

Data sheet I CHIRON FZ 12 KW no. 253-80

Pos.	Qty.	Description	Price
100	1,00 ST	Completely refurbished vertical machining centre CHIRON CHIRON FZ 12 KW no. 253-80 Year of construction: 2007, weight: 7.500 kg	
200	1,00 ST	According to described below scope of delivery	
300	1,00 ST	Column moving machining centre with machine bed in mineral cast technique and workpiece swivel table Guideways with long-term-grease lubrication	
400	1,00 ST	Machine enclosure with full enclosed workspace with loading doors, electrically interlocked, including replaceable safety windows, workspace enclosure with stainless steel covers. 2140 mm high above floor, including machine lamp mounted on the center divider	
500	1,00 ST	Workpiece swivel table 0/180 degrees with centre divider made of sheet metal clamping surface 2 x 660 mm x 350 mm without locating hole grid workpiece swivel time appr. 2,0 s weight-dependent, self-regulating through self-learning speed-control table loading capacity per side 300 kg, max. 100 kg weight difference between the two table sides	
600	1,00 ST	Travel: X-axis 550 mm Y-axis 320 mm Z-axis 360 mm (+ distance spindle-taper to clamping surface acc. to data sheet)	
700	1,00 ST	Digital main drive with spindle with air purge and monitoring of the tool clamping 24,5 kW at 100 % 40 kW at 25 % spindle speed range up to 15.000 rpm; 45 Nm acceleration from 0 to 15.000 rpm or deceleration in 0,6 seconds Drilling capacity \varnothing 25 mm (with insert drill) Tapping capacity M 20 Milling capacity 120 cm ³ /min	

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Pos.	Qty.	Description	Price
800	1,00 ST	NC swivel head swivel range $-10^{\circ} / +100^{\circ}$ rapid traverse 52 rpm lowest increment $0,001^{\circ}$ with direct measuring system $\pm 5''$	
900	1,00 ST	Automatic tool change through robust, full enclosed pick up tool changer, with mechanical impact protection an cleaning of the tool taper through air blow No. of tools 44 Tool taper HSK-A 50 DIN 69893 Max. tool dia. max. 60 mm Tool length max. 250 mm Max. tool weight max. 3 kg Tool change time appr. 0,9 s (depends on CNC) Chip-to-chip-time appr. 2,4 s (depends on CNC)	
1000	1,00 ST	SIEMENS CNC-control 840D (PCU 50 / NCU 572.5, 10 measuring cycles, 1 channel) incl. 10,4" TFT colour LCD screen / full keyboard OP010S control panel logic Windows XP NC-memory 256 KB (extendible till max. 1,5 MB) (max. 200 programmes storage capacity) for ISO 66025 programming hard disk with approx. 20 GB for free disposal drilling cycles G81-G89 drilling and milling cycles M- and T- functions circular interpolation (360 degrees) re-start into program Subroutines, parameter programming simultaneous programming contour programming with cycle support support through cycles polar coordinates tool offsets for geometry, wear tool radius correction for intersection computing crossing radius 4 zero offsets G54-G57 30 zero shifts programmable with G-functions 3D and helical interpolation	

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Pos.	Qty.	Description	Price
		<p>screen switch off</p> <p>mirror function</p> <p>scaling function</p> <p>insert of chamfer and radius</p> <p>Universal interface RS 232C (1 x V24) at control panel</p> <p>USB-interface at the control panel</p> <p>Ethernet connection RJ45 in control panel</p> <p>orientated spindle stop</p> <p>drip feed function through V24 interface</p> <p>dimension metric or inch</p> <p>software limit switch</p> <p>NC-diagnosis</p> <p>machine-diagnosis</p> <p>absolute indirect path measurement systems</p> <p>power meter in screen</p> <p>rigid tapping</p> <p>look ahead function</p> <p>Selectable operator Level (3 steps)</p> <p>with different keys</p> <p>Additional button for indexing in the loading station</p> <p>indexing 4 x 90° or 2 x 180° for NC rotary tables, 4th or 4th and 5th axis</p> <p>Operating via two hand start</p> <p>Walk switch</p> <p>MCIS DNC</p> <p>Option to send and receive NC-programs in a network. The client-software (e. g. UNIX, Novell, Windows NT) and the wiring to the network is not included.</p> <p>CHIRON Powersafe</p> <p>Software package for selective shutdown of installed consumers like axis motors, drives, spindles, seal air, airsensing and ancillary equipment in production breaks or during programmable points in time using a shift calendar.</p> <p>Definable point in time at which the machine starts demand-oriented automatically with a variable warmup programm to recovery the production readiness.</p>	

