code: B-1, B-2, B-3 code: C-1

## 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.



## 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  Version		KCI <b>250 N</b> B-1		KCI 320 N B-2			KCI 500 N B-3			KDC 700 N C-1		
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	n 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
<ul><li>Steel table:</li><li>Rolling bearing</li></ul>	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		320 × 320 / 350 × 350 <sup>(1)</sup>							350 × 420 500 × 500 <sup>(1)</sup> / 600 × 600 <sup>(1)</sup>			
Max. cutting force	×10 kN	70		70/80			80/100			120		
Milling spindle												
Max. rotation rate:												
Ram live tool spindle	rpm	3000 <sup>(3)</sup> / 2000 <sup>(4)</sup>							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 <sup>(1)</sup>							35 / 60 (1) / 75 (1)			
Machine tool overall dimensions	and weigh	nt										
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	1:	130			180			490			

(1) – Optional execution. (2) – For standard execution of machine tool.

 $^{(3)}$  – For ram travel 1500 / 1800 mm.  $^{(4)}$  – For ram travel 2100 / 2500 / 3000 mm.

