

KUNZMANN[®]
FRÄSMASCHINEN

Product Range

Universal Milling Machines

Machining Centers



ABOUT KUNZMANN



Since 1907, KUNZMANN ranks among the world's leading manufacturers of universal milling machines and machining centers. In 2015, KUNZMANN became part of the Eisler Corporate Group – owner of WEILER Werkzeugmaschinen GmbH. Today, KUNZMANN and WEILER are your expert team for milling and lathing.

KUNZMANN machines stand for perfect precision, high performance, easy handling, and long-life operation.

KUNZMANN machines are used in a wide range of applications, such as tool making, machine engineering, R&D, and professional training.

EDUCATION4.0 is a unique KUNZMANN / WEILER concept that adds digital and virtual training contents to your machines.

In addition to our machines, KUNZMANN offers a wide range of customer services. This includes programming trainings, a fast and convenient after-sales support, sparepart delivery, and free service and application hotlines.

WF 410 MA / M

WF 610 MA / M



Working range

X axis	mm	410
Y axis	mm	350
Z axis	mm	450

Main drive	kW at 100% of duty cycle	8.5
	kW at 25% of duty cycle	16.2

Spindle speed	rpm	4,500
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Tool taper		SK 40
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Feed X/Y/Z	m/min	5 / 5 / 4
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3-Axis active digital readout		HEIDENHAIN
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M: Positioning control		HEIDENHAIN TNC 128
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Weight	kg	≥1,900
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Working range

X axis	mm	610
Y axis	mm	400
Z axis	mm	450

Main drive	kW at 100% of duty cycle	8.5
	kW at 25% of duty cycle	16.2

Spindle speed	rpm	4,500
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Tool taper		SK 40
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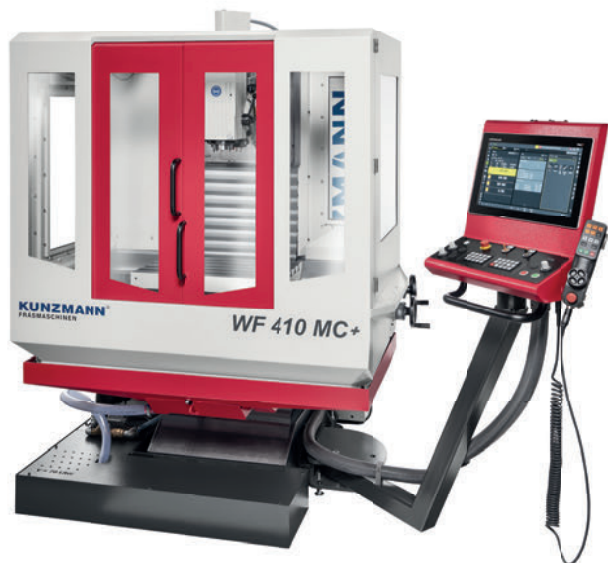
Feed X/Y/Z	m/min	5 / 5 / 4
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3-Axis active digital readout		HEIDENHAIN
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M: Positioning control		HEIDENHAIN TNC 128
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Weight	kg	≥2,000
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WF 410 MC+



