81:1
- Lost motion < 3 arcmin
- Acceleration torque up to 380 Nm



IB-Series P2 Type

- 2 sizes
- Ratio 4-100:1
- Lost motion < 3 arcmin
- Acceleration torque up to 3,000 Nm



IB-Series PK Type

- 3 sizes
- Ratio 5.5-243:1
- Lost motion < 6 arcmin
- Acceleration torque up to 380 Nm



# GEARS & GEARMOTORS

Versatile. Proven. Unique.

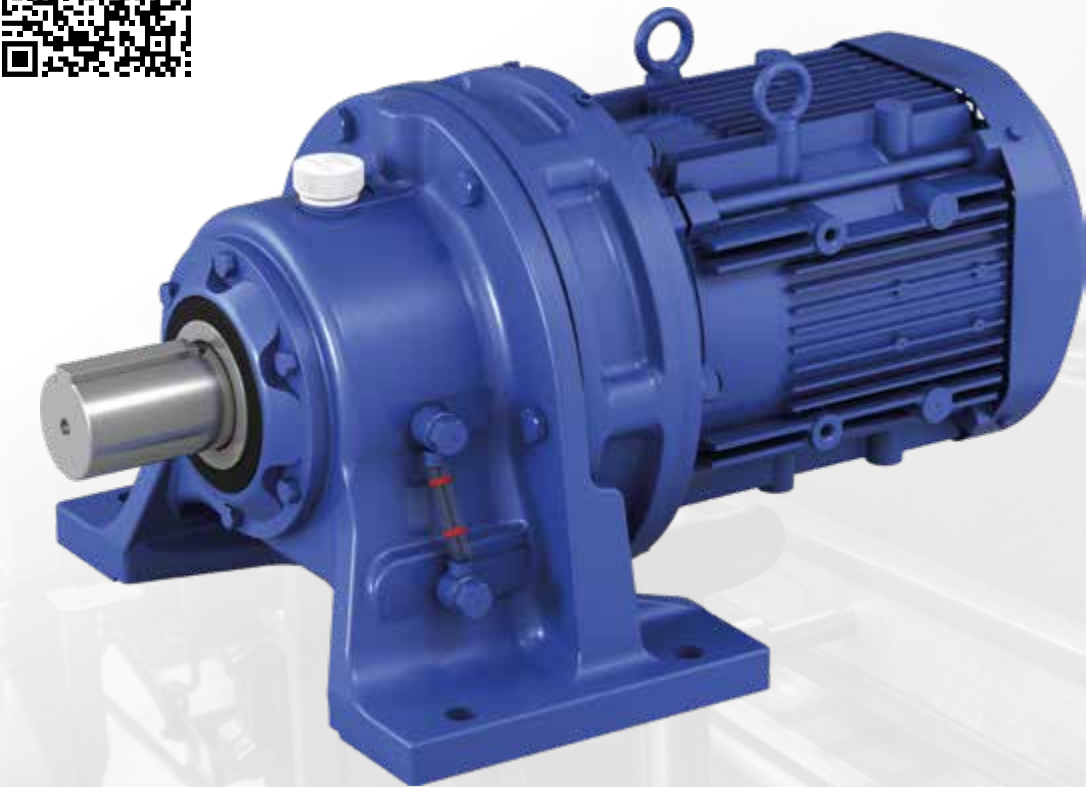
Gears and gearmotors are essential tools for many drive systems. With unique designs and configurations available, gearmotors can be used to increase torque, reduce speed, reverse direction, or change the push or pull of a driveshaft.

For over 80 years, we have been providing world-class gearmotors, gearboxes, and speed reducers, featuring industry-leading technology with fully integrated premium efficient motors. Our compact and powerful transmission units come in various mounting configurations.

