

Data sheet I CHIRON FZ 08 KSM Nr. 415-50

Pos.	Qty.	Description	Price
100	1,00 ST	Partly refurbished vertical machining centre CHIRON FZ 08 KSM no. 415-50 Year of construction: 2007, weight: 3.400 kg	
200	1,00 ST	According to described below scope of delivery	
300	1,00 ST	Column moving machining centre with fixed 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, 2070 mm high above floor, including machine lamp	
500	1,00 ST	Digital main drive with spindle 7,0 kW at 100 % 9,0 kW at 25 % - 11 Nm watercooled Spindle speed range up to 30.000 rpm Acceleration and deceleration 0 - 30.000 rpm ca. 1,9 sec. each drilling capacity in St 60 Ø 12 mm tapping M 8 milling capacity in St 60 30 cm ³ /min	
600	1,00 ST	Travel: X-axis 450 mm Y-axis 270 mm Z-axis 310 mm	
700	1,00 ST	Fixed table with chip pan for optimal chip drop at wet- and dry milling clamping surface 770 mm x 290 mm with thread and locating hole grids M16 x ø 15 H7 x 50 mm table loading capacity max. 500 kg	

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800	1,00 ST	Automatic tool changer by robust, full encased Pick up Chain magazine, with mechanic drive protection and cone cleaning above blow out air No. of tools 40 Tool shaft HSK-A 40 DIN 69893 Max. tool dia. max. 47 mm Max. tool dia. max. 100 mm if adjacent places are free Tool length max. 160 mm Max. tool weight max. 1,2 kg Tool change time appr. 0,8 s (depends on control) Chip-to-chip-time appr. 1,9 s (depends on control)	
900	1,00 ST	Digital feed drives for X-, Y- and Z-axis with digital direct drives and indirect absolut path measuring system rapid traverse in X-, Y-axes and Z-axis 75 m/min, acceleration: 1,0 g in X-axis 1,5 g in Y-axis 2,0 g in Z-axis Remark: With normal conditions the machine does not have to be anchored to the floor. (For slippery floors we recommend anchoring.)	
1000	1,00 ST	SIEMENS CNC-control 840D (PCU 50 / NCU 573.5, till 12 measuring cycles for free form milling, 1 canal) incl. 10,4" TFT colour LCD screen / full keyboard OP010S control panel logic Windows NT/XP NC-memory 3 MB (expandable till 6 MB) (max.200 programmes storage capacity) for ISO 66025 programming hard disk with approx. 2 GB for free disposal screen switch off power meter in screen look ahead function bellshape-acceleration ramp software limit switch access right via key-switch for tool correction, NC-program changes and machine parameter drilling cycles G81-G89 drilling and milling cycles M- and T- functions circular interpolation (360 degrees) re-start into program	

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		Subroutines, parameter programming simultaneous programming support through cycles polar coordinates tool offsets for geometry, wear tool radius correction for intersection computing 4 zero offsets G54-G57 30 zero shifts programmable with G-functions 3D and helical interpolation 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 spindle stop drip feed function through V24 interface NC-diagnosis machine-diagnosisrigid tapping Selectable operator Level (3 steps) with different keys	
1100	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. Password protected confirmation of the performed maintenance through the maintenance staff.	
1200	1,00 ST	Thermocontrol (deactivated with use of measuring systems e.g. spindle probe, stationary 3D probe or laser control)	
1300	1,00 ST	Thermodrive with indirect path measuring system	
1400	1,00 ST	Installation elements	
1500	1,00 ST	Wash gun	

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1600	1,00 ST	Working hours and piece counter in the screen	
1700	1,00 ST	Socket 230 V at control panel	
1800	1,00 ST	Socket for portable mini-hand wheel without emergency stop button, at control panel	
1900	1,00 ST	Cabinet cooler as a door mounting unit	
2000	1,00 ST	Oil-free air service unit with automatic condensate separator, pressure control of the air supply and microfilter 0,01 µm for air purge	
2100	1,00 ST	Signal lamp on machine enclosure for 3 signals Signal "red" = failure Signal "white" = load machine Signal "green" = machine is running	
2200	1,00 ST	Chip conveyor (scratch band) discharge height 490 mm with coolant equipment tank capacity 100 l, pump capacity 110 l/min at 1,3 bar coolant cleaning through slot filter box	
2300	1,00 ST	Fixture washing incl. coolant supply (for S-Machines)	
2400	1,00 ST	Machine preparation for through tool coolant system including - Sealing system in the HSK collet - coolant distributor installed at the main spindle drive - Implemented mud flap in the high pressure piping and flow control switch - Solenoid valve, controlled via machine program (retrofitting not possible)	
2500	1,00 ST	Automatic loading door of total enclosure opening and closing, actuating via push button at control panel	
2600	1,00 ST	Walk Switch	

