



*Optimal Solutions for the Future*

# **DNM 500 / 50 II**

# **DNM 650 / 50 II**



---

**ISO #50, High  
Productivity Vertical  
Machining Center**

---

**DNM 500 / 50 II**  
**DNM 650 / 50 II**

---

ver. EN 160530 SU

## Basic structure

LM guide way is adopted as standard for all the axis feed system to easy maintenance, and High rigidity column is adopted for heavy duty machining performance .

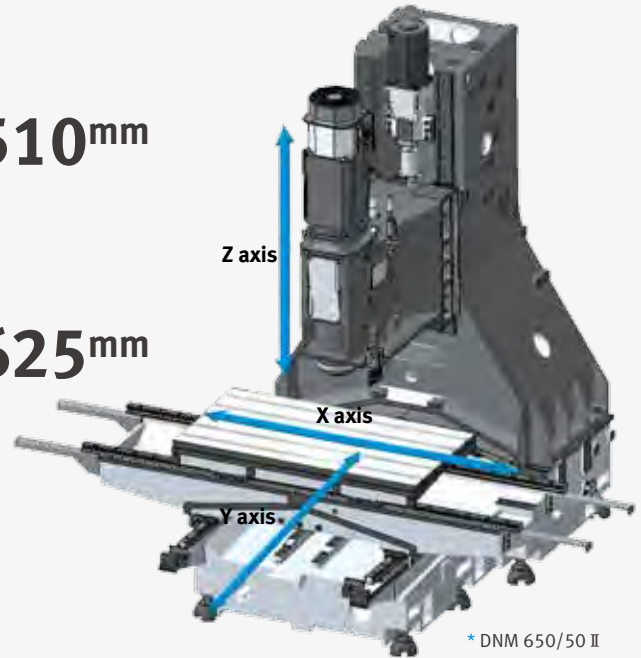
Travel distance (X x Y x Z axis)

**DNM 500/50 II**

**1020 x 540 x 510mm**  
(40.2 / 21.3 / 20.1 inch)

**DNM 650/50 II**

**1270 x 670 x 625mm**  
(50.0 / 26.4 / 24.6 inch)



## Axis system

Roller-type LM Guides are provided to enhance the rigidity.

Rapid traverse rate (X / Y / Z axis)

**36 / 36 / 30m/min**  
(1417.3 / 1417.3 / 1181.1 ipm)

Roller LM guideway life is longer about twice than Ball LM guideway



## Table

This machining center offers workpiece capacity from 400 to 670 mm in the Y axis, enabling the user to handle a wider range of workpieces.

Table size (A x B)

**DNM 500/50 II**

**1200 x 540 mm**  
(47.2 / 21.3 inch)

**DNM 650/50 II**

**1300 x 670 mm**  
(51.2 / 26.4 inch)

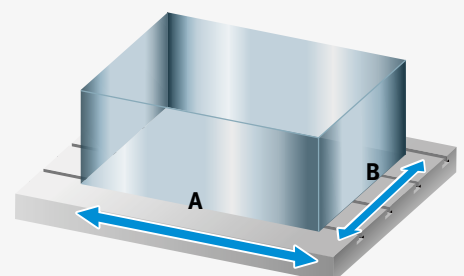
Max weight on Table

**DNM 500/50 II**

**800kg**  
(1763.7 lb)

**DNM 650/50 II**

**1000kg**  
(2204.6 lb)



## Spindle

Direct-coupled type spindles have been adopted as a standard feature to further reduce vibration and noise while enhancing productivity, work environment and machining accuracy.

Max. spindle speed

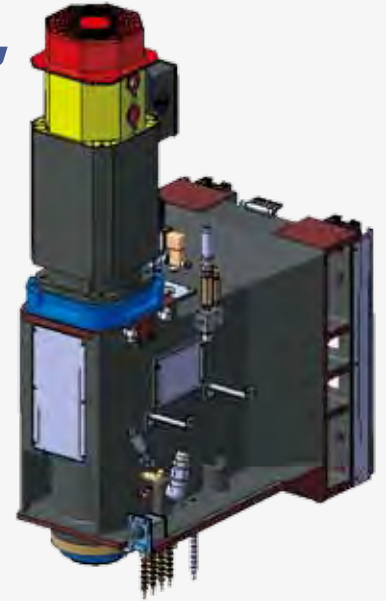
**8000 r/min**    **10000 r/min** option

