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DM-2500W-CNC CNC Gantry Machining Centre 2500 × 4000 mm





Main image of the DM-2500W-CNC model – CNC gantry machining centre with W-axis
CNC Gantry Machining Centre with W-Axis

DM-2500W-CNC CNC Gantry Machining Centre

CNC gantry with W-axis, a 2500 × 4000 mm table and a 37 kW spindle

DM-2500W-CNC is a heavy-duty gantry / portal-type CNC machining centre with a **W-axis**, designed for efficient milling, drilling and machining of wide and large-scale workpieces. The machine is suitable for machining large plates, frames, moulds, housings, castings and structural components requiring stability, wide clearance between the columns and precise head positioning in relation to the workpiece.



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The PM-W series uses a milling head mounted on a crossbeam, feed axes and an additional auxiliary axis. The CNC system enables contour milling with simultaneous 3-axis control, while the use of additional attachments allows machining internal and external surfaces in one clamping.

2500

Table Width

2500 mm

4000

Table Length

4000 mm / optional 6000 mm

3200

Distance Between Columns

3200 mm

37

Spindle Motor Power

37 kW

DM-2500W-CNC – CNC centre with W-axis for heavy-duty machining of wide plates, moulds and housings.

The model offers a 2500 × 4000 mm table with an optional length of up to 6000 mm, 3200 mm distance between the columns, X/Y/Z/W-axis travel of 4200 / 3200 / 1000 / 2000 mm, optional X-axis travel up to 6200 mm and Z-axis travel up to 1200 mm, spindle speed of 2–1600 rpm with a 2500 rpm option and a 37 kW spindle motor.

Product Gallery

Images and Key Components of the DM-2500W-CNC Model

Equipment Components and Operating Systems of the W-Axis CNC Gantry Centre

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CNC Control

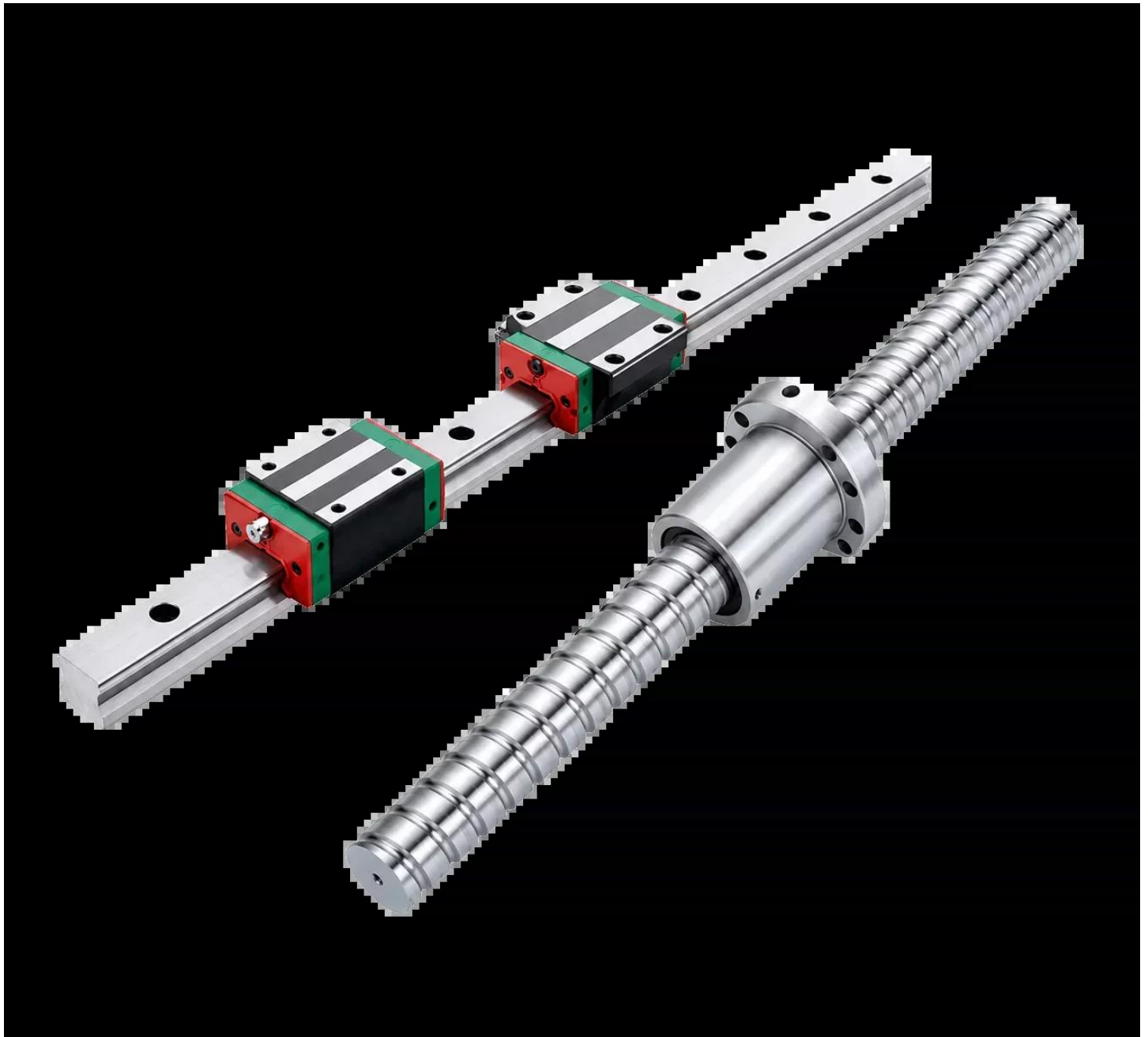
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Drive Module



