



July 6, 2016

5-Axis Vertical Machining Center *MX-330*

Vertical Machining Center *V.Plus-550*

## Machine Release

Matsuura Machinery Corporation has developed a new 5-axis vertical machining center model, *MX-330*, and a completely renewed vertical machining center, *V.Plus-550*, and starts selling these models from today.

With the keywords "Security" and "Ease" for simple and reliable 5-axis machining, the *MX* series offers good operability, high machining capability, and good cost performance. Since its debut in 2010, the lineup has been expanded to *MX-520* and *MX-850*, both of which are highly evaluated by our customers (total sales of more than 650 machines).

This time, the *MX-330* is added to the lineup to meet customer requests for a compact *MX* series model for machining small parts. This model is built in a compact frame but ensures a sufficient machining area for machining a maximum workpiece size of D420 mm x H320 mm [D16.53 x H12.59 in.].

In addition to the fundamental concept of the *MX* series, the *MX-330* has introduced a new concept: simple automation. In general, the smaller the workpiece size, the shorter the machining time becomes; consequently, an extended unmanned production system is required to improve productivity. Such a system tends to be complex and expensive. However, the *MX-330* offers a package option, consisting of a PC10 (floor pallet system) and 90-tool magazine, at a reasonable price. In addition, the machine is optionally equipped with a robot interface, which is compatible with a universal robot. The *MX-330* is the optimal machine for those considering 5-axis machining with automation.

The highly capable **MAXIA** spindle of 15,000 min<sup>-1</sup> is provided as standard. According to the workpiece type to be machined, a powerful type of 15,000 min<sup>-1</sup> (119.3 Nm) and a high-speed type of 20,000 min<sup>-1</sup> are also optionally available.

In parallel with the *MX-330* development, the 3-axis vertical machining center, *V.Plus-550*, has undergone a full model change. Both *MX-330* and *V.Plus-550* have a compact footprint and can be installed within a space equivalent to that of an existing machine of the same class.

The *MX-330* and *V.Plus-550* are going to be exhibited at IMTS2016 (International Manufacturing Technology Show 2016) to be held in Chicago from September 12 to 17, 2016.

## MX-330/ V.Plus-550 Features

1. **MAXIA** spindle (from heavy duty machining to high speed machining)
  - 1.1. 15,000 min<sup>-1</sup>/ 65.1 Nm (standard)
  - 1.2. 15,000 min<sup>-1</sup>/ 119.3 Nm (option)      Powerful type
  - 1.3. 20,000 min<sup>-1</sup>/ 108.5 Nm (option)      High-speed type
2. Table specifications (to cover the wide range of applications)
  - 2.1. *MX-330*
    - 2.1.1. D250 mm [D9.84 inch] (standard)
    - 2.1.2. D250 mm [D9.84 inch] + 6 ports for fixture hydraulic system (option)
  - 2.2. *V.Plus-550*
    - 2.2.1. 860 x 400 mm table [33.85 x 15.74 in. table]
3. *MX-330* simple automation (option)
  - 3.1. Pallet (CAPTO C6): PC10 (floor pallet system) + 90-tool magazine
  - 3.2. Pallet (CAPTO C6): PC1 (single-pallet pallet changer)
  - 3.3. Pallet (CAPTO C6) + 3 ports for fixture hydraulic system
  - 3.4. Robot interface + auto door
4. Operability / accessibility
  - 4.1. Operator assisting software "MIMS (Matsuura Intelligent Meister System)": Standard
  - 4.2. 15-inch touch panel screen
  - 4.3. Distance from floor to table top surface: 1,000 mm [39.37 in.] (table specification)
  - 4.4. Distance from machine front to table center: 385 mm [15.15 in.]
  - 4.5. Front door opening width      : 650 mm [25.59 in.]  
(Opening width sufficient for the maximum workpiece depth 420 mm [16.53 in.]

## Main Specifications

Item	Unit	5-Axis Vertical Machining Center		Vertical Machining Center (3-axis)	
		<i>New!</i> <i>MX-330</i>	<Reference> <i>MX-520</i>	<i>New!</i> <i>V.Plus-550</i>	<Reference: Previous Model> <i>V.Plus-550</i>
Travel (X/ Y/ Z axis)	mm	<b>435/ 465/ 560</b> [17.13/ 18.31/ 22.05 in.]	630/ 560/ 510 [24.80/ 22.04/ 20.07 in.]	<b>550/ 410/ 560</b> [21.65/ 16.14/ 22.04 in.]	550/ 410/ 460 [21.65/ 16.14/ 18.11 in.]
Travel (A/ C axis)	deg	<b>-125 ~ +10</b> <b>/ 360</b>	-125 ~ +10 / 360	-	-
Rapid traverse rate (X/ Y/ Z axis)	m/ min	<b>40/ 40/ 40</b> [1574.8 imp]	40/ 40/ 40 [1574.8 imp]	<b>40/ 40/ 40</b> [1574.8 imp]	36/ 36/ 30 [1417.32/ 1417.32/ 1181.1 imp]
Rapid traverse rate (A/ C axis)	min <sup>-1</sup>	<b>17/ 33</b>	17/ 33	<b>-/ -</b>	<b>-/ -</b>
Feedrate (X/ Y/ Z axis)	m/ min	<b>40/ 40/ 40</b> [1574.8 imp]	40/ 40/ 40 [1574.8 imp]	<b>40/ 40/ 40</b> [1574.8 imp]	36/ 36/ 30 [1417.32/ 1417.32/ 1181.1 imp]
Spindle speed	min <sup>-1</sup>	<b>15,000</b>	12,000	<b>15,000</b>	15,000
Spindle motor power	kW	<b>5.5 / 7.5</b>	7.5/ 11	<b>5.5 / 7.5</b>	5.5/ 7.5
Spindle torque	N· m	<b>65.1</b>	120.0	<b>65.1</b>	65.1
Working surface size	mm	<b>D250</b> [9.84 in.]	D300 [11.81 in.]	<b>860 x 400</b> [33.85 x 15.74 in.]	860 x 400 [33.85 x 15.74 in.]
Max. workpiece size (table specification)	mm	<b>D420 x H320*</b> [D16.53 x H12.59 in.]	D710 x H350* [D27.95 x H13.77 in.]	-	-
Maximum allowable workpiece weight	kg	<b>80</b> [176.6 lb.]	200 [441.5 lb.]	<b>400</b> [883.0 lb.]	400 [883.0 lb.]

\* Bullet shaped