code: A-2, A-3, A-4

KCM 150 N

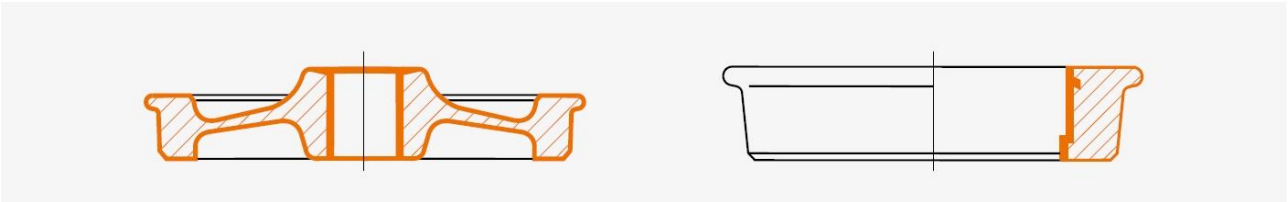
The KCM 150 N Wheel Boring Machine is single-column Vertical Turning Lathe specifically designed to machine railway wheels. It is available in single and double railhead versions, the latter with increased productivity.

Wheel Boring Machine

- Machine major body elements made as extremely rigid, heavily ribbed box type, high grade grey iron castings providing maximum vibration-damping capabilities during cutting process
- Main drive powered by one or two AC motors of continuously variable rotation rates providing high productivity and quality of wheelset machining
- Solid forged steel railhead ram equipped with Coromant CAPTO® quick-change tool adapter
- Workpiece measuring probe (of Renishaw or equivalent make) mounted in tool seat

Available Machining Operations

Wheels



TECHNICAL SPECIFACTIONS		KCM 150 N		
Table				
Version		A-2	A-3	A-4
Table diameter	mm	1500	1500	1450
Max. turning diameter	mm	1600		
Max. tread diameter of solid wheel/wheel tyre	mm	1250		
Min. diameter of the hole turned in solid wheels	mm	145		
Number of jaws in hydraulic chuck	pcs	3		
Max. weight of workpiece	×10 kN	6		
Max. continuously variable rotation rates of table:				
• Cast iron table	rpm	250	250	-
• Forged steel table	rpm	-	-	400
Power of main drive motor [(1)]	kW	2 × 31	2 × 31	81
Cross – rail (fixed)				
Max. height of turning	mm	400	400	700
Railhead				
Number of railheads		1	2	1
Vertical ram travel (stroke)	mm	400	400	700
Rapid travel rate of X and Z axes	mm / min	6000 / 10000 [2)]		
Range of feed rates in X and Z axes	mm / min	0.1 to 2000		
Ram cross-section	mm	250 × 250		
Max. horizontal travel of railhead from table axis: • In right direction (X+) • In left direction (X-)		 1130 106		
Power of drive motors for X and Z axes travel	kW	4.9	4.9	7
Power of liquid cooling system	kW	3		
Machine tool overall dimensions and weight				
Machine tool overall dimensions [(3)]**:**				
• Length	mm	ca. 4500		
• Width	mm	ca. 4300		
• Height	mm	ca. 4205		
Approximate weight of machine tool [(3)]	×10 kN	ca. 21		
Machine tool accuracies				
X – axis positioning accuracy M_{ar} (L=1000 mm)	mm	0.015		
Z – axis positioning accuracy M_{ar} (L=1000 mm)	mm	0.015		
X – axis positioning repeatability $RP_{Max.}$ (L=1000 mm)	mm	0.012		
Z – axis positioning repeatability $RP_{Max.}$ (L=1000 mm)	mm	0.012		
Roughness after machining (R_a)	µm	0.8 to 1.6		

[(1)] – Main drive motors of higher power available.
[(2)] – Optional execution
[(3)] – For standard execution of machine tool.

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.