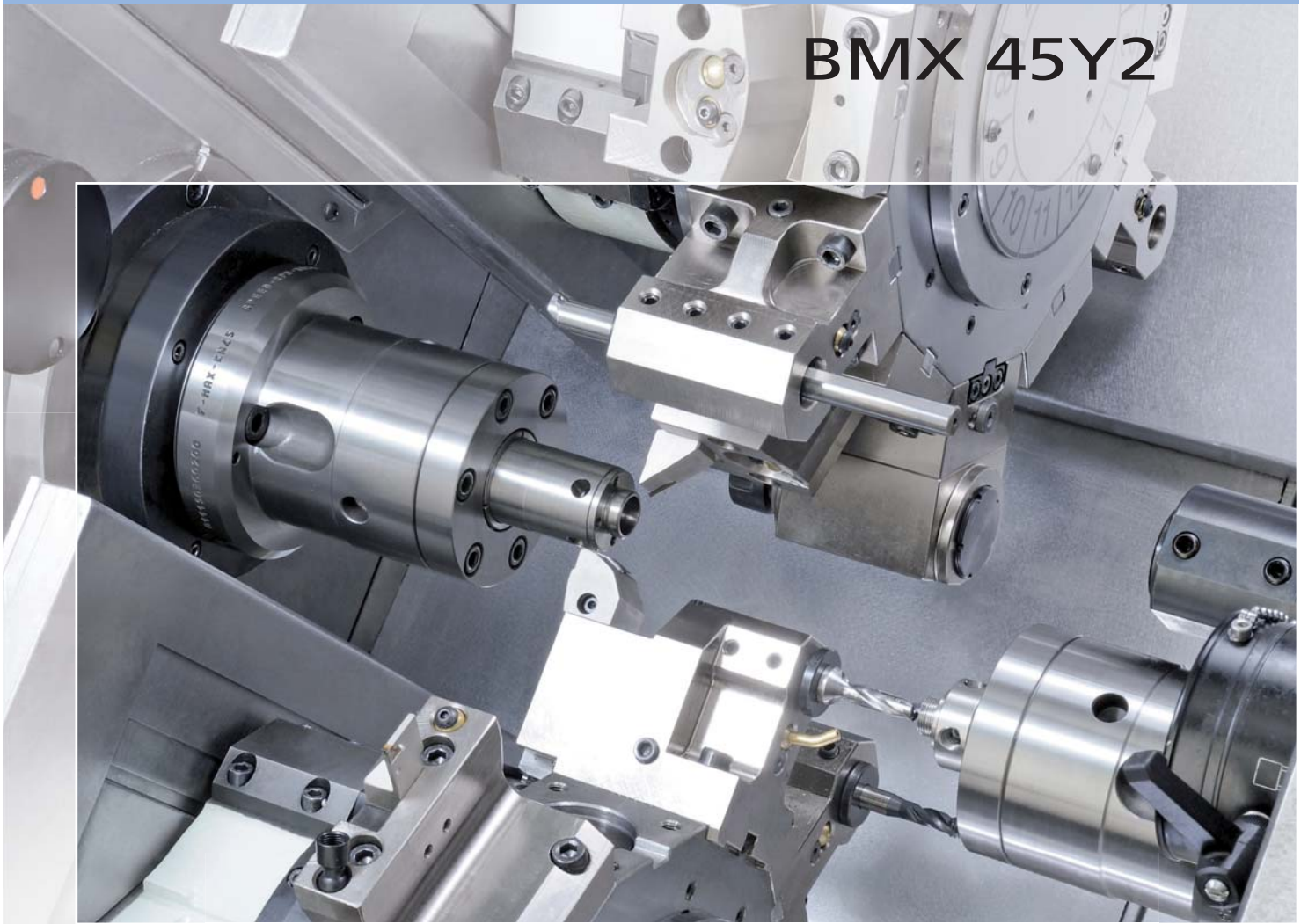


MULTITURRET BAR TURNING

BMX 45Y2





BMX 45Y2

The new BMX 45Y2 featuring ten axes is the latest evolution of the established B436/B438 machines. This new model is launched to meet with the specific market requirements for bar machining in automatic turning: a Twin-turret and Twin-spindle CNC-lathe, compact, versatile and quick for combined turning, milling and drilling of small-sized parts.