Visit the Gears & Gearmotors product page and configure the product to your needs:



visit us



Cyclo Drive

- 34 single & 56 double stage sizes
- Ratio 3-7,569:1
- Motor type: three phase IE3 with multiple options
- Capacity 0.12 kW-55 kW



Bevel BuddyBox 4

- 6 sizes
- Ratio 11-26,000:1
- Motor type: three phase IE3 with multiple options
- Capacity 0.12 kW-55 kW



Helical BuddyBox

- 6 sizes
- Ratio 21-2,559:1
- Motor type: three phase IE3 with multiple options
- Capacity 0.12 kW-30 kW



Bevel BuddyBox H

- 5 sizes
- Ratio 5-30:1
- Motor type: three phase IE3 / alternative IE5 ultra-premium efficiency motor
- Capacity 0.75 kW-11 kW



Altax Neo

- 12 sizes
- Ratio 3-1,003:1
- Motor type: three phase IE3 with multiple options
- Capacity 40 W-3.7 kW



Neo Hyponic

- 12 sizes
- Ratio 5-1,440:1
- Motor type: three phase IE3 with multiple options
- Capacity 15 W-5.5 kW



# INDUSTRIAL GEARBOXES

## Powerful. Reliable. Versatile.

The broad portfolio of industrial gearboxes stands for versatile applications where peak loads in rough applications are the rule. The wide range of helical and bevel helical gear units is designed for high radial and axial loads.

The in-house competencies range from basic research, development and product design to construction and manufacturing and are complemented by product-specific after-sales services. As a result, customer-specific drive solutions are designed promptly and application requirements are fully met by reliable industrial gear units and flexible gear options.

Besides the gear units our specialists carefully select your drive package components including supporting structures or motor adapter with couplings, brakes, motors, variable frequency drives and the right protection guards. We provide flexible engineering solutions for any requirements with regard to drive technology that perfectly suit your application!

Visit the Industrial Gearboxes product page and configure the product to your needs:



PARAMAX 9000 · Multi-Stage Universal

- 26 sizes
- Helical and bevel helical ratios 6.3-500:1
- Output torque 2.6-552 kNm
- Input speed up to 1,800 rpm



Hansen P4 · Multi-Stage Horizontal

- 19 sizes
- Helical and bevel helical ratios 6.3-630:1
- Output torque 6-1,100 kNm
- Input speed up to 1,800 rpm



Hansen P4 · Multi-Stage Vertical

- 20 sizes
- Helical and bevel helical ratios 3.55-630:1
- Output torque 3-1,100 kNm
- Input speed up to 1,800 rpm



Hansen P4 · Single Stage

- 9 sizes
- Helical ratios 1.2-5.6:1
- Output torque 15-185 kNm
- Input speed up to 1,800 rpm



Hansen M4 ACC · Air Cooled Condenser drives

- 6 sizes
- Helical ratios 9-25:1
- Output torque 20-70 kNm
- Input speed up to 1,800 rpm



Hansen M5CT · Cooling Technology drives

- 26 sizes
- Ratios 6.3-500:1
- Output torque 2.6-552 kNm
- Input speed 1,800 rpm



# CENTRIFUGE DRIVES

High Performance. High Quality. Robust.

Our centrifuge drives are optimally suited for use in decanters and screen scroll centrifuges. A comprehensive product portfolio with a focus on quality and reliability makes our gearboxes the most commonly used drives for centrifuges.

The uses for our gearboxes span the entire transmission requirements of centrifuge applications: from wastewater treatment to the extraction of olive oil, wine and other foods, bioethanol and petrochemicals, chemical raw materials and drilling sludge treatment as well as salt extraction and many other separation applications.

Visit the Centrifuge Drives product page:



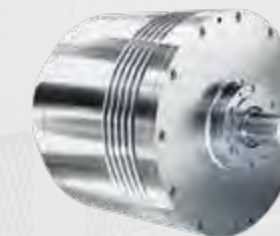
## ZS – Cyclo Line

- 14 sizes
- Ratios 6-87:1
- Output torque 300-46,000 Nm
- Leading screw



## ZSP – Cyclo/Planet Line

- 12 sizes
- Ratios 45-348:1
- Output torque 630-46,000 Nm
- Trailing, leading or differential screw



## ZP – Planet Line

- 5 sizes
- Ratios 20-224:1
- Output torque 5,000-50,000 Nm
- Trailing, leading or differential screw



# SERVICE & PREDICTIVE MAINTENANCE

Original. Experienced. Connected.

