



Sumitomo Drive Technologies

**INNOVATIVE DRIVE TECHNOLOGY FOR
WATER AND WASTEWATER TREATMENT**

WATER IS THE FOUNDATION OF ALL LIFE

Groundwater provides both drinking water and a habitat. We use water for our nutrition, daily hygiene and leisure activities. Water is also an important economic resource as an energy source, transport medium and raw material. Streams, rivers, lakes, wetlands and oceans are habitats for a multitude of plants and animals and form an important part of the natural environment. The effective protection and responsible stewardship of water resources is essential for biological diversity and sustainable use. Sewage and wastewater that is fed into the sewerage system or natural waters must be free from pollutants.

In water and sewage treatment plants, biological and mechanical treatment methods are used to achieve this. Mechanical methods, such as aeration, thickening, extraction or separation place high demands on the drive technology used, such as gearboxes and geared motors. These must have a high load capacity and a long lifetime, while being easy to maintain as well as energy-efficient — even under the toughest conditions.

Sumitomo Drive Technologies delivers the solution to these demands with drive technology that has already proven its value worldwide, including a wide range of industrial gearboxes in the **Hansen P4** and **Paramax** series, special centrifuge drives and robust standard drives according to the Cyclo principle and other drive solutions.

Plant operators in commercial public sector enterprises and industry have placed their confidence in this expertise for many decades.

SERVICE

No matter where you are.

Sumitomo Drive Technologies understands the requirements of different applications and creates the best solution for the plant and the individual stages of water treatment.

Our Service Capabilities

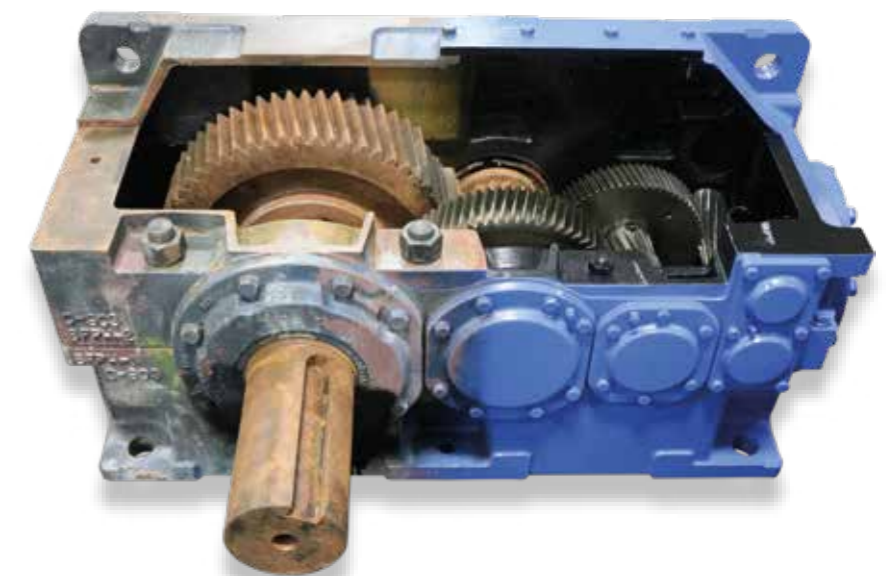
Our experts provide practical know-how and leverage cutting-edge technology for efficient solutions, wherever you are.

We can be your high-performance service partner by assisting with:

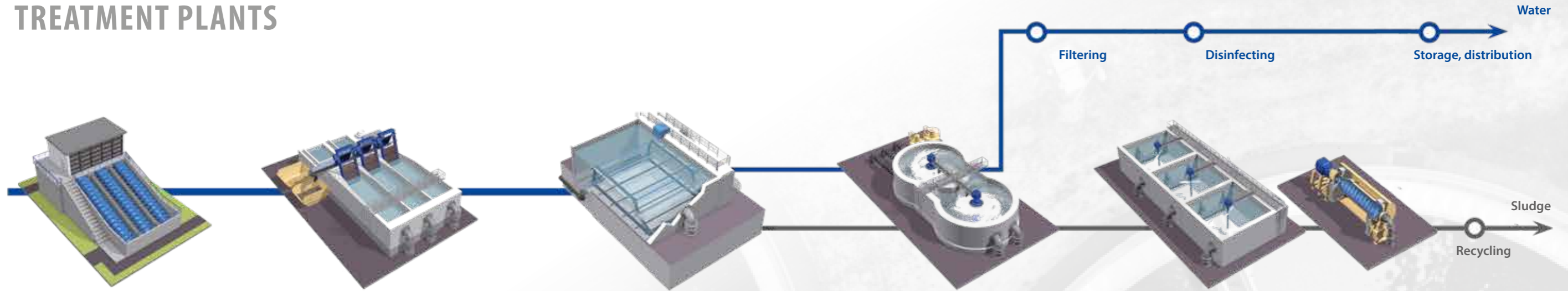
- Inspections
- Repairs
- Replacement Service
- Customizing
- Training



Want to avoid breakdowns?
Have a breakdown and need
help immediately?



