

## Data sheet I CHIRON MILL 800 FA no. 283-34

Pos.	Qty.	Description	Price
100	1,00 ST	<p><b>Completely refurbished vertical machining centre CHIRON MILL 800 FA no. 283-34</b></p> <p><b>Year of construction: 2008, weight: 7.800 kg</b></p>	
200	1,00 ST	<b>According to described below scope of delivery</b>	
300	1,00 ST	<p><b>Column moving machining centre with NC-Swivel unit</b> Machine substructure with integrated chip discharge left Linear guides with long-term-lubrication</p>	
400	1,00 ST	<p><b>Machine enclosure with full enclosed workspace</b> with loading doors, electrically interlocked, including replaceable safety windows, workspace enclosure with stainless steel covers. 2500 mm high above floor, including machine lamp</p>	
500	1,00 ST	<p><b>2 axis rotary table type ZAS 280</b> consisting of: Interface for 4th and 5th axis smallest increment 0,0001°</p> <p>Tilting axis Tilting angle: <math>\pm 110^\circ</math> Tilting accuracy <math>\pm 6''</math> with absolute, direct path measuring system RCN 220 via worm drive system incl. hydraulic clamping system max. transmittable torque 1.100 Nm max. torque if the table is clamped 3.800 Nm max spindle rev. 30 rpm</p> <p>rotary table faceplate dia 280 mm with thread and locating hole grid M 16 x <math>\varnothing</math> 15H7 x 50 mm incl. hydraulic clamping system Tilting accuracy <math>\pm 6''</math> with absolute, direct path measuring system RCN 220 max. transport weight (workpiece weight): 320 kg via worm drive system max. transmittable torque 700 Nm max. torque if the table is clamped 2.800 Nm Max spindle rev. 45 rpm Clamping surface left and right of the face plate</p>	



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		<p>Counter bearing incl. hydraulic clamping system without drive max. torque via clamping system 3.800 Nm</p> <p><b>Hydraulic unit</b> for permanent operations pressure: 210 bar incl. valves for supply and clamping circuit for clamping of faceplate and counter bearing complete with hydraulic connection</p> <p><b>Central Pneumatic or Hydraulic Turning Supply</b> 4-fold, integrated in A- and B-axis, with 4 O-ring connections in the center of the face plate Remark: power-actuated clamping fixtures on the faceplate require additional connections and clamping circuits.</p>	
600	1,00 ST	<p><b>Travel:</b> X-axis 800 mm Y-axis 500 mm Z-axis 550 mm</p>	
700	1,00 ST	<p><b>Main spindle drive with AC-motor</b> 17,0 kW at 100 % 47,2 kW at 5 % Spindle speed range: 20 - 12.000 rpm - 180 Nm</p> <p>Drilling capacity in steel 60    <math>\varnothing</math> 45 mm (with insert drill) Tapping capacity                    M 33 Milling capacity in steel 60        700 cm<sup>3</sup>/min.</p>	
800	1,00 ST	<p><b>Automatic tool changer, protected against chips</b> Tool places                            92 with dynamical background magazine, space-saving shelf-design, mounted at the back of the machine. During the operation movement of the machine the tool hand-over from the background is simultaneously to the tool magazine of the basic machine. With tool operating times shorter than 15 s the chip-to-chip-time may increase.</p>	



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		<p>Tool capacity chain magazine: 21 places,</p> <p>Tool capacity shelf magazine: 71 places with max. tool length 320 mm, max. tool diameter 75 mm, max. tool diameter if adjacent places are free max. 160 mm, including drip pans below the toolplaces to collect dripping coolant.</p> <p>Tool shaft HSK-A 63 DIN 69893 Max. tool dia. 75 mm if all magazine pos. are occupied Max. tool dia. 160 mm - if adjacent places are free Max. tool length 320 mm Max. tool weight 4,0 kg Tool change time approx. 1,5 s (depends on CNC) Chip-to-chip-time approx. 5,0 s (depends on CNC)</p> <p><b>Including Siemens Tool lifetime control with:</b> - tool place organization - sister tool organization</p>	
900	1,00 ST	<p><b>AC-servo motors</b> for x-, y- and z-axes digital direct drives with indirect absolut path measuring system rapid traverse in all axes 40 m/min.</p>	
1000	1,00 ST	<p><b>Turnable control panel</b> with additional sliding door at the machine enclosure, electrically interlocked, for good view into the working area during setup</p>	
1100	1,00 ST	<p><b>SIEMENS CNC-control 840D</b> (PCU 50 / NCU 573.5, 12 measuring cycles for free form milling, 1 canal) incl. 10,4" TFT colour LCD screen / full keyboard OP010S control panel logic Windows XP NC-memory 3 MB (memory till max. 6 MB expandable) (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)</p>	



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		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 screen switch off mirror function scaling function insert of chamfer and radius Universal interface RS 232C (1 x V24) at control panel USB-interface at control panel Ethernet connection RJ45 in control panel orientated spindle stop drip feed function through V24 interface dimension metric or inch software limit switch NC-diagnosis machine-diagnosis absolute indirect path measurement systems power meter in screen rigid tapping look ahead function	
1200	1,00 ST	<b>SINDNC</b> 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.	
1300	1,00 ST	<b>Shopmill</b> including Siemens tool management. Condition: PCU 50	
1400	1,00 ST	<b>Tools with radius information</b>	



