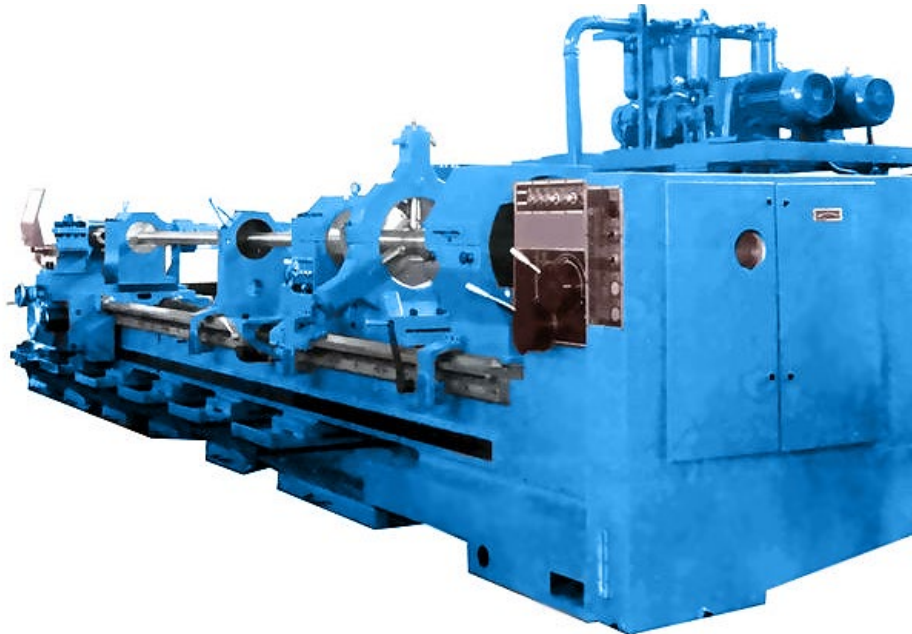


WR2 160 / WR2 200

HORIZONTAL DEEP DRILLING MACHINES



BASIC PARAMETERS

Max. torque on spindle	50,000 Nm
Max. weight of workpiece clamped in rests	40 tonnes
Max. length of drilled holes	10,000 mm
Max. diameter of drilled holes	800 mm

PURPOSE

The WR2 series horizontal drilling machines (WR2 160 / WR2 200) are the special-purpose machine tools used in processes that require deep hole drilling using drilling and boring with high-efficiency specialized tools.

CONTROL SYSTEM

The application of the state-of-the-art CNC system allows for automatic, precise and productive workpiece machining according to a program.

MAIN FEATURES

- 2-guideway bed made from cast iron of enhanced mechanical properties, standardized, heavily ribbed, rested on foundation along its entire length
- Cast-iron bed guideways hardened up to 45 HRC
- Drilling tailstock travels along two guideways lined with an anti-friction material and assisted by central lubrication system that guarantee precise guidance
- Headstock body made from cast iron of enhanced mechanical properties
- Spindle rested on bearings of increased accuracy class
- All shafts and gears carburized, hardened and ground
- Tool coolant supply head installed on an independent floor
- Dampening rests for the tool bars to compensate for vibrations during drilling
- Tool liquid cooling system with a 10,000 l tank

STANDARD EXECUTION

- Swing over bed $\varnothing 1,600$ mm (WR2 160)
- Drilling length 10,000 m
- Main drive motor power 75 kW
- Range of continuously variable drilled workpiece spindle rotation rates 0.5 to 315 rpm
- Power supply 3×400 V / 50 Hz
- Rack-and-pinion transmission for Z-axis travel
- Central lubrication system
- Drilling tailstock with fixed tool
- Tool coolant pressure head carriage with housing
- Control panel
- Adjusting wedges for leveling and foundation bolts
- CE mark
- Operations and maintenance manuals
- CNC operation and programming documentation

OPTIONAL EXECUTION

- Swing over bed $\varnothing 2,000$ mm (WR2 200)
- Drilling tailstock with live tool
- Steel guideways hardened up to 56 HRC and ground
- Other according to additional arrangements

ADDITIONAL EQUIPMENT

- Steady rest $\varnothing 100$ to 400 mm
- Steady rest $\varnothing 250$ to 600 mm
- Steady rest $\varnothing 400$ to 800 mm
- Steady rest $\varnothing 700$ to 1,100 mm
- Open-type steady rest $\varnothing 1,100$ to 1,600 mm (for WR2 200)
- Dampening rest for the tool bar


BASIC TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS (WR2 SERIES)			
Model		WR2 160	WR2 200
Machine tool code			
Range of diameters of drilled holes	Ø mm	30 to 800	
Max. length of drilled holes	mm	10,000	
Swing over bed	Ø mm	1,600	2,000*
Max. weight of workpiece clamped:			
• in 1 rest	kg	35,000	
• in 2 rests	kg	40,000	
• in chuck	kg	4,000	
Headstock			
Range of continuously variable rotation rates	rpm	0.5-315	
Number of ranges of rotation rates	quantity	3	
Power of main drive motor	kW	75	
Max. torque on spindle	Nm	50,000	
Drilling tailstock with fixed tool			
Longitudinal travel	mm	Drilling length	
Z-axis travel drive		Rack and pinion	
Max. axial force	N	100,000	
Max. hole diameter for drilling bar	mm	540	
Rapid feed rate	mm/min	4,000	
Range of feed rates	mm/min	3 to 1,000	
Drilling tailstock with live tool*			
Range of continuously variable rotation rates	rpm	50 to 300	
Number of ranges of rotation rates	quantity	2	
Power of main drive motor	kW	75	
Max. torque on spindle	Nm	50,000	
Longitudinal travel	mm	Drilling length	
Z-axis travel drive		Rack and pinion	
Max. axial force	N	100,000	
Max. hole diameter for drilling bar	mm	304.8	
Rapid feed rate	mm/min	4,000	
Range of feed rates	mm/min	3 to 1,000	
Machine tool overall dimensions, approx.			
Length	mm	4,700 + 2 x drilling length	
Width	mm	5,750	
Height	mm	2,200	2,400
Weight for 3,000 mm drilling	kg	30,000	33,000
Increase in weight for 1,000 mm	kg	1,300	
* optional execution		© RAFAMET S.A. – All Rights Reserved	