

Machine Name : CNC cylindrical grinder

Brand : STUDER

Machine Model : PF51 UNN 1000

Stock No. : 85224

Ex-factory Date : 2007



Main Technical Parameters:

CNC CNC System: Siemens

x*z travel :300*1150mm

machining length: 1000mm

Center height: 255mm

grinding wheel diameter: 400mm





Grinding diameter (max.)	2.380	mm
Height of centres	440	mm
Grinding length = distance between centres	225	mm
Workpiece weight between the centres (max.)	1.000 ¹⁾	mm
Machine weight (without auxiliary assemblies)	250	kg
Continuous sound level at the control desk (max.)	49.000	dB(A)
Connected loads, see Section 4.4 "Connecting / connected loads"	70	
8.2 WORKPIECE TABLE (Z AXIS)		
Drive	Three-phase servomotor, position-controlled	
Positioning rate (max.)	15.000 ¹⁾	mm/min
Displacement path	1.150	mm
Computational resolution	0.0001	mm
8.3 WHEEL HEAD POSITIONING UNIT (X AXIS)		
Drive	Three-phase servomotor, position-controlled	
Positioning speed (max.)	15.000 ¹⁾	mm/min
Displacement path	300	mm
Computational resolution	0.0001	mm
8.4 WORKPIECE SPINDLE HEAD		
Drive	Three-phase servomotor, speed-controlled	
Workpiece spindle speed (max.)	1.000	rpm
Load torque at spindle head (workpiece incl. chuck)	250	Nm
Centre point, rotating	Morse K4	
Cylindricity error compensation	±0.05	mm/10
8.5 TAILSTOCK		
Drive	Clamping force and quill retraction hydraulically	
Quill stroke	80	mm
Centre point, stationary	Morse K4	
Cylindricity error compensation	±0.1	mm/10

1) The work space can be partially limited by accessories or special devices/systems.

Drive	Motor spindle, speed-controlled, water-cooled	
Grinding wheel diameter (max.)	500	mm
Wheel bore	203.2	mm
Wheel width (max.)	80	mm
Circumferential wheel speed (CWS), constant (max.)	50	m/s
Drive power	10	kW
Grinding spindle 2 – external grinding: Grinding attachment, RH		
Drive	Motor spindle, speed-controlled, water-cooled	
Grinding wheel diameter (max.)	500	mm
Wheel bore	203.2	mm
Wheel width (max.)	80	mm
Circumferential wheel speed (CWS), constant (max.)	50	m/s
Drive power	10	kW
8.7 SLEWING FACILITY FOR WHEEL HEAD (B AXIS)		
Drive	Three-phase servomotor, position-controlled	
Slewing angle	±45 to ±190	deg
8.8 DRESSING DEVICES		
Dressing device on the table, shifting		
Position of the dressing tiles (left, middle, right)	±30, 0, -30	deg
Profile camber (max.)	40	mm
Dressing tile width	10.5	mm
8.9 NOTES		
For the technical data of the vendor subassemblies, please refer to the attached documentation of the appropriate manufacturers.		