

KCI Series

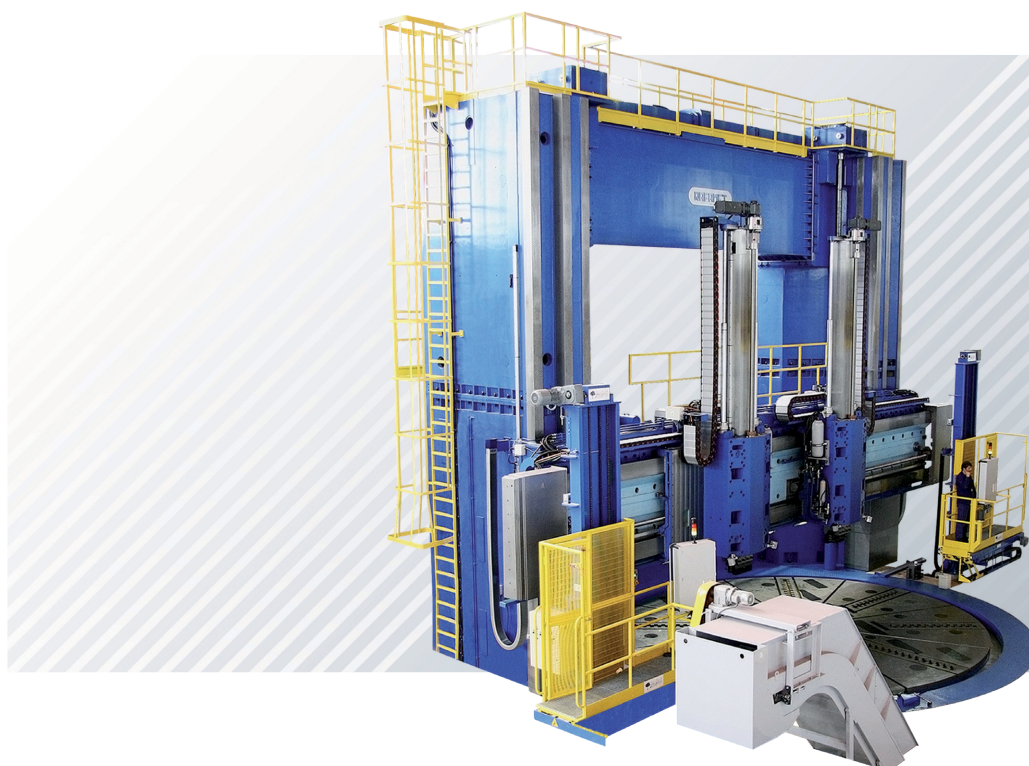
KDC Series



The KCI Series / KDC Series heavy-duty double-column Vertical Turning Lathes are intended for turning and boring of cylindrical, conic and curved surfaces, as well as complex shaped large-size workpieces.

The use of the latest Siemens SINUMERIK ONE and digital drive technology guarantees maximum performance and the complete compatibility of all drive and control components.

The KCI Series / KDC Series Vertical Turning Lathes along with a wide array of optional equipment are customized to meet the Customer's individual requirements.



KDC Series

Main features:

- Compact design adjusted to machining requirements
- High rigidity and accuracy of machining
- Complex machining of workpiece in one setup
- Railhead(s) for turning, milling and drilling operations
- Feed drives of X and Z axes through precise ball-screw transmissions
- Tool / toolhead magazines
- ISO/BT, CAPTO, KM or any other tooling system
- Heidenhain high-resolution linear scales
- Available table travel drive (Y-axis)
- Twin main drive with C-axis
- Cooling system for cutting tools – working pressure up to 350 Bar

The machine tool major members as base, table, columns, cross-rail and railhead are made as high grade iron castings.

This ensures both high geometrical stability and excellent vibration-damping, better than those of the fabricated structures.

TECHNICAL SPECIFACTIONS		KCI 250 N		KCI 320 N			KCI 500 N			KDC 700 N		
Version		B-1		B-2			B-3			C-1		
Table												
Table diameter	mm	2270	2500	3200	3600	4000	4500	5000	6000	6300	7000	8000
Max. turning diameter	mm	3000		4000 - 5000			5500 - 8000			16000		
Max. table load	×10 kN	30		50			150			350	350	400
Max. continuously variable rotation rates:												
• Cast iron table: - Rolling / Hydrostatic bearing	rpm	170/140	150/140	120/80	110/80	95/80	63/55	63/55	60/55	50/35	45/35	45/35
• Steel table: - Rolling bearing	rpm	250	190	160	150	140	-	-	-	-	-	-
Power of main drive	kW	2 × 58		2 × 81			2 × 81 / 2 × 125 ⁽¹⁾			2 × 100 / 2 × 125 ⁽¹⁾		
Cross – rail												
Max. height of turning	mm	2500		4000			4500			7000		
Railhead												
Ram travel	mm	1500 / 1800 ⁽¹⁾ / 2100 ⁽¹⁾ / 2500 ⁽¹⁾ / 3000 ⁽¹⁾								2500 ⁽¹⁾ / 3000 ⁽¹⁾ / 4000 ⁽¹⁾		
Ram cross-section	mm	320 × 320 / 350 × 350 ⁽¹⁾								350 × 420 500 × 500 ⁽¹⁾ / 600 × 600 ⁽¹⁾		
Max. cutting force	kN	70		70/80			80/100			120		
Milling spindle												
Max. rotation rate:												
• Ram live tool spindle	rpm	3000 ⁽³⁾ / 2000 ⁽⁴⁾								2000		
• Electro spindle ⁽¹⁾	rpm	3000								3000		
Power for milling:												
• Ram live tool spindle	kW	20.5 / 31 ⁽¹⁾ / 44 ⁽¹⁾								31 / 44 ⁽¹⁾ / 60 ⁽¹⁾		
• Electro spindle ⁽¹⁾	kW	35 / 60 ⁽¹⁾								35 / 60 ⁽¹⁾ / 75 ⁽¹⁾		
Machine tool overall dimensions and weight												
Machine tool overall dimensions: ⁽²⁾												
• Length	mm	5200		7200			9000			12500		
• Width	mm	7800		9000			10800			10200		
• Height	mm	7500		7500			9700			10400		
Approximate weight ⁽²⁾	×10 kN	110		130			180			490		
⁽¹⁾ – Optional execution.				⁽³⁾ – For ram travel 1500 / 1800 mm.								
⁽²⁾ – For standard execution of machine tool.				⁽⁴⁾ – For ram travel 2100 / 2500 / 3000 mm.								

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.

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