

Data sheet No. 20404801 / 17.10.2024

CHIRON Group SE

Item	Qty	Description
1000	1	Vertical CNC-machining center DZ 12 W HS 262-35
1040	1	Year of construction: 2014 Condition: will be partly refurbished
1060	1	Machine base in mineral cast technique Guideways with long-term-grease lubrication 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 Mini-operating panel with start and receipt push buttons, for pallet recognition M61/M62 Machine base prepared for installation of a integrated workpiece swivel table IWW Minimum distance spindle nose - pivot point of tilting unit IWW max. 349 mm
1080	1	Travel: X-Achse 550 mm Y-Achse 400 mm Z-Achse 360 mm
1100	1	Integrated Workpiece swivel table IWW 0/180 degrees With gaps underneath the trunnion fixture for optimal chip drop, with center divider workpiece swivel time appr. 2,4 s weight-dependent, self-regulating through self-learning speed-control table loading capacity per side 0 - max. 160 kg, max. 100 kg weight difference between the two table sides. Per table side integrates: NC-rotary-table, type AWU 160 P with pneumatic clamping repetition accuracy $\pm 15''$, face plate dia. 160 mm, with center bore dia. 50 +0.012 mm, fixture pin dia.16 h7, 4 fixture bores M10, CHIRON standard fixture for rotary table bridge size 620 mm counter bearing with pneumatic clamping flange plate incl. connecting couplings and quick locator, on side of the rotary table flange plate incl. connecting couplings and quick locator, on side of the counter bearing 2 x 4-core energy supply pneumatic or hydraulic swing radius 240 mm 4th or 5th NC-axes, complete pneumatic supply without control

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- 1120 1 **Spindle head four-spindle**
to integration of 2 motor spindles
Spindle distance in X-axis 250 mm

- 1140 1 **Main drive with 2 motor spindles**
with air purge and monitoring of the tool clamping
24, 5 kW at 100 %
40,0 kW at 25 %
spindle speed range up to 12.000 rpm
torque max. 45 Nm
acceleration from 0 to 12.000 rpm
or deceleration in 0,6 seconds

Drilling capacity 2 x Ø 25 mm
Tapping capacity 2 x M 20
Milling capacity 2 x 120 cm³/min
in steel E335

- 1160 2 **Machine preparation**
for through tool coolant system including:
4-fold dividing valve
Sealing system in the DIN 69893 HSK A50 collet
coolant distributor installed at the motor spindle
Coolant leakage sensor
Implemented mud flap in the high-pressure piping
and 4 flow control switches
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.

- 1180 1 **Automatic tool changer**
robust, full enclosed pick-up tool changer
with mechanical impact protection a cleaning
of the tool taper
No. of tools 2 x 24
Tool taper HSK-A 50 DIN 69893
Max. tool dia. max. 70 mm
Max. tool dia. at neighbour place with max. 40 mm, max. 100 mm
Tool length max. 250 mm
Max. tool weight max. 5 kg
Tool change time appr. 0,9 s (depends on CNC)

- 1200 1 **Feed drives for X-, Y- and Z-axes**
digital direct drives with indirect absolute path measuring system
rapid traverse 75 - 75 - 60 m/min.
acceleration: 0,7 - 1,0 - 1, 5 g

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- 1220 1 **SIEMENS CNC-control 840D solution line**
(PCU 50 / NCU 720.2, 6 measuring cycles, 1 canal)
incl. 10,4" TFT colour LCD screen
full keyboard / control panel OP010S
control panel logic Windows XP
NC-memory 3 MB (max. 1 MB for free disposal)
(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
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
look ahead function
- 1260 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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1280	1	<p>Working hours and piece counter in the screen</p>
1300	1	<p>Service socket at control panel (description see "main circuit")</p>
1320	1	<p>Socket for portable mini-hand wheel without emergency stop button, at control panel</p>
1340	1	<p>Cabinet cooler as a door mounting unit</p>
1360	1	<p>Signal lamp on control panel for 3 signals Signal "red" = failure Signal "white" = load machine Signal "green" = machine is running</p>
1380	1	<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>
1400	1	<p>Coolant Package</p>
1420	1	<p>Chip conveyor (scratch band) tank capacity 230 l pump capacity 110 l/min at 1,3 bar coolant cleaning through slot filter box Chip conveyor 1500 mm Chip conveyor discharge backwards</p>
1440	1	<p>Coolant unit HL 450 / 900 (for cast iron slurry, Al with Si \geq 12%) tank capacity 900 l, pump capacity from 100 l/min at 2,1 bar up to 250 l/min at 1,8 bar</p> <p>70 bar high pressure pump flow rate 20 l/min at 30 bar - 11 l/min at 70 bar with vario pressure control valve for 8 programmable pressure stages pre-defined pressure steps (20, 30, 40, 50, 55, 60, 65, 70 bar)</p> <p>Coolant filtration for high pressure and flood coolant with hydrostatic paper bond filter HL 450, filtration 50 µm nominal twin filter in the high pressure circuit for the protection of the machine</p>
1460	1	<p>Fixture washing incl. coolant supply in the working area</p>

