

Complete machine description

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| 1 | 1 | Completely refurbished
vertical CNC-machining centre model FZ 15 W
Year of construction: 2003, weight: 7.820 kg | |
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Machine-No. 147-37

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	Ø 36 mm with reversible plate drill
Tapping capacity	M 24
Milling capacity in St 60	300 cm ³ /min

Travel:

X-axis	550 mm
Y-axis	400 mm
Z-axis	425 mm with adjustable tool change level

Automatic tool changer, protected against chips

Tool places	20
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 4 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 / €
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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

SIEMENS CNC-control 840D

(PCU 20 / NCU 572.3, 6 measuring cycles, 1 channel)
incl. 10,4" TFT colour LCD screen / full keyboard OP010S
NC-memory 256 KB
(max.200 programmes storage capacity)
for ISO 66025 programming
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 (2 x V24)
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
powermeter in screen



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.

Working hours and piece counter

in the screen

Socket 230 V

at control panel

Socket for portable mini-hand wheel

without emergency stop button,
at control panel

Cabinet cooler as a door mounting unit

Machine enclosure

with sliding doors, electrically interlocked,
2200 mm high above floor, incl. machine lamp
service friendly with removable side walls
vertical bellows

Chip conveyor (scratch band)

with lateral discharge, discharge height 1050 mm,
tank capacity 300 ltr., with pump capacity 150 l/min. at 1,5 bar
incl. bed flush

For machining with high chip volume or additional flushing options

and the resultant big coolant flow
we recommend, to calm down the coolant and to
decrease the cleaning cycles at the chip conveyor and
the coolant pipes, coolant equipment with a tank capacity of 900 l.

Mini-operating panel

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

Installation elements

Wash gun

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



Pos.	Qty.	Article Description	Price / €
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Central pneumatic connection
uncontrolled with 2 connection couplings

Coolant equipment
tank capacity 900 l,
pump capacity 200 l/min. at 2,0 bar
(the pump in the chip conveyor becomes the lift pump)
incl. bed flushing system

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)

Slot sieve type W = 0,35

Fully enclosed working area

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

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 ± 10 %, 50 cycles N/PE,
neutral conductor, load possible, pressure supply
6 bar, ± 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.

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.

