

UFB 125 N

The UFB 125 N Above Floor Wheel Lathe is CNC double-saddle special-purpose lathe designed for reprofiling railway rolling stock wheelsets with axle boxes, gears and brake discs, operating in roll-in roll-out system.



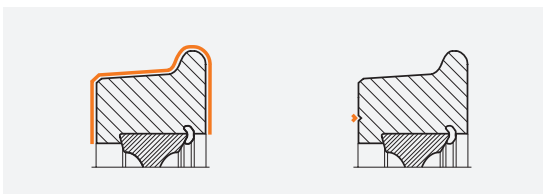
Roll-In Roll-Out / Friction Roller Drive



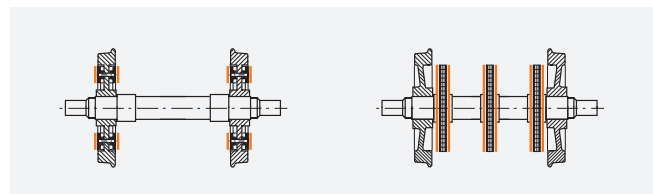
- Machine major body elements made as extremely rigid, heavily ribbed box-type, high-grade grey iron castings providing maximum vibration-damping capabilities during cutting process
- Main drive from six independent friction rollers, individually powered by AC motors of continuously variable rotation rates providing high productivity and quality of wheelset machining
- Automatic and reliable profile wear measurement using touch-type or laser-based system
- Versatile equipment and wide programming options guarantee precise machining of even unusual wheel profiles
- Adjustable track gauge in the range of 1000 to 1676 mm

Available Machining Operations

Wheels



Brake discs



TECHNICAL SPECIFICATIONS		UFB 125 N
Wheelset geometry		
Track gauge	mm	1000 to 1676 ⁽¹⁾
Max. wheel tread diameter (before machining)	mm	1250
Min. wheel tread diameter (after machining)	mm	600
Max. width of wheel rim	mm	150
Min. / Max. length of wheelset axle	mm	1215 / 2840
Max. weight of wheelset	×10 kN	3
Machine tool parameters		
Max. chip cross-section (for each saddle)	mm ²	10 ⁽²⁾
Max. working feed rate	mm / min	1000
Max. travel rate of saddles	mm / min	5000
Max. continuously variable cutting speed for wheel profiling	m / min	130
Number of main drive motors	pcs	6
Power of each main drive motor	kW	12
Total power installed (standard execution)	kW	110
Machine tool overall dimensions and weight		
Machine tool overall dimensions:		
• Length	mm	4500
• Width	mm	7700
• Height	mm	2500 ⁽³⁾
Workshop floor surface demand	mm	12000 × 4700
Approximate weight of machine tool	×10 kN	25 ⁽³⁾
Machine tool accuracies		
Difference in diameters between two wheels of the same wheelset	mm	≤ 0.15
Radial run-out of wheel tread	mm	≤ 0.10
Axial run-out of wheel inner faces	mm	≤ 0.10
Accuracy of profile machining	mm	≤ 0.15 ⁽⁴⁾
Roughness of wheel profile surface after machining, Ra	µm	5 to 20
Roughness of brake disc surface after machining, Ra	µm	2.5 to 3.2
⁽¹⁾ – Adjustable track gauge in the range of 1000 to 1676 mm available. ⁽²⁾ – Wheel material – Steel: Hardness ≤ 270 HB, Tensile strength ≤ 950 N/mm ² . ⁽³⁾ – For standard execution. ⁽⁴⁾ – Measured with machine tool measuring system or clearance between profile gauge and wheel profile surface.		

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.