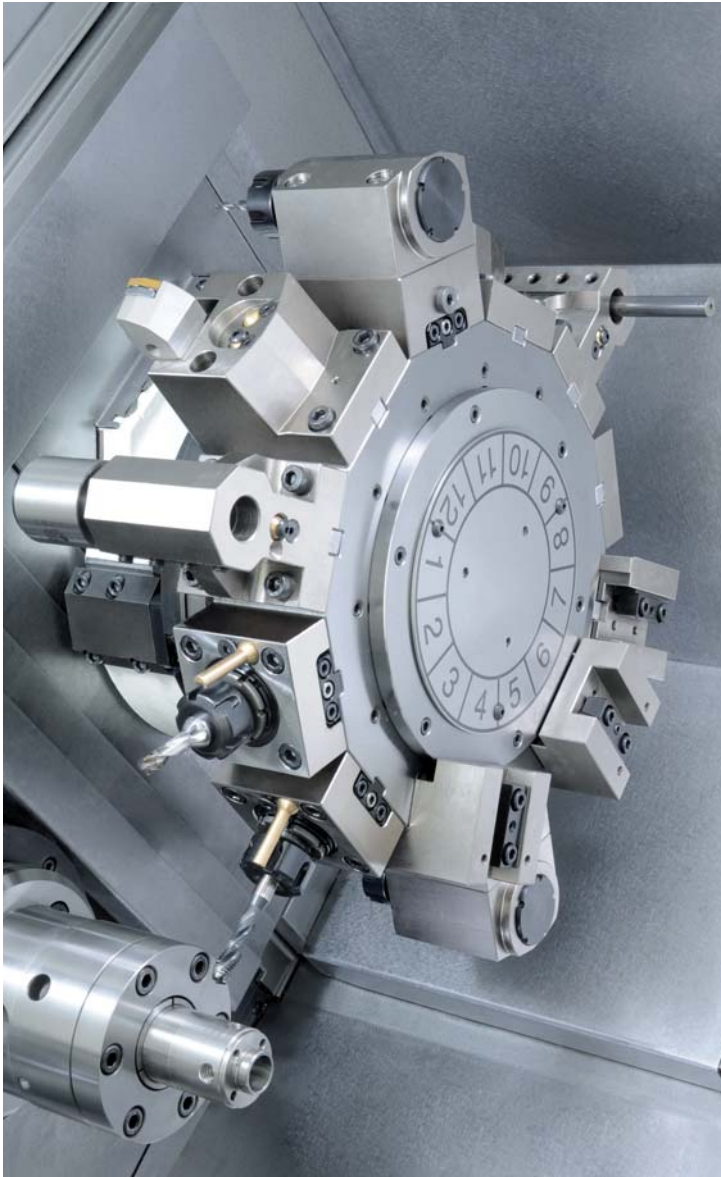
The BMX 45Y2 has a very compact structure offering optimum use of available space in the workshop. The sturdy cast-iron construction featuring a 45° slant bed, the robust mechanical components combined with powerful spindle motors (11 kW) and live tools (max 4,6 kW) will allow you to achieve significant results:

- optimal machining of all materials, especially tough alloys
- reduction of cycle times and longer tool service life
- perfect and efficient method of 'Chip' removal
- ergonomics and easy access for setup and retooling operations

Double-spindle and double-turret turning centre featuring 2 Y-axes

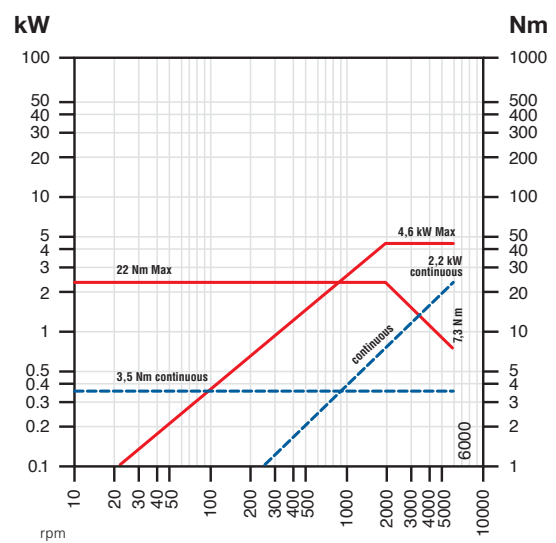
- Quick cycles
- From bar to the finished part in one set-up
- Higher productivity (up to 50%)
- Compact





Biglia turrets Live tooling

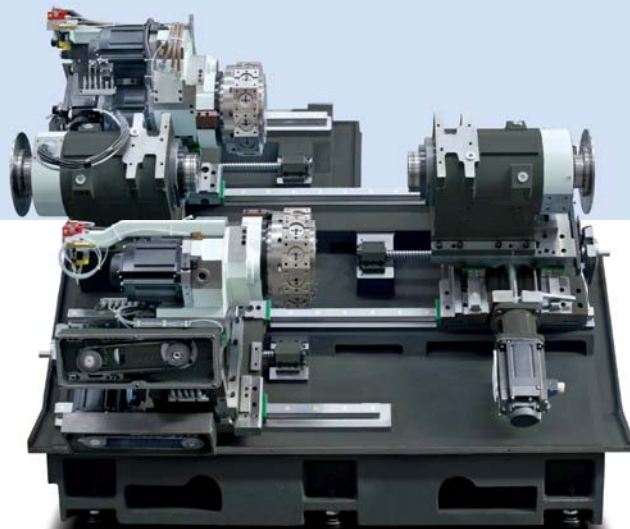
The BMX 45Y2 is equipped with two rugged and quick Biglia servo turrets. Live tooling on all positions. Up to 30 tools can work simultaneously. The rotary tools are driven by a motor with 22 Nm torque, 2,2/4,6 kW power and speed range of 6000 rpm.



and 2 C-axes: high productivity in machining complex parts from the bar.

Machine construction and bed

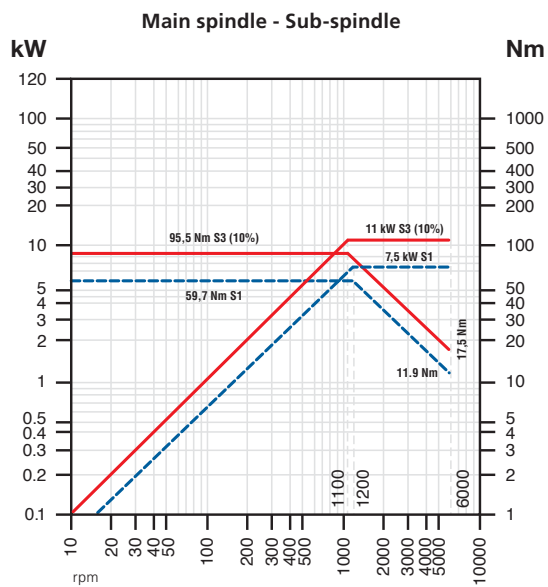
The massive rigid cast iron 45° slant bed embodying linear rails ensures high rigidity, exceptional vibration dampening and thermal stability.



