Contact Technical Communication:
Eva Manzenreiter
DMG MORI EMEA Holding GmbH
eva.manzenreiter@dmgmori.com
dmgmori.com

World Premiere: DMU 55 H Twin / DMC 55 H Twin

Double the productivity, unlimited flexibility

Munich. One of the biggest challenges in fast-growing industries such as medical, die & mold, mobility, and energy is increasing productivity and efficiency to counteract rising cost pressures. The new DMU/C 55 H Twin offers a solution in this case. DMG MORI has equipped the horizontal machining center with two spindles and tables—connected by a common swivel axis—to double output. Since the DMU/C 55 H Twin has independent X, Y, and Z axes, it is able to compensate for tool lengths and radii under changing environmental conditions. At the same time, the machining center guarantees maximum flexibility in the machining of complex precision components.

Wide range of components and up to 214 tools per spindle

The travel distances of the DMU/C 55 H Twin are 580 x 750 x 500 mm. Each table can accommodate workpieces weighing up to 400 kg with a diameter of up to 630 mm and a height of 500 mm, enabling the machine to handle a wide range of components. The distance between the spindles is 640 mm. The modular design of the DMU/C 55 H Twin allows for application-specific equipment. The spindle range includes motor spindles with speeds of up to 30,000 rpm or a torque of 200 Nm. Instead of the standard 4-axis table, a version for 5-axis simultaneous machining and mill-turn is available. The DMC variant with pallet changer is also available here. A narrow swivel bridge and the double swivel rotary table with up to four B axes are ideal for automated large-scale production. The scalable wheel magazine has 60 tool positions per spindle as standard and can be expanded to 214, ensuring flexibility for a wide range of workpieces and drastically reducing non-productive times. The same applies to fast tool changes with chip-to-chip times of up to 3.2 seconds. The compact wheel magazine is designed for tools up to 400 mm in length and 160 mm in diameter. The footprint of the DMU/C 55 H Twin is a compact 18.4 m² (with pallet changer: 25 m²), so that production capacity can be increased even in tight production areas.

Precise positioning accuracy and maximum dynamics

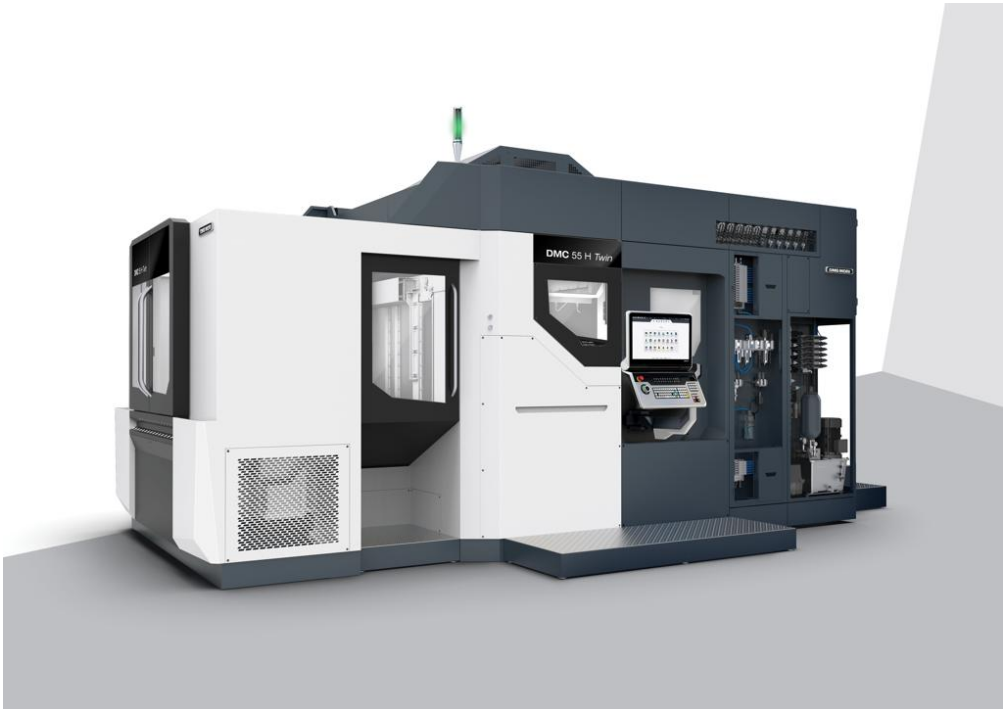
A stable basic structure and good damping properties thanks to cast iron components made of EN-GJS-600-3, three guides in the X-axis, comprehensive temperature compensation, and permanent synchronization of the two spindles ensure that the DMU/C 55 H Twin meets even the most demanding accuracy requirements over the long term—with a positioning accuracy of 5 µm. The rigid basic design and low moving masses – which support highly energy-efficient operation – also enable highly dynamic machining with accelerations of up to 10 m/s² and rapid traverse speeds of 75 m/min in the X and Z axes and 100 m/min in the Y axis.