INNOVATIVE DRIVE TECHNOLOGY IN SEWAGE TREATMENT PLANTS



<p>Preliminary stage: Wastewater pumping station</p> <p>Plant section: Wastewater pumping station</p> <p>Application: Screw pumps</p> <p>Screw pumps are a very efficient method of transporting large quantities of water or wastewater at low discharge heads. In wastewater treatment plants, the natural slope of the overall system is used to run through the whole process.</p> <p>Sumitomo gearboxes are known for their high efficiency and reliability, and they enable extremely high availability at low maintenance and operating costs.</p> <p>Products: Cyclo Drive 6000, HBB, Paramax 9000, Hansen P4</p>	<p>Pre-treatment: Screening plant</p> <p>Plant section: Screening plant</p> <p>Application: Bar screens</p> <p>In the screening plant, all the coarse contaminants in the wastewater are caught and automatically fed into a separate container.</p> <p>Sumitomo gearboxes are outstandingly well-suited to slow-running applications with high ratios, and offer high security and system availability thanks to their exceptional overload capacity. Our environmentally friendly grease-lubricated models minimise the risk of the water becoming contaminated.</p> <p>Products: Cyclo Drive 6000, Neo Hyponic, HBB, BBB, Paramax 9000, Hansen P4</p>	<p>Further treatment: Grit chamber, clarifier, aeration tank</p> <p>Plant sections: Sedimentation tank, grit chamber, primary clarifier, secondary clarifier</p> <p>Application: Scrapers</p> <p>In the sedimentation tank, the flow velocity is reduced so that any solids that are heavier than water are deposited there. The sludge is removed using mechanical scrapers or drag conveyors.</p> <p>Sumitomo gearboxes are outstandingly well-suited to slow-running applications with high ratios, and offer high security and system availability thanks to their exceptional overload capacity.</p> <p>Products: Cyclo Drive 6000, HBB, BBB</p>	<p>Plant section: Aeration tank</p> <p>Application: Surface aerators, brush aerators</p> <p>Surface aerators add oxygen to the water through mechanical means. The oxygen is used to supply the bacteria and microorganisms in the activated sludge. Mechanical surface aerators and brush aerators are often used in the addition of compressed air.</p> <p>In addition to our many years of experience, Sumitomo products are characterised by their high quality and reliability.</p> <p>Products: Cyclo Drive 6000, Paramax 9000, Hansen P4</p>	<p>Sludge treatment: Dewatering, thickening</p> <p>Plant section: Sludge treatment, flocculation plant, digestion tower, centrifuge</p> <p>Application: Agitators for flocculation plants and digestion towers, screw presses, belt filter presses and centrifuges for thickening and dewatering</p> <p>Mechanical sludge dewatering helps to reduce the volume of the sludge by separating the water from it. Before dewatering, the liquid sludge is enriched with a flocculant. The wastewater sludge is dewatered in centrifuges and then incinerated, or broken down in digestion towers before being dewatered in centrifuges.</p> <p>Sumitomo products are the ideal solution for slow-rotating agitator applications. Thanks to the unique Cyclo principle, our gearboxes achieve outstanding efficiency, even at very high reduction ratios. Robust bearing and gearing components made from reinforced high-performance steels give our products unmatched strength and durability. The Cyclo system can withstand extreme impact loads of up to 500%. These properties have always been highly valued by our customers in presses and other high-stress applications.</p> <p>Products: Cyclo Drive 6000, HBB, BBB, Paramax 9000, Hansen P4, ZS-centrifuge drives</p>
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Cyclo Drive 6000



