

code: A-5

## **KKB 150 N**

The KKB 150 N Vertical Wheel Lathe is single-column Vertical Turning & Boring Mill specifically designed for productive machining of railway wheels with two railheads.



- Machine column and cross-rail combined into a single-piece (monolithic structure)
- Major body components 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 modular torque motor with continuously variable speed control
- Workpiece measuring probe (of Renishaw or equivalent make) mounted in tool seat
- Solid forged steel railhead ram equipped with Coromant CAPTO® quick-change tool adapter and HSK® angle machining head
- Tool / toolhead magazines

**Available Machining Operations** 

Wheels





Table diameter         mm         1450           Max. turning diameter         mm         2000           Max. wheel tread diameter         mm         1250           Max. weight of workpiece         ×10 kN         2           Clamping stroke of chuck jaws         mm         82           Max. clamping force of chuck         kN         370           Max. rotation rate for turning         rpm         400           Max. torque (of main drive) on table         kNm         31.3           Max. power of main drive         kW         362.5           Cross – rail (fixed)         mm         800           Max. height of turning         mm         800           Railhead         2         and stroke         mm         630           Rapid traverse         m / min         25         and stroke         mm         630           Max cutting force – RH / LH railhead         kN         30         and stroke         mm         6800           Machine tool overall dimensions:         —         Length         mm         6800           • Length         mm         6800         mm         5200           Machine tool accuracies         X         x         axis positioning accuracy M <sub>w</sub> (L=1000 m	TECHNICAL SPECIFICATIONS		KKB 150 N
Max. turning diameter         mm         2000           Max. wheel tread diameter         mm         1250           Max. weight of workpiece         x10 kN         2           Clamping stroke of chuck jaws         mm         82           Max. clamping force of chuck         kN         370           Max. rotation rate for turning         rpm         400           Max. torque (of main drive) on table         kNm         31.3           Max. power of main drive         kW         362.5           Cross – rail (fixed)         mm         800           Max. height of turning         mm         800           Railhead         2         and stroke         mm         630           Ram stroke         mm         630         and stroke         mm         630           Max cutting force – RH / LH railhead         kN         30         and stroke         mm         6800           Machine tool overall dimensions:         • Length         mm         6800         • Width         mm         5200           Machine tool accuracies         X – axis positioning accuracy M <sub>w</sub> (L=1000 mm)         mm         0.015         X – axis positioning accuracy M <sub>w</sub> (L=1000 mm)         mm         0.015           X – axis positioning repe	Table		
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Max. power of main drive         kW         362.5           Cross - rail (fixed)         Max. height of turning         mm         800           Railhead         Number of railheads           Number of railheads         2         Ram stroke         mm         630           Rapid traverse         m/min         25           Max cutting force – RH / LH railhead         kN         30           Machine tool overall dimensions           Machine tool overall dimensions:         •         Length         mm         6800           • Width         mm         7800           • Height         mm         5200           Machine tool accuracies         X         axis positioning accuracy Mar (L=1000 mm)         mm         0.015           X – axis positioning accuracy Mar (L=1000 mm)         mm         0.015           X – axis positioning repeatability RP <sub>max</sub> (L=1000 mm)         mm         0.012	Max. rotation rate for turning	rpm	400
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Ram stroke         mm         630           Rapid traverse         m / min         25           Max cutting force – RH / LH railhead         kN         30           Machine tool overall dimensions           Machine tool overall dimensions:           • Length         mm         6800           • Width         mm         7800           • Height         mm         5200           Machine tool accuracies           X – axis positioning accuracy M <sub>ar</sub> (L=1000 mm)         mm         0.015           Z – axis positioning accuracy M <sub>ar</sub> (L=1000 mm)         mm         0.015           X – axis positioning repeatability RP <sub>max</sub> (L=1000 mm)         mm         0.012	Railhead		
Rapid traverse         m / min         25           Max cutting force – RH / LH railhead         kN         30           Machine tool overall dimensions           Machine tool overall dimensions:           • Length         mm         6800           • Width         mm         7800           • Height         mm         5200           Machine tool accuracies         X – axis positioning accuracy M <sub>ar</sub> (L=1000 mm)         mm         0.015           Z – axis positioning accuracy M <sub>ar</sub> (L=1000 mm)         mm         0.015           X – axis positioning repeatability RP <sub>max</sub> (L=1000 mm)         mm         0.012	Number of railheads		2
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Machine tool overall dimensions  Machine tool overall dimensions:  • Length mm 6800  • Width mm 7800  • Height mm 5200  Machine tool accuracies  X – axis positioning accuracy M <sub>ar</sub> (L=1000 mm) mm 0.015  Z – axis positioning repeatability RP <sub>max</sub> (L=1000 mm) mm 0.012	Rapid traverse	m / min	25
Machine tool overall dimensions:         • Length         mm         6800           • Width         mm         7800           • Height         mm         5200           Machine tool accuracies         X – axis positioning accuracy M <sub>ar</sub> (L=1000 mm)         mm         0.015           Z – axis positioning accuracy M <sub>ar</sub> (L=1000 mm)         mm         0.015           X – axis positioning repeatability RP <sub>max</sub> (L=1000 mm)         mm         0.012	Max cutting force – RH / LH railhead	kN	30
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Height	• Length	mm	6800
Machine tool accuracies         X – axis positioning accuracy M <sub>ar</sub> (L=1000 mm)       mm       0.015         Z – axis positioning accuracy M <sub>ar</sub> (L=1000 mm)       mm       0.015         X – axis positioning repeatability RP <sub>max</sub> (L=1000 mm)       mm       0.012	Width	mm	7800
$X$ – 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	Height	mm	5200
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X – axis positioning repeatability RP <sub>max</sub> (L=1000 mm) mm 0.012	X – axis positioning accuracy M <sub>ar</sub> (L=1000 mm)	mm	0.015
	Z – axis positioning accuracy M <sub>ar</sub> (L=1000 mm)	mm	0.015
Z – axis positioning repeatability RP <sub>max</sub> (L=1000 mm) mm 0.012	X – axis positioning repeatability RP <sub>max</sub> (L=1000 mm)	mm	0.012
	Z – axis positioning repeatability RP <sub>max</sub> (L=1000 mm)	mm	0.012

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.