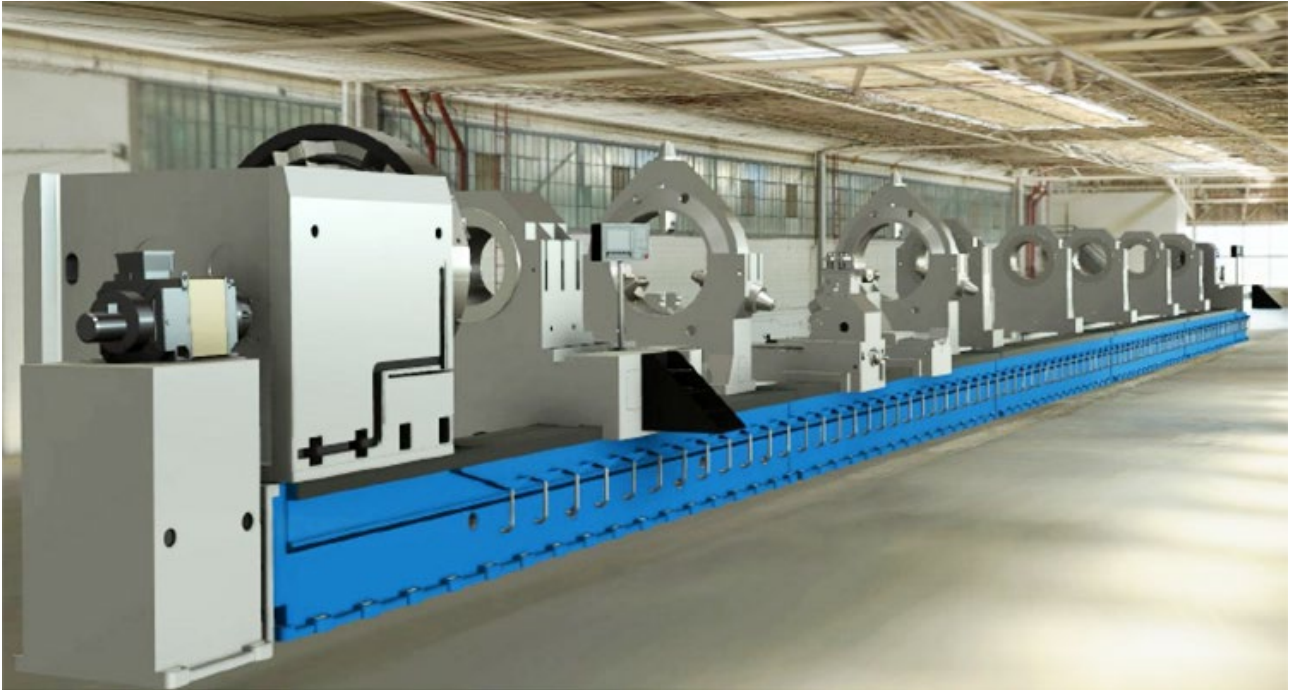


WT3 250

HORIZONTAL DEEP DRILLING LATHE



BASIC PARAMETERS

Max. torque on spindle	130,000 Nm
Max. weight of workpiece clamped in rests	100 tonnes
Max. length of drilled holes	12,000 mm
Max. diameter of drilled holes	1,400 mm

The **WT3 250** horizontal deep drilling lathe is the machine tool based on the TCE 250 horizontal lathe equipped with devices that facilitate drilling and machining of deep holes with the use of highly-efficient, specialized tools.

PURPOSE

The WT3 250 horizontal deep drilling lathe is designed for deep hole drilling, external and internal turning, reaming and contour thread cutting.