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Pos.	Qty.	Description	Price
1500	1,00 ST	<b>CHIRON Maintenance Management in the screen</b> 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.	
1600	1,00 ST	<b>5-axes-machining (CYCLE 800)</b> for the machining of three-dimensional curved or tilted surfaces with 3 linear and 2 additional axes - 5-axes-transformation with tool center point management. The machining task is programmed completely in Cartesian coordinates with Cartesian position and orientation. The movements of all 5 axes resultant from that are computed internally with the 5-axes-transformation.	
1700	1,00 ST	<b>Working hours and piece counter</b> in the screen	
1800	1,00 ST	<b>Socket for portable mini-hand wheel</b> without emergency stop button, at control panel	
1900	1,00 ST	<b>Wash gun</b>	
2000	1,00 ST	<b>Cabinet cooler as a door mounting unit</b>	
2100	1,00 ST	<b>Installation elements</b>	
2200	1,00 ST	<b>Safety glass in the front doors</b>	
2300	1,00 ST	<b>Socket 230 V</b> at control panel	
2400	1,00 ST	<b>Chip conveyor (scratch band)</b> Left side discharge, discharge height 1050 mm tank capacity 200 l, pump capacity 300 l/min at 1,3 bar	
2500	1,00 ST	<b>Signal lamp for 3 signals</b> Signal "red" = failure Signal "white" = machine loaded Signal "green" = machine is running	



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2600	1,00 ST	<p><b>Coolant tank TPF 350 S / FKA 900</b>            (also for sludge generating materials, i.e. grey cast iron, GGG, Al with Si <math>\geq</math> 12%)            tank capacity 900 l            low pressure pump capacity from 100 l/min at 2.4 bar up to 250 l/min at 2.3 bar            high pressure pump capacity 30 l/min at 30 bar            Full stream purification via drum paper bond filter TPF 350 S, with coolant purification 50 <math>\mu</math>m nominal            twin filter in the high pressure circuit for the protection of the machine</p>	
2700	1,00 ST	<p><b>Through tool coolant package with air cleaner</b>            consisting of:            Machine preparation            for through tool coolant system including:            - sealing system in the DIN 69871 Form A40 or DIN 69893 HSK A63* collet            - coolant distributor installed at the main spindle drive            coolant leakage sensor            - implemented mud flap in the high pressure piping and flow control switch            - solenoid valve, controlled via machine program            * HSK A63 tool holders for through tool coolant require 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: requires high pressure equipment)</p>	
2800	1,00 ST	<p><b>Exhaust fan with air cleaner</b>            exhaust capacity 800 m<sup>3</sup>/h</p> <p>Smoke and gases that arise during the processing are not filtered by this unit.            In this case we recommend the connection to a central exhaust fan.</p>	
2900	1,00 ST	<p><b>Glass scales</b>            overpressured            X, Y, Z = 800 x 500 x 550 mm</p>	



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3000	1,00 ST	<p><b>Probe for automatic measuring in the machine</b>            Renishaw - probe - package OMP 40            for part measuring and            automatic machine compensation,            - probe with optical contact modul and            tool taper suitable for machine spindle            - tracing pin 58 mm with ruby ball dia. 4 mm            - interface MI12            - receiver OMM-C with integrated interface            - process oriented measuring            - software for measuring cycles and strategy program</p> <p>Remark:            For the carrying out of machine compensations with probe            a suitable reference surface at the machine or at the fixture or            an optional gauge block (VCS12100800) are necessary.</p>	
3100	1,00 ST	<p><b>Portable mini-hand wheel</b>            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.)</p>	
3200	1,00 ST	<p><b>- Pneumatic- and Hydraulic Connections -</b></p>	
3300	1,00 ST	<p><b>Pneumatic connection (A+B)</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)</p>	
3400	1,00 ST	<p><b>Hydraulic connection for 210 bar</b>            with 2 connecting couplings "A + B" and            hydraulic installation up to outside of            machine bed, electrical control for clamping            ON - OFF via push button at control panel</p>	
3500	1,00 ST	<p><b>Extension hydraulic unit</b>            for further clamping circuits            1 additional clamping circuit, double acting            1 x A/B</p>	



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Pos.	Qty.	Description	Price
3600	1,00 ST	<b>- Documentation -</b>	
3700	1,00 ST	<b>Documentation acc. to CE of the first delivery into market</b> 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	
3800	1,00 ST	<b>Machine colour</b> Two-components-structure varnish - 2 colours light grey acc. to NCS S1502-B basalt grey acc. to RAL 7012	
3900		<b>Main circuit</b> 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°	
4000		<b>Information Export</b> We point out that the CNC-machining centres are subject to controls. For the export from the European Union an export license is necessary.	
4100		<b>Information Machine safety</b> The machine is designed and built in accordance with the European machine guideline, according placing the product on the first time onto the market. Other safety features due to special company rules and specifications can be considered. The actual cost will be invoiced.	
4200		<b>Information Coolant lubrication</b> The machine is designed for standard water soluble coolant and fully enclosed at the standard version. The machine must be equipped with fume extraction.  The machine contents different plastics, varnish, resin and glue, which are selected carefully for using coolant and cutting oil. The use of aggressive coolant and additive could cause major damages and machine stops. Contact in any case your coolant supplier before machine set-up and installation.	