WF 610 MC+



Working range

X axis	mm	410
Y axis	mm	350
Z axis	mm	450

Guideway system Linear guideways

Main drive kW at 100% of duty cycle 5,5 / 8
kW at 25% of duty cycle 10,5 / 12

Milling head / motor spindle rpm 5.000 / 12.000

Tool taper SK 40 / HSK 63-A*

Feed X / Y / Z m/min 10

Contouring control SIEMENS ONE
HEIDENHAIN TNC7 basic

Weight kg ≥ 2,350

Working range

X axis	mm	610
Y axis	mm	400
Z axis	mm	450

Guideway system Linear guideways

Main drive kW at 100% of duty cycle 5,5 / 8
kW at 25% of duty cycle 10,5 / 12

Milling head / motor spindle rpm 5.000 / 12.000

Tool taper SK 40 / HSK 63-A*

Feed X / Y / Z m/min 10

Contouring control SIEMENS ONE
HEIDENHAIN TNC7 basic

Weight kg ≥ 2,400

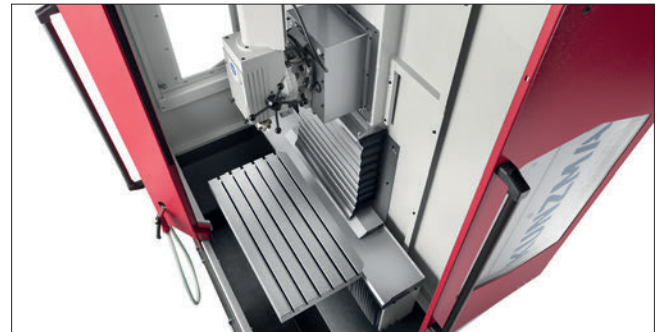
*only for milling head

*only for milling head

Universal tool milling machines

CNC-operated

WF 610 CNC



Working range

X axis	mm	610
Y axis	mm	400
Z axis	mm	450

Main drive

(for motor spindle with up to 12,000 rpm)	kW at 100% of duty cycle	9
	kW at 25% of duty cycle	14

Spindle speed	rpm	5,000 / 12,000
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Tool taper		SK 40 / HSK 63-A*
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Feed X / Y / Z	m/min	30 / 30 / 15
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Contouring control		HEIDENHAIN TNC7 basic HEIDENHAIN TNC7 SIEMENS ONE
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Weight	kg	≥2,550
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Options

- ▶ 20-pocket tool changer
- ▶ Motor spindle: 12,000 rpm
- ▶ Slat-band chip conveyor
- ▶ Internal cooling through spindle – 25 bar
- ▶ Internal / external air cooling
- ▶ Suction unit
- ▶ Touch probe systems
- ▶ Linear encoder
- ▶ CNC dividing heads – 4th axis
- ▶ Universal tilting-swiveling table
- ▶ Automatic sliding door of the cabin

*only for milling head

EDUCATION4.0

THE WHOLE WORLD OF DIGITAL LEARNING

WF 410 / 610 MC+ EDUCATION4.0

EDUCATION4.0

Interaktive Ausbildung auf einem neuen Level



Digital training machines

for up-to-date training in the context of Industry 4.0



Individual learning

Virtual contents for classrooms and "to go", based on data of the digital machine twin



EDUCATION4.0 is a **didactic training concept** especially designed for instruction and training in the field of metal cutting.

Do you have questions concerning public funding of machines and training contents? Please contact us – we are always happy to help.



What's behind EDUCATION4.0?

Digital interactive learning contents:

- ▶ Milling machine / lathe basics
- ▶ Professional operation of milling machines / lathes
- ▶ Training material for industrial mechanics
- ▶ Training material for mechatronics engineers
- ▶ Hybrid Learning Package - Interaction between real machine and virtual twin
- ▶ Gamification

AUTOMATION

Our new automation solution combines machining technology and collaborative robotics by the KUNZMANN milling machine with a collaborative robot (Cobot). Human and cobot share both tasks and work areas. A 2D camera enables the compensation of robot movements through position scanning, which makes the relocation of the cobot between different machines possible.



Universal tool milling machines

3 to 5 axes

WF 650 MS



Working range

X axis	mm	650
Y axis	mm	500
Z axis	mm	450

Main drive	kW at 100% of duty cycle	23
	kW at 25% of duty cycle	44

Spindle speed	rpm	12,000 / 18,000
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Tool taper		SK 40 / HSK 63-A
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Feed X / Y / Z	m/min	25 / 25 / 20
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Tool changer	pockets	38 / 60
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Contouring control		HEIDENHAIN TNC 640
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Weight	kg	≥5,500
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WF 650 5AX



