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# Inventory number: 19353

# Milling machine gantry type WALDRICH COBURG 20-10 FP 280



## Technical data

Number of axis total 3

Table length 8000 mm

Table width 2800 mm

Number of T-channels 11

T-channel width 36H8 mm

Distance of the T-slots 250 mm

Travels:

X axis 9000 mm Y axis 2950 mm Z axis 1250 mm W axis 2200 mm 2806 mm Distance table to spindle max. 3200 mm Distance between columns Table load max. 64000 kg Taper in spindle 60 ISO

Spindle speeds:

number (steps) 16
from 20 rpm
up to 600 rpm

Feeds:

 X axis from
 5 mm/min

 up to
 3000 mm/min

 Y axis from
 5 mm/min

 up to
 3000 mm/min

 Z axis from
 5 mm/min

 up to
 2000 mm/min

W axis from 5 mm/min up to 750 mm/min

Creep speeds:

 X axis
 5 - 3000 mm/min

 Y axis
 5 - 3000 mm/min

 Z axis
 5 - 2000 mm/min

 W axis
 5 - 50 mm/min

Voltage 50 Hz 3x 380 Volt
Spindle motor 100 kW
Spindle torque 13000 Nm

Overall dimensions about:

Length 21000 mm
Width 7800 mm
Height 6622 mm

Various accessories:

90° attachment

90° narrow attachment

Vertical extension

Tilting attachment







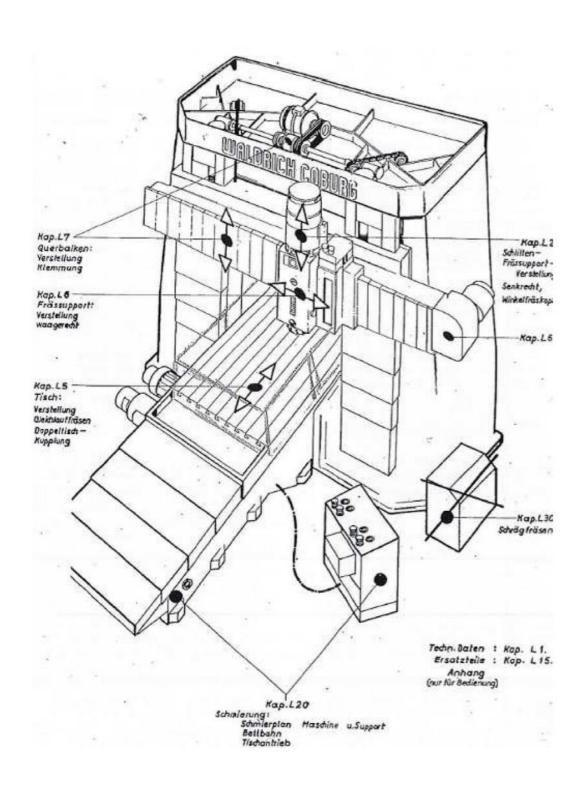








# **Movements sketch**



# **OVERALL DIMENSIONS**

<ul><li>Length</li><li>Width</li><li>Height from floor</li></ul>	mm mm mm	21.000 7.800 6.622
SIZES		
<ul><li> Table height from floor</li><li> Table width</li><li> Table length</li></ul>	mm mm mm	500 2.800 8.000 (5.000 + 3.000)
<ul><li>N° of "T" slots</li><li>Distance between centers of slots</li><li>Type of slots</li></ul>	n° mm mm	11 250 36H8
MACHINE CAPACITY		
<ul> <li>Milling useful width</li> <li>Distance between columns</li> <li>Max distance spindle-nose/table</li> <li>Max weight admitted on table</li> </ul>	mm mm mm T	3.100 3.200 2.806 64
AXES STROKE		
<ul><li>Table stroke ("X" axis)</li><li>Rapid feeds</li><li>Slow feeds</li></ul>	mm mm/min mm/min	9.000 5-3.000 5.5-50
<ul><li>Slide stroke on crossrail ("Y" axis)</li><li>Rapid feeds</li><li>Slow feeds</li></ul>	mm mm/min mm/min	2.950 5-3.000 5-50
<ul><li>Slide vertical stroke ("Z" axis)</li><li>Rapid feeds</li><li>Slow feeds</li></ul>	mm mm/min mm/min	1.250 5-2.000 5
<ul><li>Cross-rail stroke ("W" axis)</li><li>Rapid feeds</li><li>Slow feeds</li></ul>	mm mm/min mm/min	2.200 5-750 5-50

### **RETROFITING WITH NUMERICAL CONTROL SIEMENS 840 D SL**

It controls "X" axis (table movement), "Y" axis (Head movement along crossrail), "Z" axis (vertical movement of the Head), the cutting speed, the main motor power management, the automatic tools changer management (if the machine will be equipped).

