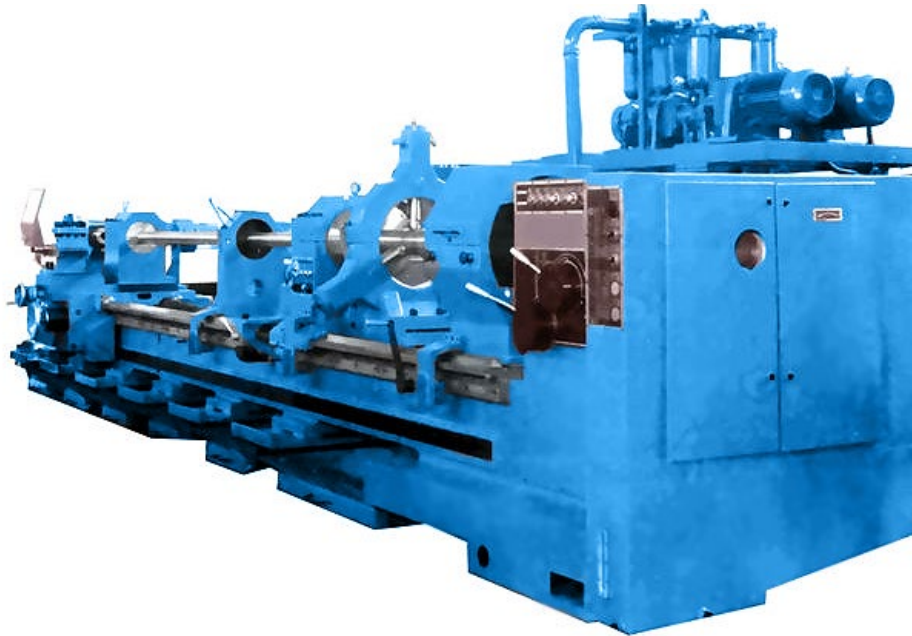


WR1 80

HORIZONTAL DEEP DRILLING MACHINE



BASIC PARAMETERS

Max. torque on spindle	5,600 Nm
Max. weight of workpiece in steady rests	10 tonnes
Max. length of drilled holes	2,000 mm
Max. diameter of drilled holes	220 mm

PURPOSE

The WR1 80 horizontal drilling machine is a special-purpose machine tool 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
- Bed and carriage guideways hardened up to minimum 50 HRC
- Drilling tailstock travel along two V-block guideways lined with an anti-friction material and assisted by central lubrication system that guarantee precise guidance
- Drilling tailstock with clamping ring for tool bars with bushings for different diameters
- 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 tool bars to compensate vibrations during drilling
- Tool liquid cooling system with a 2,500 l tank

STANDARD EXECUTION

- Swing over bed $\varnothing 930$ mm
- Spindle swing $\varnothing 200$ mm
- Drilling length 2,000 m
- Power of main drive motor 22 kW
- Range of continuously variable spindle rotation rates 4 to 550 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
- Machining zone guards
- Control panel
- Adjusting wedges for leveling and foundation bolts
- CE mark
- Operations and maintenance manuals
- CNC operation and programming documentation

OPTIONAL EXECUTION

- Drilling tailstock with live tool
- Other according to agreement

ADDITIONAL EQUIPMENT

- Roller steady rest $\varnothing 40$ to 400 mm
- Roller steady rest $\varnothing 400$ to 600 mm
- Dampening rest for the tool bar



BASIC TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS WR1 80

Model	WR1 80	
Machine tool code		
Range of diameters of drilled holes	Ø mm	50 to 220
Max. length of drilled holes	mm	2,000
Swing over bed	Ø mm	930
Max. weight of workpiece with:		
• 1 steady rest	kg	7,600
• 2 steady rests	kg	10,000
• in chuck	kg	1,000
Headstock		
Spindle hole diameter	mm	200
Spindle nose	size	A1-15
Range of continuously variable rotation rates	rpm	4 to 550
Number of ranges of rotation rates	quantity	4
Power of main drive motor	kW	22
Max. torque on spindle	Nm	7,000
Drilling tailstock with fixed tool		
Longitudinal travel	mm	Drilling length
Z-axis travel drive		Rack-and-pinion
Max. axial force	N	40,000
Rapid travel	mm/min	4,000
Range of feed rates	mm/min	3 to 1,000
Drilling tailstock with live tool *		
Spindle hole diameter	mm	200
Spindle nose	size	A1-15
Range of continuously variable rotation rates	rpm	4 to 550
Number of ranges of rotation rates	quantity	4
Power of main drive motor	kW	22
Max. torque on spindle	Nm	7,000
Longitudinal travel	mm	Drilling length
Max. axial force	N	40,000
Rapid travel	mm/min	4,000
Range of feed rates	mm/min	3-1,000
* optional execution		© RAFAMET S.A. – All Rights Reserved