

Universal centre lathes

Universal centre lathes belong to the most requested products from the TRENS, a.s. production portfolio. From the middle of the 20 th century our lathes, known under the TOS Trenčín and now TRENS brands, have fulfilled clients demanding requirements. Their advantage is the high precision of machining, easy operating and maintenance, long lifetime, and low operating costs. Thanks to sustained quality and constant development we have attained a leading position among manufacturers of universal lathes worldwide. The result is over 100,000 lathes sold throughout the world, and satisfied customers who repeatedly choose the TRENS brand.

PURPOSE

SN 500 SA is a universal centre lathe designed for piece and small series production; however it is also suitable for maintenance in repair workshops. Main motor output is 7.5 kW. Optional execution with enlarged spindle bore and a wide range of operating speed represent an advantage of the universal centre lathe SN 500 SA.

SN 500 SA



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We Shape the Shapes



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VERSATILITY

- small built-up area
- increased swing over bed by bed gap
- simple gearshifting
- simple maintenance
- the inch or metric execution
- option to modify to meet different mains voltage
- wide range of executions and accessories
- fulfil all CE standards

MATERIAL MACHINING QUALITY

- stability in material cutting
- ergonomic operating
- · clutch driven spindle, smooth movement stop by brake

LIFE-CYCLE AND PROFITABILITY

- hardened guide ways
- low operating costs
- service availability experience

STANDARD

- operating manual
- spindle reducing sleeve
- MORSE 5 dead centre
- · operator's tool kit
- shear pins
- exchange gears set



OPTIONAL EXECUTIONS

- inch execution
- spindle nose ISO 702/II CAMLOCK
- exchange gears for 11,5; 13 and 27 t.p.i.
- tool head Multi Suisse B, C
- tropical execution
- enlarged spindle bore Ø 105 mm
- folding handles
- different voltages and frequencies
- · digital read out

ACCESSORIES

- 4-jaw face-plate, Ø 500 mm
- plain face-plate, Ø 500mm
- universal 3 4-jaw chuck, Ø 250mm, 315 mm
- live centre MORSE 5
- steady rest, Ø 10 115 mm
- follow rest, Ø 10 115 mm
- large steady rest, Ø 110 250 mm
- rolling contact bearings for steady rests
- rear tool holder
- taper turning attachment
- tool post grinder
- longitudinal micrometer stop (cross)
- thread indicator
- drive plate
- flange for chuck
- anchoring material grease gun
- face-plate guards



TECHNICAL PARAMETRES

Working range

Swing over bed 505 mm Swing over cross slide 270 mm Swing of the bed gap 700 mm Useful length of the bed gap 230 mm Distance between centres 1000, 1500, 2000 mm | 980, 1480, 1980 mm* Height of centres over bed 250 mm

Spindle

Speed range	12,5 – 2000 min ^{.1}	12,5 – 1600 min ^{-1*}
Spindle front nose	STN ISO 702/III – B8	STN ISO 702/III – B11*
Bore	77 mm	105 mm*
Internal taper	METRIC 90	METRIC 115*
Max. torque/limiting	1450/50 Nm/min ⁻¹	

Carriages

* bore 105 mm

Cross slide working travel Tool slide working travel Max. tool size Traverse feed number Working range of longitudinal feeds Working range of cross feeds Longitudinal rapid traverse Cross rapid traverse

300 mm 140 mm 32 x 25 mm 38 0,05 – 6,4 mm.rev.⁻¹ 0,025 – 3,2 mm.rev.-1 3000 mm.min⁻¹ 1500 mm.min⁻¹





80 mm

180 mm

±12 mm

1000 kg

80 kg

MORSE 5

Tailstock	
Tailstock sleeve diameter	
Tailstock sleeve stroke	
Tailstock sleeve internal taper	

Threads

Cross resetting

Metric threads	– number	29
	– range	0,5 – 40 mm
Whitworth threads	– number	38
	– range	1 – 80 thread/1"
Modular threads	– number	26
	– range	0,25 – 20 mm
Thread Diametral Pitch	– number	31
	– number of DP thread	2 – 72

Work piece weight

Max. work piece weight clamped between centres Max. work piece weight, clamped in the chuck

Power drives

Total power input	12 kVA
Supply voltage	3 x 400 ± 10 % V
Motor output:	
- main drive	7,5 kW
- coolant pump	0,09 kW
- rapid traverse	0,55 kW

Dimensions

Width x Height Length for DBC 1000, 1500, 2000

Weiaht

Length for DBC 1000, 1500, 2000

2300, 2400, 2600 kg

2595, 3095, 3595 mm

1100 x 1525 mm

