# Sumitomo Drive Technologies

# **PRODUCT OVERVIEW**

## **HISTORY – WHERE THE STORY BEGAN...**



## 1925

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 Compact. Precise. Dynamic.



Drive Solutions for AGV/AMR Integrated. Intelligent. Safe.



Motion Control Drives Precise. Compact. Durable.



Gears and Gearmotors Versatile. Proven. Unique.



Industrial Gearboxes Powerful. Reliable. Versatile.



Centrifuge Drives High Performacne. High Quality. Robust.



Service Original. Experienced. Connected.



6 8

8 10

12

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18

# **ACTUATORS**

### Compact. Precise. Dynamic.

The TUAKA 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:

TUAKA with cylindrical housing 2 sizes

Visit the TUAKA product page:



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#### TUAKA - ACTIVE

BASIC OPTIONS Integrated disc brake

- ACCESSORIES

- Additional heat sink
- External driver



#### TUAKA - SERVO

### BASIC OPTIONS

- Integrated disc brake Variety of encoders

ACCESSORIES

- Additional heat sink
- External Driver



### TUAKA - DRIVE

- BASIC OPTIONS
- Integrated disc brake
- Integrated torque sensor
- Second encoder at gear output
- Advanced safety functions
- Additional heat sink

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)

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# **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.

& smartris

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:



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#### ECO Line

- Gear output shaft rotation design
- Cost efficient
- 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
- Saftey feature STO
- Operating modes: torque speed position

Ideal for light payloads and high-speed AGV



# **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 cycloidical 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</p>
- Acceleration torque up to 284 Nm



### **A-Series**

- 6 sizes
- Ratio 29/59/89/119/179
- Lost motion < 1 arcmin</p>



**DA-Series** 

6 sizes



#### **UA-Series**

- 8 sizes
- Ratio 60-283:1
  - Lost motion < 0.5 arcmin



**IB-Series P1 Type** 

Ratio 3.7-81:1

Lost motion < 3 arcmin</p>

3 sizes



**IB-Series P2 Type** 

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

Acceleration torque up to 380 Nm



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





- Lost motion < 3 arcmin</p>



Acceleration torque up to 7,610 Nm



### **C-Series**

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



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 PK Type**

- 3 sizes
- Ratio 5.5-243:1
- Lost motion < 6 arcmin</p>
- 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:





#### **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

Motor type: three phase IE3 with multiple options





#### Bevel BuddyBox 4

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



#### **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:



visit us



#### PARAMAX 9000 · Multi-Stage Universal

- 26 sizes
- Helical and bevel helical ratios 6.3-500:1
- Output torque 2.6-552 kNmInput 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 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 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 · Single Stage

- 9 sizes
- Helical ratios 1.2-5.6:1
- Output torque 15-185 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 Performacne. 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:



visit us









# **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:

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24/7 Hotline

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



Analysation and optimisation of your unit anyplace & anytime





short delivery time



and service



Global network with local engineering & application knowledge



Original components to guarantee complete compatability



Immediate assistance and emergency deliveries for exceptional circumstances



Find your closest Sumitomo Drive Technologies facility here.

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