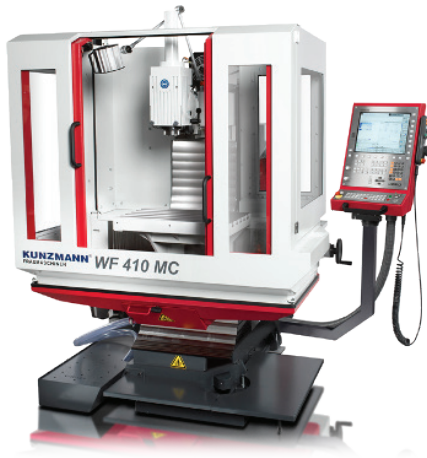


Kunzmann WF 410 MC



KUNZMANN[®]
FRÄSMASCHINEN

An interesting concept for a milling machine that permits total manual operation via the mechanical hand wheels (assisted by a digital readout) and a CNC contouring control.

Major characteristics are:

- Stable multi-ripped cast iron construction with horizontal-/vertical spindle and manual quill
- Hardened and ground flat guideways in all axes for highest rigidity
- Backlash-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
- Mechanical hand wheels in all axes
- Coolant fluid tank free-standing, capacity 66 liters
- Splash-guard cabin with wide door openings
- Simple-to-use contouring control Heidenhain TNC 620 with processing cycles and assisted by a 3-axis digital readout

Control:

HEIDENHAIN TNC 620 CONTOURING CONTROL

Compact versatile contouring control with 3 controlled axes and the possibility of another 4th axis, for example to integrate a CNC dividing unit.

Workshop-oriented programmability with Heidenhain conversational programming or on request: with DIN/ISO code.

- cycles: boring, reaming, pockets, slots, contours
- 3-D-graphics incl. simulation
- Automatic machining of boring holes under an angle (option) - Touch probe cycles for 3-D-touch probe system
- USB- and fast-ethernet-interface

WF 410 MC *_ Technical Data*

TECHNICAL DATA		WF 410 MC	STANDARD EQUIPMENT:
Working range	longitudinal cross vertical	X-axis Y-axis Z-axis	410 mm 350 mm 450 mm
Main spindle drive	A.C. motor		7,0 kW
Spindle speed range	horizontal and vertical spindle infinitely variable 1 mechanical gear stage		1 – 5000 rpm
Feed drives			AC single drives
Feed rate	infinitely variable		0 – 2000 mm/min
Rapid traverse	X- and Y-axis Z-axis		5000 mm/min 4000 mm/min
Swivel range Vertical milling head			+/- 90°
Extending quill, vertical			stroke 70 mm
Tool taper			SK 40 DIN 69871 / 2080 / 7388
Linear measuring systems	direct, distance-coded		resolution 0,001 mm
Machine accuracy			0,005 mm
Operating voltage			400 Volt, 50 Hz
Power consumption			approx. 18 kVA
Weight			approx. 1.800 kg

OPTIONS:
▶ Angular table: WF 410 MC: 650 x 375 mm WF 610 MC: 800 x 425 mm
▶ Universal table 650 x 395 mm (rotating angle digital indicated)
▶ Arbor holder
▶ Electronic hand wheel HR 510
▶ Touch probe systems
▶ Oriented spindle stop
▶ Minimum-quantity lubrication system
▶ Dividing units – 4th axis