

# EUROPEAN CUTTING-EDGE TECHNOLOGY AT BEST PRICES

## HIGHLIGHTS

- / Extremely solid machine bed, highest thermostability
- / Top processing precision
- / State-of-the-art control technology with Sinumerik 828D or Fanuc Oi TD with ShopTurn and ManualGuide i
- / Made in the Heart of Europe



# S65 AND S45 – SPECIAL EDITION – MANUFACTURING MEDIUM-SIZED WORKPIECES USING EUROPEAN CUTTING-EDGE TECHNOLOGY

Alternatively available with or without tailstock including up to 6 (S45) or 12 (S65) driven tools. As regards the control, you may choose between Sinumerik 828D and Fanuc Series 0i.

### S45 UNIVERSAL PRECISION TURNING CENTER

The compact CNC lathe with turn-mill turret is predestined for processing bar parts with a diameter of up to 45 mm and chuck parts of up to 220 mm. The main spindle features speeds of up to 6300 rpm and a main drive power of 11 kW. For shaft machining the machine is also available with an automatic tailstock. With an optimal accessibility the machine offers best conditions for the production of small lot sizes.



### S65 UNIVERSAL PRECISION TURNING CENTER

The compact CNC lathe with turn-mill turret is predestined for processing bar parts with a diameter of up to 65 mm and chuck parts of up to 310 mm. The main spindle features speeds of up to 4200 rpm and a main drive power of 18 kW. For shaft machining the machine is also available with an automatic tailstock. With an optimal accessibility the machine offers best conditions for the production of small lot sizes.



# /Technical data

Work area	S45	S65
Swing over bed	Ø 430 mm	Ø 540 mm
Swing over cross slide	Ø 210 mm	Ø 360 mm
Distance (spindle nose - center)	631 mm	680 mm
Maximum turning diameter	Ø 170 mm	Ø 310 mm
Maximum part length	310 mm	520 mm
Maximum bar stock diameter	Ø 45 mm	Ø 65 mm
Travel		
Travel in X	160 mm	210 mm
Travel in Z	310 mm	610 mm
Main spindle		
Speed range	0 – 6300 rpm	0 – 4200 rpm
Drive performance	11 kW	18 kW
Spindle torque	70 Nm	192 Nm
Spindle nose DIN 55026	A2-5	A2-6
Spindle bearing (inner diameter at front)	Ø 80 mm	Ø 100 mm
Spindle bore	Ø 53 mm	Ø 73 mm
C axis		
Resolution	0,001°	0,001°
Rapid motion speed	1000 rpm	1000 rpm
Spindle indexing (disc brake)	0,01°	0,01°
Tool turret		
Number of tool positions	12	12
Tool holding shaft in accordance with VDI (DIN 69880)	30 mm	30 mm
Tool cross-section for square tools	20 x 20 mm	20 x 20 mm
Shank diameter for boring bars	Ø 32 mm	Ø 32 mm
Turret indexing time	0,2 sec.	0,2 sec.
Driven tools DIN 5480		
Number of driven stations	6	12
Drive performance	4 kW	5 kW
Torque	16 Nm	20 Nm

Feed drives	S45	S65
Feed force in X / Z axis	4000 / 6000 N	5000 / 7000 N
Position variation Ps in accordance with VDI 3441 in X / Z	0,003 / 0,0035 mm	0,003 / 0,0035 mm
Automatic tailstock		
Tailstock travel	460 mm	500 mm
Maximum thrust	5000 N	8000 N
Quill bore taper	MT 4	MT 4
Coolant system		
Tank volume	230 liters	230 liters
Pump performance at 3.5 bar	0,57 (2,2) kW	0,57 (2,2) kW
Volume pumped at 3.5 bar / 1 bar	15 / 65 l/min	15 / 65 l/min
Hydraulic unit		
Multiple circuit hydraulics for clamping device	max. 60 bar	max. 60 bar
Dimensions and weight		
Height of centers above floor	1152 mm	1100 mm
Machine height	1940 mm	1880 mm
Required space for machine (L X D)	2250 x 1675 mm	2855 x 1770 mm
Total weight	3300 kg	4300 kg
EMCO SL1200		
Par longth	150 900 mm	150 1100 mm

Bar length	150 – 800 mm	150 – 1100 mm
Bar diameter	Ø 8 – 45 mm	Ø 8 – 65 mm
Material storage	12 bars of Ø 45 mm	8 bars of Ø 65 mm
Length	1700 mm	1700 mm
Width	1250 mm	1250 mm
Weight	500 kg	500 kg