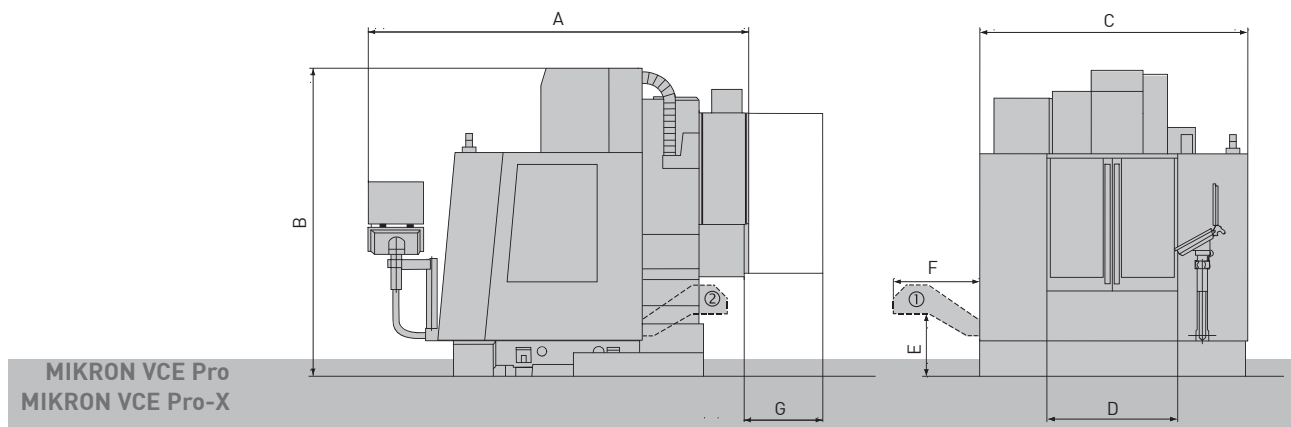


Technical data

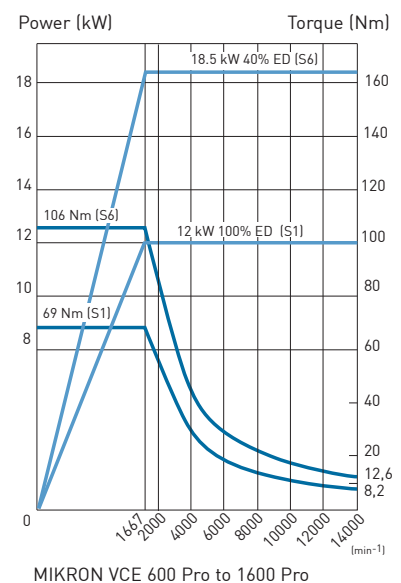
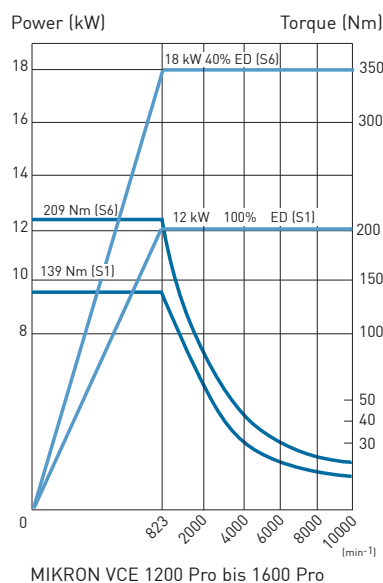
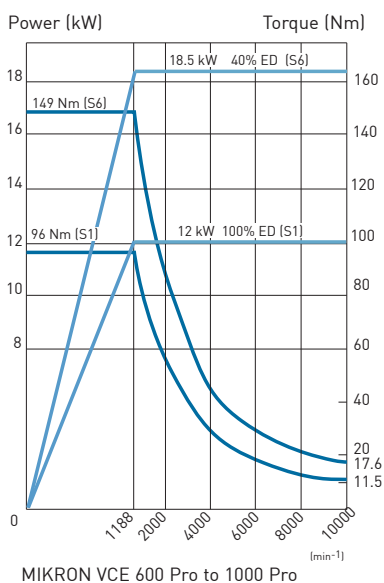
MIKRON VCE Pro / MIKRON VCE Pro-X

