

Press Release

April 23, 2009

Ideal for Heavy-duty Cutting, The Vertical CNC Lathe Has Fully Changed The VL-553 II and VL-553MC II will be released simultaneously.

Mori Seiki Co., Ltd will start accepting orders for the vertical CNC lathe **VL-553 II** and **VL-553MC II** on April 23, 2009.

We have received many orders for our previous models of the VL-553 (turning specifications) and VL-553MC (milling specifications) from various industries such as aircraft, construction machinery and agricultural machinery. Both machines have been highly praised for being an ideal machine for heavy-duty cutting.

While keeping the **superior machining ability** and **compact size** the same, **improved operability** and **expansion of machining area** for the VL-553 II and VL-553MC II have been achieved, so that customers can use the machines more easily.

The main features are as below.

① Improved operability

Compared to the previous model, the distance between the operator and the spindle has been shortened, and also the spindle height has been reduced by 120 mm to improve operability for setup.

Distance from front part of the machine to the spindle center: 531 mm (Previous machine: 615 mm)

Height of spindle large nose : 935 mm (Previous machine: 1,055 mm)

② Expanded machining area

By extending the X-axis stroke, the maximum turning diameter has been expanded by 130 mm compared to the previous model, which has enabled machining of larger workpieces.

X-axis stroke: 415 mm (Previous machine: 350 mm)

Maximum turning diameter: $\phi 780$ mm (Previous machine: $\phi 650$ mm)

③ Wide range of variations

We have added a specification for placing the work envelope and operation panel in reverse positions, and another for controlling connected machines by a single operation panel. We will also respond to customers' requests for stand-alone machines or systems.

Mori Seiki will continue developing new models as well as improving performance on previous models to deliver better machines.

Type	Vertical CNC Lathe
Model	VL-553 II, VL-553MC II
Market	Aircraft, construction machinery, agricultural machinery
Orders Start	April 23, 2009
Production	5 units/ month

■Major Specifications

	VL-553 II	VL-553MC II
Swing over bed	830 mm	
Max. turning diameter	780 mm	810 mm
Max. turning length	660 mm	
Axis travel (X/Z)	415/660 mm	430/660 mm
Max. spindle speed	1,500 [913] min ⁻¹	
Spindle bearing inner diameter	160 mm	
Spindle drive motor	30/22 kW (30 min/cont)	
Number of tool stations	10[12]	12[10] (Rotary tool: 12[10])
Max. rotary tool spindle speed	-	3,000 min ⁻¹
Rapid traverse rate	X: 24,000 mm/min Z: 20,000 mm/min	
Machine height	2,910 mm	
Floor space (width x depth)	1,930×3,625 mm	

[] Option



Figure 1. Exterior

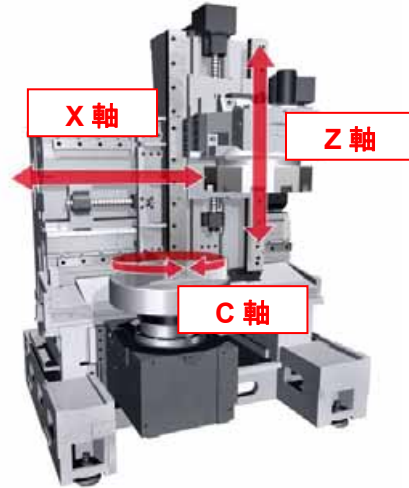


Figure 2. Axis structure (VL-553MC II)

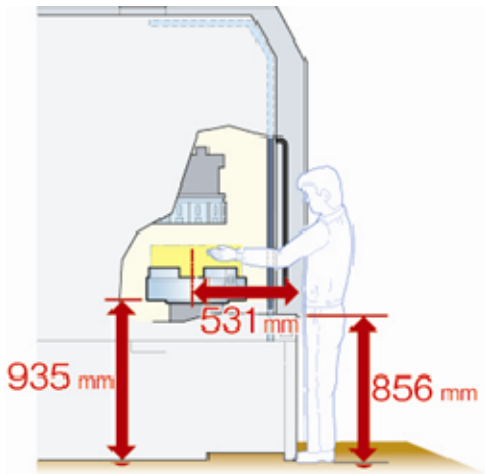


Figure 3. Improved operability



Figure 4. Example of target workpiece
(Aircraft part; disk)