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DM-1800W-CNC CNC Gantry Machining Centre 1800 × 2000 mm





Main image of the DM-1800W-CNC model – CNC gantry machining centre with W-axis
CNC Gantry Machining Centre with W-Axis

DM-1800W-CNC CNC Gantry Machining Centre

CNC gantry with W-axis, an 1800 × 2000 mm table and a 22 kW spindle

DM-1800W-CNC is a gantry / portal-type CNC machining centre with a **W**-axis, designed for efficient milling, drilling and machining of large and wider workpieces. The machine is suitable for machining plates, frames, moulds, housings, castings and structural components requiring stability, greater 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.

1800

Table Width

1800 mm

2000

Table Length

2000 mm / optional 6000 mm

2100

Distance Between Columns

2100 mm

22

Spindle Motor Power

22 kW

DM-1800W-CNC – CNC centre with W-axis for machining wider plates, moulds and housings.

The model offers an 1800 × 2000 mm table with an optional length of up to 6000 mm, 2100 mm distance between the columns, X/Y/Z/W-axis travel of 2200 / 2100 / 1000 / 1500 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 22 kW spindle motor.

Product Gallery

Images and Key Components of the DM-1800W-CNC Model

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

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CNC Control



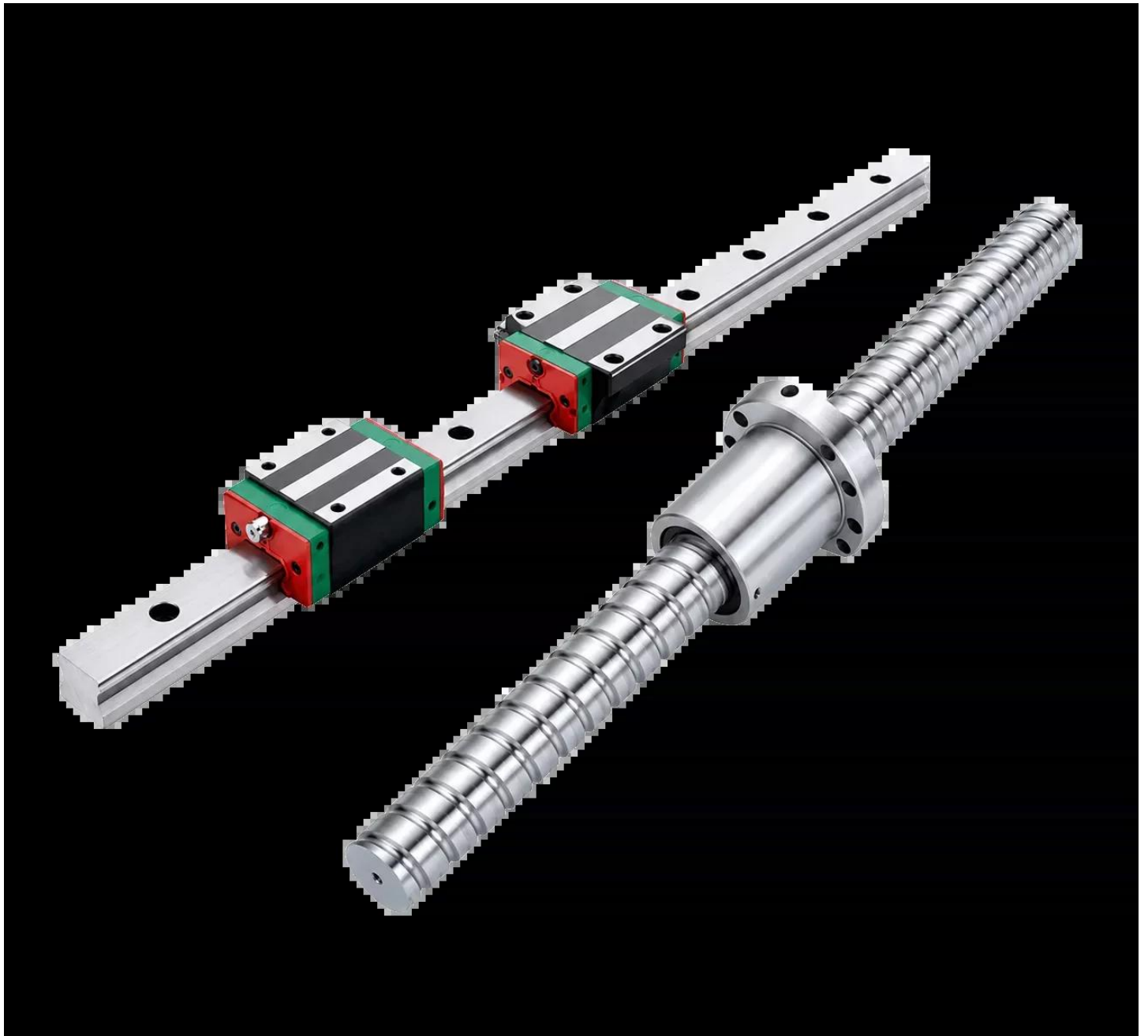
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Drive Module



Servo Motor



Ball Screws and Guideway



Spindle
Machine Construction

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

The DM-1800W-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.



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The wide box-type bed provides high table load capacity and stable workpiece support. The 1800 × 2000 mm worktable allows clamping of 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 22 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-1800W-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 22 kW milling spindle enables milling, drilling and machining of large surfaces.

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.

2100 mm distance between the columns enables convenient work with wider workpieces and welded structures.

Equipment and Configuration

Working Components and Equipment of the DM-1800W-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 22 kW spindle for machining faces, holes and mounting surfaces.

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

Applications

Where is the DM-1800W-CNC gantry centre suitable?

The DM-1800W-CNC is designed for plants performing large-scale machining, machine production, machining of 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 wider components.

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

Moulds and tools – milling 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-1800W-CNC Specifications



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Technical Specifications of the DM-1800W-CNC Model

Model **DM-1800W-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 **1800 × 2000 mm**

Optional Table Length **up to 6000 mm**

Distance Between Columns **2100 mm**

X-Axis Travel **2200 mm / optional up to 6200 mm**

Y-Axis Travel **2100 mm**

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

W-Axis Travel **1500 mm**

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

Spindle Motor Power **22 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 **Milling, drilling, contour machining, machining of plates, frames, moulds and housings**