

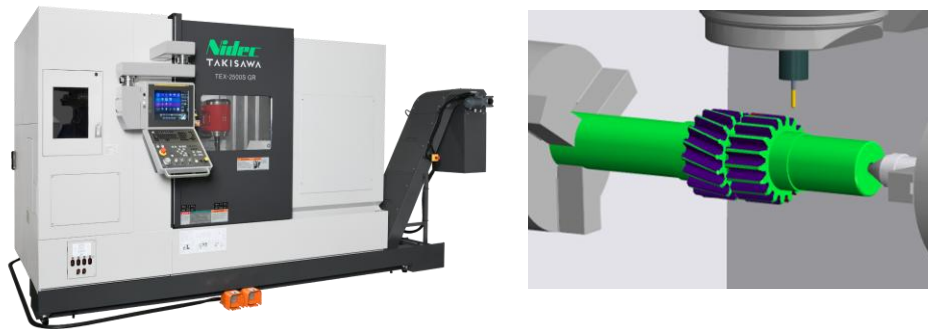
October 15, 2026

Takisawa to Add Gear-Machining-Dedicated "GR Specification" to Its Lineup of Multi-Tasking Machine TEX-2500S

— Facilitating the Machining of High-Mix, Low-Volume Gears —

Takisawa Machine Tool Co., Ltd. announced today the upcoming release of the "GR Specification," developed exclusively for gear machining, as a new addition to the lineup of TEX-2500S—the company's mid-sized multi-tasking machine that went on full-scale sale in June 2026. Scheduled for release in March 2027, this new model consolidates turning, milling, and gear processing—which previously required dedicated equipment—into a single machine. By eliminating the need for dedicated gear-cutting machinery or special tooling, the GR Specification facilitates in-house gear machining for high-mix, low-volume production, empowering small- and mid-sized manufacturing plants to establish highly efficient production systems.

TEX-2500S GR will be exhibited at JIMTOF2026 later this month.



TEX-2500S GR and its software-produced screen image

■ Background of developing the GR specifications

Component machining sites face urgent demands to adapt to high-mix, low-volume production. However, because conventional gear machining requires specialized machines, expensive special tooling, and advanced technical skills, manufacturers frequently outsource these operations—often leading to missed business opportunities. Furthermore, bringing these processes in-house typically requires a dedicated line of separate machines for turning, milling, drilling, and gear processing, resulting in space inefficiencies and transfer losses between processes.

To resolve these challenges amid the global trend toward process integration, Takisawa Machine Tool developed the GR Specification. This solution easily integrates into small- and mid-sized production sites, enabling complete, end-to-end manufacturing through gear processing on a single multi-tasking machine.

■ Gear Processing Methods Enabled by the GR Specification

Depending on the target workpiece geometry,

TEX-2500S GR can perform any of the following three gear-machining methods:

1. Gear Milling (External Gears / Prototyping & Trial Cutting) [Module Range: Up to M6.0]

This method eliminates the need for expensive, dedicated tooling by utilizing standard end mills and general-purpose tools to freely machine external teeth. Operators can begin machining immediately using tools already on hand. This is ideal for custom orders, high-mix/low-volume runs, and reducing cost and lead time during prototype processing.

2. Gear Hobbing (External Gears / Mass Production) [Module Range: Up to M3.0]

Designed for highly efficient, high-speed mass production of external gears.

3. Gear Skiving (Internal Gears / Mass Production) [Module Range: Up to M2.0]

Enables high-efficiency machining of internal gears in a compact footprint—a process historically difficult due to

tool interference constraints. Companies can now process internal gears in-house without requiring bulky dedicated equipment, such as broaching machines, or expanding floor space.

■ **Dedicated Gear Machining Software**

TEX-2500S GR comes equipped with dedicated conversational software that enables operators to produce gears easily and accurately without needing G-code expertise. Beginner operators can run TEX-2500S GR smoothly, supporting cross-training efforts and helping alleviate labor shortages on the factory floor.

-Intuitive Conversational Input: Operators simply follow interactive on-screen prompts to enter gear specifications and tool data. TEX-2500S GR automatically generates the optimal machining program, minimizing reliance on specialized programmers.

-Automatic Parameter Setup: The system automatically determines optimal cutting conditions (machining speeds and feed rates), interference avoidance (setup checks), and tool approach paths.

-Automatic Macro Generation: Complex toolpaths, spindle synchronization commands, and necessary M-codes are automatically output as macros, preventing setup errors commonly associated with manual program creation.

■ **Multi-Tasking Machine TEX-2500S Product Details:**

<https://www.takisawa.co.jp/english/product/fk/tex/index.html>

■ **Inquiries Regarding the Product:**

<https://www.takisawa.co.jp/english/product/contact.html>

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