Press release

New generation of cycloidal gearboxes

Combines high dynamics and rigidity with a compact design

Markt Indersdorf (Germany), 20 October 2026 – At SPS 2026 in Nuremberg, Sumitomo Drive Technologies is presenting, amongst other things, new gearboxes and gearmotors from the NEO Essential series, innovative servo drive solutions for automated guided vehicles (AGVs) and, as a highlight, its new generation of cycloidal precision gearboxes: the Fine Cyclo B series.

This successor generation to the well-known single-stage A-series cycloidal gearboxes has been improved in almost all technical areas, as Nils Zieglgänsberger, Key Project Manager for Business Development at Sumitomo Drive Technologies, emphasises: “In particular, we have been able to significantly increase the acceleration torques and torque densities, the permissible overturning moments and the input speeds. This combination of characteristics is very much in line with the trend towards further power densification in servo motors through higher speeds.”

With the new B-Series, precision drives can be designed to be significantly more compact and positioning movements can be executed even more dynamically, for example in machine tools, medical technology, and in automation and handling systems. In addition, the developers have managed to increase the efficiency of the Fine Cyclo B Series to up to 90 per cent. The combination of extreme compactness and high efficiency also greatly expands the range of possible applications. Applications involving continuous operation (S1) and without specific precision requirements offer, thanks to their compactness, a whole new scope for design when integrating the drive solution into the machine or plant.

Extremely compact drives with high gear ratios

The Fine Cyclo B Series is available in solid-shaft and hollow-shaft versions, as a complete gearbox or as a so-called ‘KIT’, in the four sizes 15, 25, 35 and 45. Depending on the version, reduction ratios ranging from 29 to 179 are available. With external diameters ranging from just 120 to 231 mm, the B-Series transmits

acceleration torques of 417 to 4,000 Nm and, in the event of an emergency stop, peak torques of up to 8,000 Nm.

Two variants for different machine designs

With the Fine Cyclo F4C-B main bearing type, Sumitomo Drive Technologies offers ready-to-install, sealed and permanently lubricated precision gearboxes. The tilt-resistant main bearing accommodates particularly high radial and axial loads. With the Fine Cyclo FC-B KIT, Sumitomo Drive Technologies caters to machine builders who wish to determine the design integration of the gearbox themselves. Bearings, interfaces, and other components can be flexibly integrated into the respective machine. The gearbox kit thus offers maximum design freedom.

Technical principle: Cyclo gearbox technology

The Fine Cyclo B series utilises the tried-and-tested Cyclo® technology, which enables particularly high torques whilst ensuring smooth and vibration-free operation. An eccentric bearing is mounted on the input shaft, which drives the cam discs. These transfer the rotational movement precisely to the output shaft. This principle reduces mechanical play and ensures smooth, highly dynamic movements.

What began in 1925 with the company’s own patenting of the groundbreaking Cyclo principle by the Munich-based designer Lorenz Braren has, to this day, developed into the epitome of German engineering and makes Sumitomo Drive Technologies an international manufacturer of drive solutions with its European headquarters near Munich.

Sumitomo Drive Technologies will be exhibiting at SPS 2026 in Hall 3A, Stand 456.

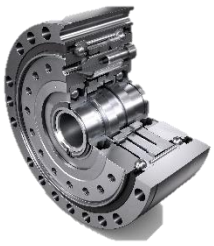
Images are available for download at:

https://emeia.sumitomodrive.com/en-gb/press-material



(Image source: Sumitomo Drive Technologies)

Fine Cyclo B series also suitable for S1 operation



(Image source: Sumitomo Drive Technologies)

Fine Cyclo B Series for demanding industrial applications: compact, precise and efficient

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About Sumitomo Drive Technologies

Sumitomo Drive Technologies is a leading global supplier of drive and control solutions, providing gear motors, gearboxes, and related services to a wide range of industries. With a long-standing commitment to technical excellence, product reliability and customer support, Sumitomo Drive Technologies helps manufacturers worldwide to increase uptime, efficiency and performance.

Drive technology close to the customer – worldwide.

With ten production sites, over 30 assembly plants, 250 sales offices and around 7,000 employees across five continents, Sumitomo Drive Technologies has an extensive network to meet regional customer requirements worldwide.

Sumitomo Drive Technologies is part of Sumitomo Heavy Industries Ltd., one of the largest corporate groups in Japan and the world, with an annual turnover of around 7 billion euros.

Further information is available at: www.sumitomodrive.com

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