Max. spindle motor power

**22 / 11 kW**    **26 / 22 kW** option  
 (29.5 / 14.8 Hp)    (38.9 / 29.5 Hp)

Max. spindle motor torque

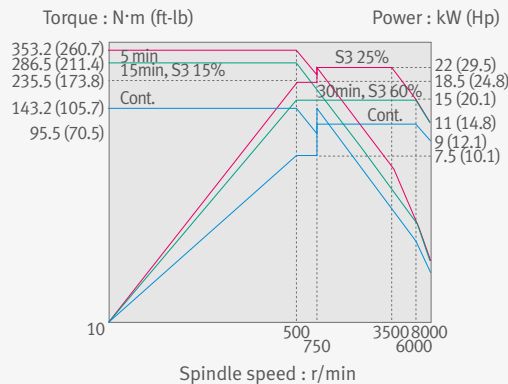
**353.2 N·m**    **165.5 N·m** option  
 (260.7 ft-lb)    (122.1 ft-lb)



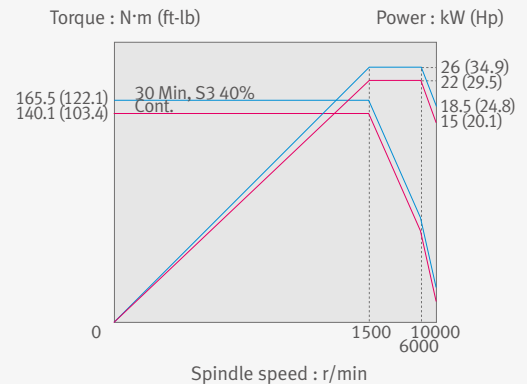
\* Direct coupled spindle of DNM 650/50 II

### Spindle Power – Torque Diagram

**8000r/min**



**10000r/min** option



## Tool change system

Higher productivity can be achieved with the CAM-type tool changer that supports faster tool changing.

Tool to Tool **2.5s**

Chip to Chip\* **5.5s**

Tool storage capacity **24ea**

**30ea** (DNM 650 / 50 II option)



\* The Chip-to-Chip time has been tested in accordance with Doosan's strict testing conditions, but may vary depending on the user's operating conditions.

## Major Specifications

### DNM 500 / 50 II DNM 650 / 50 II



| Description                 | UNIT         | DNM 500 / 50 II                                 | DNM 650 / 50 II                       |
|-----------------------------|--------------|---|---------------------------------------|
| Max. spindle speed          | r/min        | 8000 {10000}*                                   |                                       |
| Max. spindle power          | kW (Hp)      | 22 / 11 {26 / 22}* (29.5 / 14.8 {38.9 / 29.5}*) |                                       |
| Max. spindle torque         | N·m (lbf-ft) | 353.2 {165.5}* (260.7 {122.1}*)                 |                                       |
| Taper                       | -            | ISO #50   |                                       |
| Travel distance (X / Y / Z) | mm (inch)    | 1020 / 540 / 510 (40.2 / 21.3 / 20.1)           | 1270 / 670 / 625 (50.0 / 26.4 / 24.6) |
| Tool storage capa.          | ea           | 24  | 24 {30}*                              |
| Table size                  | mm (inch)    | 1200 x 540 (47.2 x 21.3)                        | 1300 x 670 (51.2 x 26.4)              |
| NC system                   | -            | DOOSAN FANUC i                                  |                                       |

{ } Option



## Doosan Machine Tools

<http://www.doosanmachinetools.com>

[www.facebook.com/doosanmachinetools](https://www.facebook.com/doosanmachinetools)

### Optimal Solutions for the Future

#### Head Office

Yeonkang Bldg., 6th FL., 270, Yeonji-dong,  
Jongno-gu, Seoul, Korea  
Tel +82-2-3670-5345 / 5362  
Fax +82-2-3670-5382

#### Doosan Machine Tools America

19A Chapin Rd., Pine Brook, NJ 07058, U.S.A.  
Tel +1-973-618-2500  
Fax +1-973-618-2501

#### Doosan Machine Tools China

Room 101,201,301, Building 39 Xinzhuan Highway  
No.258 Songjiang District,China Shanghai(201612)  
Tel +86 21-5445-1155  
Fax +86 21-6405-1472

#### Doosan Machine Tools Europe

Emdener Strasse 24, D-41540 Dormagen, Germany  
Tel +49-2133-5067-100  
Fax +49-2133-5067-111

#### Doosan Machine Tools Japan

#2412, Mita Kokusai Bldg. 1-4-28 Mita,  
Minato-ku, Tokyo 108-0073, Japan  
Tel +81 3 5730 9013  
Fax +81 3 5730 9016

#### Doosan Machine Tools India

106 / 10-11-12, Amruthahalli, Byatarayanapura,  
Bellary road, Bangalore-560 092, India  
Tel +91-80-4266-0122 / 121 / 100



\* For more details, please contact Doosan Machine Tools.

\* The specifications and information above-mentioned may be changed without prior notice.

\* Doosan Machine Tools Co., Ltd. is a subsidiary of MBK Partners. The trademark  DOOSAN is used under a licensing agreement with Doosan Corporation, the registered trademark holder.