Servo Motor



Ball Screws and Guideway



Spindle
Machine Construction

W-Axis for a Wider Head Positioning Range and Heavy-Duty Multi-Surface Machining

The DM-2500W-CNC uses a symmetrical gantry construction that provides high rigidity during intensive and heavy cutting. The W-axis system expands head positioning capabilities in relation to the workpiece and allows operation with components requiring greater machining flexibility and a wider machining area.



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The wide box-type bed provides high table load capacity and stable workpiece support. The 2500 × 4000 mm worktable allows clamping of wide plates, moulds, housings and welded structures, while the optional length of up to 6000 mm increases capacity for working with longer components.

The crossbeam is driven by servo drives and precision ball screws, ensuring controlled and accurate working movement. The machine is equipped with an efficient 37 kW milling spindle, CNC system, automatic guideway lubrication system and the possibility of using additional attachments for machining multiple surfaces in one clamping.

Technical Features

Key Features of the DM-2500W-CNC

Symmetrical gantry construction provides high rigidity even under heavy cutting conditions.

Wide box-type bed provides high table load capacity and stable support for the machined workpiece.

Large-section frame made of high-grade steel supports heavy-duty and efficient machining.

Efficient 37 kW milling spindle enables milling, drilling and machining of large surfaces.

2000 mm W-axis expands head positioning capabilities and enables more flexible workpiece machining.

Servo drives and ball screws ensure precise axis movement and repeatable positioning.

CNC control enables contour milling with simultaneous 3-axis control.

3200 mm distance between the columns enables convenient work with very wide workpieces and welded structures.

Equipment and Configuration

Working Components and Equipment of the DM-2500W-CNC Model

CNC control — numerical control for contour milling, drilling and repeatable machining of large workpieces.



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Drive module – drive system responsible for stable operation of machine axes and working movements.

Servo motor – provides precise movement and accurate positioning control.

Ball screws – enable accurate and smooth travel of the working axes.

Spindle – powerful 37 kW spindle for heavy-duty machining of faces, holes and mounting surfaces.

Machining attachments – possibility to expand the configuration for machining multiple surfaces in one clamping.

Applications

Where is the DM-2500W-CNC gantry centre suitable?

The DM-2500W-CNC is designed for plants performing heavy-duty large-scale machining, machine production, machining of wide plates, moulds, housings and steel structures. The W-axis increases the flexibility of head positioning in relation to the workpiece, while the greater distance between the columns allows more convenient machining of wide and tall components.

Machine production – machining housings, frames, mounting plates and structural components.

Moulds and tools – milling large moulds, dies and process surfaces.

Steel industry – machining welded structures and heavy technical components.

Power generation and heavy industry – preparation of mounting surfaces and holes in large components.

CNC machining facilities – milling, drilling, planing and contour machining of large workpieces.

Single-piece and serial machining – production, repairs and refurbishment of large-scale components.

DM-2500W-CNC Specifications



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Technical Specifications of the DM-2500W-CNC Model

Model **DM-2500W-CNC**

Machine Type **CNC Gantry Machining Centre with W-Axis**

Construction **Gantry**

Control **CNC, possibility of contour milling with simultaneous 3-axis control**

Table Dimensions **2500 × 4000 mm**

Optional Table Length **up to 6000 mm**

Distance Between Columns **3200 mm**

X-Axis Travel **4200 mm / optional up to 6200 mm**

Y-Axis Travel **3200 mm**

Z-Axis Travel **1000 mm / optional 1200 mm**

W-Axis Travel **2000 mm**

Spindle Speed **2–1600 rpm / optional 2500 rpm**

Spindle Motor Power **37 kW**

Crossbeam / Axis Drive **Servo drives and precision ball screws**

Bed / Base **Wide box-type bed providing high table load capacity**

Gantry Construction **Symmetrical gantry frame for maximum rigidity during heavy machining**

Lubrication **Automatic forced guideway lubrication system**

Selected Components **CNC control, drive module, servo motor, ball screws and guideway, spindle**

Applications **Heavy milling, drilling, contour machining, machining of wide plates, frames, moulds and housings**