

Data sheet I CHIRON MILL 2000 no. 220-28

Pos.	Qty.	Description	Price
100	1,00 ST	Completely refurbished vertical machining centre CHIRON MILL 2000 no. 220-28 Year of construction: 2002, weight: 9.500 kg	
200	1,00 ST	According to described below scope of delivery	
300	1,00 ST	Column moving machining centre with fixed table Machine substructure with chip discharge left	
400	1,00 ST	Machine enclosure with loading door, electrically interlocked, suitable for loading by crane 2.500 mm high above floor, incl. machine lamp	
500	1,00 ST	NC swivel head Motor spindle for swivel head N max. = 12.000 rpm, grease lubrication Md = 80 Nm at S6 / 40 % ED 7,5 kW at 100 % ED 22,5 kW at 10 % ED 20 - 12.000 rpm, 140 Nm acceleration and deceleration 0 - 12.000 rpm – 140 Nm tool clamping with disk springs, hydraulic knock out, tool shaft for HSK-A 63 DIN 69893 NC swivel axis $\pm 100^\circ$ - 30 rpm, lowest increment 0,001° - repetition accuracy $\pm 10''$ with direct measuring system - driving torque 280 Nm - with hydraulic clamping system, max. torque through clamping 1400 Nm Hydraulic unit for clamping of swivel head and automatic knock out of tool	
600	1,00 ST	Travel: X-axis 2000 mm Y-axis 480 mm Z-axis horizontal spindle 715 mm / vertical spindle 630 mm	

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700	1,00 ST	<p>Automatic tool changer, protected against chips</p> <p>No. of tools 40</p> <p>Tool shaft HSK A-63 DIN 69893</p> <p>tool dia. max. 75 mm</p> <p>tool dia. max. 125 mm</p> <p>if adjacent places are free max. 125 mm</p> <p>Max. tool length max. 280 mm</p> <p>Max. tool weight 3 kg (max. 8 kg)</p> <p>Tool change time approx. 1,5 s (depends on CNC)</p> <p>Chip-to-chip-time approx. 5,0 s (depends on CNC)</p> <p>Drilling capacity in steel 60 \varnothing 36 mm (with insert drill)</p> <p>Tapping capacity M 24</p> <p>Milling capacity in steel 60 350 cm³/min.</p>	
800	1,00 ST	<p>Fixed table with chip pan</p> <p>clamping surface 2600 x 550 mm²</p> <p>with 3 T-slots 1 x 18 H12, 1 x 18 H8</p>	
900	1,00 ST	<p>AC-servo motors for x-, y- and z-axes</p> <p>digital direct drives with indirect absolute path measuring system (no time-consuming reference)</p> <p>rapid traverse in all axes 40 m/min.</p>	
1000	1,00 ST	<p>SIEMENS CNC-control 840D</p> <p>(PCU 50 / NCU 572.3, 6 measuring circuits, 1 canal)</p> <p>incl. 10,4" TFT colour LCD screen / full keyboard OP010S</p> <p>incl. network card, control panel logic Windows NT</p> <p>hard disk. Approx. 2 GB programs storage for free disposal</p> <p>NC-memory 1,5 MB (max.200 programs storage capacity)</p> <p>for ISO 66025 programming</p> <p>hard disk with approx. 2 GB for free disposal</p> <p>drilling cycles G81-G89</p> <p>drilling and milling cycles</p> <p>M- and T- functions</p> <p>circular interpolation (360 degrees)</p> <p>re-start into program</p> <p>Subroutines, parameter programming</p> <p>simultaneous programming</p> <p>contour programming with cycle support</p> <p>support through cycles</p> <p>polar coordinates</p>	