HBB



BBB



Neo Hyponic



Paramax



ZS - Centrifuge drives

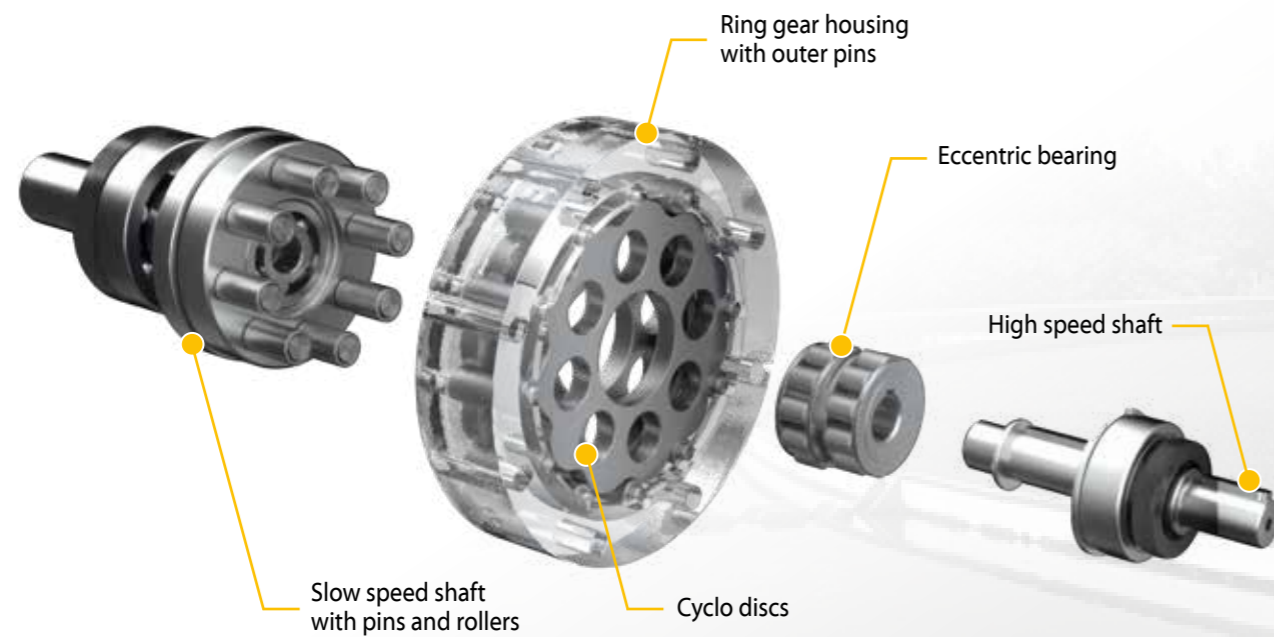


Hansen P4 Vertical

OUR PRODUCT PORTFOLIO

Powerful. Reliable. Versatile.

The cycloidal gear revolutionised drive technology and remains one of the highlights in Sumitomo Drive Technologies' portfolio. The design of a cycloidal gearbox is simple, ingenious and comprises five basic elements:



Advantages of the Cyclo Principle:

- High impact load capacity, efficiency and reliability
- Compact size
- No thermal factor limitation
- Long Life time



Helical BuddyBox

Helical BuddyBox: Combination of Cyclo and helical gearboxes. Parallel flat gearboxes and geared motors, in hollow and solid shaft versions.

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



Bevel BuddyBox

Bevel BuddyBox: Combination of Cyclo and bevel gearboxes. Right-angled gearboxes and geared motors, in hollow and solid shaft versions.

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



Cyclo Drive

Compact design, high overload reserves, long lifetime.
Variants: H foot housing, F and V flange housing.

- 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



Neo Hyponic

Right-angled hypoid gearbox and geared motors, in hollow and solid shaft versions.

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



ZS - Centrifuge Drive

Single stage centrifuge gearbox. Compact design, high overload reserves, long lifetime.

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



ZSP - Centrifuge Drives

Double stage centrifuge gearbox. Compact design, high overload reserves, long lifetime.

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



Hansen P4 Vertical

Robust industrial gearbox series, dedicated for vertical applications, with a wide torque and power range.

- 20 sizes
- Helical and bevel helical, ratio 6.3:1 to 630:1
- Output torque 3.1 - 1100 kNm
- Horizontally split housing above the oil level for easy inspection and maintenance



Paramax 9000

Flexible industrial gearbox series for various applications, engineered and produced in Europe.

- 26 sizes
- Helical and bevel helical, ratio 6.3-500:1
- Output torque 2.6-552 kNm
- Numerous options and accessories: condition monitoring, backstop, cooling fan, ...



Find your closest Sumitomo Drive Technologies facility here.

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