Apart from structured maintenance and repair activities, we also provide breakdown management, preventive & predictive maintenance programs.

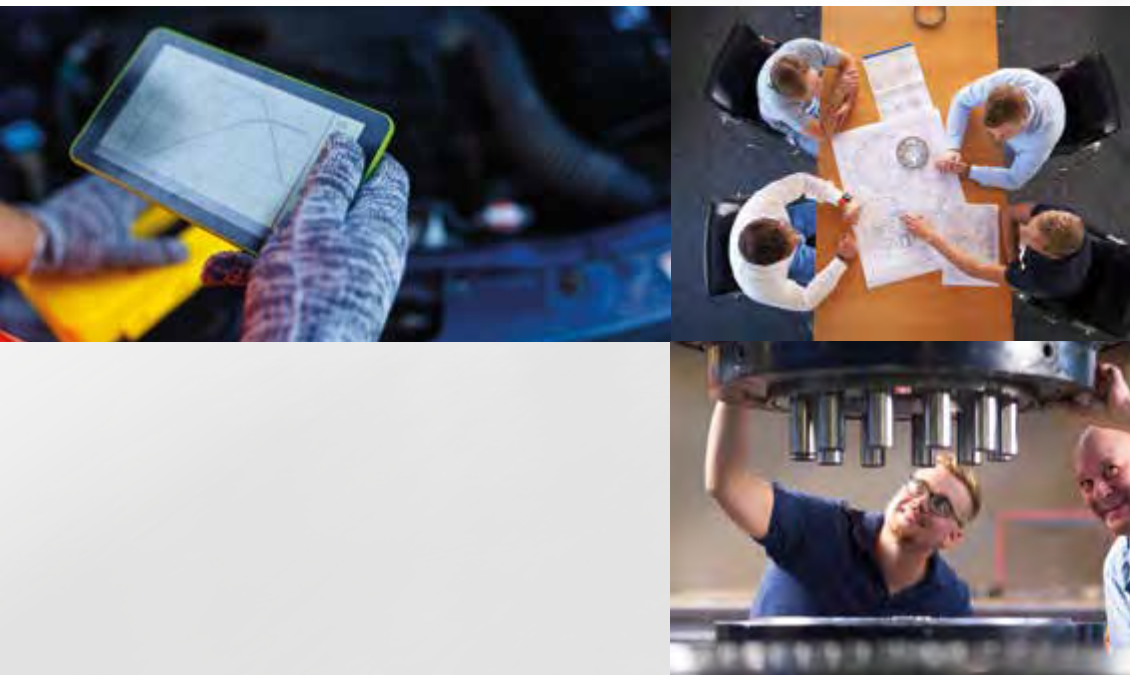
Our expertise is based on an extensive product range knowledge and global applications experience. Our service operations provide customer-focused and flexible service solutions, not only for our own product portfolio, but also for other brands.

Many of our customers have realised the long-term benefits of implementing one or all of our service programs in order to maximize up-time, to protect the value of their investment and to reduce equipment operating costs.

Visit the Service page here:



NEED URGENT HELP?  
Call us anytime: **+32 3 450 12 34**



Analysation and optimisation  
of your unit anyplace & anytime



Global network with local engineering &  
application knowledge



Local production to ensure  
short delivery time



Original components to guarantee  
complete compatability



Quick technical support  
and service



Immediate assistance and emergency  
deliveries for exceptional circumstances



# Worldwide locations

## World Headquarters JAPAN

Sumitomo Heavy Industries Ltd.  
PTC Group  
Think Park Tower, 1-1  
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[www.cyclo.shi.co.jp](http://www.cyclo.shi.co.jp)  
[www.sumitomodrive.com](http://www.sumitomodrive.com)

## Headquarters & Manufacturing CHINA

Sumitomo (SHI) Cyclo Drive China, Ltd. Shanghai Branch  
10F, SMEG Plaza, No.1386  
Hongqiao Road  
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## Headquarters & Manufacturing EUROPE

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[www.sumitomodrive.com](http://www.sumitomodrive.com)

## Headquarters & Manufacturing AMERICAS

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## Headquarters ASIA PACIFIC

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