

M175

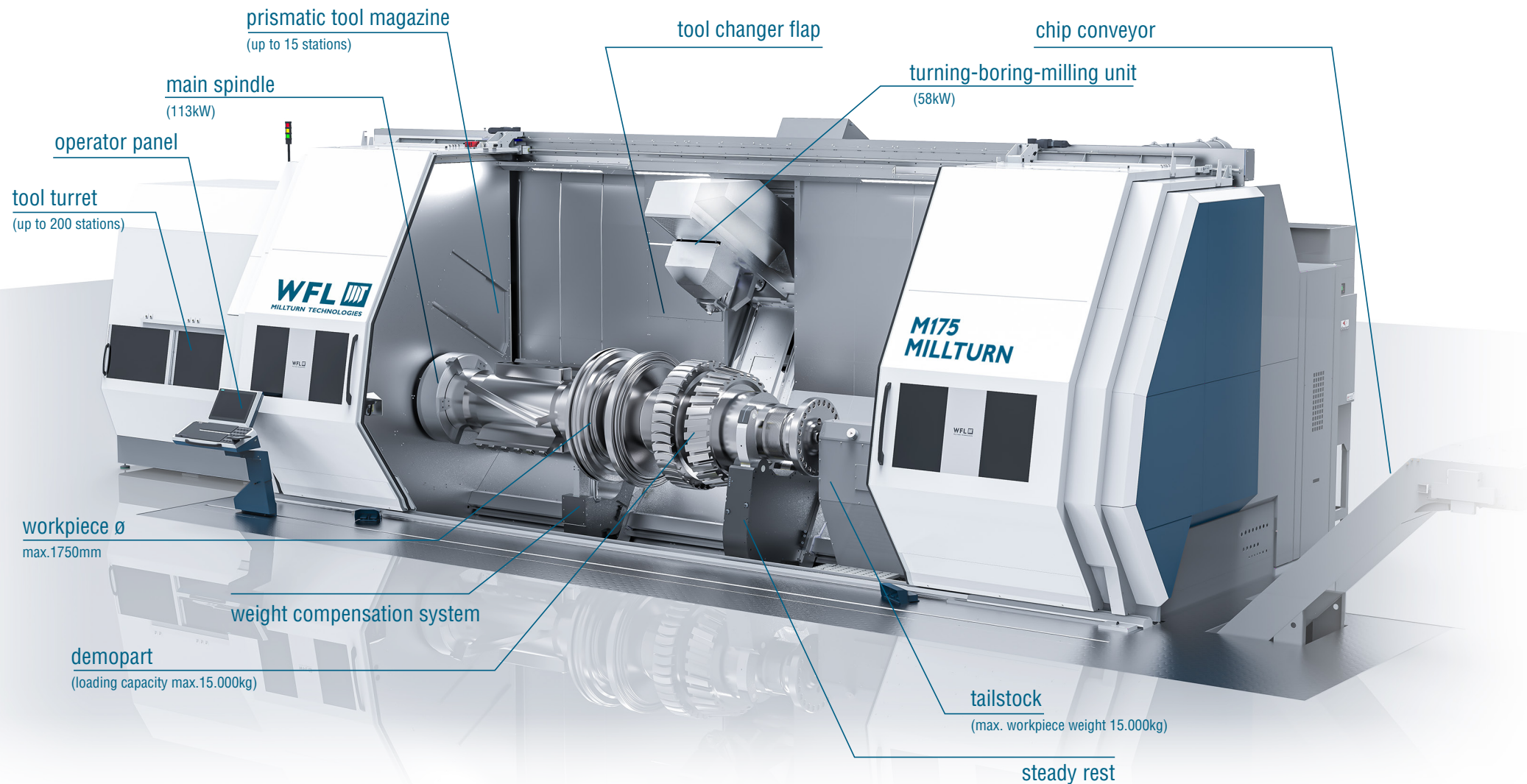
M175
[DE] [EN]

CLAMP ONCE – MACHINE COMPLETE

M175 MILLTURN - Quality and size in a new dimension

With the models M100, M120, M150 and M175, WFL Millturn Technologies presents the premium class of multifunctional turning-boring-milling centres. Complete machining of complex workpieces up to 12m in length becomes a reality.