Contact Technical Communication:
Eva Manzenreiter
DMG MORI EMEA Holding GmbH
eva.manzenreiter@dmgmori.com
dmgmori.com

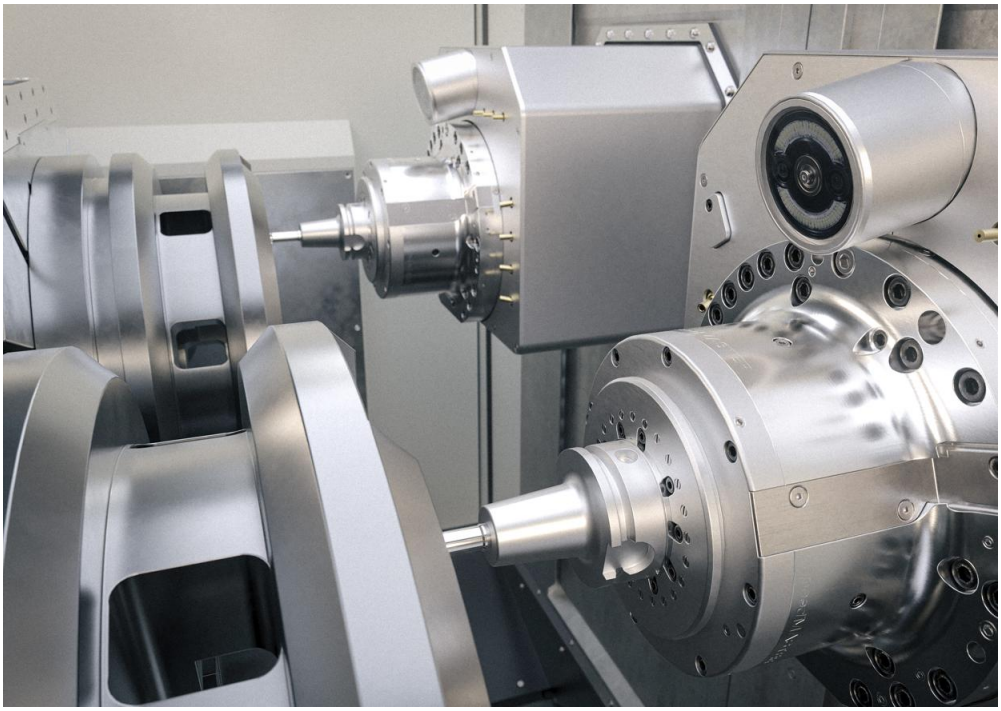
Integrated processes and automated production

With a view to Machining Transformation (MX), the DMU/DMC 55 H Twin proves to be a future-proof investment. It combines milling, turning, and grinding or even gear cutting in a single setup to reduce throughput times to a minimum—a unique selling point in the twin-spindle machine segment. DMG MORI achieves autonomous production with robot-based workpiece handling and customer-specific special solutions. For example, pallet handling such as the PH Cell series or connection to a central tool magazine (CTS) are possible here. The CELOS X platform for production digitization with a Siemens SINUMERIK ONE serves as the basis for networked and digitalized production. The use of numerous DMG MORI technology cycles also reduces programming times by up to 60 percent. In addition, GREENMODE ensures energy-efficient and resource-saving machining to pave the way for more sustainable manufacturing.

Contact Technical Communication:
Eva Manzenreiter
DMG MORI EMEA Holding GmbH
eva.manzenreiter@dmgmori.com
dmgmori.com



Equipped with two spindles, the DMC 55 H Twin offers double productivity and maximum flexibility on a compact footprint.



As the DMC 55 H Twin has independent X, Y and Z axes, it is able to compensate for tool lengths and radii under changing ambient conditions.

Contact Technical Communication:
Eva Manzenreiter
DMG MORI EMEA Holding GmbH
eva.manzenreiter@dmgmori.com
dmgmori.com

Company Profile // DMG MORI

DMG MORI is a leading global manufacturer of high-precision machine tools and is represented in 44 countries – with 124 sales and service locations, including 17 production plants. In the “Global One Company”, more than 13,500 employees are driving the development of holistic solutions in the manufacturing industry. Under the guiding principle of Machining Transformation (MX), DMG MORI combines four pillars for the efficient, sustainable production of the future: Process Integration, Automation, Digital Transformation (DX) and Green Transformation (GX).

DMG MORI stands for innovation, quality and precision. Our portfolio covers sustainable manufacturing solutions based on the technologies Turning, Milling, Grinding, Boring as well as Ultrasonic, Lasertec and Additive Manufacturing. With technology integration, end-to-end automation and digitization solutions we make it possible to increase productivity and resource efficiency at the same time.

At our production sites worldwide, we implement holistic turnkey solutions for the main sectors of aviation & space, automotive & e-mobility, die & mold, medical, and semiconductor. With the DMG MORI Qualified Products (DMQP) partner program, we offer perfectly matched peripheral products from a single source. Our customer-oriented services cover the entire life cycle of a machine tool – including training, repair, maintenance and spare parts service.

DMG MORI EMEA Holding GmbH | Walter-Gropius-Str. 7 | 80807 Munich
Managing Directors: Hirotake Kobayashi, James Nudo, Irene Bader, Rajeev Anand, Ralf Riedemann, Yosuke Nakatsukasa, Marc Joost
Phone number: +49 89248835900
Data protection: DMG MORI EMEA Holding GmbH