Dimensions	A	B	C	D	E	F	G
MIKRON VCE 600 Pro	3160 mm	2720 mm	2240 mm	940 mm	473 mm	417 mm	650 mm
MIKRON VCE 800 Pro	3160 mm	2720 mm	2240 mm	940 mm	473 mm	417 mm	650 mm
MIKRON VCE 800 Pro-X	3160 mm	2720 mm	2240 mm	940 mm	473 mm	417 mm	650 mm
MIKRON VCE 1000 Pro	3300 mm	2840 mm	2270 mm	940 mm	462 mm	417 mm	650 mm
MIKRON VCE 1000 Pro-X	3300 mm	2840 mm	2270 mm	940 mm	462 mm	417 mm	650 mm
MIKRON VCE 1200 Pro	3440 mm	2790 mm	2960 mm	1260 mm	450 mm	920 mm	650 mm
MIKRON VCE 1400 Pro	3420 mm	2790 mm	3250 mm	1400 mm	450 mm	920 mm	650 mm
MIKRON VCE 1600 Pro	4255 mm	3240 mm	3840 mm	1600 mm	500 mm	1100 mm	650 mm

- Minimum required door width for all MIKRON VCE 600-1400Pro: 2300 mm for transportation and for MIKRON VCE 1600 Pro: 2870 mm
- MIKRON VCE 600 Pro - MIKRON VCE 1000 Pro: 1 chip conveyor on the left side a;
MIKRON VCE 1200 Pro - MIKRON VCE 1600 Pro: 2 chip conveyors on the back b
- Height of the machine is raised about 80mm with the option «integrated band filter»
(for machine sizes MIKRON VCE 600 Pro to 1000 Pro and MIKRON VCE 800/1000 Pro-X)



Machine type	Unit	MIKRON VCE 600 Pro	MIKRON VCE 800 Pro	MIKRON VCE 800W Pro
Working area				
Lengthways, X	mm	600	800	860
Crossways, Y	mm	500	500	560
Vertical, Z	mm	540	540	600
Max. distance Spindle nose/working table	mm	690	690	735
Heavy duty working spindle				
Drive type		Tooth belt	Synchronous belt	Synchronous belt
Maximum rpm	rpm	10,000	10,000	10,000
Spindle performance at 40% ED/ S6	kW @ rpm	18.5 @ 1188	18.5 @ 1188	18.5 @ 1188
Spindle torque 40% ED/ S6	Nm	149	149	149
Spindle taper		ISO/BT 40	ISO/BT 40	ISO/BT 40
Optional working spindle	rpm	14,000	14,000	14,000
Feed drives				
Rapid traverse, X, Y	m/min	24	24	24
Rapid traverse, Z	m/min	20	20	20
Tool changer				
Magazine spaces	pce.	24	24	24
Tool changer types		Laterally mounted	Laterally mounted	Laterally mounted
Max. tool length	mm	305	305	305
Max. tool diameter	mm	77/115	77/115	77/115
Work tables				
Table surface area	mm	700 x 500	910 x 500	1000 x 560
Maximum table load	kg	800	1100	1350
Number of T-slots		5	5	5
T-slot spacing	mm	100	100	100
T-slot dimension	mm	18 ^{+0.006/ +0.024}	18 ^{+0.006/ +0.024}	18 ^{+0.006/ +0.024}
Coolant				
Coolant tank	l	300	300	300
Control unit				
		Heidenhain iTNC 530	Heidenhain iTNC 530	Heidenhain iTNC 530
Weight				
	kg	4800	5000	6500

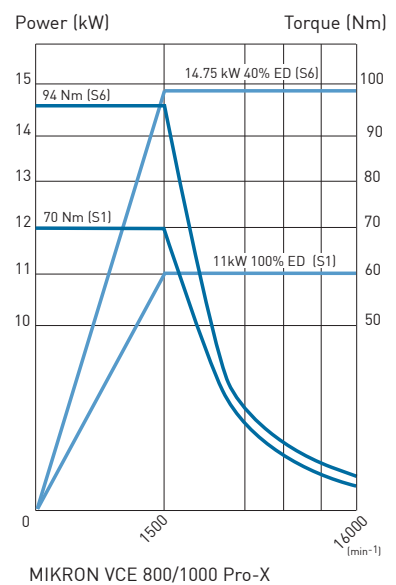
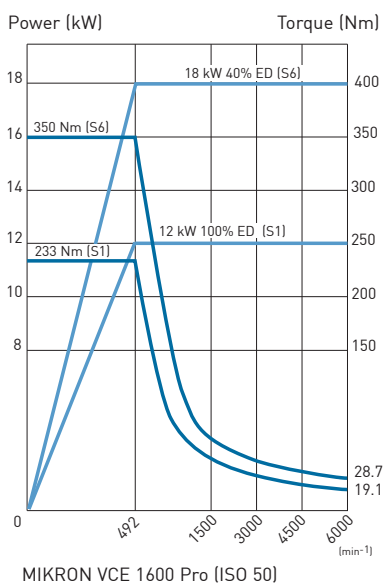


