

Press Release

September 9, 2010

The birth of the X-class! The NLX2500 CNC lathe is the first series launched as the X-class

Mori Seiki Co., Ltd. has announced the debut of the X-class, which fills the needs of the times.

The NLX2500 Series, which has evolved from the NL Series as a result of a full model change, is Mori Seiki's first series launched as the X-class. We start taking orders for the NLX2500 Series from September 9, 2010.

The NLX2500 Series has evolved from the NL Series that sold more than 10,000 units, and is designed to reflect current market needs and over 5,000 feedback from our customers. It is packed with extensive features including (1) high rigidity, (2) measures against thermal displacement, (3) energy saving, (4) space saving, (5) MAPPS IV + ESPRIT, and (6) compliance with safety standards.

(1) High rigidity

The NLX2500/700 (turning specifications), NLX2500MC/700 (milling specifications) and NLX2500Y/700(Y-axis specifications) use different platforms for each model to ensure high rigidity. In addition, the machines offer longer tool life and capabilities for heavy-duty cutting by using slideways.

(2) Measures against thermal displacement

As standard specifications, the NLX Series uses a bed with coolant circulating inside. This allows the machine to achieve active control over thermal displacement caused by cutting heat and changes in the ambient temperature.

(3) Energy saving

The NLX Series uses a compact CNC that consumes less power, an inverter-type hydraulic unit, and LED lighting to reduce environmental burden and running costs. The total power consumption has been reduced by approximately 13% for the NLX2500/700 (turning specifications), by approximately 10% for the NLX2500MC/700 (milling specifications), and by approximately 14% for the NLX2500Y/700 (Y-axis specifications). Additionally, the lubricating oil consumption has been reduced by approximately 15% by stopping the oil supply during standby.

(4) Space saving

Each model uses different platforms and is optimally-designed to suit the specifications. The NLX2500/700 (turning specifications), for example, has achieved approximately 22% reduction in the installation area compared to the conventional NL Series.

(5) MAPPS IV + ESPRIT

The NLX Series uses the MAPPS IV high-performance operating system for its operation panel. In addition to automatic programming software (standard), ESPRIT CAM software is available as an option. The combination of MAPPS IV and ESPRIT allows the machine to handle complex machining programming and to flexibly meet customer needs.

(6) Compliance with safety standards

The NLX Series conforms to safety standards all over the world, including CE Standards, UL Standards and ANSI.

Mori Seiki will continue to provide highly-functional and affordable products that satisfy the needs of our customers.

Type	CNC Lathe
Model	NLX2500/700, NLX2500MC/700, NLX2500Y/700
Market	Automobiles, construction machinery, hydraulic / pneumatic equipments, etc
Orders start	September 9, 2010
Production	120 units/month

■Major specifications

Item	NLX2500/700	NLX2500MC/700	NLX2500Y/700
Max. turning diameter (mm)	φ 460	φ366 ^{*1} , φ356 ^{*2}	
Max. turning length (mm)	728	705	
Axis travel(X/Z/Y)(mm)	260/795/-		260/795/±50
Max. spindle speed (min ⁻¹)	3,500 [4,000]	4,000	4,000
Rapid traverse rate (X/Z/Y)(mm/min)	30,000/30,000/-		30,000/30,000/10,000
Number of tool stations	10/12		
Spindle drive motor (30 min/cont)	18.5/15		

[] Option

*1 For 35 mm overhang of O.D. cutting tool

*2 For 40 mm overhang of O.D. cutting tool



Fig. 1. Exterior (Turning specifications)



Fig. 2. Turret
(Turning specifications)



Fig. 3. Turret
(Milling specifications)



Fig. 4.
MAPP5IV+ESPRIT