

# TRENS

Universal  
center lathes

SN 32 > SN 50 > SN 71

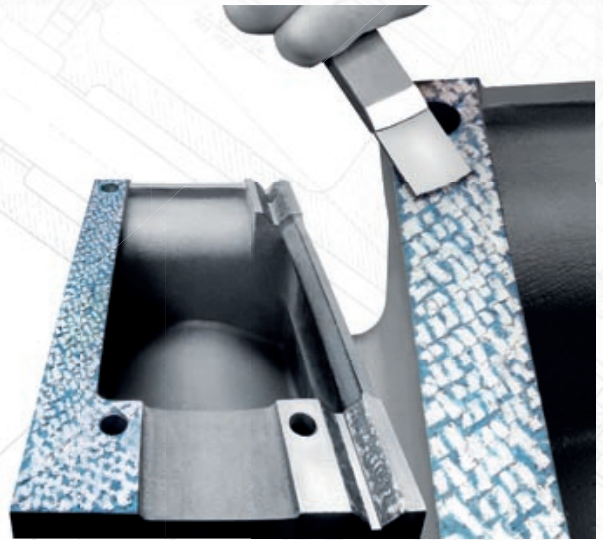


> Universal center lathes are the most popular products in the portfolio of TRENS SK, a.s. Since half of the twentieth century they have been sold under the brand TOS Trencin, currently TRENS. Thanks to consistent high standards and sustained development TRENS machines fulfill the most demanding customer requirements a proof of which is more than 100 000 lathes sold throughout the world.



## ➤ MAIN ADVANTAGES

- Simple and ergonomic control
- **High turning precision**
- Long lifetime
- **Low operating costs**
- Possibility to cut non-standard threads
- **Easy maintenance**
- Possibility to cut various types of threads with wide range of pitches
- **Wide range of optional accessories – digital read-outs, quick change tool posts, steady and follow rests, rolling contact bearings for steadies, micrometric stops, taper turning attachments, faceplates and chucks**



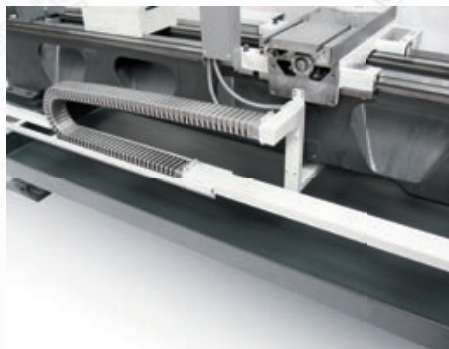
▲ Hand scraping of important parts – high precision during machining

## ➤ OPTIONAL EXECUTIONS

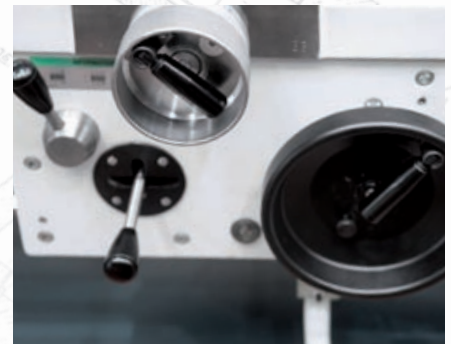
- Quick change tool post
- **Folding handles**
- Different voltages and frequencies
- **Cable carrier**
- End switch for front chip guard for CE execution
- **Left hand handwheel (SN 32, SN 50)**
- Foot central stop switch for d.b.c. up to 1000 mm (SN 32, SN 50)
- **Inch version**
- CAMLOCK spindle nose
- CAMLOCK spindle nose
- **Increased motor output 11 kW (SN 71)**