CONTROL SYSTEM

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

MAIN FEATURES

- Base consisting of two 2-guideways beds made of high-grade cast iron of enhanced mechanical properties, standardized, suitably ribbed, rested on foundation along its entire length
- Carriage travels along two guideways that guarantee precise guidance
- Bed and carriage guideways hardened to 45 HRC
- Longitudinal and cross-wise travels are realized along guideways lined with an anti-friction material and are assisted by central lubrication system
- Headstock body made of high-grade cast iron of enhanced mechanical properties
- Spindle rested on bearings of increased accuracy class
- All shafts and gears carburized, hardened and ground
- Drilling tool coolant supply head installed on an independent floor
- Drilling carriage with tool bar clamp with sleeves for different diameters
- Dampening rests for the for tool bars to compensate for vibrations during drilling
- Tool liquid cooling system for drilling with a 10,000 l tank

STANDARD EXECUTION

- Swing over bed \varnothing 2,500 mm
- Turning length 4,000 to 25,000 mm, every 1,000 mm
- Carriage rested on two guideways
- Power of main drive motor 150 kW
- Range of spindle rotation rates 0.5 to 160 rpm
- Power supply 3 \times 400 V / 50 Hz
- SIEMENS SINUMERIK 840D sl CNC system
- Automatic 4-position turret
- Z-axis travel drive by backlash-free rack-and-pinion transmission
- Crosswise travel (X axis) by ball screw and nut transmission
- Automatic change of range of headstock rotation rates
- Central lubrication system controlled by CNC
- Drilling tailstock with fixed tool
- Tool coolant head carriage with housing
- Tailstock with quill \varnothing 450 mm with spindle, clamping force indicator, workpiece elongation compensation, with automatic quill stroke, travel along bed, automatic clamping against bed
- Dead centre - 2 pcs
- Adjusting wedges for leveling and foundation bolts
- CE mark
- Operations and maintenance manuals
- CNC operation and programming documentation



OPTIONAL EXECUTION

- GE FANUC 0i-TD CNC system with Manual Guide with basic turning functions
- Automatic turret with live tools (CNC drive) and controlled C axis realized by main drive motor
- Automatic turret with live tools (CNC drive), Y axis (CNC drive) and controlled C axis realized by main drive motor
- Double lamellar cross-slide
- Linear measuring scales for Z and X axes
- Tool and workpiece measuring system
- Air conditioning for electrical cabinet
- Other according to agreement



ADDITIONAL EQUIPMENT

- Steady rest \varnothing 250 to 600 mm / 25 tonnes
- Steady rest \varnothing 600 to 1,000 mm / 25 tonnes
- Steady rest \varnothing 600 to 1,000 mm / 40 tonnes
- Open-type steady rest \varnothing 1,000 to 1,800 mm / 50 tonnes (does not pass the carriage)



BASIC TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS (WT3 250)

Model	WT3 250	
Machine tool code		
Range of diameter of drilled holes	Ø mm	400 to 1,400
Max. length of drilled holes	mm	12,000
Swing over bed	Ø mm	2,500
Swing over carriage	Ø mm	1,800
Distance between centres (every 1,000 mm)	mm	4,000 to 25,000
Max. weight of workpiece clamped:		
• in centres	kg	80,000
• in 2 rests	kg	100,000
• in chuck	kg	4,000
Headstock		
Range of continuously variable rotation ranges	rpm	0.5 to 160
Number of ranges of rotation rates	quantity	3
Power of main drive motor	kW	150*
Max. torque on spindle	Nm	130,000
Carriage		
Rapid travel in Z axis	mm/min	4,000
Rapid travel in X axis	mm/min	2,500
Longitudinal travel	mm	Turning length
Crosswise travel	mm	800
Z-axis drive		Rack-and-pinion; backlash-free
Tool system		Automatic 4-pos. turret
Tailstock		
Quill diameter	Ø mm	450
Quill stroke	mm	200
Drilling tailstock with live tools*		
Spindle nose		A1-20
Range of continuously variable rotation rates	rpm	50 to 200
Number of ranges of rotation rates	quantity	2
Power of main drive motor	kW	100
Max. torque on spindle	Nm	80,000
Longitudinal travel	mm	Drilling length
Z-axis travel		Rack-and-pinion
Max. axial force	N	150,000
Max. hole diameter for drilling bar	mm	304.8
Rapid feed rate	mm/min	2,500
Range of feed rates	mm/min	3 to 1,000
Machine tool overall dimensions and weight, approx.		
Length	mm	7,000 + turning length
Width (including hydraulic equipment)	mm	7,350
Height	mm	2,900
Weight for 3,000-mm turning length	kg	75,000
* optional execution		© RAFAMET S.A. – All Rights Reserved