



Experience our machines in action!



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Heavy machine bed with hardened and ground guides

Premium heavy-duty lathe for customized productivity and long machining distances

- Heavy ribbing of the 45° inclined bed with wide box ways ensures excellent vibration damping, especially during continuous cutting operations.
- This design is very spacious, featuring a large work space for tools and improved chip removal
- A wide support saddle with maximum guide length will result in significantly more stability and much less vibration
- The preloaded ball screws connect to powerful drives via a zero-loss transmission clutch, and extensive bilateral bearings ensure high axial and radial rigidity and minimize deviations caused by heating and preloading of spindle
- Excellent rigidity and minimum influence of fluctuating operating temperatures are possible due to an innovative and massive spindle head design
- The main spindle is designed for demanding loads and lasting accuracy, it includes precision dual cylinder roller bearings on both sides, plus additional angular ball bearings on both sides of the front bearings
- The rigid tailstock for shaft machining provides additional flexibility in production operations
- The design with 2 additional box ways ensures collision-free tailstock movements. Extra long guideways, superior rigidity and precision of guides result in excellent vibration damping even during heavy machining operations
- Automatic tailstock is available as an option.
- Servo-turret for quick and precise tool changes
- L models offer an additional center width for even more capacity
- Optionally, a hydraulically self-centering rest from SMW can be used, and the included tailstock allows machining of long workpieces

Fanuc 0i TF control

- Easy programming and operation, short learning curve

Standard Equipment

CE, Fanuc 0i TF control, 10.4" LCD color monitor, USB interface, R232 interface, 12-station tool holder, programable tailstock, hydraulic 3-jaw chuck with soft jaws, set of soft jaws, foot switch for 3-jaw chuck, chuck close/open confirm switch, hydraulic unit, coolant system, air and coolant spray wand, central lubrication, LED work lamp, 3-color signal lamp (LED), door lock, machine feet, operating tools

Options

Part No.

• Infrared receiver 91.50 for Stahlwerk machines	251598
• Air Blower	251621
• Automatic door	251637
• Set of hard jaws for 18" chuck	251667
• Air condition for electric cabinet	251693
• Manual steady rest (Ø 300-400 mm)	251711

For additional options for this machine, visit our website.

Specifications TAURUS

		250	300L	450L
Working area				
Turning-Ø over bed (max.)	mm	610	610	775
Swing-Ø over cross slide (max.)	mm	480	480	630
Turning diameter (max.)	mm	400	400	690
Turning length (max.)	mm	1.080	2.080	2.265
Travels				
Travel X-axis	mm	230	230	350
Travel Z-axis	mm	1.130	2.130	2.330
Angle of slant bed	deg	45	45	45
Headstock				
Bar capacity (incl. chuck)	mm	76	90	119
Spindle speed	1/min	3.500	3.000	2.000
Spindle mount		A2-8	A2-8	A2-11
Spindle bore	mm	86	105	132
Spindle torque max. (steps)	Nm	470	470	2.628
Spindle drive method		Belt	Belt	Belt
Lathe chuck diameter	mm	250	300	450
Rapid feed				
Rapid feed X-axis	mm/min	20.000	20.000	20.000
Rapid feed Z-axis	mm/min	24.000	18.000	18.000
Feed				
Feed force X-axis (cont./max.)	kN	15,7 / 35,3	15,7 / 35,3	18,4 / 52,1
Feed force Z-axis (cont./max.)	kN	12,5 / 28,2	10,4 / 23,5	23,9 / 81,9
Tooling				
Tool changer type		Servo	Servo	Servo
Number of tool stations	Pieces	12	12	12
Shank size	mm	25x25	25x25	32x32
Boring bar mount diameter	mm	50	50	60
Turret indexing time	sec	0,2	0,2	0,25
Accuracies				
Repeatability X-axis	mm	± 0,005	± 0,005	± 0,003
Repeatability Z-axis	mm	± 0,01	± 0,01	± 0,006
Tailstock				
Tailstock quill diameter	mm	110	110	160
Tailstock quill stroke	mm	100	100	150
Tailstock taper	MT	5	5	5
Drive capacity				
Motor rating main drive	kW	18,5	18,5	37
Main drive, continuous load	kW	15	15	30
Motor rating X-axis	kW	3	3	7
Motor rating Z-axis	kW	3	3	6
Total power consumption	kVA	30	30	57
Measures and weights				
Overall dimensions (length x width x height)	m	3,92x1,81x2,05	5,24x1,81x2,02	5,81x2,18x2,35
Weight	kg	7.100	8.600	13.200
Part No.		181175	181131	181139