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Pos.	Qty.	Description	Price
2700	1,00 ST	Automatic central grease lubrication	
2800	1,00 ST	2-axes NC rotary table with direct drive completely installed, consisting of: - NC 2-axes rotary table, type ZASD 160 with digital direct drives through water-cooled torque-motor - 4th and 5th NC-axis, complete 4th axis lowest increment 0,001° 5th axis lowest increment 0,001° - base plate to mount on machine table - pneumatic supply, without control 4th NC-axis +/- 180°, indexing accuracy ± 12" with direct absolut path measuring system, spindle speed 250 rpm, 5th NC-axis 360°, indexing accuracy ± 12", with direct absolut path measuring system, spindle speed 250 rpm, center height 220 mm, face plate dia 100 mm, with center bore dia 30+0,012, location pin dia 10h7, 4 bolt holes M8 with air purge with water cooling unit	
2900	1,00 ST	Preparation for zero-point clamping system System 3R	
3000	1,00 ST	Glass scales overpressured in all axes X, Y, Z = 450 x 270 x 310 mm (Thermodrive in Basic machine is cancelled)	
3100	1,00 ST	Mechanical loading interface Opening in the right sidewall With pneumatic lifting door, Locked electrical	
3200	1,00 ST	Direct Switch for automatic loading doors, in position 'door open' (for automatic loading)	

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Pos.	Qty.	Description	Price
3300	1,00 ST	<p>Electric interface for loader with "Profibus" - Siemens on S- machines for loading through side wall of machine (mechanical feasibility must be checked for respective machine series) for automatic loading system, with DP/DP-coupler (slave) in the electrical cabinet, according to documentation of CHIRON loader interface, consisting of: circuit diagram, signal description and functional diagram, interface tested according to Chiron-description, incl. key-operated switch and indicator lamp in the control panel "with loader",</p> <p>Deviation from the standard interface and set up will be charged according to effort. Waiting periods during set up will also be charged.</p> <p>Recommended options: - Modification of side wall - tool life control - tool breakage control - fixture washing - chip conveyor, if not included in basic machine - air sensing - automatic central lubrication</p> <p>Note: The machine has to be anchored with robot loading or linkage. Anchoring the machine to the ground can be made by Chiron if wanted. This outlay will be charged according to effort.</p>	
3400	1,00 ST	<p>Parts location air sensing with 1 switch, completely installed, including energy-efficient shutdown during machining. Remark: Maximum 3 nozzles per switch. Precondition: Processed faces or aluminium die casting (not on partition or ejector flags), no grey cast iron. At rotary table and standard fixture for rotary table are additional turning supplies necessary.</p>	

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3500	1,00 ST	Suction point for customer specific installation Ø 200 mm on top of the machine enclosure and electrical preparation in cabinet	
3600	1,00 ST	Pneumatic connection (A + B) for pneumatic clamping device electrically controlled pneumatic connection, for double acting; pressure control; pressure control switch with automatic pressure regulation. (in case of pressure change automatic pressure sensing) per connection	
3700	1,00 ST	Pneumatic connection controlled Single acting for pneumatic clamping device	
3800	1,00 ST	Clamping force monitoring 2-6 bar adjustable	
3900	1,00 ST	Machining of tilted working planes (CYCLE 800) with 3 linear and 2 additional axes. - 5-axis-transformation The machining task is programmed completely in Cartesian coordinates with Cartesian position. The movements of all 5 axes resultant from that are computed internally. (for Siemens 840 D)	
4000	1,00 ST	MCIS DNC 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. Precondition: PCU 50	
4100	1,00 ST	CHIRON Tool lifetime control with: - tool place organization - sister tool organization - tool data check for geometric values - work field organisation via 4-digit program no. in the screen	

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4200	1,00 ST	- Documentation –	
4300	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	
4400	1,00 ST	Machine colour Two-components-structure varnish - 3 colours window grey acc. to RAL 7040 grey white acc. to RAL 9002 basalt grey acc. to RAL 7012 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°	