



June 14, 2017

5-Axis Vertical Machining Center

MX-520 PC4

Machine Release

Matsuura Machinery Corporation announces the launch of *MX-520 PC4*, a four pallet automated version of our groundbreaking and market leading *MX-520* single table 5-axis vertical machining center model. This 4 pallet model (PC4) is available to order from today's date.

As a single table entry model into the high quality world of Matsuura 5 axis machining, the *MX-520* has been nothing short of a phenomenal success for Matsuura globally. Offering ease of use and reliable 5-axis machining, the *MX* delivers dynamic machining versatility, high accuracy and reliability, and excellent cost performance. Since its debut in 2010, the *MX-520*, has sold in substantial numbers in every territory to a myriad of industries, machining all known materials. Many customers sought to automate their *MX-520* machines with aftermarket none Matsuura pallet pools and changers. The demand for a Matsuura automation solution for the *MX-520 PC4* has arisen directly from our customers.

With cost down pressures on all manufacturers, the need for reliable automated machining is increasing – and Matsuura across our range have a proven and demonstrable history in reliable and innovative unmanned operation. The *MX-520 PC4* comes equipped with 90 tools and an installed Universal Robot Interface to maximize the automation potential of this eagerly awaited addition to our 5 axis range.

The latest FANUC 31i (iHMI, 15-inch touch panel type) is installed and integrated with Matsuura's renowned original software, which ensures ease of use, status at a glance and excellent operability. With consideration for the growing requirement for factory optimization and remote offsite monitoring, the *MX-520 PC4* is "Internet of Things" ready. The highly capable **MAXIA** 12,000 min⁻¹ spindle (120.0 Nm) is provided as standard. To cope with increasing requests from industry to machine hard-to-cut materials, a high-torque (187.0 Nm) motor is available as an option. Our renowned and reputable 20,000 min⁻¹ (108.7 Nm) spindle for high-speed machining of aluminum parts is also available as an option.

Matsuura will exhibit the *MX-520 PC4* at **EMO2017** (September 18-23 in Hannover, Germany), as well as **CMTS2017** (September 25-28 in Toronto, Canada).

MX-520 PC4 Features

1. MX-520 simple automation system (option: dedicated pallet size D400 mm)
 - 1.1. PC4 (floor pallet system) + 90-tool magazine
 - 1.2. PC1 (single pallet)
 - 1.3. Pallet + 3 ports for fixture hydraulic system
 - 1.4. Robot interface + auto door (table type)
2. **MAXIA** spindle (from heavy duty machining to high speed machining)
 - 2.1. 12,000 min⁻¹/ 120.0 Nm (standard)
 - 2.2. 12,000 min⁻¹/ 187.0 Nm (option) Powerful type *New!*
 - 2.3. 20,000 min⁻¹/ 108.4 Nm (option) High-speed type
3. Table specifications (to cover the wide range of applications)
 - 3.1. D300 mm (standard)
 - 3.2. D500 mm / D300 mm + flat table (option)
 - 3.3. 6 ports for fixture hydraulic system (option)
4. Operability / accessibility
 - 4.1. NC: FANUC 31i (iHMI, 15-inch touch panel type)
 - 4.2. Operator assisting software "MIMS (Matsuura Intelligent Meister System)": Standard
 - 4.3. Distance from floor to table top surface : 850 mm (table type) / 870 mm (pallet type)
 - 4.4. Distance from machine front to table center : 385 mm
 - 4.5. Front door opening width : 800 mm

(Opening width sufficient for the maximum workpiece D710 mm)

Main Specifications

Item	Unit	<Reference> MX-330	<i>New!</i> MX-520	<Reference> MX-850
Travel (X / Y / Z axis)	mm	435/ 465/ 560	630/ 560/ 510	900/ 780/ 650
Travel (A / C axis)	deg	-125 ~ +10/ 360	-125 ~ +10/ 360	-125 ~ +30/ 360
Rapid traverse rate (X / Y / Z axis)	m/ min	40/ 40/ 40	40/ 40/ 40	40/ 40/ 40
Rapid traverse rate (A/C axis)	min ⁻¹	17/ 33	17/ 33	17/ 33
Feedrate (X / Y / Z axis)	m/ min	40/ 40/ 40	40/ 40/ 40	40/ 40/ 40
Spindle speed	min ⁻¹	15,000	12,000	12,000
Spindle motor power	kW	5.5 / 7.5	7.5 / 11	15 / 22
Spindle torque	N·m	65.1	120.0	187.3
Pallet type (option)	pallets	PC10	PC4	-
Max. workpiece size (pallet type option)	mm	D420 x H320* (D330 x H300)	D710 x H350* (D520 x H330)	D850 x H450
Loading capacity (pallet type option)	kg	80 / (80)	200/ (175)	500

* Bullet shaped



Figure: Appearance of *MX-520 PC4*