

Milling machines	CC-F1200	CC-F1200 hs	CC- F1210	CC-F1210 hs	CC-F1410 LF	CC-F1410 LF hs
Working range						
Longitudinal travel X-axis	260 mm	260 mm	500 mm	500 mm	500 mm	500 mm
Transverse travel Y-axis	150 mm optional 180 mm	150 mm optional 180 mm	150 mm optional 180 mm	150 mm optional 180 mm	200 mm	200 mm
Vertical travel Z-axis	280 mm	280 mm	280 mm	280 mm	280 mm	280 mm
Drill stroke	55 mm	55 mm	55 mm	55 mm	55 mm	55 mm
Distance milling table - tool spindle	min. 100 mm max. 380 mm	min. 100 mm max. 380 mm	min. 90 mm max. 370 mm	min. 90 mm max. 370 mm	min. 60 mm max. 340 mm	min. 60 mm max. 340 mm
Outreach tool spindle - column	185 mm	185 mm	185 mm	185 mm	185 mm	185 mm
Machine precision						
Machine precision	according to DIN 8615	according to DIN 8615	according to DIN 8615	according to DIN 8615	according to DIN 8615	according to DIN 8615
True running accuracy of the tool spindle	0.01 mm	0.01 mm	0.01 mm	0.01 mm	0.01 mm	0.01 mm
Positioniergenauigkeit	± 0.015 mm	± 0.015 mm	± 0.015 mm	± 0.015 mm	± 0.015 mm	± 0.015 mm
Main drive motor						
Main drive motor 230 V, 50/60 Hz	1.4 kW	2.5 kW	1.4 kW	2.5 kW	1.4 kW	2.5 kW
Single-phase inverse-speed motor speed-controlled	•	○	•	○	•	○
as direct current model with permanent, closed loop rpm control system	•	○	•	○	•	○
frequency-controlled main drive motor	○	•	○	•	○	•
due to high speed suitable for small workpieces e.g. for engraving work	○	•	○	•	○	•
Clockwise and counter clockwise rotation for thread boring	○	•	○	•	○	•
electronically infinitely variable drive	140 - 3000 rpm	100 - 7500 rpm	140 - 3000 rpm	100 - 7500 rpm	140 - 3000 rpm	100 - 7500 rpm
Spindle speed can be adjusted by means of a potentiometer over a wide range of cutting speeds	•	•	•	•	•	•
Main drive motor	with overload protection	with overload protection	with overload protection	with overload protection	with overload protection	with overload protection
constant torque throughout the entire speed range	•	•	•	•	•	•
Drive technology						
Drive electronics with multiple fault monitoring circuit	•	•	•	•	•	•
e.g. milling in steel with a shank cutter Ø 10 mm with one infeed	ca. 4 mm	ca. 4 mm	ca. 4 mm	ca. 4 mm	ca. 4 mm	ca. 4 mm

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Feed screws						
re-adjustable free of play trapezoidal thread spindle in all axes by means of adjustable bronze double nuts	•	•	•	•	•	•
Scale rings reading accuracy	0.05 mm	0.05 mm	0.05 mm	0.05 mm	0.05 mm	0.05 mm
Tool spindle						
Tool holder MT2 with tightening thread M10	•	•	•	•	•	•
with re-adjustable anti-friction bearings arranged in a large diameter drilling- and milling quill	•	•	•	•	•	•
high torque even in the lowest speed range e.g. for machining hard-to-cut materials	•	•	•	•	•	•
breiter Zahnriemen zwischen Motor und Tool spindle sorgt für einen schlupffreien Antrieb und ruhigen Lauf	•	•	•	•	•	•
Z-column and coordinate table						
made of ribbed gray cast iron	•	•	•	•	•	•
Work table	450 x 180 mm	450 x 180 mm	700 x 180 mm	700 x 180 mm	700 x 180 mm	700 x 180 mm
Number of T-slots	3	3	3	3	3	3
Width of T-slots	12 mm	12 mm	12 mm	12 mm	12 mm	12 mm
Center distance between T-slots	50 mm	50 mm	50 mm	50 mm	50 mm	50 mm
Fine feed in the Z-axis	•	•	•	•	•	•
Milling head						
Swiveling feature of milling head in both directions	90° (-90° bis +90°)	90° (-90° bis +90°)	90° (-90° bis +90°)	90° (-90° bis +90°)	90° (-90° bis +90°)	90° (-90° bis +90°)
Angle position easily read off of the large scale	•	•	•	•	•	•
Vertical positon can be preset by means of a hardened and ground conical index pin	•	•	•	•	•	•
Protective hood	•	•	•	•	•	•
formschlüssige Klemmung der Pinole auf der gesamten Mantelfläche	•	•	•	•	•	•
Quill stroke with drilling depth stop	•	•	•	•	•	•

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Stepper motors						
maintenance-free	•	•	•	•	•	•
Limit switches X-, Y- and Z-axis						
mechanical single limit switches	•	•	•	•	•	•
Verfahrensgeschwindigkeit (Eilgang) X- und Y-Achse						
nccad basic	30 - 600 mm/min	30 - 600 mm/min	30 - 600 mm/min	30 - 600 mm/min	30 - 600 mm/min	30 - 600 mm/min
nccad professional	30 - 1200 mm/min	30 - 1200 mm/min	30 - 1200 mm/min	30 - 1200 mm/min	30 - 1200 mm/min	30 - 1200 mm/min
Z-Achse						
nccad basic	30 - 400 mm/min	30 - 400 mm/min	30 - 400 mm/min	30 - 400 mm/min	30 - 400 mm/min	30 - 400 mm/min
nccad professional	30 - 800 mm/min	30 - 800 mm/min	30 - 800 mm/min	30 - 800 mm/min	30 - 800 mm/min	30 - 800 mm/min
Dimensions and weight						
Machine dimensions without packaging	W665 x D635 x H740 mm	W665 x D635 x H880 mm	W910 x D635 x H740 mm	W910 x D635 x H880 mm	W950 x D730 x H740 mm	W950 x D730 x H880 mm
Weight without packaging	106 kg	115 kg	122 kg	131 kg	139 kg	148 kg
Machine safety cabin (optional)						
Content coolant	42 Liter	42 Liter	42 Liter	42 Liter	58 Liter	58 Liter
Dimensions without packaging						
Dimensions without packaging	W1500 x D700 x H475 mm	W1500 x D700 x H475 mm	W1500 x D700 x H475 mm	W1500 x D700 x H475 mm	W1530 x D950 x H475 mm	W1530 x D950 x H475 mm
Weight without packaging	83 kg	83 kg	83 kg	83 kg	109 kg	109 kg
NC-rotary table (optional)						
Table diameter	150 mm	150 mm	150 mm	150 mm	150 mm	150 mm
Height	80 mm	80 mm	80 mm	80 mm	80 mm	80 mm
Width of T-slots	10 mm	10 mm	10 mm	10 mm	10 mm	10 mm
Number of T-slots	3	3	3	3	3	3
Spindle bore continuous	MT2	MT2	MT2	MT2	MT2	MT2
True running accuracy	0.02 mm	0.02 mm	0.02 mm	0.02 mm	0.02 mm	0.02 mm
Weight without packaging	14 kg	14 kg	14 kg	14 kg	14 kg	14 kg