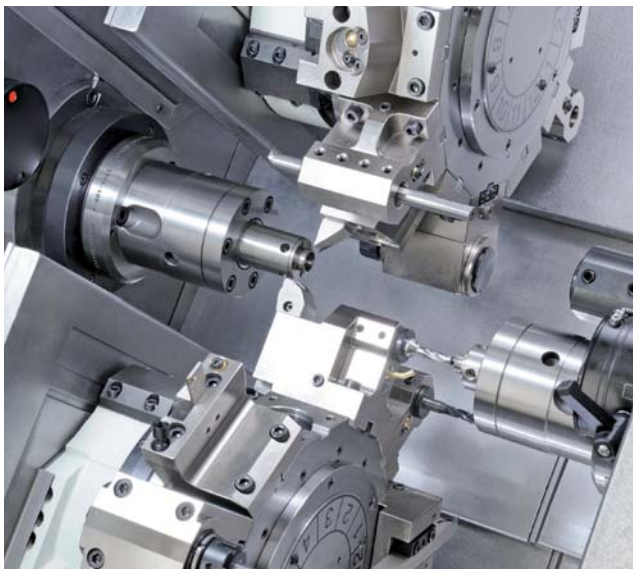
BMX 45Y2

Spindles

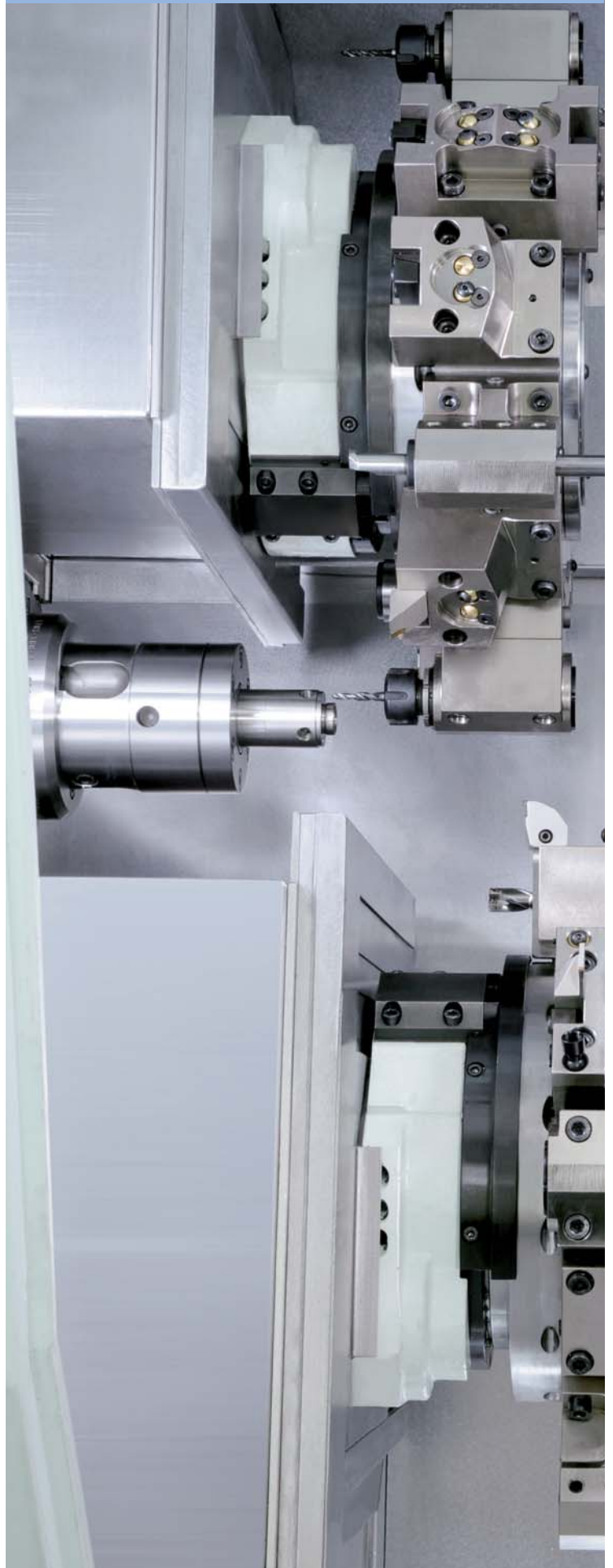
The BMX 45Y2 is equipped with two liquid cooled integral motor-spindles which are driven by high-performance motors (11 kW power and 6000 rpm spindle speed). These spindles allow powerful cutting as well as exceptional surface finish and roundness accuracy.



Simultaneous "follow up" machining



Generous machining area to



achieve top-level performance



Sub-spindle

The position of the CNC-operated sub-spindle featuring a double movement (longitudinal and transversal – Z3 and X3 axes) enables reliable and flexible machining operations.

The sub-spindle can be offset from the main spindle.

