

Press Release

March 9th, 2018

Debut of MATRIS, programming-free new robot system

DMG MORI CO., LTD. (hereinafter referred to as DMG MORI) launched an innovative and use-friendly robot system MATRIS, which requires no expertise in robot programming and operation.

MATRIS stands for “Module Automation Transfer Robot Intelligence System.” The modularized peripherals ensure quickest installation, setup and even layout retrofit of MATRIS. With standardized robot programs and MAPPScnected, a dedicated control system to connect robots, peripherals and machines, MATRIS users can enjoy its simple and intuitive operation without special knowledge.

The features of MATRIS are described below in 5 categories; (1) Modularization, (2) Operability, (3) Packaged functions, (4) Applicable models and (5) Customer support.

(1) Modularization

- Modularized peripherals; transfer equipment, workpiece stockers, external measuring equipment and washing machine
 - Standardized size for flexible layout change and customization
- Installation lead time reduced by 80%* due to modularization. Layout retrofit done within a day*

*It might change depending on the specifications.

(2) Operability

- MAPPScnected for integrated control of the whole automatic system, including robots, modularized peripherals and machines
 - Operation monitoring, scheduling and production process etc. centrally controlled
 - Simple setting and maintenance, no need for robot teaching expertise
- Touch-sensitive operation panel “COMPACTline” for easy job creation and setting
- Accumulated database of measuring, transfer, operation and job history
 - Visualization for higher productivity

(3) Packaged functions

- Frequent requests included as packages for high-quality and short-term delivery
 - Handling package (workpiece stocker)
 - Rotary workpiece stockers with 10/14 pallets
 - Failed workpiece automatically rejected and discharged with in-machine measurement; suitable for continuous operation without system down

Handling package (IN/OUT conveyor)

-Automatic workpiece transfer from preceding process to post process

Handling package (tray changer)

-Store max. 8 trays with tray stacking method

-Workpieces arranged automatically on a tray, ready to be shipped

Measuring package (external workpiece measuring system)

-High-accuracy measurement and acceptance/ rejection judgement of workpieces with measuring equipment

-Measuring results to be fed back to machines for stable machining accuracy

Measuring package (3D measuring instruments)

-Measuring arbitrary points with 3D CMM, flexible use for various workpieces

(4) Applicable models

Wide range of machines, including turning centers, machining centers and 5-axis machines

(5) Customer support

- DMG MORI Academy supports legally-required basic lectures and robot operation certificate

-Basis safety lecture using robots

-Machine and robot operation support

-Launch "MATRIS training course" from 2019, no need for trainings at robot manufacturers' schools

- Service and maintenance equivalent to the ones for machines

-Service centers open 24/7 for early recovery

*Robot operation certificate required for introducing MATRIS

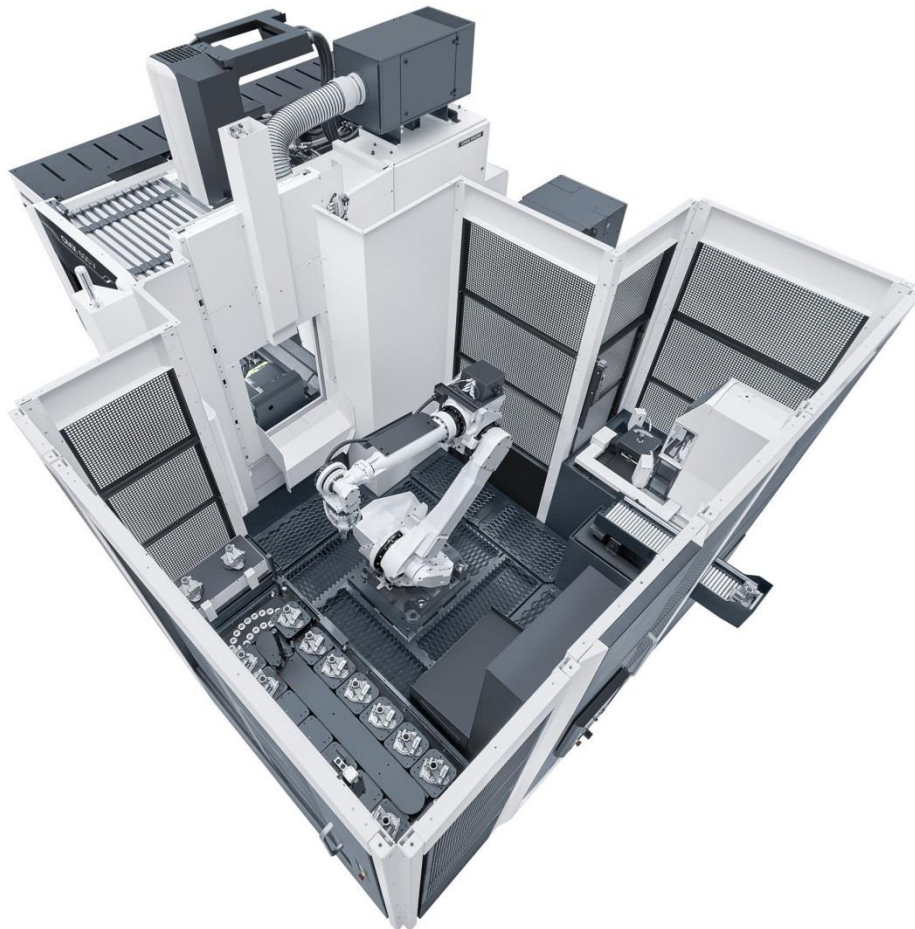
DMG MORI will continuously be committed to fulfill the customer needs for high-functional and reliable products.

Product type	Robot system
Product name	MATRIS
Target markets	Medical, automotive, industrial machines etc.
Sales volume (plan)	100 systems in 2018

*MATRIS standard package includes a robot hand, workpiece stocker, material table, NG chute, safety fence, floor oil pan, maintenance door and MAPPScnnected



CMX 600 V + MATRIS (Front view)



MATRIS (Upper view)