TCE Series

The TCE Series super heavy centre lathes are designed for workpiece machining in the range of turning in accordance with their specifications, especially for machining of large-size shafts. When delivered with special equipment they can operate as the horizontal machining centres with turning, drilling and milling capabilities. They can be equipped with an automatic turret, tool attachments, tool and workpiece measuring systems, controlled C axis, workpiece steady rests.





Main features:

- Machine tool construction based on a rigid bed with hardened guideways
- 4-guideway bed, headstock body made from high-grade cast iron of enhanced mechanical properties
- Carriage travels along two guideways that guarantee precise guidance and a third support guideway
- Bed and carriage guideways hardened to 45 HRC and ground.
- A wide variety of optional equipment that expands the machine tool capabilities
- Slidable operator cabin with the control panel

TECHNICAL SPECIFACTIONS		TCE 200 CNC	TCE 250 CN
Capacity			
Swing over bed	ø mm	2000	2500
Swing over carriage	ø mm	1700	2000
Turning length (every 1000 mm)	mm	4000 – 25000 *	
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	0.5 - 160	
Power of main drive	kW	150 / 200 *	
Max. torque on spindle	Nm	180000 *	
Carriage			
Longitudinal travel	mm	turning length	
Cross-wise travel	mm	660 + 450	
Rapid travel in X axes	mm/min	2000	
Rapid travel in Z axes	mm/min	4000	
Z-axis travel drive	type	rack-and-pinion, backlash-free	
Tailstock			
Quill diameter	ø 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	2500	2900
Weight (for 3000 mm turning length)	kg	7000	75000
Increase in weight for 1000 mm of turning length	kg	3500	

Steady rests for lathes

Name	Diameters	Application	Steady rest
Roller steady rest	Ø 250 – 600 mm (TZL 420 CNC, TCF) Ø 600 – 1000 mm (TZL 420 CNC, TCE) Ø 20 – 160 mm (TRP 63, TRP 72) Ø 40 – 400 mm (TRP 93, TRP 110) Ø 160 – 380 mm (TRP 93, TRP 72) Ø 400 – 600 mm (TRP 93, TRP 110) Ø 100 – 400 mm (TCF) Ø 400 – 800 mm (TCF) Ø 700 – 1100 mm (TCF) Ø 250 – 650 mm (TCE) Ø 50 – 450 mm (TCM) Ø 450 – 950 mm (TCM)	 TZL 420 CNC TRP Series TCF Series TCE Series TCM Series 	
C – type roller steady rest	Ø 150 – 700 mm (TZL 420 CNC, TCF) Ø 400 – 800 mm (TZL 420 CNC, TCF) Ø 700 – 1000 mm (TZL 420 CNC, TCF)	TZL 420 CNCTCF Series	
Hydrostatic steady rest	Ø 600 – 1000 mm (TZL 420 CNC, TCE)	TZL 420 CNCTCE Series	
Open-type roller steady rest	Ø 1000 – 1350 mm (TCE) Ø 1000 – 1800 mm (TCE) Ø 1100 – 1600 mm (TCF)	TCE SeriesTCF Series	
Tilting-type roller steady rest	Ø 50 – 450 mm (TRB) Ø 450 – 750 mm (TRB) Ø 450 – 950 mm (TRB)	• TRB Series	Ø 50 – 450 mm Ø 450 – 750 mm Ø 450 – 950 mm