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⁻¹ is provided as standard. According to the workpiece type to be machined, a powerful type of 15,000 min⁻¹ (119.3 Nm) and a high-speed type of 20,000 min⁻¹ 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⁻¹ / 65.1 Nm (standard)
   1.2. 15,000 min⁻¹ / 119.3 Nm (option) Powerful type
   1.3. 20,000 min⁻¹ / 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.])

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**Main Specifications**

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>5-Axis Vertical Machining Center</th>
<th>Vertical Machining Center (3-axis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel (A/ C axis)</td>
<td>deg</td>
<td>-125 ~ +10 / 360</td>
<td>-125 ~ +10 / 360</td>
</tr>
<tr>
<td>Rapid traverse rate (X/ Y/ Z axis)</td>
<td>m/ min</td>
<td>40/ 40/ 40 [1574.8 imp]</td>
<td>40/ 40/ 40 [1574.8 imp]</td>
</tr>
<tr>
<td>Rapid traverse rate (A/ C axis)</td>
<td>min⁻¹</td>
<td>17/ 33</td>
<td>17/ 33</td>
</tr>
<tr>
<td>Feedrate (X/ Y/ Z axis)</td>
<td>m/ min</td>
<td>40/ 40/ 40 [1574.8 imp]</td>
<td>40/ 40/ 40 [1574.8 imp]</td>
</tr>
<tr>
<td>Spindle speed</td>
<td>min⁻¹</td>
<td>15,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Spindle motor power</td>
<td>kW</td>
<td>5.5 / 7.5</td>
<td>7.5 / 11</td>
</tr>
<tr>
<td>Spindle torque</td>
<td>N·m</td>
<td>65.1</td>
<td>120.0</td>
</tr>
<tr>
<td>Working surface size</td>
<td>mm</td>
<td>D250</td>
<td>D300 [11.81 in.]</td>
</tr>
<tr>
<td>Max. workpiece size (table specification)</td>
<td>mm</td>
<td>D420 x H320* [D16.53 x H12.59 in.]</td>
<td>D710 x H350** [D27.95 x H13.77 in.]</td>
</tr>
<tr>
<td>Maximum allowable workpiece weight</td>
<td>kg</td>
<td>80 [176.6 lb.]</td>
<td>200 [441.5 lb.]</td>
</tr>
</tbody>
</table>

* Bullet shaped