

Press Release

August 23, 2006

The Largest Through-Spindle Hole Diameter in its Class at 560 mm We start accepting Orders for the ZL-1003D Large 4-axis Control CNC Lathe

We resume production of large lathes in response to the brisk oil and energy markets.

Mori Seiki Co., Ltd. will start accepting orders for the large 4-axis control CNC lathe, the **ZL-1003D**, from August 23.

Accompanying skyrocketing oil prices, the demand for **energy-related** machines such as oil rigs and shafts for power generators has been increasing rapidly in the United States and China.

In response to the growing need for highly rigid lathes which can withstand machining of large-diameter material which is hard to cut, or thread cutting which requires a large machining load, Mori Seiki will release the ZL-1003D.

The ZL-1003D boasts a **through-spindle hole diameter of 560 mm**, and offers continuous machining of large-diameter pipes. What's more, it has 2 independent turrets which allow simultaneous machining of the workpiece's inner and outer diameters. The steep slope of the **70° slanted bed** reduces accumulation of chips and makes it easy for the operator to reach the spindle. The ZL-1003D has a maximum spindle speed of 300 min⁻¹, spindle output of 75/60 kW (30 min/cont.) and the 18iTB manufactured by FANUC is used for the control unit.

This is a large lathe with state-of-the-art technologies, which uses the newest control unit and drive motors, a high-output spindle, and a cover which takes into account the operator's safety, etc. We will start production from March 2007 and shipment from May 2007.

Type	4-axis control CNC lathe
Model	ZL-1003D
Market	Oil/Energy industries
Orders from	August 23, 2006

■ Main features

1. The latest motors and control units
2. Through-spindle hole diameter of 560 mm
3. A cover which ensures safety

■ Features

1. The latest motors and control units

The FANUC18iTB and MAPPSⅢ are used for the control unit. They have improved all aspects, such as accuracy, speed, ease of use through the conversational function, etc. Also, the spindle's power has been increased to AC75/60 kW (30 min/cont.), much higher than previous models, extracting even greater machining ability.

2. Through-spindle hole diameter of 560 mm

The ZL-1003D boasts a through-spindle hole diameter of 560 mm, and has an automatic feed of large-diameter pipe material as an option. It will save labor and improve work efficiency at the same time.

3. A cover which ensures safety

The shock-resistant window and the door lock system which prevents unexpected opening/closing of the operator's door are standard, ensuring the operator's safety.

■ Main Specifications

Max. machining diameter	1,000 mm
X-axis travel	End turret: 500 mm, side turret: 540 mm
Z-axis travel	1,900 mm
Max. spindle speed	300 min ⁻¹
Spindle drive motor	75/60 kW (30 min/cont.)
Rapid traverse rate	X-axis: 5,000 mm/min, Z-axis: 8,000 mm/min
Machine size (Width × Depth)	7,800 × 2,920 mm
Machine mass	28,000 kg

(Note: the specifications may be changed without notice.)