

Pos.	Qty.	Article Description	Price / €
------	------	---------------------	-----------

Complete machine description

- 1 1 **Completely refurbished vertical CNC-machining centre model DZ 15 W**
Year of construction: 2006, weight: 7,820 kg

Machine-No. 258-36

Scope of delivery:

Column moving machining centre in steel- concrete- composite design with workpiece changing device
 Suitable for dry-machining with optimized chip drop
 Guideways with long-term-grease lubrication

Main Spindle drive with 2 AC-motors

9,5 KW at 100 %
 14,0 KW at 15 %
 Spindle speed range: 20 – 12.000 rpm - max. 90 Nm

Drilling capacity in St 60	2 x Ø 36 mm with reversible plate drill
Tapping capacity	2 x M 24
Milling capacity in St 60	2 x 150 cm ³ /min

Travel:

X-axis	300 mm
Y-axis	400 mm
Z-axis	425 mm with adjustable tool change level
Spindle distance	250 mm

Automatic tool changer, protected against chips

Tool places	2 x 12
Tool shaft	SK 40 DIN 69871 + 72
Tool-Ø	max. 65 mm
Tool-Ø	
if adjacent places are free	max. 150 mm
Tool weight	max. 2,5 kg (5,0 kg at 2 places)
Tool change time appr.	0,9 s (depends on CNC)
Chip-to-chip-time approx.	2,1 s (depends on CNC)



Pos.	Qty.	Article Description	Price / €
------	------	---------------------	-----------

Workpiece swivel table 0/180 degrees

with centre divider made of stainless steel
 clamping surface 2 x 660 mm x 400 mm
 with thread and locating hole grid M16 x ø 15 H7 x 50 mm
 workpiece swivel time appr. 2,4 s weight-dependent, self-regulating
 through self-learning speed-control
 table loading capacity per side 0 - max. 300 kg
 max. 100 kg weight difference between both table sides

AC-servo motors for X-, Y- and Z-axes

digital direct drives with indirect absolute path measuring system
 rapid traverse in all axes 60 m/min. With 1,0 g acceleration.

Remark:

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

SIEMENS CNC-control 840D

(PCU 50 / NCU 572.5, 6 measuring circuit, 1 channel)
 incl. 10,4" TFT colour LCD screen / full keyboard OP010S
 Windows XP
 NC-memory 256 KB
 (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)



Pos.	Qty.	Article Description	Price / €
		<p>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</p> <p>CHIRON Powersafe 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. Definable point in time at which the machine starts demand-oriented automatically with a variable warmup programm to recovery the production readiness.</p> <p>CHIRON maintenance management on the screen display of the pending maintenance: advance warning = "prepare maintenance" warning = "carry out maintenance" machine stop = "catch up on maintenance"</p> <p>Brief instructions for the pending maintenance with graphic illustration on USB data-carrier. Password protected confirmation of the maintenance work carried out by the maintenance staff.</p> <p>Operating hours and piece counter on the screen</p> <p>Socket 230 V at control panel</p> <p>Socket for portable mini-hand wheel without EMERGENCY-STOP button, at control panel</p> <p>Electrical cabinet cooler mounted to the door</p>	



Pos.	Qty.	Article Description	Price / €
------	------	---------------------	-----------

Signal lamp on control panel for 3 signals

Signal "red" = failure
 Signal "white" = machine loading
 Signal "green" = machine is running

Machine enclosure with full enclosed workspace

with sliding doors, electrically interlocked,
 2200 mm high above floor, incl. machine lamp
 service friendly with removable side walls
 workspace enclosure with stainless steel covers

Chip conveyor (scratch band) small version

with discharge backwards, discharge height 1.050 mm,
 tank capacity 150 l
 lift pump capacity max. 300 l/min. at 1,3 bar

(In case of steel machining and other materials with long chips
 we recommend the use of a screw conveyor)

Mini-operating panel

with start and receipt push buttons, for pallet recognition M61/M62

Installation elements

Wash gun

with 1 connection and quick coupling each
 in loading- and working area

Coolant equipment FKA 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
 incl. bed flushing system and

Device flushing

with nozzles controlled with m-functions
 for washing the working area

Device flushing

incl. coolant connection
 in the loading station

Working area flushing

with flushing nozzles at both sides
 in the machine enclosure



Pos.	Qty.	Article Description	Price / €
------	------	---------------------	-----------

Automatic loading door of total enclosure
opening and closing

Automatically central grease lubrication

Package m-functions

m72/m73 2 m-function pairs for
m74/m75 simple ON/OFF function
m76 m-functions to control a
m78 peripheral equipment with external setback
(blocking of the machine course)

Fully enclosed working area

Suction point

for customer specific installation
Ø 200 mm on top of the machine enclosure

Central hydraulic and pneumatic supply

prepared for max. 20 connections,
6 connections are installed including connecting couplings,
4 for hydraulic, max. 200 bar and
2 for pneumatic without control.
Installation up to the outside of machine bed, with electrical control
for clamping ON - OFF via push button at control panel

Hydraulic unit – extension

Incl. connection couplings, max. 210 bar,
for central hydraulic- and pneumatic connection
(in sum are max. 20 lines for hydraulic/pneumatic possible)

Hydraulic unit

continuous duty
at switch cycles less than 30 seconds
pressure: 210 bar, flow rate: 4,3 l/min.
incl. valves for supply of 2 clamping circuits
and 2 pressure switches for electric clamping control

Hydraulic unit – extension

second pressure stage with additional pressure valve



Pos.	Qty.	Article Description	Price / €
------	------	---------------------	-----------

CHIRON Variable Clamping Logic

For the definition of different clamping and releasing sequences, for a maximum of 10 functions with a maximum of 8 steps. Considering of time delay and monitoring of clamping circuits e.g. through pressure switches or airsensing. The storing of the configuration and reloading, allows fast changeover.

Pressure regulator in the unclamping line (B-cylces)

Rigid taping

USB-interface Cutting tools

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

Machine colour

Two-components-structure varnish - 2 colours
light grey acc. to NCS S1502-B
basalt grey acc. to RAL 7012

Main circuit

total power supply 400 / 230V \pm 10 %, 50 cycles N/PE, neutral conductor, load possible, pressure supply 6 bar, \pm 1 bar at all procedures, room temperature max 40°

Information Export

We point out that the CNC-machining centres are subject to controls. For the export from the European Union an export license is necessary.

Information Machine safety

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.



Pos.	Qty.	Article Description	Price / €
------	------	---------------------	-----------

Information Coolant lubrication

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.