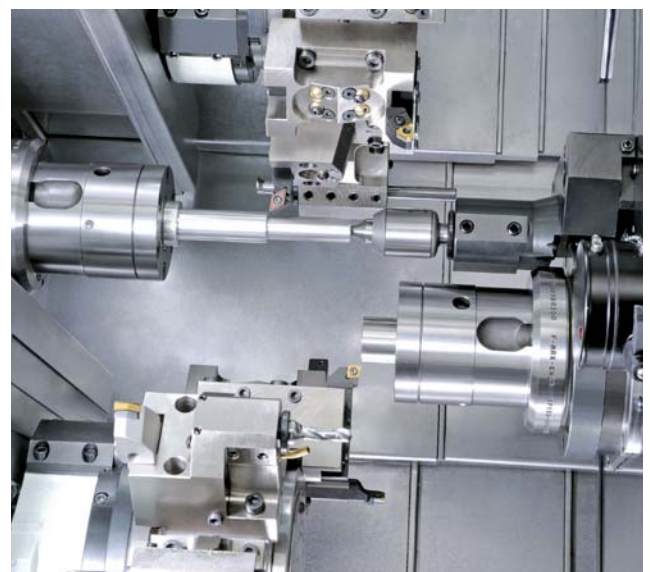
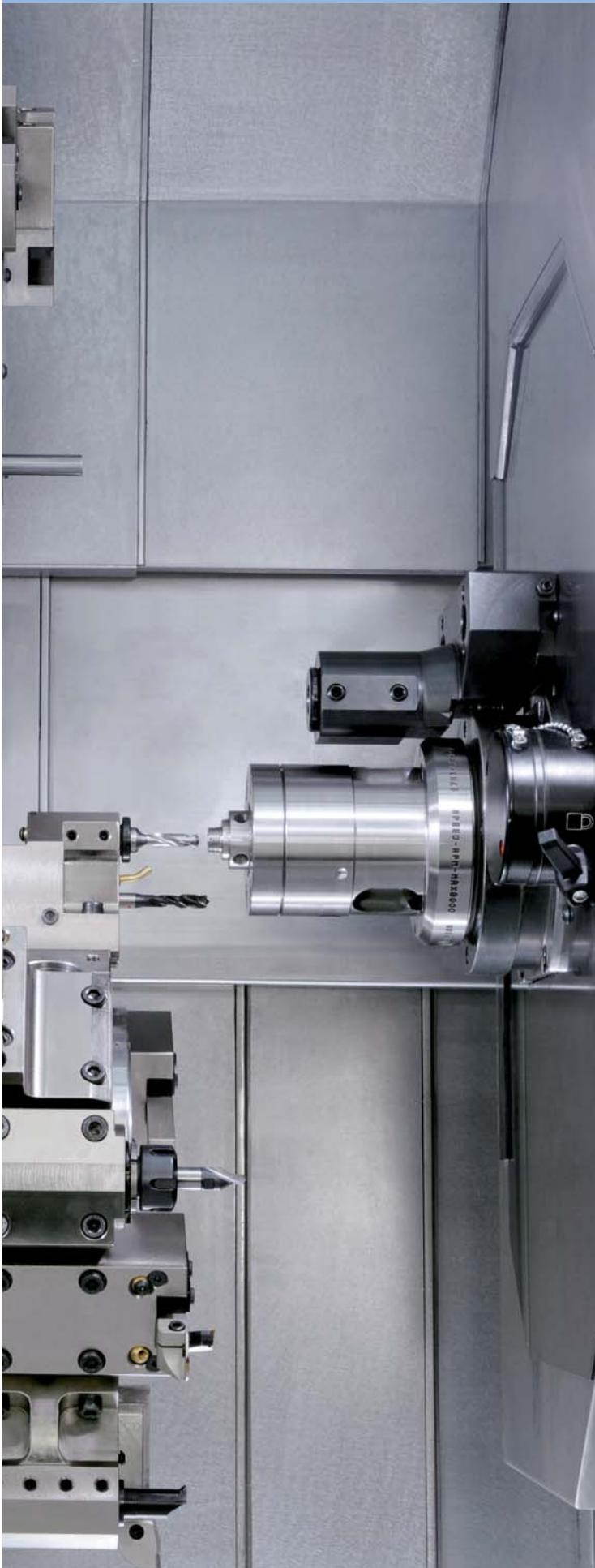
The main advantages are:

- elimination of interference problems between the two turrets
- simultaneous “follow up” machining using three tools thanks to the “Superimposition” function
- possibility to use the sub-spindle as a regular tailstock to hold the component machined on the main spindle with T1 and simultaneously perform finishing with T2