Working range

X axis	mm	650
Y axis	mm	500
Z axis	mm	450

A axis	degree	-95 to +120
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Main drive	kW at 100% of duty cycle	23
	kW at 25% of duty cycle	44

Spindle speed	rpm	12,000 / 18,000
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Tool taper		SK 40 / HSK 63-A
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Feed X / Y / Z	m/min	25 / 25 / 20
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Tool changer	pockets	38 / 60
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Contouring control		HEIDENHAIN TNC 640
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Weight	kg	≥5,500
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BA 1100 / BA 1100 H

BA 1300



Machining center with optional paper band filter unit

Working range

X axis	mm	1100
Y axis	mm	750
Z axis	mm	650 / 900

Main drive

(for belt-driven spindle 10,000 rpm max.)	kW at 100% of duty cycle	12
	kW at 25% of duty cycle	23

Spindle speed	rpm	8,000 / 10,000 / 14,000 / 18,000
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Tool taper		SK 40 / HSK 63-A
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Feed X / Y / Z	m/min	30 / 30 / 45
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Tool changer	pockets	38 / 60
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Contouring control		HEIDENHAIN TNC7
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Weight	kg	≥8,900
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Working range

X axis	mm	1300
Y axis	mm	750
Z axis	mm	900

Main drive

(for belt-driven spindle 10,000 rpm max.)	kW at 100% of duty cycle	13,5
	kW at 25% of duty cycle	25,5

Spindle speed	rpm	8,000 / 10,000 / 14,000 / 18,000
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Tool taper		SK 40 / HSK 63-A
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Feed X / Y / Z	m/min	30 / 30 / 45
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Tool changer	pockets	38 / 60
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Contouring control		HEIDENHAIN TNC7
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Weight	kg	≥9,500
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Universal milling and drilling machines

Manually operated

WF 410 MA/M



XYZ 410 x 350 x 450 mm
Vertical / horizontal spindle
4,500 rpm
3-Axis active digital readout
M: Positioning control TNC 128

Manually and CNC-operated

WF 410 MC+



XYZ 410 X 350 X 450 mm
Milling head 5,000 rpm
Motor spindle 12,000 rpm
TNC7 basic / SIEMENS ONE

Universal tool milling machines

CNC

WF 610 CNC



XYZ 610 x 400 x 450 mm
Milling head 5,000 rpm
Motor spindle 12,000 rpm
TNC7 / TNC7 basic /
SIEMENS ONE

WF 650 MS



XYZ 650 x 500 x 450 mm
MS 12,000 / 18,000 rpm
TNC 640

WF 610 MA/M



XYZ 610 x 400 x 450 mm
Vertical / horizontal spindle
4,500 rpm
3-Axis active digital readout
M: Positioning control TNC 128

WF 610 MC+



XYZ 610 X 400 X 450 mm
Milling head 5,000 rpm
Motor spindle 12,000 rpm
TNC7 basic / SIEMENS ONE

WF 610 CNC *with automation*



XYZ 610 x 400 x 450 mm
Milling head 5,000 rpm
Motor spindle 12,000 rpm
TNC7 / TNC7 basic

WF 650 5AX



XYZ 650 x 500 x 450 mm
MS 12,000 / 18,000 rpm
TNC 640

EDUCATION4.0



WF 410 M / 610 M



WF 410 MC+ / 610 MC+



Visit our
Website

KUNZMANN[®] FRÄSMASCHINEN

KUNZMANN Maschinenbau GmbH

Tullastraße 29-31, 75196 Remchingen

Phone: +49 (0) 7232 / 36 74-0

Fax: +49 (0) 7232 / 36 74-74

E-mail: info@kunzmann-fraesmaschinen.de

www.kunzmann-fraesmaschinen.de

- ▶ Manufacturer of universal milling machines and vertical machining centers
- ▶ Expert technology consulting
- ▶ Customized application technology
- ▶ Individual programming trainings
- ▶ Fast and convenient after-sales support

Our strong partner

