



Kunzmann WF 600 CNC





A CNC milling machine for production-oriented users and manufacturers of high-quality single parts and small-batch products. This modern universal milling machine is characterized by high quality, performance, the highest levels of precision, and optimal accessibility.

Major characteristics are:

- Stable multi-ripped cast iron construction with horizontal-/vertical spindle and manual guill
- · Hardened and ground flat guideways in all axes for highest rigidity
- · Backslash-free ballscrews for up- and down milling
- · Stepless feed rate and spindle speed rate
- High-torque main spindle drive with gear box (automatically changed)
- · Hydraulic tool clamping
- Recirculationg cooling system in machine ram, incl. temperature compensation system of Y-axis for high milling precision and surface quality
- Ergonomically designed machine with large front and side door, providing direct access to working area
- High performance contouring control Heidenhain TNC 640 or Siemens 840 D sl ShopMill for 3-D processing.

Control:

HEIDENHAIN TNC 640 CONTOURING CONTROL

Modern CNC-high performance control for 3-D-processing of complex workpieces with a fast block processing time.

The control provides a hard disk as well as USB/Fast-Ethernet-Interfaces for a fast program management.

Extensive functions for graphics and simultaneous possibilities.

Especially Heidenhain TNC 640:

- Programming with Heidenhain conversational, DIN/ISO-Code
- Making of angular boring holes automatically / machining of cylindrical contours (option)
- DXF-Converter (option), load directly and convert DXF-files

SIEMENS 840 D sl ShopMill COUNTOURING CONTROL

Modern CNC-high performance control for 3-D-processing of complex workpieces with a fast block processing time.

The control provides a memory card as well as USB/Fast-Ethernet-Interfaces for a fast program management.

Extensive functions for graphics and simultaneous possibilities.

Especially Siemens 840 D sl:

- ShopMill user interface - Wide range of programming possibilities in the DIN/ISO code

WF 600 CNC_ Technical Data

TECHNICAL DATA		WF 600 CNC	STANDARD EQUIPMENT:
Working range	longitudinal X-axis cross Y-axis vertical Z-axis	600 mm 400 mm 400 mm	 Vertical milling head with extending quill Horizontal spindle Stable cast iron column with flat guideways
Main spindle drive	A.C. motor Power rating at 100% duty cycle Power rating at 60% duty cycle	6,5 kW 8,0 kW	in all axes (hardened) Recirculation cooling system in the ram Temperature compensation of the Y-axis
Spindle speed range	horizontal and vertical spindle Infinitely variable by gear stages	1 – 5000 min ⁻¹	 Hydraulic tool clamping Ballscrews Anti-collision couplings in Z-Axis Distance-coded linear measuring systems
Feed drives	AC-drives	digital	Elektronic handwheelFull-protection cabin
Feed rate	X- and Y-axis Z-axis	10,0 m/min 7,5 m/min	➤ Coolant fluid tank, free-standing, 70 litres ➤ Leveling elements
Rapid traverse	X- and Y-axis Z-axis	10,0 m/min 7,5 m/min	► Contouring control Heidenhain iTNC 530
Swivelling range vertical milling head		+/- 90°	OPTIONS:
Extending qill, vertical		stroke 60 mm	► Angular table:
Tool taper		ISO 40 DIN 69871 / 2080 / 7388	WF 400 CNC: 650 x 350 mm WF 600 CNC: 800 x 425 mm
Linear measuring systems	direct, distance-coded	resolution 0,001 mm	 Universal table 650 x 395 mm (rotating angle with digital readaout)
Machine accuracy	Pmax as per VDI/DGQ 3441	0,010 mm	➤ Arbor holder Touch probe systems
Operating voltage		400 Volt, 50 Hz	 Oriented spindle stop Minimum-quantity lubrication system
Power consumption		ca. 15 kVA	CNC dividing units – 4th / 5th axis Contouring control Siemens 840 D ShopMill
Weight		ca. 2.200 kg	