In addition to superior performance and torque values of the spindle drives, tremendous feed forces on all axes ensure impressive dynamics and maximum productivity.

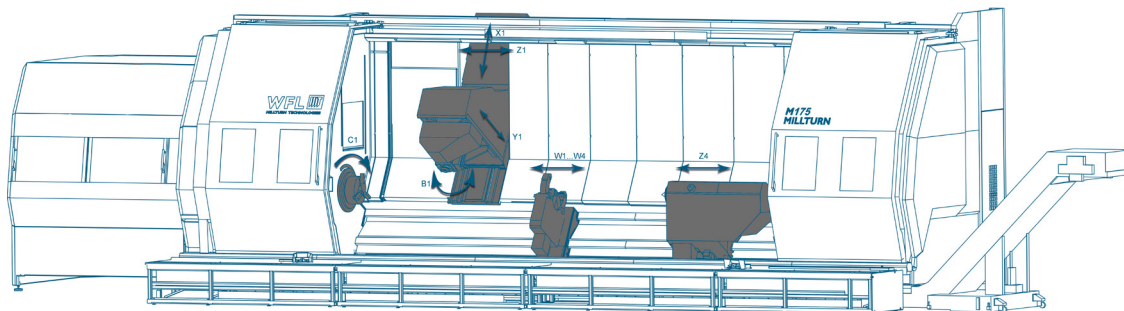


Bigger, stronger, faster - with the latest M-series product - the M175 MILLTURN - WFL is launching a new giant of complete machining. This contains significant innovations, ensures the highest precision and an advantageous versatility for customer requirements. The new turning-boring-milling unit offers a max. swing diameter of 1750mm and can accommodate up to 15.000kg heavy workpieces very stable due to the new, large-sized bed guideway for steady rest and tailstock.

The turning-boring-milling unit has an X-axis travel of 1620mm and a Y-axis travel of 1100mm and can therefore be used uncompromisingly and universally, e.g. for deep radial machining.

Due to the large volume box structure of the turning-boring-milling unit cross slide with a very wide bed guide base and multiple arrangement of ground gliding guideways in the X- and Z-axis, the tool carrier system has a particularly high stability.

This massive and powerful construction is combined with proven main and milling spindle systems, whose 113kW and 58kW drives are extremely reliable in their performance.

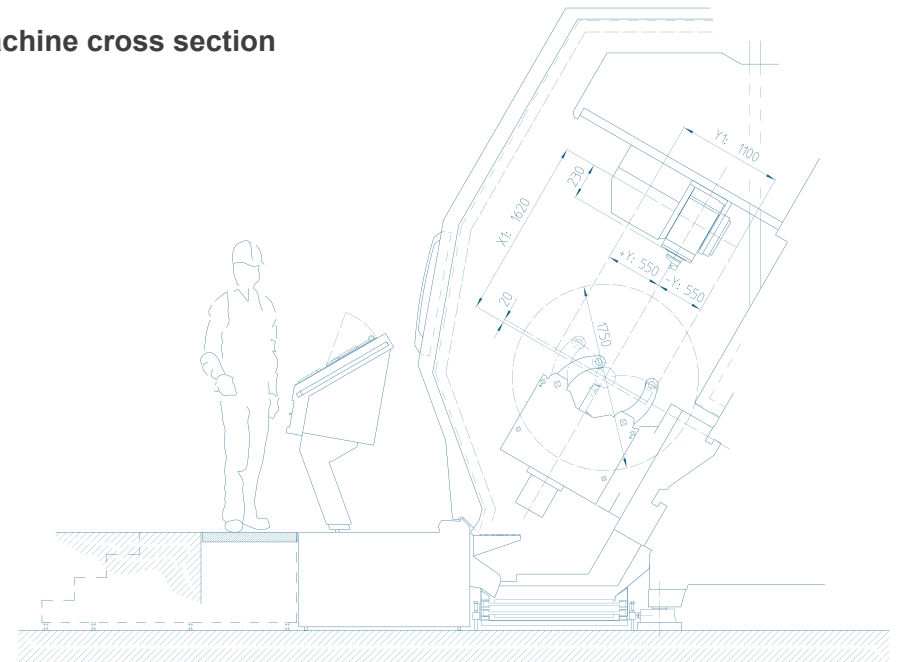


The leading machine concept for the manufacturing of complex and precise workpieces