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Pos.	Qty.	Description	Price
1100	1,00 ST	<p>AC-servo motors for x-, y- and z-axes digital direct drives with indirect absolut path measuring system rapid traverse in all axes 75 m/min. Acceleration: X-axis 1 g, Y-axis 1,5 g, Z-axis 2,0 g</p> <p>Remark: With normal conditions the machine does not have to be anchored to the floor. (For slippery floors we recommend anchoring.)</p>	
1200	1,00 ST	<p>Remote diagnosis and tele service For the optimization of the maintenance process and trouble shooting through shorter diagnosis times. Detailed information about the machine status is available to support both, internal and also optionally external experts, independent from time and location. This way a faster and more qualified support is possible. Possibility of remote control of the NC-control, analysis of operation sequences and support with programming problems. Access to PLC for diagnosis, trouble shooting and programming.</p> <p>Notification service with SMS / E-mail e. g. at end of job or in the case of breakdown. Simple backup through use of the existing infrastructure of the internet. Safe access through defined user rights, access control and encryption of data. Access through Ethernet connection RJ45 or telephone line (preferably ISDN RJ45 or analog RJ11) with router.</p> <p>For this option you need a contract with CHIRON.</p> <p>Precondition: Internet connection through in-house net or telephone line including the wiring to the machine.</p>	

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Pos.	Qty.	Description	Price
1300	1,00 ST	CHIRON Maintenance Management in the screen display of the pending maintenance: advance warning = "prepare maintenance", warning = "carry out maintenance", machine stop = "catch up on maintenance". Abridged instructions for the pending maintenance with graphic illustration on CD-ROM. Confirmation of the performed maintenance through the maintenance staff by password.	
1400	1,00 ST	Thermodrive at indirect absolute path measuring system	
1500	1,00 ST	Working hours and piece counter in the screen	
1600	1,00 ST	Socket for portable mini-hand wheel without emergency stop button, at control panel	
1700	1,00 ST	Cabinet cooler as a door mounting unit	
1800	1,00 ST	Mini-operating panel with start and receipt push buttons, for pallet recognition M61/M62	
1900	1,00 ST	Socket 230 V at control panel	
2000	1,00 ST	Chip conveyor (scratch band) instead of standard coolant equipment discharge height 490 mm tank capacity 100 l, pump capacity 110 l/min at 1,3 bar coolant cleaning through slot filter box	

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Pos.	Qty.	Description	Price
2100	1,00 ST	<p>Coolant equipment KF 150 / FKA 500 (also for sludge generating materials, e.g. grey cast iron, GGG, Al with Si \geq 12%) tank capacity 500 l low pressure pump capacity from 80 l/min. at 3.0 bar up to 100 l/min at 1,8 bar high pressure pump capacity 20 l/min at 30 bar full stream purification via compact paper bond filter KF 150, with coolant purification 50 μm nominal twin filter in the high pressure circuit for the protection of the machine Fixture washing with nozzles controlled through m-functions for washing in the machining station</p>	
2200	1,00 ST	<p>Signal lamp for 3 signals Signal "red" = failure Signal "white" = machine loaded Signal "green" = machine is running</p>	
2300	1,00 ST	<p>Machine preparation for through tool coolant system including: - Sealing system in the DIN 69893 HSK A50 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 We recommend for tool holders the use of our patented coolant tube with sieve. Advantages: - Decrease of the clogging in the internal coolant channel. - Reduction of the wear at the O-ring seal in the collet. (Subject: required high pressure equipment)</p>	
2400	2,00 ST	<p>Adaptor for multi spindle heads angular heads and speed increased spindle without support</p>	
2500	1,00 ST	<p>Oil-free air service unit with automatic condensate separator, pressure control of the air supply and micro filter 0,01 μm for air purge</p>	
2600	1,00 ST	<p>Installation elements</p>	