Tailstock on the sub-spindle

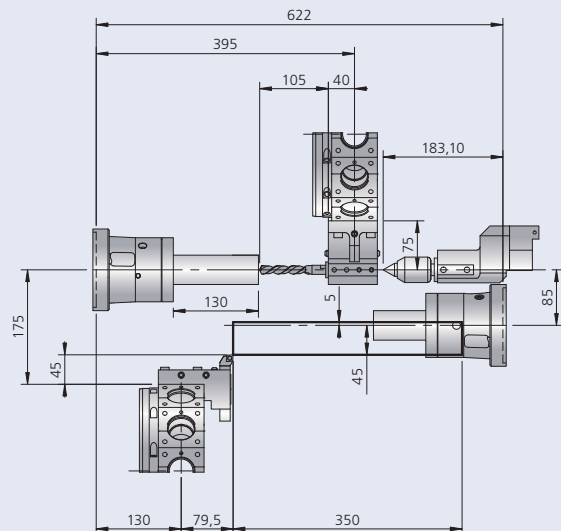
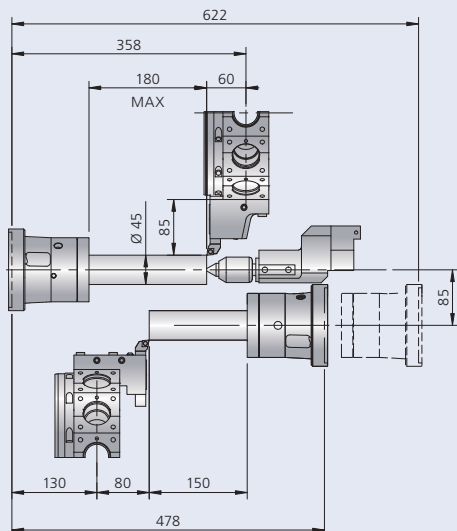
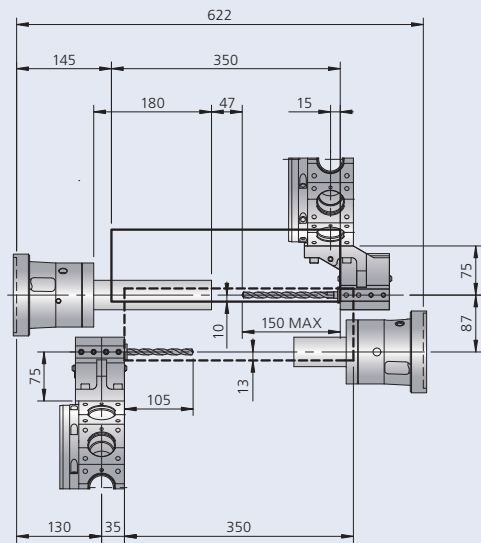
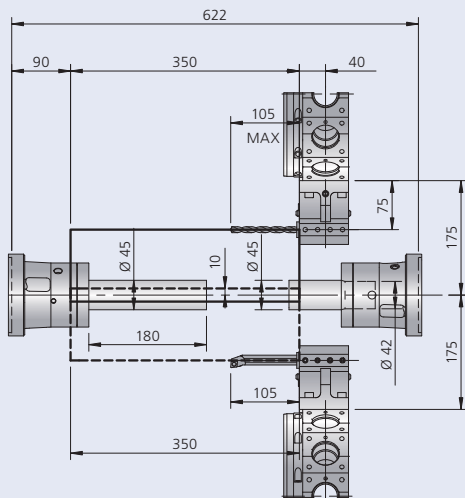
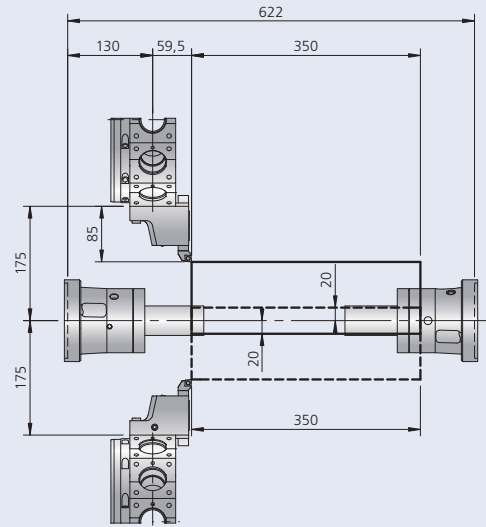
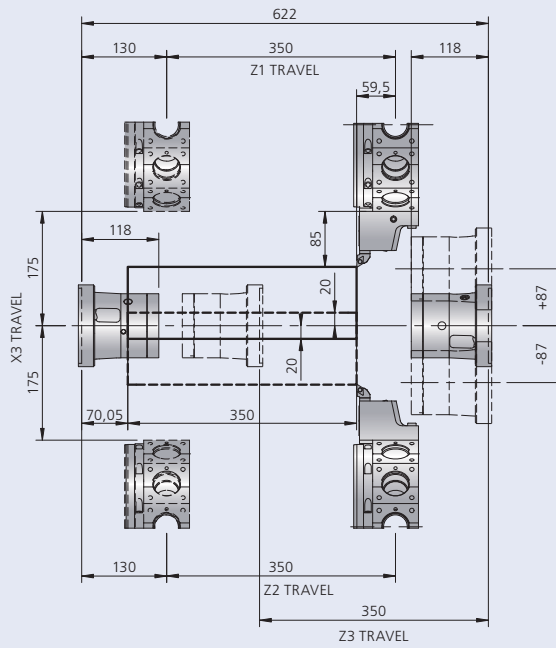
(Option)

