

# 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 840D CNC 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.

Heavy – Duty Vertical Turning Lathes



KDC Series

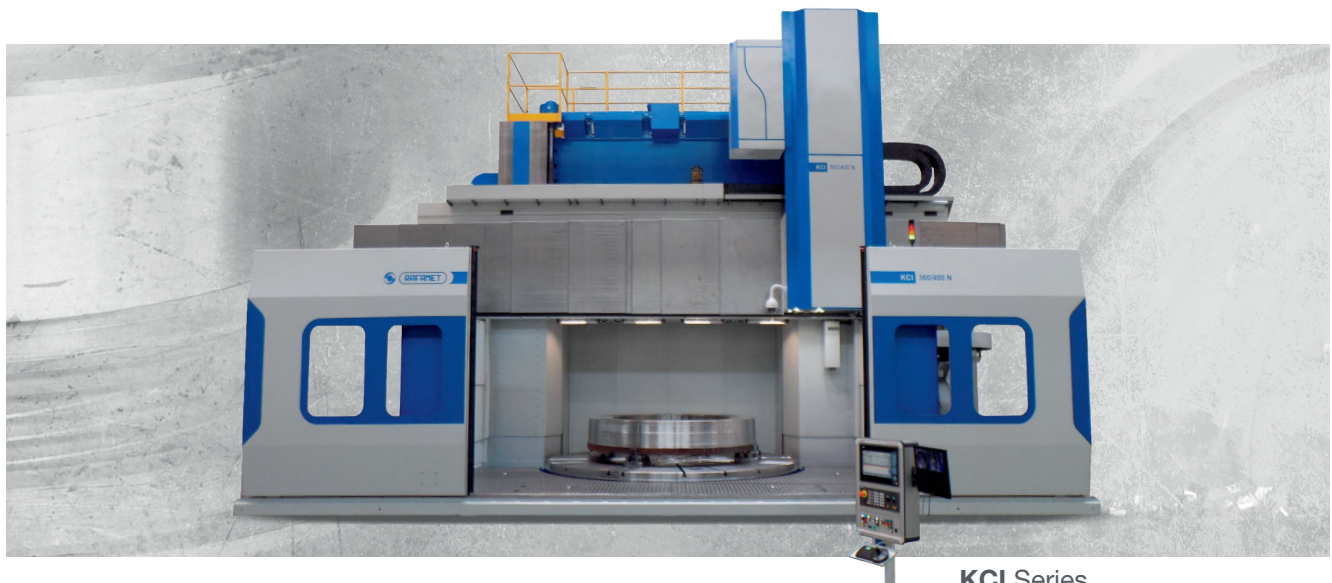
## Main features:

- 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 (KCI Series)

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 SPECIFICATIONS		KCI 250 N		KCI 320 N			KCI 500 N			KDC 700 N		
Version		B-1		B-2			B-3			C-1		
<b>Table</b>												
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
<b>Max. continuously variable rotation rates:</b>												
• Cast iron table: – Rolling / Hydrostatic bearing	rpm	170 / 140	150 / 140	120 / 80	110 / 80	95 / 80	80 / 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 × 81		2 × 81			2 × 81 / 2 × 125 <sup>(1)</sup>			2 × 100 / 2 × 125 <sup>(1)</sup>		
<b>Cross – rail</b>												
Max. height of turning	mm	2500		4000			4500			7000		
<b>Railhead</b>												
Ram travel	mm	1500 / 1800 <sup>(1)</sup> / 2100 <sup>(1)</sup> / 2500 <sup>(1)</sup> / 3000 <sup>(1)</sup>								2500 <sup>(1)</sup> / 3000 <sup>(1)</sup> / 4000 <sup>(1)</sup>		
Ram cross-section	mm	320 × 320 / 350 × 350 <sup>(1)</sup>								350 × 420 / 500 × 500 <sup>(1)</sup> 600 × 600 <sup>(1)</sup>		
Max. cutting force	×10 kN	7		7 / 8			8 / 10			12		
<b>Milling spindle</b>												
Max. rotation rate	rpm	3000								3000		
<b>Power for milling:</b>												
• Ram live tool spindle	kW	20.5 / 31 <sup>(1)</sup> / 44 <sup>(1)</sup>								31 / 44 <sup>(1)</sup> / 60 <sup>(1)</sup>		
• Electro spindle <sup>(1)</sup>	kW	35 / 60 <sup>(1)</sup>								35 / 60 <sup>(1)</sup> / 75 <sup>(1)</sup>		
<b>Machine tool overall dimensions and weight</b>												
<b>Machine tool overall dimensions: <sup>(2)</sup></b>												
• Length	mm	5200		7200			9000			12500		
• Width	mm	7800		9000			10800			10200		
• Height	mm	7500		7500			9700			10400		
Approx. weight of machine tool <sup>(2)</sup>	×10 kN	110		130			180			490		
<sup>(1)</sup> – Optional execution.						Some of the above data can be altered to meet the Customer requirements.						
<sup>(2)</sup> – For standard execution of machine tool.						Above data are subject to change due to product development, without prior notice.						



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