Struers
Ensuring Certainty

TECHNICAL DATA

Xmatic Compact without vertical conveyor

Capacity	Individual speciemens	No
	Specimen holder	Diameter: 140 mm for 250 mm MD disc Diameter: 160 mm for 300 mm MD disc
MD grinding and polishing station	Diameter	250 (10") mm or 300 mm (12")
	Rotational speed	50 - 600 rpm (1000 rpm when spin-drying the disc)
	Rotational direction	Clockwise
	Motor power	
	Continuous (s1)	1.5 k W
Specimen mover	**Specimen holder**	Only applicable with RFID-tag holders
	Max. weight	4 kg (8.8 lbs) incl. specimens
	Max. specimen height	40 mm (1.6")
	Max. specimen protrusion under holder	6 mm (0.2")
	Force	50 - 500 N in steps of 10 N
	Force accuracy	+/-10% up to 100N, +/-10N on higher values
	Rotational speed	
	in process	50 - 300 rpm, variable in steps of 10
	when drying	1200 rpm
	Rotational direction	Counter-clockwise, Clockwise
	Motor	1.1 kW
	Torque	7.3 Nm @ 150 rpm
MD elevator	Number of MD surfaces	8
Cleaning station	High pressure water	40 bar (580 psi)
	Alcohol and soap	Yes
Features	Material removal	0.05 mm - 6 mm (0.002 - 0.2") on MD grindig and polishing station
	Dressing of MD surfaces	Automatic (diamond tip/aluminum oxide stick)
	Automatic dosing	7 pumps for OP or DP suspension
		1 alcohol ejector for cleaning station
		1 soap ejector for cleaning station
		Automatic cleaning of dosing tubes

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Options	Ultrasonic cleaning	Yes
	Recirluation for MD grinding/polishing station	Yes
Software and electronics	Touchscreen	Capacitive
	Display	LCD, 12.1" (1280 x 800)
Safety standards/directives/legislation	See the Declaration of Conformity/Instruction manual.	
REACH	For information about REACH, contact your local Struers office.	
Operating environment	**Surrounding temperature**	
	During operation	5 - 40°C (41 - 104°F)
	During transport	-25°C - 55°C (transport) -25°C - 70°C (max. 24 hours during transport)
	Humidity	35 - 85 % RH non-condensing
Water supply (tap water)	Flow	Min. 10 l/m (2.6 gmp)
	Water inlet, connection	3/4"
	Pressure	2 - 4 bar (29 - 58 psi)
Waste water outlet	Diameter	50 mm (1.97")
	Outlet height	50 cm (19.7") above the floor
	Max. distance to drain	600 cm (20')
	Slope	Min. 8%
Compressed air supply	Pressure	6 - 9.9 bar (87 - 143 psi)
	Flow	Min. 200 l/m (53 gpm)
	Recommended quality	Class-3, as specified in ISO 8573-1

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Power supply	Voltage/frequency	220 V/430 V +/-15% (50/60Hz)
	Power inlet	15 A
	Power	
	Max load	2.4 KW
	- Nominal load	1.5 KW
	- Idle	250 W
	Current	
	Nominal 220 V	6 A
	Nominal 430 V	4 A
	Max. 220 V	15 A
	Max. 430 V	8 A
	Current, motor max. load	6.5 A (1 ph.)
	SCCR	25 kA
	Ik min	180 A
	Residual Current Circuit Breaker (RCCB)	The machine has no more than 6mA residual current. RCCB type A can be used.
	Power supply connection terminals	Max. conductor size 10 mm^2/AWG 6
Exhaust	Diameter	100 mm (4")
	Minimum capacity	250 m^3/h (8830 ft^3/h)
Dimensions and weight	Width	149 cm (586.6")
	Depth	75.0 cm (29.5")
	Height Height (with open cover)	189.0 cm (74.4") 244.0 cm (96.0")
	Weight	690 kg (1522 lbs)

Safety Circuit Categories/Performance Level	SF-1 Emergency stop	PL c, Category 1 Stop category 0
	SF-4 Limited speed function, mover head	PL d, Category 3 Stop category 0
	SF-5 Main safety cover interlock, hazardous movements	PL c, Category 3 Stop category 0
	SF-5A Main safety cover interlock, water and ethanol	PL d, Category 1 Stop category 0
	SF-6 Main safety cover interlock with locking device	PL a, Category b Stop category 0
	SF-7 MD-elevator door locking device	PL d, Category 3 Stop category 0
	SF-8 MD-elevator door locking device	PL c, Category 1 Stop category 0
	SF-10 Recirculation unit doors interlock, MD station	PL b, Category 1 Stop category 0
	SF-12 Alcohol exhaust timer	PL b, Category 1 Stop category 0
Noise level	A-weighted sound emission pressure level at workstations	LpA = 64.4 dB(A) (measured value). Uncertainty K = 4 dB
Ultrasonic noise level	Equivalent ultrasound sound pressure level (equivalent level of ultrasound)	Lteq, T=95.2 dB (measured value). Uncertainty K = 2 dB
Noise emission level	The figures quoted are emission levels and are not necessarily safe working levels. While there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required. Factors that influence the actual level of exposure of the workforce include characteristics of the work room, the other sources of noise, etc., i.e. the number of machines and other adjacent processes. Also, the permissible exposure level can vary from country to country. This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.	

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