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		tool offsets for geometry, wear tool radius correction for intersection computing crossingradius 4 zero offsets G54-G57 30 zero shifts programmable with G-functions 3D and helical interpolation screen switch off mirror function scaling function insert of chamfer and radius Universal interface RS 232C (2 x V24) at control panel Ethernet connection RJ45 in control panel orientated spindlestop drip feed function through V24 interface dimension metric or inch software limitswitch NC-diagnosis machine-diagnosis absolute indirect path measurement systems powermeter in screen rigid tapping look ahead function	
1100	1,00 ST	CMS Powersafe Software package for selective shutdown of installed consumers such as axis motors, drives, spindles, coolant-pumps and auxiliary equipment during production breaks. Definable point in time at which the machine goes demand-oriented automatically into it's Power Safe mode.	
1200	1,00 ST	Preparation for portable mini-handwheel without emergency stop button, for conventional travel	
1300	1,00 ST	Working hours and piece counter in the screen	
1400	1,00 ST	Socket 230 V at control panel	
1500	1,00 ST	Cabinet cooler as a door mounting unit	
1600	1,00 ST	Automatic grease lubrication	
1700	1,00 ST	Wash gun	

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1800	1,00 ST	Installation elements	
1900	1,00 ST	Signal lamp on machine enclosure for 3 signals Signal "red" = failure Signal "white" = load machine Signal "green" = machine is running	
2000	1,00 ST	Coolant equipment (for cast iron slurry, Al with Si \geq 12%) tank capacity 800 l, pump capacity 200 l/min at 2,5 bar (the pump in the coolant tank becomes the lift pump) pump capacity 20 l/min at 30 bar high pressure circuit with coolant filtration via paperbondfilter and twinfilter (This filtration method will not eliminate increasing cast iron slurry from the coolant equipment.)	
2100	1,00 ST	Chip conveyor (scratch band) discharge height 1.500 mm with coolant tank tank capacity 400 ltr., lift pump with 150 ltr./min. at 2,0 bar, incl. bed flushing system, adjusted at the chip outlet of the mill machine	
2200	1,00 ST	Machine preparation for through tool coolant system including: - sealing system in the DIN 69893 HSK A63 collet - coolant distributor installed at the main spindle drive - coolant leakage sensor - implemented mud flap in the high pressure piping - solenoid valve, controlled via machine program	
2300	2,00 ST	4. Axis ready for plug-in	
2400	1,00 ST	Centre divider with controlled door. Shuttle machining swivel head 2 x 765 mm (swivel head only in 0 ° - position) incl. machining area recognition M61/M62 and start and receipt push buttons, mounted on both sides.	

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2500	2,00 ST	Exhaust fans air cleaner mounted on the machine exhaust capacity each 1000 m ³ /h Smoke and gases that arise during the processing are not filtered by this units. In this case we recommend the connection to a central exhaust fan.	
2600	1,00 ST	Loading door of total enclosure "opening and closing" automatic incl. thrust shaft switch and 2 x two-hand push buttons for clamping OPEN-CLOSE instead of button at the control panel (for Shuttle machining 2 are necessary)	
2700	1,00 ST	Pneumatic connection With controlled line and 1 connection coupling	
2800	1,00 ST	Portable mini-hand wheel for conventional travel, without emergency stop button, including connecting cable 900 mm. (This way the emergency stop button at the control panel is within the reach of the operator.)	
2900	1,00 ST	Cutting tools The cutting tools have to be balanced according to DIN ISO 1940, class G 2,5, in two levels, with max. operating speed	
3000	1,00 ST	- Documentation -	
3100	1,00 ST	Documentation acc. to CE of the first delivery into market 1 x safety regulations in a folder in English 1 x complete documentation on a USB as PDF Language of the operating manuals and safety in English	
3200	1,00 ST	Machine colour Two-components-structure varnish - 2 colours light grey acc. to NCS S1502-B basalt grey acc. to RAL 7012	

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Main circuit

total power supply 400 / 230V \pm 10 %, 50 cycles N/PE,
neutral conductor, load possible, pressure supply
6 bar, \pm 1 bar at all procedures,
room temperature max 40°

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