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# **Press Release**

June 12, 2012

# Mori Seiki to Host Innovation Days 2012

Mori Seiki Co., Ltd. will host Innovation Days 2012 at its Iga Campus from June 21 (Thurs.) to 23 (Sat.). The Iga Campus, located in Iga City, Mie Prefecture, is Mori Seiki's main plant that handles assembly of medium to large machines, as well as production of key components such as spindles, ball screws and castings. In April, the Bed/Column Precise Processing Plant, a plant newly constructed within the Iga Campus, started its operation.

At Innovation Days 2012, we will showcase 37 innovative machine tools including 12 new models, and present live cutting demonstrations to provide customers with solutions for greater productivity.

Also, 15 multi-axis machines and 5-axis machining centers will be on display, which includes seven 5-axis machining centers made by GILDEMEISTER. In addition to process integration, both companies will propose a wide range of high-efficiency, 5-axis/multi-axis machining solutions by means of multi-faced fixtures and advanced machining technologies. At this three-day event, we will also exhibit lathes, machining centers, a ultrasonic machine and laser machine, and introduce the latest machining examples from the various industries including the automobile, aircraft, construction machinery, medical equipment, die and mold, and energy industries.

During the event, seminars on DMG products and the latest machining technologies, as well as plant tours will be offered every day. On the factory tours, visitors will see the new Bed/Column Precise Processing Plant along with the Assembly Plant and Machining Plant. The Bed/Column Precise Processing Plant is a state-of-the-art facility in which temperature variations are kept to within  $\pm 0.5^{\circ}$ C throughout the year and centralized tool/fixture management is carried out to reduce setup times. These features enable us to further improve product quality and significantly increase machines' operating rate.

Approximately 10,000 people will be expected to visit Innovation days 2012. During the event, free shuttle bus services to and from JR Nagoya Station and JR Shin-Osaka Station are available.

We are looking forward to your visit.

Date	June 21 (Thurs.) - 23 (Sat.), 2012 10:00 - 17:00		
	Mori Seiki Co,. Ltd. Iga Campus 201 Midai, Iga City, Mie 519-1414, Japan TEL: +81-(0)595-45-4151		
Place	<access by="" car=""> Exit at Midai IC on Route 25 (Meihan Expressway) It takes about an hour and a half from Nagoya, and two hours from Osaka.</access>		

The following shows the highlights of machines to be exhibited at Innovation Days 2012.

### <MILLTAP 700>

Three units of MILLTAP 700 next-generation compact machining centers will be on display to showcase high-speed cutting of aluminum, heavy-duty cutting of steel with a No. 30 taper spindle, and 4-axis machining using a new rotary table. Thanks to the high-output spindle with a maximum output of 25kW, the machine has achieved up to 60% greater machining capability than conventional models. Additionally, the use of the new compact, high-speed, high-precision rotary table allows the MILLTAP to take full advantage of its large work envelope even in 4-axis machining. This enables machining of complex-shaped workpieces like turbines, thereby expanding the range of machining on the MILLTAP 700.

# <ECOLINE Series>

Also on display will be the new ECOLINE Series that features a new design and upgraded functions. In addition to a design that focuses on good visibility and operability, the new series offers faster rapid traverse rate and increased spindle variations for excellent ease of use.

# <DMU 80 eVo linear>

This is a high-speed, 5-axis machining center equipped with linear drives. In machining demonstrations, we will present machining of different workpieces using tilting fixtures. Designed with the swivel rotary table and linear drives with a 80 m/min rapid traverse rate, the machine offers not only smooth, high-speed 5-axis machining, but also heavy-duty cutting of steel which utilizes a high-output spindle (maximum output: 35 kW, maximum torque: 130 Nm).

#### <NTX2000/1500SZ>

With this machine, we will propose advanced machining technologies that expand the potential of multi-axis machines. In hobbing and gear grooving, machining time can be shortened by more than 80% compared to conventional models, which is realized by the revolutionary machining method. In turning, the Spinning Tool is used to achieve high-speed, high-efficiency machining, which brings 5 times greater productivity.

# <NLX4000MC/750>

The newest model in the NLX Series of CNC lathes is characterized by its stable turning, which is made possible by the highly rigid construction, and heavy-duty cutting with a high-torque milling spindle (maximum torque: 100 Nm). We will perform heavy-duty milling on this machine which is comparable to that of a machining center.

# <NMV5000 II Series>

From the NVX Series of vertical machining centers, three models with different table sizes will be displayed, and cutting demonstrations to outline key features of each model will be performed. In die & mold machining on the NMV5060 II/40, surface roughness has more than doubled and machining time has been reduced by 60% compared with the previous model. The NVX5080 II/40 and NVX5100 II/50 equipped with the DDRT Series of rotary tables will be on display. The NVX5080 II/40 with the 5AX-DDRT200 rotary table enables 5-axis machining with the ideal tool length and cutting conditions, making it possible to reduce machining time for hard die and mold materials.

# <ULTRASONIC 55 linear>

The ULTRASONIC 55 *linear* realizes high-speed, high-efficiency machining of extremely hard but brittle material of glass by integrating 5-axis milling with ultrasonic machining. The combination of the linear drives, high speed spindle and 5-axis machining allows high-efficiency machining of various shapes and materials.

<Display Machines> \* indicates new models

5-axis machines	DMU 40 monoBLOCK <sup>®</sup>		DMU 50 ECOLINE	*
	DMU 50		DMU 60 monoBLOCK <sup>®</sup>	
		NMV5000 DCG		
	DMU 60 evo linear		(with Zerochip <sup>®</sup> , S-Quad)	
	DMU 80 P duoBLOCK®		DMU 80 eVo linear	*
Vertical machining	MILLTAP 700 (2 units)		MILLTAP 700	*
centers			(with new rotary table)	
	DMC 635 V ECOLINE	*	NVX5060 II/40	*
	NVX5080 II/40 +	*	NVX5100 II/50 + DDRT-260	*
	5AX-DDRT200			
	NVX7000/50		DMF 500 linear	
Horizontal machining	NULX 4000			
centers				
	NHX5500	*	NHX6300 (pre-release display)	*
CNC lathes	CTX 310 ECOLINE V1	*	NL1500SY/500	
	NL2000Y/500		NLX2500MC/700 + GX-05	
			(Gantry loader specification)	
			NLX4000MC/750	*
	NEX25005 17700		(pre-release display)	
	SPRINT 42 10 linear		NVL1350MC	
Multi ovia machinaa	NTX1000/SZM		NTX2000/1500SZ	
	(Bar feeder specification)		(Robot specification)	
	NTX2000/1500SZ		NZX2000/800STY3	
	NZX2500/600Y			
Laser machine	LASERTEC 40 Shape			
Ultrasonic machine	ULTRASONIC 55 linear	*		
Vertical grinding machine	Vertical Mate <sup>®</sup> 85			





Figure 2. Machining of steel



Figure 3. DMU 50 ECOLINE



Figure 4. DMC 635 V ECOLINE





Figure 5. CTX 310 ECOLINE V1



Figure 6. DMU 80 eVo linear





Figure 7. NTX2000/1500SZ



Figure 8. Machining with Spinning Tool



Figure 9. NLX4000MC/750



Figure 10. NVX5080 II/40



Figure 11. Bevel gear forging die (NVX5080 II/40 + 5AX-DDRT200)



Figure 12. ULTRASONIC 55 linear (Photo shows HSC 55 linear)