**Press Release** 



October 23, 2018

## **5-Axis Vertical Machining Center**

## MX-850 PC4 Product Release

Matsuura Machinery Corporation is pleased to announce the launch of the *MX-850 PC4*, a four-pallet automated version of our large capacity and market leading *MX-850* single table 5-axis vertical machining center model. Order intake begins from today's date.

As a single table entry model into the high-quality world of Matsuura 5 axis machining, the *MX-850* has been a major success for Matsuura globally. Offering ease of use and reliable 5-axis machining, the *MX-Series* across the range delivers dynamic machining versatility, high accuracy and reliability, and excellent cost performance. Since its debut, the *MX-850* has sold in strong numbers in every territory to a myriad of industries, machining all known materials. Many customers sought to automate their *MX-850* machines with aftermarket none Matsuura pallet pools and changers. The demand for a Matsuura automation solution for the *MX-850 PC4* has arisen directly from our customer base, and equally significantly potential customer base whose business is the CNC processing of large billets and castings.

With cost down pressures on all manufacturers, the need for reliable automated machining is increasing globally in both established and emerging markets – and Matsuura across our range have a proven and demonstrable history in reliable and innovative unmanned operation ready for the new IOT automation and information age. The *MX-850 PC4* comes equipped with 90 tools and a load capacity per pallet of 500kg. An installed Universal Robot Interface to maximize the automation potential of this eagerly awaited addition to our 5-axis range is standard.

The latest NC unit is installed and integrated with Matsuura's proven and original software optimizing performance, automation and spindle utilization.

Matsuura will exhibit the *MX-850 PC4* at JIMTOF2018 (The 29th Japan International Machine Tool Fair) that is to be held from November 1 at Tokyo Big Sight.

## MX-850 Features

- 1. **MX-850** simple automation system (option: dedicated pallet size D630 mm)
  - 1.1. PC4 (floor pallet system) + 90-/120-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<sup>-1</sup>/ 187.3 Nm (standard)
  - 2.2. 15,000 min<sup>-1</sup>/ 350.0 Nm (option) Powerful type
  - 2.3. 20,000 min<sup>-1</sup>/ 108.4 Nm (option) High-speed type
- 3. Table specifications (to cover a wide range of applications)
  - 3.1. D500 mm (standard)
  - 3.2. D700 mm/D500 mm + flat table (option)
  - 3.3. 6 ports for fixture hydraulic system (option)
- 4. Operability / accessibility
  - 4.1. NC: *Matsuura* G-Tech 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: 910 mm (table type) / 975 mm (pallet type)
  - 4.4. Distance from machine front to table center : 500 mm
  - 4.5. Front door opening width : 1,055 mm (Opening width sufficient for the maximum workpiece depth 850 mm)

## Main Specifications

Item	Unit	<reference> MX-330</reference>	<reference> MX-520</reference>	<new> MX-850</new>
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 <sup>-1</sup>	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 <sup>-1</sup>	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	PC4
Max. workpiece size (With a pallet option)	mm	D420 × H320* (D330 × H300)	D710 × H350* (D520 × H330)	D850 × H450* (D850 × H385*)
Loading capacity (With a pallet option)	kg	80 (80)	200 (175)	500 (400)

<sup>\*</sup> Bullet shaped



Figure: Appearance of *MX-850 PC4*