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2700	1,00 ST	Discharge of the shaft for torque value support	
2800	2,00 ST	Increased chain place for angle heads	
2900	1,00 ST	Viewing window as safety glued glass	
3000	1,00 ST	Automatic loading door of total enclosure opening and closing, actuating to closing via two-hand push buttons	
3100	2,00 ST	NC-rotary-table package complete installed consisting of: - NC-rotary-table, type AWU 160 P - 4th and 5th NC-axes, complete - 2 adapter-plates for center height 200 mm - central pneumatic supply without control Technical description for NC-rotary-table: center height 165 mm, repetition accuracy $\pm 15''$, load moment of inertia (without turning supply) 1,9 kgm ² face plate dia. 160 mm, with center bore dia. 50 +0.012, fixture pin dia. 16 h7, 4 fixture bores M10, incl. pneumatic clamping	
3200	2,00 ST	CHIRON standard fixture for rotary table with pneumatic actuated counter bearing bridge size 620 mm existing of: - base plate (instead of the adaptor plate from the rotary table package) detachable to machine table - counter bearing with pneumatic clamping - flange plate incl. connecting coupling and quick-locator, on side of the rotary table - flange plate incl. connecting coupling and quick-locator, on side of the counter bearing - 2 x 2-core energy supply pneumatic or hydraulic - center height 165 mm below the base plate	
3300	1,00 ST	CHIRON Lasercontrol Single F500 for tool breakage control, distance from transmitter to receiver ≤ 1000 mm, min. tool $\varnothing > 1$ mm, incl. test mandrel with tool holder, transmitter and receiver, gland and shutter	

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Pos.	Qty.	Description	Price
3400	1,00 ST	Preparation for probe OMP40 (without device) <ul style="list-style-type: none"> ▪ interface MI 12 ▪ bracket with infrared sensor OMM-E ▪ process oriented measuring ▪ software for measuring cycles and strategy program 	
3500	1,00 ST	Thermocontrol (deactivated with use of measuring systems e.g. spindle probe, stationary 3D probe or laser control)	
3600		Pressure relief flap	
3700		Canal for pressure relief flap (removable for maintenance work)	
3800		Electrical main switch at the pneumatic equipment	
3900	1,00 ST	Cutting tools The cutting tools have to be balanced according to DIN 69 888, class G 6,3, in two levels, with max. operating speed	
4000	1,00 ST	- Documentation -	
4100	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	
4200	1,00 ST	Machine colour Two-components-structure varnish - 2 colours light grey acc. to NCS S1502-B basalt grey acc. to RAL 7012	
4300		Main circuit total power supply 400 / 230V ± 10 %, 50 cycles N/PE, neutral conductor, load possible, pressure supply 6 bar, ± 1 bar at all procedures, room temperature max 40°	
4400		Information Export We point out that the CNC-machining centres are subject to controls. For the export from the European Union an export license is necessary.	

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Pos.	Qty.	Description	Price
4500		<p>Information Machine safety</p> <p>The machine is designed and built in accordance with the European machine guideline, according placing the product on the first time onto the market.</p> <p>Other safety features due to special company rules and specifications can be considered. The actual cost will be invoiced.</p>	
4600		<p>Information Coolant lubrication</p> <p>The machine is designed for standard water soluble coolant and fully enclosed at the standard version. The machine must be equipped with fume extraction.</p> <p>The machine contents different plastics, varnish, resin and glue, which are selected carefully for using coolant and cutting oil.</p> <p>The use of aggressive coolant and additive could cause major damages and machine stops.</p> <p>Contact in any case your coolant supplier before machine set-up and installation.</p>	