

Data sheet No. 20385473 / 15.09.2022

Item	Qty	Description
1000	1	CNC-machining centre CHIRON CHIRON FZ 12 KW Year of construction: 2009
1040	1	Column moving machining centre with machine bed in mineral cast technique and workpiece swivel table Guideways with long-term-grease lubrication
1060	1	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
1070	1	Travel: X-axis 550 mm Y-axis 400 mm Z-axis 360 mm
1080	1	Digital main drive with spindle with air purge and monitoring of the tool clamping 1,5 kW at 100 % 3,7 kW at 25 % spindle speed range up to 12.000 rpm; 17 Nm acceleration from 0 to 12.000 rpm or deceleration in 0,7 seconds Drilling capacity 16 mm (with insert drill) Tapping capacity M 16 Milling capacity 80 cm ³ /min
1090	1	Workpiece swivel table 0/180 degrees with centre divider made of sheet metal clamping surface 2 x 660 mm x 350 mm with thread and locating hole grid M16 x ø 15 H7 x 50 mm 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
1100	1	Mini-operating panel with start and receipt push buttons, for pallet recognition M61/M62
1110	1	Digital feed drives for X-, Y- and Z-axis with digital direct drives and indirect absolut path measuring system rapid traverse in X- and Y-axes 40 m/min, Z-axis 60 m/min, acceleration X- and Y-axes 0,7 g, Z-axis 1 g

Remark:

With normal conditions the machine does not have to be anchored to the floor.
(For slippery floors we recommend anchoring.)

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1120 1 **Automatic tool change**
 through robust, full enclosed pick up tool changer,
 with mechanical impact protection and cleaning
 of the tool taper through air blow
 No. of tools 48
 Tool taper HSK-A 50 DIN 69893
 Max. tool dia. max. 60 mm if all magazine pos. are occupied
 Max. tool dia. for adjacent place
 with max. dia 40 mm max. 100 mm
 Max. tool dia. for adjacent place
 with max. dia 20 mm max. 125 mm
 Tool length max. 250 mm
 Max. tool weight max. 5 kg
 Tool change time appr. 0,9 s (depends on CNC)
 Chip-to-chip-time appr. 2,4 s (depends on CNC)

1130 1 **FANUC 0 i - 3-axes continuous path control**
 10.5" color screen
 memory capacity 128 KB
 drilling cycles G81-G89
 absolute path measuring system
 M- and T-functions
 circular interpolation (360 degrees)
 re-start into program
 makro B sub-routines
 look ahead
 simultaneous programming
 automatic corner override
 64 tool offsets
 cutter radius - contour compensation
 6 zero shifts G54-G59
 metric/inch switch
 3 D-interpolation/helical interpolation
 S-analogue
 rigid tapping
 orientated spindle stop
 Slot for PCMCIA memory card
 Interface RS 232C on the side at the control panel
 software-limitswitch
 NC-diagnosis
 machine diagnosis
 high speed skip
 macro common variables

1140 1 **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.

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| 1160 | 1 | Installation elements |
| 1170 | 1 | Working hours and piece counter
in the screen |
| 1180 | 1 | Socket 230 V
at control panel |
| 1190 | 1 | Socket for portable mini-hand wheel
without emergency stop button,
at control panel |
| 1200 | 1 | Cabinet cooler as a door mounting unit |
| 1210 | 1 | Signal lamp on machine enclosure for 3 signals
Signal "red" = failure
Signal "white" = load machine
Signal "green" = machine is running |
| 1220 | 1 | Oil-free air service unit
with automatic condensate separator,
pressure control of the air supply
and micro filter 0,01 µm for air purge |
| 1230 | 1 | Wash gun
with 1 connection and quick coupling each
in loading- and working area |
| 1240 | 1 | 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 |
| 1250 | 1 | Stationary 3D Probe System
type TS 27 R, maker RENISHAW,
with adapter plate and
air blow for the measuring stylus,
for tool breakage control (in one working area),
for automatic tool length measurement (at FZ),
for automatic temperature compensation,
including process-orientated measuring,
software for measuring cycles,
strategy program and tool holder with ball dia. 12 mm. |
| 1260 | 1 | Probe for automatic measuring in the machine
Renishaw - probe - package OMP 40-2LS
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
- receiver OMI with integrated interface |

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- bracket for receiver
- process oriented measuring
- software for measuring cycles and strategy program

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.

1270 1 **Automatic loading door of total enclosure**
opening and closing, actuating to closing via two-hand push buttons

1280 1 **Pneumatic- and Hydraulic Connections**

1290 1 **Central pneumatic supply**
without control and 2 outlet couplings

1300 1 **Interface 4th and 5th NC axis**

1310 1 **Cutting tools**
The cutting tools have to be balanced according to DIN 1940, class G 2,5, in two levels, with max. operating speed

1320 1 **Machine colour**
Two-components-structure varnish - 2 colours
light grey acc. to NCS S1502-B
basalt grey acc. to RAL 7012

1330 1 **- Documentation -**

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