

Hurco VMX50S

Technical data

- Coolant system
- Spindle chiller
- Coolant filtration by means of a suction filter
- Full enclosure for protection against chips and coolant
- Signal tower light indicating machine operating status
- Flushing system for chip removal
- Machine work light
- Set of leveling pads
- Machine manual on CD in English, French, and German.
- WINMAX MIL 09.01.312.17 control system
- Two LCD monitors (text and graphical display)
- Two software modules:
 - 1 × conversational programming at the machine
 - 1 × ISO code programming via an external programming device or CAD/CAM system through RS-232C / V24 interface

Chip conveyor

Detachable electronic handwheel

Pocket milling with islands

Rigid tapping (without length compensation)

High-Pressure Through-Spindle Coolant System

- Coolant type: emulsion
- Coolant pressure: 20 bar
- Integrated hydraulic tool clamping system
- Cartridge filter (paper band filter available upon request)

DXF Software

Up to 90% faster programming of machining programs.

- Automatic toolpath recognition from CAD (DXF) files
 - Direct import of existing CAD data into the control system
 - Easy programming by selecting geometry data with a mouse click
 - Compatible with all common CAD systems
 - Incorrect CAD data can be edited directly at the control
 - Recognition of multiple layers
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Engraving Software

This software module allows the operator to create text using a text field with variable height and width and engrave it directly into the workpiece.

Tool Length Measurement and Workpiece Position Detection with two Renishaw probing systems (TS27 and OMP60)

CNC-Controlled Rotary Table MR320

High-precision CNC rotary table controlled via the ULTIMAX 4 system.

- 4th axis controls rotary movement
 - Fully programmable through conversational programming
 - Table diameter: 320 mm
 - Center height: 225 mm
 - Spindle bore: 105 mm
 - Including faceplate
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CE Compliance and Safety Standards

The machine complies with the following directives:

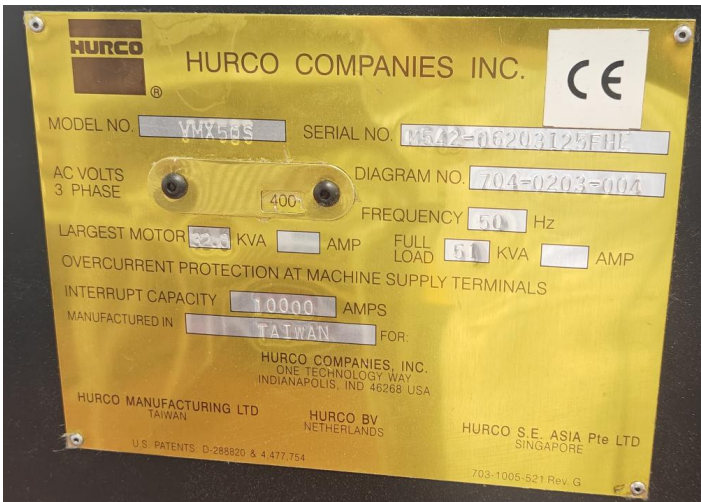
- Machinery Directive 98/37/EC
- EMC Directive 89/336/EEC
- Low Voltage Directive 73/23/EEC

The machine complies with the following standards:

- EN 292-1 Safety Standard
- EN 292-2 Safety Standard
- EN 294 Safety Standard
- EN 349 Safety Standard
- EN 418 Safety Standard
- EN 953 Safety Standard
- EN 954-1 Safety Standard
- EN 60204-1 Safety Standard
- Supplemented by 91/263/EEC
- Supplemented by 92/31/EEC
- EMC Standard EN 50081-2
- EMC Standard EN 50082-2
- Supplemented by 93/68/EEC
- BS 5378 Part 1 & 3

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Pictures



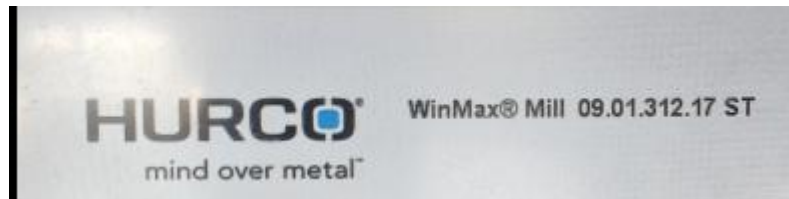
16.000 RPM SK40 (BIG-PLUS) spindel



4th axis:



RENISHAW MEASURING SYSTEM:



WINMAX MIL 09.01.312.17 ST:

SYSTEEM CONFIGURATIE	
MACHINE SPECIFICATIE	
MACHINE TYPE	VERTICAAL
VERTICAAL/HORIZONTAAL	VERTICAAL
AANTAL ASSEN	4
MACHINE-UUR METER	61762.1
MAXIMUM SPILMOTORTOERENTAL	10000 TPM
MAXIMUM SPIL TOOL TOERENTAL	15134 TPM
MAXIMUM IJLGANG SNELHEID	30000 MPPM
MAXIMUM FREESVOEDING	15240 MPPM

System configuration:

New HYDAC cooling unit:



Inside:

Backside:



Hurco VMX50S – Repair History (only latest ones)

04/13/2011: New keyboard + control update into WINMAX MIL 09.01.312.17

02/25/2013: Spindle replaced

11/14/2016: New Renishaw TS27R probe.

03/01/2016: 2 new LCD screens

05/28/2018: New rotary feed and replacement of coupling between spindle and motor

01/14/2019: New keyboard

01/20/2021: New indexing arm RTC

05/20/2021: New panel for rapid feed/spindle speed knobs.

06/21/2021: New belt + sensor.

06/21/2021: New compressed air booster needed for RTC

06/07/2022: SSD replaced

07/17/2022: New sensor for clamping/unclamping mechanism.

10/11/2022: New cooling unit.

06/22/2023: New mechanical spindle.

06/28/2023: Refurbished Z-axis servo pack installed.

07/06/2023: Central lubrication unit replaced.

04/13/2025: New X-axis and new bearings (cause: lubrication failure).

05/20/2025: New A-axis servo drive

05/20/2025: 2 new touchscreens.

07/22/2025: New sensor for WZW pneumatic cylinder.

08/11/2025: Repaired Z-drive unit installed.

12/19/2025: New coupling for X-axis / motor shaft.

02/05/2026: New belt for spindle – Motor

05/26/2026: New lock on door