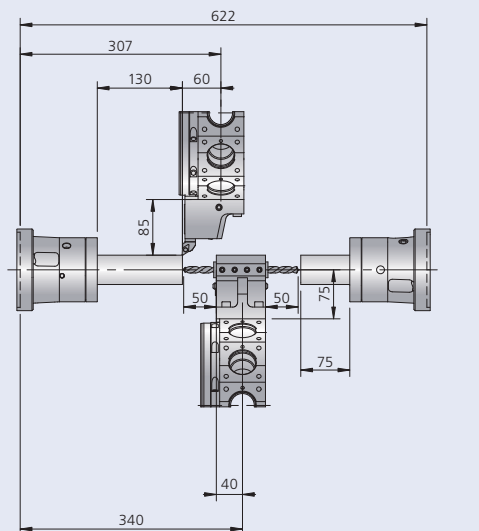
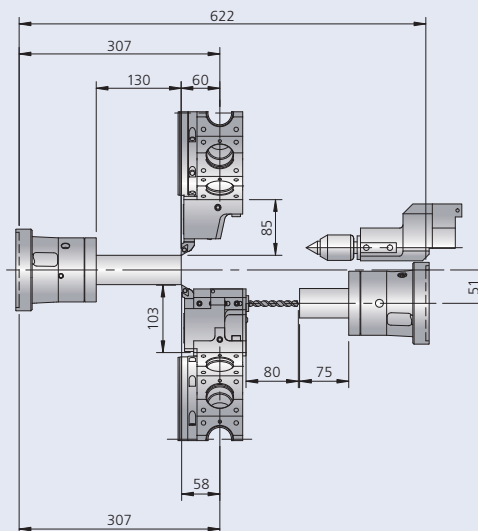
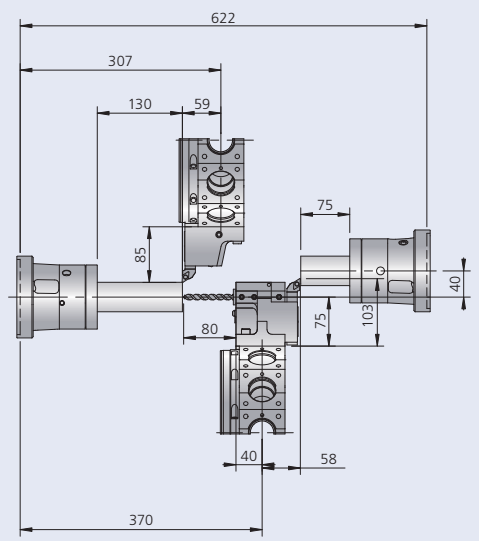
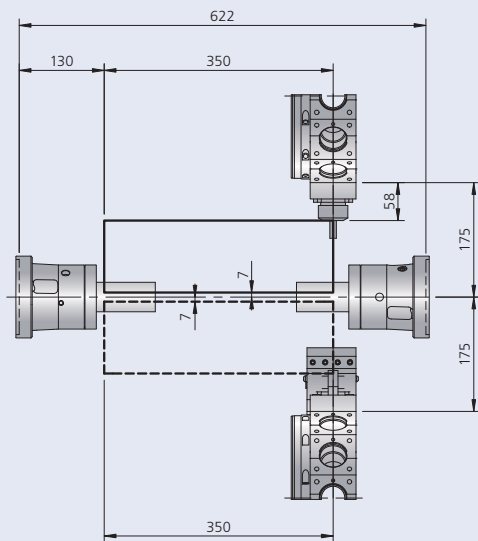
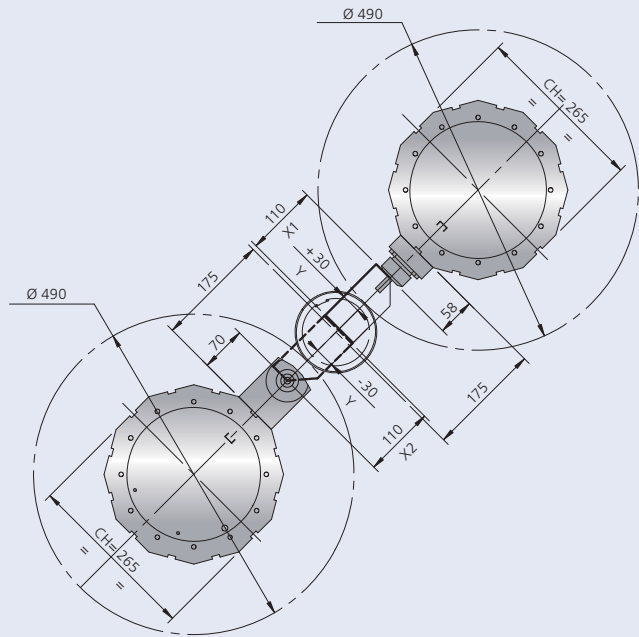
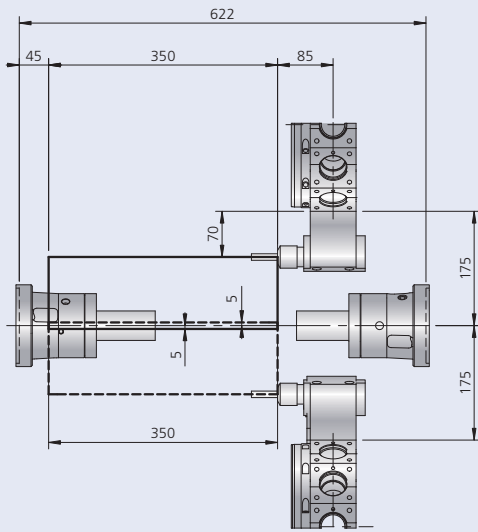
Upon installation of a support with rotating center, the sub-spindle can be used as a regular tailstock to machine small-sized shafts.



