

## Press Release

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August 30, 2011

### **SIEMENS Control is Available for NMV5000DCG!**

Mori Seiki Co., Ltd. announces that the control produced by SIEMENS has become available for NMV5000 DCG, 5-axis vertical machining center from August 30, 2011.

The NMV5000 DCG has been well-received as high-speed, high-precision 5-axis machining center with the innovative structure. Having a cantilevered table with the Table-in-Table Construction, the machine offers excellent accessibility to the workpiece. The Top Box-in-Box Construction, in which the X, Y and Z axes are placed in the upper part of the machine, eliminates overhang, and the symmetrical structure with respect to the spindle minimizes thermal displacement. In addition, three original technologies support complex 5-axes machining, offering high rigidity, high precision, and high speed. It achieves roundness of 3.1 μm for simultaneous 5-axis control machining, approximately 9 times better than that of conventional models.

The control produced by SIEMENS has newly become available for NMV5000 DCG. All the functions of the **SINUMERIK 840D sl** with a reputation for simultaneous 5-axis control machining can be used with NMV5000 DCG. The newly available NMV5000 DCG with SIEMENS control offers extensive features including (1) SINUMERIK 840D sl, (2) MAPPS IV operating panel, (3) Integration with original functions of MAPPS IV.

#### **(1) SINUMERIK 840D sl**

The SINUMERIK 840D sl has many functions supporting complex 5-axis machining programs, such as Advanced Surface path control that gives high quality machined surface, and ShopMill that supports programming in a short time. It is a highly flexible and user-friendly control system.

#### **(2) MAPPS IV operating panel**

The user-friendly operating panel MAPPS IV is used. The large size 19 inch display is available as standard for high level of visibility. Users can enter data with PC type keyboard, just like using personal computers. In addition, not only the USB memory, but also the mouse and keyboard connected via USB can be used. It provides the highest level of operability.

### (3) Integration with original functions of MAPPS IV

By integrating the functions of SIEMENS control with MAPPS IV hardware including its original functions, it becomes higher-level operating system. The MAPPS IV offers strong support for customers with 3D interference checking function that the machine will stop when interference is detected for safety. As option, Fixed-Point In-Machine Camera is available for checking machining, chip accumulation, etc. The camera can be installed in machining area, tool magazine, or other points requested by customers.

The NMV5000 DCG with SIEMENS control will be exhibited at **EMO Hannover 2011** Machine Tool World Exhibition to be held from September 19 to 24 in Hannover, Germany. We are looking forward to seeing you at our booth.

Mori Seiki will continue to provide various systems to meet customers' needs.

Type	High-precision, 5-axis control vertical machining center
Model	NMV5000 DCG
Control	SINUMERIK 840D sl
Market	Die & mold, Aero space, Automobile, etc
Order start	August 30th, 2011

#### ■ Main specifications

Travel (X/Y/Z) (mm)	730/510/510
(B/C)	+160°~-180°/360°
Table working surface (mm)	φ 500
Table loading capacity (kg)	300
Max. workpiece size (mm)	φ 700×450
Max. spindle speed (min <sup>-1</sup> )	12,000 [20,000]
Spindle motor (kW)	12,000 min <sup>-1</sup> :26/21 (30 min/ cont.)
Rapid traverse rate (X/Y/Z) (mm/min)	50,000/50,000/40,000
Max. rotation speed (B/C) (min <sup>-1</sup> )	35 [50]/120 [500] [1,200]
Tool storage capacity	31 [61, 91, 121, 181]

[ ] Option



Fig. 1 Exterior  
(Control: SINUMERIC 840 sl)



Fig. 2 SINUMERIK 840D sl display example  
(Setup screen)