

TZL Series

The TZL 420 CNC lathe is designed for workpiece machining in the range of turning in accordance with the machine tool specifications, especially machining of large-size shafts and large-diameter workpieces. When delivered with special equipment it can operate as horizontal machining centre with turning, drilling and milling capabilities. It can be equipped with an automatic tool head, tool and workpiece measuring systems, controlled C axis, workpiece steady rests.



Centre Lathe

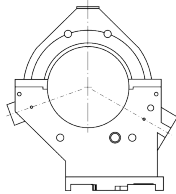
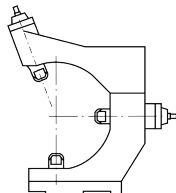
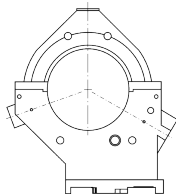
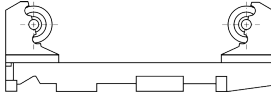
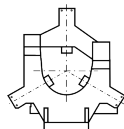
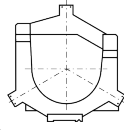



Main features:

- Max. turning diameter \varnothing 4,200 mm
- 4-guideway bed, headstock body made from high-grade cast iron of enhanced mechanical properties
- Carriage and tailstock bed guideways hardened to 45 HRC and ground, additional carriage guideway hardened to 60 HRC
- Cross-slide guideways carburized and hardened to 60 HRC and ground
- Headstock and tailstock on separate plates
- A wide variety of optional equipment that expands the machine tool capabilities
- Slidable operator cabin with a control panel

TECHNICAL SPECIFICATIONS		TZL 420 CNC
Capacity		
Swing over bed	∅ mm	4200
Swing over carriage	∅ mm	700
Distance between centres	mm	5000 / 12000 * / 19000 * / 26000 *
Max. weight of workpiece clamped in:		
• chuck	kg	12000
• centres	kg	80000
• centres + 1 steady rest	kg	90000
• centres + 2 steady rests	kg	100000
Headstock		
Spindle nose	size	Taper 1:10
Range of continuously variable rotation rates	rpm	0.3 - 100
Power of main drive motor	kW	150 / 200 *
Max. torque on spindle	Nm	180000
Carriage		
Longitudinal travel	mm	turning length
Cross-wise travel	mm	1300 + 450
Rapid travel in X axis	mm/min	4000
Rapid travel in Z axis	mm/min	4000
Z-axis travel drive	type	rack-and-pinion, backlash-free
Spindle – C axis *		
Range of continuously variable rotation rates	rpm	0.3 - 42
Positioning rotation rates	rpm	0.2 - 2
Max. torque on spindle	Nm	36000
Positioning accuracy	deg.	0.001
Tailstock		
Quill diameter	∅ mm	450
Quill stroke	mm	200
Rapid travel of quill	mm/min	300
Working travel of quill	mm/min	4
Machine tool overall dimensions and weight, approx.		
• Length	mm	7000 + turning length
• Width	mm	4350
• Height	mm	3500
Weight:		
• for 3000 mm turning length	kg	100000
• for 5000 mm turning length	kg	138500
• for 19000 mm turning length	kg	177000
• for 26000 mm turning length	kg	215500
* – Optional execution.		Some of the above data can be altered to meet the Customer requirements. Above data are subject to change due to product development, without prior notice.

Steady rests for lathes

Name	Diameters	Application	Steady rest
Roller steady rest	<p>Ø 250 – 600 mm (TZL 420 CNC, TCF)</p> <p>Ø 600 – 1000 mm (TZL 420 CNC, TCE)</p> <p>Ø 20 – 160 mm (TRP 63, TRP 72)</p> <p>Ø 40 – 400 mm (TRP 93, TRP 110)</p> <p>Ø 160 – 380 mm (TRP 63, TRP 72)</p> <p>Ø 400 – 600 mm (TRP 93, TRP 110)</p> <p>Ø 100 – 400 mm (TCF)</p> <p>Ø 400 – 800 mm (TCF)</p> <p>Ø 700 – 1100 mm (TCF)</p> <p>Ø 250 – 650 mm (TCE)</p> <p>Ø 50 – 450 mm (TCM)</p> <p>Ø 450 – 750 mm (TCM)</p> <p>Ø 450 – 950 mm (TCM)</p>	<ul style="list-style-type: none"> • TZL 420 CNC • TRP Series • TCF Series • TCE Series • TCM Series 	
C – type roller steady rest	<p>Ø 150 – 700 mm (TZL 420 CNC, TCF)</p> <p>Ø 400 – 800 mm (TZL 420 CNC, TCF)</p> <p>Ø 700 – 1000 mm (TZL 420 CNC, TCF)</p>	<ul style="list-style-type: none"> • TZL 420 CNC • TCF Series 	
Hydrostatic steady rest	<p>Ø 600 – 1000 mm (TZL 420 CNC, TCE)</p>	<ul style="list-style-type: none"> • TZL 420 CNC • TCE Series 	
Open-type roller steady rest	<p>Ø 1000 – 1350 mm (TCE)</p> <p>Ø 1000 – 1800 mm (TCE)</p> <p>Ø 1100 – 1600 mm (TCF)</p>	<ul style="list-style-type: none"> • TCE Series • TCF Series 	
Tilting-type roller steady rest	<p>Ø 50 – 450 mm (TRB)</p> <p>Ø 450 – 750 mm (TRB)</p> <p>Ø 450 – 950 mm (TRB)</p>	<ul style="list-style-type: none"> • TRB Series 	 <p>Ø 50 – 450 mm</p>  <p>Ø 450 – 750 mm</p>  <p>Ø 450 – 950 mm</p>