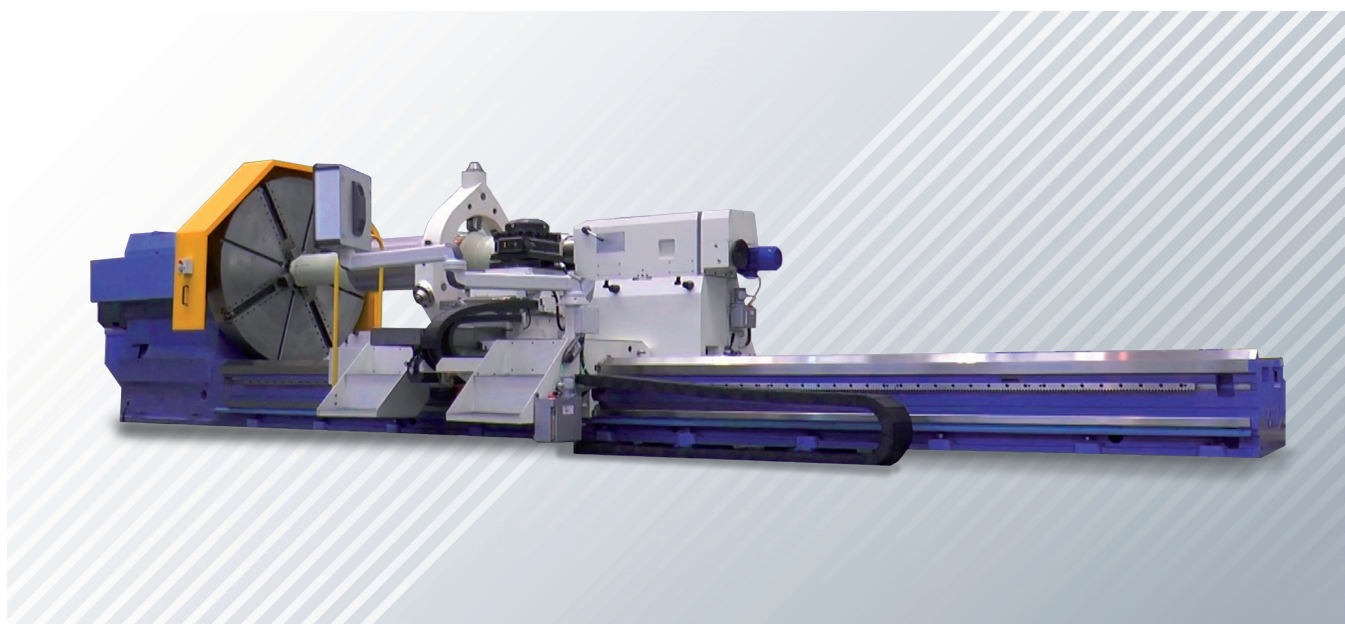


# TCF Series

The TCF Series 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.



Heavy Centre Lathes

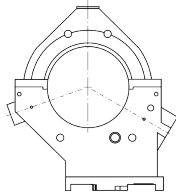
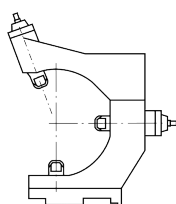
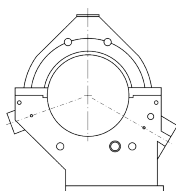

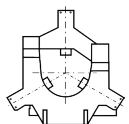
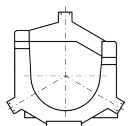
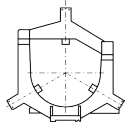


## Main features:

- Machine tool construction based on a rigid bed with hardened guideways
- 3-guideway bed, headstock body made from high-grade cast iron of enhanced mechanical properties
- Carriage travels along two or three guideways that guarantee precise guidance
- 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 SPECIFICATIONS		TCF 160 CNC	TCF 200 CNC	TCF 300 CNC
<b>Capacity</b>				
Swing over bed	∅ mm	1600	2000	3000
Swing over carriage	∅ mm	1300 / 1150 *	1600 / 1550 *	2700 / 2550 *
Distance between centres (every 1000 mm)	mm	3000 - 25000 *		
Max. weight of workpiece clamped in:				
• chuck	kg	4000	4000	4000
• centres	kg	30000	30000	30000
• centres + 1 steady rest	kg	35000	35000	35000
• centres + 2 steady rests	kg	40000	40000	40000
<b>Headstock</b>				
Spindle nose	size	Taper 1:10 / A1:20 *		
Range of continuously variable rotation rates	rpm	0.5 – 250 / 0.6 - 315 *		
Power of main drive motor	kW	71 / 100 *		
Max. torque on spindle	Nm	40000 / 50000 *		
<b>Carriage</b>				
Carriage	quantity	2 / 3 *	2 / 3 *	2 / 3 *
Longitudinal travel	mm	turning length		
Cross-wise travel	mm	650 / 1200	650 + 250 / 1200	650 + 400 / 1200 + 400
Rapid travel in X axis	mm/min	6000		
Rapid travel in Z axis	mm/min	4000		
<b>Tailstock</b>				
Quill diameter	∅ mm	280 / 450 *		
Quill stroke	mm	200		
<b>Machine tool overall dimensions and weight, approx.</b>				
• Length	mm	3550 + turning length		
• Width	mm	2600		
• Height	mm	2200	2500	3000
Weight (for 2000 mm turning length)	kg	33000 / 34000	35000 / 36000	44000 / 45000
Increase in weight for 1000 mm of turning length	kg	1600		
* – Optional execution.		Some of the above data can be altered to meet the Customer requirements.		
Full offer of TCF Series also contains: TCF 224 CNC, TCF 250 CNC, TCF 275 CNC lathes.		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	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 63, 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 – 750 mm (TCM) Ø 450 – 950 mm (TCM)	<ul style="list-style-type: none"> <li>• TZL 420 CNC</li> <li>• TRP Series</li> <li>• TCF Series</li> <li>• TCE Series</li> <li>• TCM Series</li> </ul>	
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)	<ul style="list-style-type: none"> <li>• TZL 420 CNC</li> <li>• TCF Series</li> </ul>	
Hydrostatic steady rest	Ø 600 – 1000 mm (TZL 420 CNC, TCE)	<ul style="list-style-type: none"> <li>• TZL 420 CNC</li> <li>• TCE Series</li> </ul>	
Open-type roller steady rest	Ø 1000 – 1350 mm (TCE) Ø 1000 – 1800 mm (TCE) Ø 1100 – 1600 mm (TCF)	<ul style="list-style-type: none"> <li>• TCE Series</li> <li>• TCF Series</li> </ul>	
Tilting-type roller steady rest	Ø 50 – 450 mm (TRB) Ø 450 – 750 mm (TRB) Ø 450 – 950 mm (TRB)	<ul style="list-style-type: none"> <li>• TRB Series</li> </ul>	 <p>Ø 50 – 450 mm</p>  <p>Ø 450 – 750 mm</p>  <p>Ø 450 – 950 mm</p>