CHIRON Group

Data sheet No. 20385319 / 14.09.2022

Item	Qty	Description
1000	1	**Vertical CNC-machining center CHIRON FZ 08 KWM no. 230-62**

1040   1   **Year of construction:** 2005
Condition: completely refurbished

According to descriped below scope of delivery

1060   1   **Column moving machining centre** with workpiece swivel table
Guideways with long-term lubrication

1080   1   **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

1100   1   **Travel**:
X-axis 450 mm
Y-axis 270 mm
Z-axis 310 mm

1120   1   **Main Spindle drive with AC-motor**
with air purge and monitoring of the tool clamping
2,2 KW at 100 %
7,2 KW at 25 %
Spindle speed range: 20 - 15.000 rpm - max.23 Nm

Drilling capacity in 60 pc. Ø 16 mm
Tapping capacity M 12
Milling capacity in steel in 60 pc. 60 cm³/min

1140   1   **Workpiece swivel table 0/180 degrees**
with centre divider made of sheet metal
clamping surface 2 x 550 mm x 300 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 200 kg,
max. 50 kg weight difference between the two table sides

1160   1   **Automatic tool changer**
through robust, full enclosed pick up tool changer,
with mechanical impact protection an cleaning
of the tool taper through air blow
Tool places 24
Tool shaft HSK-A 40 DIN 69893 Max Tool-∅ max. 47 mm
Max Tool-∅
if next places are free 100 mm Tool length 160 mm
Max. tool weight max. 1,2 kg
Tool change time approx. 0,8 s (depends on CNC) Chip-to-chip-time
approx. 1,9 s (depends on CNC)

Data sheet No. 20385319 / 14.09.2022

1180   1   AC-servo-motors
feed drives for X-, Y- and Z-axes,
indirect absolute path measuring system
rapid traverse in X-, Y-, and Z-axes 75 m/min
acceleration: 1,0 g in X-axis
1,5 g in Y-axis
2,0 g in Z-axis

1200   1   SIEMENS CNC-control 840D
(PCU 50 / NCU 572.3, 6 Messkreise, 1 Kanal)
incl. 10,4" TFT colour LCD screen / full keyboard OP010S
control panel logic Windows NT
NC-memory 256 KB
(max.200 programmes storage capacity)
for ISO 66025 programming
hard disk with approx. 2 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
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
Working hours and piece counter in the screen
rigid tapping
look ahead function

Data sheet No. 20385319 / 14.09.2022

1220   1   **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.

1240   1   **Thermodrive**
with indirect path measuring system

1260   1   **Working hours and piece counter**
in the screen

1280   1   **Socket 230 V**
at control panel

1300   1   **Cabinet cooler**
as a door mounting unit

1320   1   **Socket for portable mini-hand wheel**
without emergency stop button,
at control panel

1340   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

1360   1   **Signal lamp on machine enclosure for 3 signals**
Signal "red"   = failure
Signal "white"   = load machine
Signal "green"   = machine is running

1380   1   **Installation elements**
For installation in an oil pan the installation directly
on the sheet metal is not allowed. For out of it resulting
problems there is no warranty. The machine documents for
approval contain a proposal for the appropriate execution
of the oil pan.

1400   1   **Chip conveyor (scratch band)**
instead of standard coolant equipment
discharge height 490 mm
tank capacity 110 l,
pump capacity 110 l/min at 1, 9 bar
coolant cleaning through slot filter box

1420   1   **Additional coolant tank**
tank capacity 500 l,
pump capacity 100 l/min at 1,8 bar
coolant filtration via paperbondfilter 50 µm
with automatic filter transport
(only in combination with chip conveyor, the pump in the chip conveyor
becomes the lift pump)

Data sheet No. 20385319 / 14.09.2022

1440   1   **Machine preparation**
for through tool coolant system including
- Sealing system in the HSK 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

1460   1   **Wash gun**
with 1 connection and quick coupling each
in loading- and working area

1480   1   **CHIRON Tool lifetime control with:**
- tool place organization
- sister tool organization
- Working field organisation by 4 digit program number in the screen
Geometrie monitoring at tool call

1500   1   **NC Rotary table, completely installed consisting of:**
-      2 NC rotary tables, type AWU P 100
mountable to the workpiece swivel table
-      interface 4th + 5th nc-axis
lowest increment 0,001°
-      pneumatic supply, without control

Technical description NC rotary table
repetition accuracy ± 30"
max. spindle speed 80 rpm
spindle pneumatic clamped, center height 125 mm
face plate dia. 100 mm, center bore dia. 50+0,012,
through bore dia 35 mm, location pin dia. 10 h7,
4 bolt holes M8

1520   2   **Chiron standard fixture for rotary table**
Bridge size 410 mm in X, 105 mm in Y
Consisting of:
- base plate for AWU P 100 and counter bearing
- counter bearing with pneumatic clamping
- centring flange, on side of the rotary table
- centring flange, on side of the counter bearing
- counter bearing shaft
- 2 x 2-wired power supply (pneumatic)
- centre height 125 mm

1540   1   **Automatic loading door of total enclosure**
opening and closing, actuating via push button
at mini-operating panel

Data sheet No. 20385319 / 14.09.2022

**1560 1 Electric interface for loader with "Profibus" - Siemens
on W-machines for loading through manual or automatic loading door**
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",
incl. direct door switch in position "door open"

Deviation from the standard interface and set up will be
charged according to effort.
Waiting periods during set up will also be charged.

Recommended options:
- automatic doors, if necessary
- tool life control
- tool breakage control
- fixture washing
- chip conveyor, if not included in basic machine
- Parts location air sensoring
- automatic central lubrication

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.

1580 1 Additional button for indexing in the loading station
indexing 4 x 90° or 2 x 180° for NC rotary tables,
4th or 4th and 5th axis

1600 1 Chiron Lasercontrol Single F500
for tool breakage control,
min. tool Ø > 1mm,
incl. test mandrel with tool holder,
transmitter and receiver,
gland and shutter