The CNC also includes the static interface between the electrical equipment and CNC, as well as all the functions included in the basic version of the model chosen and anything else necessary for the perfect machine running.

The operator panel and all the controls are anchored to the ground in a central position with rotation of the control by means of an articulated arm (ray 1.5 mt approx.) Other solutions preferred by the Customer are possible.



- oDigital control
- oMemory: 2Gb
- oNCU 730.3 PCU 50.5P
- oEthernet
- System memory unit: 40Gb
- oPentium M (Mobile) 2,4 GHz
- oHuman-machine interface HMI
- o19" LCD, with full-function keyboard (OP19C-TFT)
- Standard networking interface
- RS232 standard communication port
- oNr. 5 USB2.0 ports (nr. 4 internal, Nr. 1 external)
- o25X CD-ROM optic drive
- oHT-2 handheld unit with screen (IP65)
- o interface
- oWindows 7
- Synchronous, non-synchronous or interpolation controlling, 3D interpolation.
- oCalling up subprogram
- oTool compensation
- oTool life control
- Rigid tapping
- oTrouble diagnosis and display
- oSafety protection system: over temperature, overpressure, battery low charge, memory, limit switch and fan.
- o3D graphic simulation and display of the working process, monitoring the path, and inputting programmable interlock data.
- oStandard cycle programs furnished with graphic display.
- oI/O function and data modification
- oBe able to realize automatic/manual control of the machine

# The offered machine is composed by:

"X" axis bed

The bed is high-quality cast-iron, oversized to grant great stiffness and to bear big loads.

It is anchored to the foundation by means of tie rods and levelling screws to give a perfect initial alignment and then to make easy the possible operations of levelling checking during the machine working life.

MOVABLE "X" AXIS TABLE

The table is made of high quality cast iron, it has a useful length of 8 meters; it can work 8 useful meters or it can be shared into 2 parts, one 5 meters long, the other 3 meters long; the "V" guideways are coated with antifriction material, Turcite type.

"Y"AXIS SUPPORT COLUMNS

The columns are high quality cast iron, oversized in order to obtain high rigidity to bear the stresses deriving from the slide-holder carriage in transverse movement on the movable crossrail.

FIXED CROSSRAIL

The crossrail is high quality cast iron, fixed in the upper part to the columns, in order to make the structure extremely rigid to bear loads and stresses deriving from the movable crossrail in all its vertical stroke on columns.

MOVABLE CROSSRAIL "Y" AXIS The crossrail is high quality cast iron suitably ribbed and structured to be able to bear flexion and torsional stresses, deriving from weight and work efforts, deriving from the slide-holder carriage.

The adjustable gibs, which guarantee a perfect sliding vertical movement, are covered with antifriction material, Turcite type.

#### SLIDE-HOLDER CARRIAGE

The slide-holder carriage is high quality cast iron, appropriately structured to make it extremely rigid to bear the stresses to which the slide is subjected, to which extremity are applied the milling attachments.

# "Z" AXIS SLIDE

It is the part of the machine subjected to the first impact related to the work effort. The slide is high quality cast iron, the dimensions are 600 mm. x 700 mm. It is strongly ribbed and structured in order to bear the most extreme working conditions with great rigidity. To ensure a perfect vertical movement in "Z", in the slide-holder are installed some antifriction material gibs, Turcite type.

#### **HYDRAULIC PLANT**

An hydraulic unit complete with electric pump and solenoid valves drives all the services necessary for the machine correct operation.

## MEASUREMENT SYSTEM

At present "PHILIPS OPTICAL SCALES" are installed for "Z" and "X" axes.