Machining fields

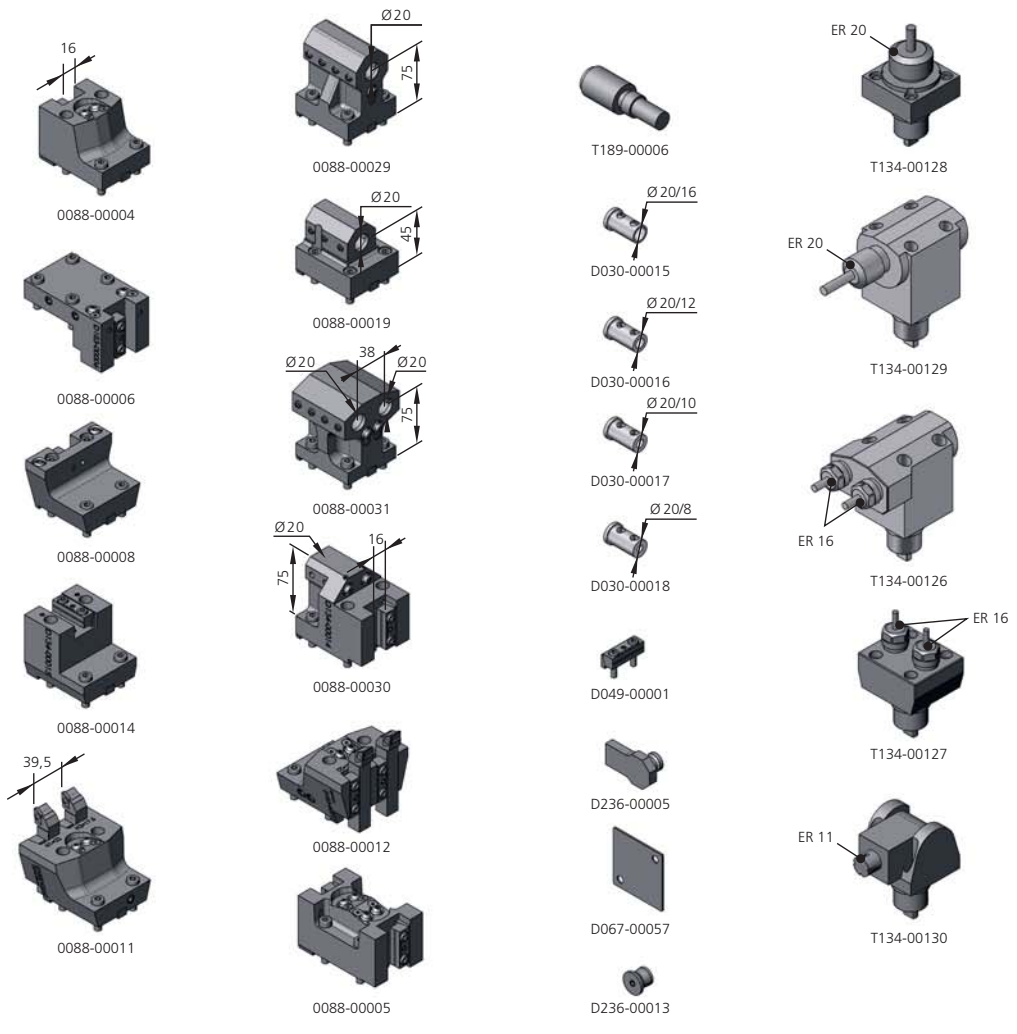
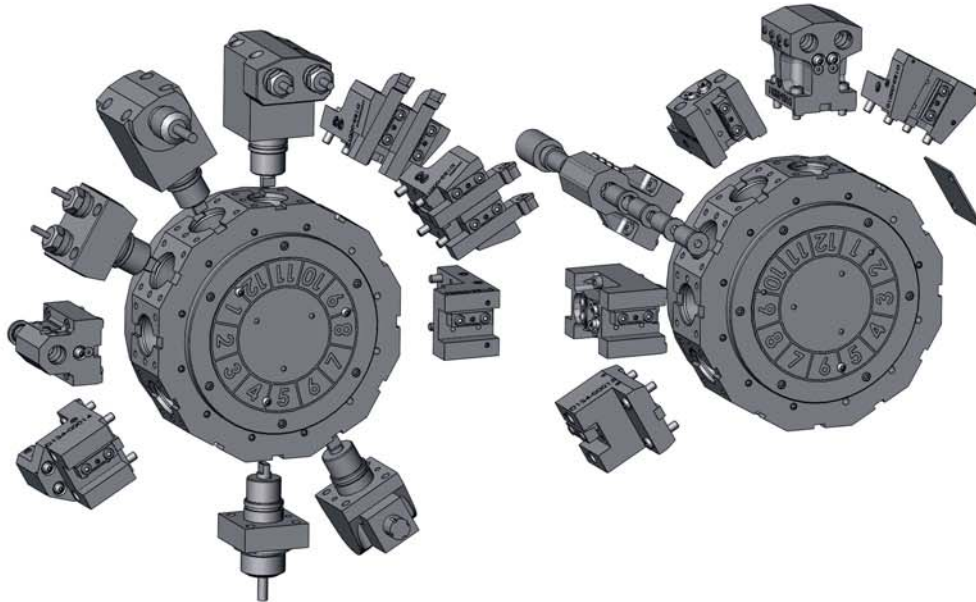
BMX 45Y2





Toolholders

BMX 45Y2



Wide range of equipment and optionals.

Standard features

- 2 liquid cooled integral motor-spindles
- 2 Biglia 12-post servo turrets featuring two Y-axes
- Sub-spindle with axial movement, parts ejector
- Scales on the X1 and X2 axes
- Bar-feeder interface
- Rigid tapping
- Automatic parts-catcher
- Finished parts conveyor
- Swarf conveyor
- Coolant system featuring 7 bar pumps and filters
- Two colour alarm lamp
- Electrical cabinet - air conditioned



Optional main features

- Tool Probing System
- High-pressure pump (40 bar)
- Mist Extractor
- Polygon turning
- Tool wear and breakage monitoring system

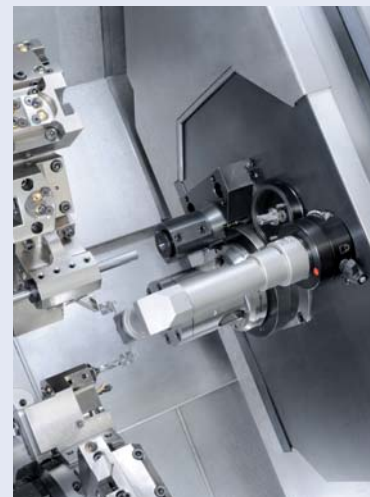


Programmable automatic parts-catcher

The automatic parts-catcher allows the unloading of finished parts up to 180 mm long in automatic mode and idle time.

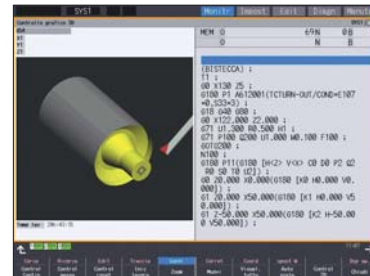
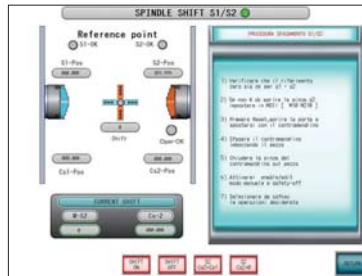
Tool Setter (Option)

This device makes tool-setting faster and easier. The two tool setting sensors offers tool offsets to be measured on both turrets, thus reducing set up times.





CNC-Unit.



Quick and easy for program reliability

- CNC-unit mod. Mitsubishi M830VS:
- 15" colour liquid crystal display, touch screen
- QWERTY keyboard
- CPU RISC 64 bits
- Data transmission: USB gate, Ethernet gate, Memory Card, RS232 gate
- Biglia operator panel featuring softkeys



SSS Control (Super Smooth Surface for determining appropriate shapes and avoiding unnecessary decelerations),
Nano Interpolation (controls everything from NC's operation to servo processing in the least command increment of 1µm) and
OMR Control (high speed and accuracy control of driving system by estimating paths of machine-end) to obtain higher-speed and higher-accuracy machining.