▲ CAMLOCK spindle nose



▲ Condurflex cable carriers



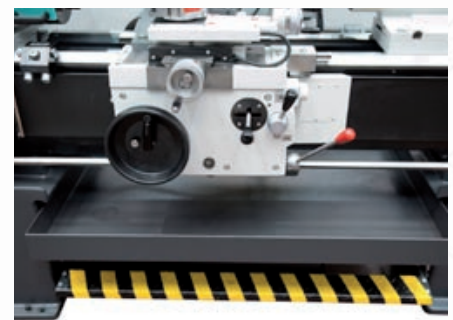
▲ Folding handles



▲ Left hand handwheel



▲ Quick change tool post



▲ Foot central stop



## OPTIONAL ACCESSORIES

### CLAMPING DEVICES



^ 3 jaw chuck

^ 4 jaw face-plate

^ Flange for chuck

^ 4 jaw chuck

^ Plain face-plate

^ Drive plate



^ Thread indicator



^ Taper turning attachment

Rear tool holder >



^ Digital read-out ^



^ Longitudinal micrometric stop



^ Cross micrometric stop



^ Cross stop

### STEADY RESTS AND ROLLING CONTACT BEARINGS



^ Steady rest



^ Follow rest



^ Large steady rest



^ Rolling contact bearings

SN 32      SN 50      SN 71

4 jaw face-plate $\varnothing$	mm	320	500	710
Plain face-plate $\varnothing$	mm	320	500	710
Universal 3-4 jaw chuck $\varnothing$	mm	200	250	315
Steady rest $\varnothing$	mm	10–115	10–115	12–180
Follow rest $\varnothing$	mm	10–115	10–115	12–180
Large steady rest I. $\varnothing$	mm	90–170	110–250	180–320
Large steady rest II. $\varnothing$	mm	–	–	282–405

- Digital read-out
- **Rolling contact bearings**
- Rear tool holder
- **Taper turning attachment**
- Micrometric longitudinal stop/cross stop

- **Cross stop**
- Thread indicator
- **Drive plate**
- Guards for faceplates
- **Flange for chuck**

- Anchoring material
- **Live centre**
- Transporting device
- **Grease gun**

## TECHNICAL PARAMETRES

MACHINE TYPE	Unit	SN 32	SN 50	SN 71
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### Working range

Max. swing over bed	mm	330	500	710
Max. swing over cross slide	mm	168	270	420
Max. swing in bed gap	mm	520	700	960
Bed gap width	mm	230	230	300
Distance between centers	mm	750, 1000	1000, 1500, 2000	1500, 2000, 3000, 4000
Height of centers	mm	160	250	355
Bed width	mm	340	340	450

### Main spindle

Spindle nose BAJONET DIN (ISO702-III)		B6	B6	B8
Spindle nose CAMLOCK (ISO702-II)		D6	D6	D8
Internal spindle taper		MORSE 6	MORSE 6	METRIC 80
Spindle bore	mm	52	52	73,5
Spindle diameter in front bearing	mm	80	80	110
Min. spindle speed	min <sup>-1</sup>	14	22	10
Max. spindle speed	min <sup>-1</sup>	2500	2000	1000
Number of gears		16	24	16

### Spindle drive

Main motor output	kW	4	5,5	7,5/11*
Max. torque	Nm	1000	1200	2400
Limit speed for max. torque	min <sup>-1</sup>	40	45	20

### Carriages

#### X-axis

Working range of cross feed	mm.rev. <sup>-1</sup>	0,12–1,6	0,025–3,2	0,025–3,2
Cross rapid traverse	mm.min <sup>-1</sup>	without rapid traverse	1500	1500
Working travel	mm	250	300	400
Tool slide working travel	mm	140	140	180

#### Z-axis

Working range of longitudinal feed	mm.rev. <sup>-1</sup>	0,025–3,2	0,05–6,4	0,05–6,4
Longitudinal rapid traverse	mm.min <sup>-1</sup>	without rapid traverse	3000	3000
Working travel	mm	depends on clamping device	depends on clamping device	depends on clamping device

### Toolposts

Standard toolpost		4-way toolpost	4-way toolpost	4-way toolpost
Max. tool size	mm	20x20	32x20	40x25
Quick change toolpost		MultiSuisse B*	MultiSuisse C*	MultiSuisse C*
Tool size	mm	20	32	40

### Tailstock

Tailstock sleeve internal taper		MORSE 5	MORSE 5	MORSE 5
Tailstock sleeve diameter	mm	70	70	90
Tailstock sleeve travel	mm	180	180	240
Tailstock control		manual	manual	manual/mechanical*
Cross resetting	mm	±12	±12	±10

### Threads

Metric threads – number/pitch	Nr./mm	26/0,25–20	29/0,5–40	29/0,5–40
Whitworth threads – number/pitch	Nr./TPI	38/2–160	38/1–80	38/1–80
Modular threads – number/pitch	Nr./mm	21/0,125–10	26/0,25–20	26/0,25–20
Diametral Pitch threads – number/number of DP threads	Nr./Nr.	32/4–160	31/2–72	31/2–72

### Machine dimensions

Height	mm	1445	1580	1600
Width	mm	1010	1100	1210/1445*
Length/Weight				
750	mm/kg	2390/1540	–	–
1000	mm/kg	2640/1620	2640/1735	–
1500	mm/kg	–	3140/1835	3445/2960
2000	mm/kg	–	3640/1940	3945/3080
3000	mm/kg	–	–	4945/3330
4000	mm/kg	–	–	5945/3580

\* optional execution