Facts

- Very stable construction
- Deep radial machining possible
- 58kW milling power
- 113kW main spindle power
- Max. workpiece weight 15.000kg
- Y-axis travel 1100mm
- X-axis travel 1620mm
- Max. turning diameter 1750mm
- Specially configured machine on customer request

Machine cross section



M175 MILLTURN
WORKING RANGE

Center distance	mm	2000 / 3000 / 5000 / 6500 / 8000 / 10000 / 12000
Turning length incl. standard chuck approx.	mm	2150 / 3150 / 5200 / 6700 / 8200 / 10200 / 12200
Swing diameter over top slide	mm	1750
Swing over bed	mm	1840 / 1810 / 1790 / 1750 / 1730 / 1700 / 1660

TURNING SPINDLE

Spindle head DIN 55026	Size	B20
Spindle bore	mm	200
Spindle diameter in front bearing	mm	320

MAIN DRIVE

Max. power, 40% duty cycle	kW	103 // 113
Max. power 100% duty cycle	kW	74 // 100
Max. speed	min ⁻¹	800 // 800
Max. torque, 40% duty cycle	Nm	10160 // 14000
Torque at the spindle max. 100% duty cycle	NM	7300 // 12400

C-AXIS

Max. speed	min ⁻¹	9
Torque at the spindle max. 100% duty cycle	Nm	12000
Smallest programmable increment	Degrees	0,0001

TURNING-BORING-MILLING UNIT – UPPER TOOL CARRIER

Max. power 40% duty cycle	kW	58
Max. power 100% duty cycle	kW	45
Max. speed	min ⁻¹	5000 / 8000
Torque at the spindle max. 100% duty cycle	Nm	500 / 310
Milling spindle diameter in front bearing	mm	130
Z-axis travel	mm	2210 / 3230 / 5270 / 6770 / 8270 / 10270 / 12270
X-axis travel	mm	1620 (-20...+1600)
Travel Y-axis 45kW	mm	1100 (-550...+550)
Z-axis feed force 100% duty cycle	kN	30
X-axis feed force 100% duty cycle	kN	31,5
Y-axis feed force 100% duty cycle 30kW / 45kW / 55kW	kN	27
Rapid feed speed Z / X / Y	m / min	15 / 15 / 15
B-axis swivelling range	Degrees	- 110 / + 110
B-axis additional indexing	Degrees	2,5
B-axis swivelling torque max.	Nm	1600
B-axis holding torque, indexed and clamped	Nm	18000
Smallest programmable increment on B-axis (interpolable)	Degrees	0,0001
Tool system	Type	HSK-A100 / C8

M175 MILLTURN
TAILSTOCK

Quill diameter	mm	300
Quill travel	mm	300
Adjustable quill force	kN	11 - 90
Live centre	MK / Me	FK150 / Me 100 (1:20)
Max. weight of workpiece	kg	15000 / *

STEADY REST

Clamping diameter max.	mm	810 / *
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DISC MAGAZINE

Number of tool stations (place-encoded) 80 / C8	Number	36 / 72 / 108 / 200
Number of tool stations (place-encoded) 100	Number	30 / 60 / 90 / 200
Tool diameter, adjacent, max.	mm	110
Tool diameter, non-adjacent, max.	mm	250
Max. tool length	mm	900
Max. tool weight	kg	35

PRINCIPAL DIMENSIONS OF THE BASE MACHINE

Length x width x height (max. magazine)	m	12 / 13 / 15 / 17,5 / 19 / 21 / 23 x 7,7 x 5,15
Number of sliding doors	Number	2 / 2 / 3 / 4 / 4 / 6 / 6
Height of the turning spindle/turning centre above the ground	mm	2010
Total weight of the machine approx.	kg	44.000 - 150.000

CONTROL

		Sinumerik 840D sl
Display on the operator panel	Type	LCD colour display / 24"

PAINTING

RAL 5023 distant blue, texture / 7035 light grey, texture / 7037 dusty grey, texture

* Other values available upon request