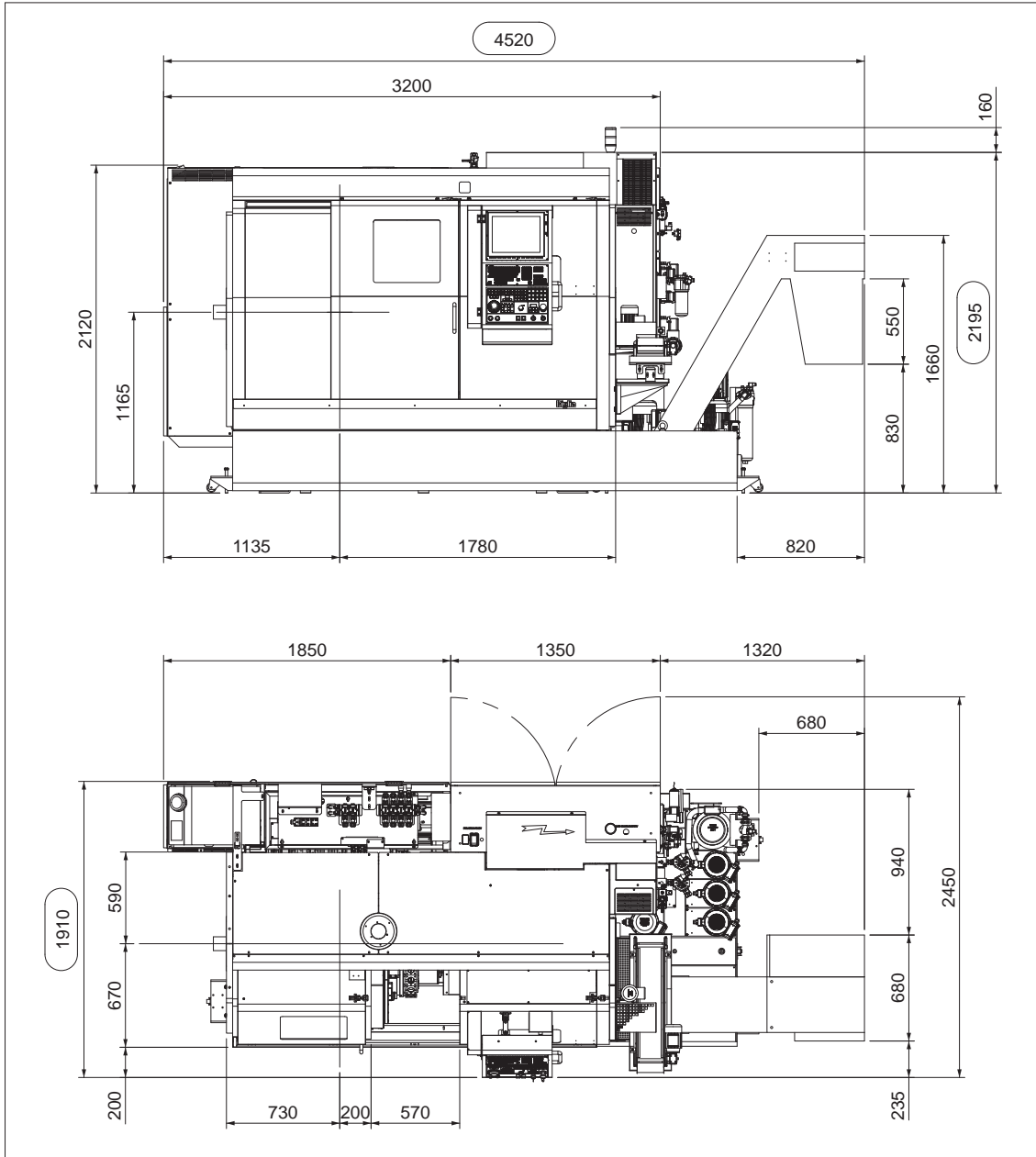
T E C H N I C A L S P E C I F I C A T I O N S

		BMX 45Y2
MACHINING CAPACITY		
Bar capacity	mm	45
Max. machining diameter	mm	100
Max. machining length	mm	180
Max. swing over diameter	mm	140
MAIN SPINDLE - SUB-SPINDLE		
Max. speed	rpm	6000
Spindle nose (flange connection)	mm	115
Spindle bore	mm	55
Drawtube inside diameter	mm	46
Inner diameter of bearings	mm	85
Chuck diameter	mm	110
Max. motor power	kW	11
Max. torque	Nm	95
C-axis: min. programmable value	°	0,001°
X3-axis: sub-spindle offset stroke	mm-m/min	170 [-85/+85] - 15
Z3-axis: sub-spindle stroke - rapid traverse	mm-m/min	390 - 30
UPPER TURRET 1 - LOWER TURRET 2		
Number of tools	N°	12
Turret indexing (1 pos)	sec	0,15
Live tools: number of tools	N°	12
Max speed	rpm	6000
Motor power	kW	2,2 / 4,6
Max torque	Nm	22
X1-X2 axes stroke - rapid traverse	mm-m/min	110 - 15
Z1-Z2 axes stroke - rapid traverse	mm-m/min	350 - 30
Y1-Y2 axes stroke - rapid traverse	mm-m/min	60 [-30/+30] - 15
COOLING SYSTEM		
Tank capacity	l	200
Pressure with standard pump	bar	7
DIMENSIONS AND WEIGHT		
Machine with swarf conveyor	mm	4520 x 1910 x 2195 h
Spindle centre height	mm	1165
Machine weight with swarf conveyor	kg	6000

MULTITURRET BAR TURNING

MACHINE DIMENSIONS

BMX 45Y2



THE TURNING TECH

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