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| 1480 | 1 | <p>Fixture washing
incl. coolant supply
in the loading area</p> |
| 1500 | 1 | <p>Wash gun
placed outside of the machine enclosure,
incl. solenoid valve for coolant supply</p> |
| 1520 | 1 | <p>Workspace washing
with nozzles installed inside the Machine enclosure
and washing of centre divide</p> |
| 1540 | 1 | <p>Bed flush system</p> |
| 1580 | 1 | <p>Exhaust fan with air cleaner
exhaust capacity 800 m³/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> |
| 1600 | 4 | <p>Hydraulic connection for 200 bar
with connecting coupling A
and hydraulic installation up to outside of machine bed,
incl. valve for supply of 1 single acting clamping device
with pressure switch for clamping control and
electrical control for clamping ON - OFF</p> |
| 1620 | 4 | <p>Hydraulic connection for 200 bar
with 2 connecting couplings A+B and
hydraulic installation up to outside of machine bed,
incl. valve for supply of 1 double acting clamping device
with pressure switch for clamping control and
electrical control for clamping ON - OFF</p> |
| 1640 | 1 | <p>Hydraulic unit
continuous duty
pressure: 200 bar</p> |
| 1660 | 4 | <p>Hydraulic unit extension second pressure stage
Function high- and low pressure</p> |
| 1680 | 1 | <p>Direct path measuring system X-axis
overpressured</p> |
| 1700 | 1 | <p>Direct path measuring system Y-axis
overpressured</p> |
| 1720 | 1 | <p>Direct path measuring system Z-axis
overpressured</p> |
| 1740 | 1 | <p>Option machine operation</p> |

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| 1760 | 1 | <p>Automatic central oil lubrication</p> |
| 1780 | 1 | <p>Walk Switch</p> |
| 1800 | 1 | <p>Automatic loading door of total enclosure
opening and closing, actuating via push button
at control panel</p> |
| 1820 | 1 | <p>Marposs Artis tool breakage monitoring system
with CTM card
For tool breakage control of tools with $\varnothing > 2,5$ mm.
Monitoring of the tools through power sensor.
Including installation, integration and function test.
Without threshold value definition and training for operators.
For this we recommend a training course booked directly from your local
Artis dealer.</p> |
| 1840 | 1 | <p>Variable clamping logic CHIRON
For the definition of different locking and unlocking sequences, for
max. 10 functions with max. 8 steps.
Considering of time delay and monitoring of clamping circuits
e.g. through pressure switches or airsensing.
Storing and reloading the configuration allows fast changeover</p> |
| 1860 | 1 | <p>CHIRON Powersave
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 points in time at which the machine starts demand-oriented
automatically with a variable warmup program
to recovery the production readiness</p> |
| 1880 | 1 | <p>Electric interface for loader with Profibus
for loading through automatic doors
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 V03.02,
incl. key-operated switch
and indicator lamp in the control panel "with loader",
incl. direct door switch in position "door open"</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:
automatic doors
signal lamp, if not included in basic machine
tool life control
tool breakage control</p> |

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fixture washing
chip conveyor, if not included in basic machine
air sensing
automatic central lubrication

Note: The machine has to be anchored with
robot loading or linkage.

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| 1900 | 1 | Machine colour
two-components-structure varnish - 3 colours
light grey acc. to NCS S1502-B
blue acc. to NCS S2050-R80B
basalt grey acc. to RAL 7012 |
| 1920 | 1 | 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 |
| 1940 | 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. |