MIKRON VCE 1000 Pro	MIKRON VCE 1200 Pro	MIKRON VCE 1400 Pro	MIKRON VCE 1600 Pro
1020	1200	1400	1600
560	600	650	900
600	675	675	800
735	775	775	900
Synchronous belt	Synchronous belt	Synchronous belt	Synchronous belt
10,000	10,000	10,000	10,000
18.5 @ 1188	18 @ 823	18 @ 823	18 @ 823
149	209	209	209
ISO/BT 40	ISO/BT 40	ISO/BT 40	ISO/BT 40
14,000	14,000	14,000	14,000 (6,000, ISO 50, 350 Nm)
24	24	24	20
20	20	20	20
24	24	24	30 (24 ISO 50)
Laterally mounted	Laterally mounted	Laterally mounted	Laterally mounted
305	305	305	305 (350, ISO 50)
77/115	77/115	77/115	85/150 (125/240, ISO 50)
1000 x 560	1220 x 620	1400 x 620	1700 x 850
1350	1700	1700	2000
5	5	5	7
100	100	100	100
18 ^{+0.006/ -0.024}	18 ^{+0.006/ +0.024}	18 ^{+0.006/ +0.024}	18 ^{+0.006/ +0.024}

MIKRON VCE 800 Pro-X	MIKRON VCE 1000 Pro-X
800	1020
500	560
540	600
690	735
Inline-motor spindle	Inline-motor spindle
16,000	16,000
14.75 @ 1500	14.75 @ 1500
94	94
ISO/BT 40	ISO/BT 40
-	-
36	36
24	24
24	24
Laterally mounted	Laterally mounted
305	305
77/115	77/115
910 x 500	1000 x 560
1100	1350
5	5
100	100
18 ^{+0.006/ -0.024}	18 ^{+0.006/ +0.024}

300	380	380	540
Heidenhain iTNC 530	Heidenhain iTNC 530	Heidenhain iTNC 530	Heidenhain iTNC 530
6500	8000	8700	18600

300	300
Heidenhain iTNC 530	Heidenhain iTNC 530
5000	6500



Standard equipment for all vertical machining centers MIKRON VCE 600 Pro to VCE 1600 Pro and 800/1000 Pro-X

- Complete machine enclosure
- 2 side windows, large front doors
- Powerful lighting sources in the working area
- Telescopic cover for X, Y and Z axis
- Spiral chip conveyor with mechanical double filter
- Automatic central lubrication
- Tool changer side mounted
- Handwash gun
- Hand air gun
- Operational status lights
- Working spindle 10,000 rpm (Pro-X 16,000 rpm)
- Water-cooled spindle head
- Active cooling circuit for the main spindle (14,000/16,000)
- Lateral wash down
(Mikron VCE 600Pro - MIKRON VCE 1400Pro)
- Coolant and air nozzles on the spindle head
- Roll-out coolant tank
- Rigid tapping feature
- iTNC Heidenhain control
- Heidenhain smarT.NC
- Management of 30,000 tools
- RS 232 interface
- Options prepared
- Ethernet connection

Accessories for all vertical machining centers MIKRON VCE 600 Pro to VCE 1600 Pro and 800/1000 Pro-X

- Through-spindle coolant (TSC) 18 or 42 bar
- Band filter unit for TSC
- Regulated cooling for the main spindle (6,000/10,000)
- Preparation of 4th axis
- NC dividing head as 4th axis
- Spray ring for spindle
- Programmable coolant nozzle
- Spray mist extraction
- Infrared measuring/ set-up probe
- Table probe system type TS27
- Tool measurement with laser
- Mobile handwheel
- Integrated band filter
- Window guards
- BT tool version
- Mechanical oil/coolant separator
- Chip carrier
- Minimal oil mist
- Preparation for angle head
- Ext. chip conveyor ejection height 760 mm (Mc size 1200 - 1600)

Cutting value for CK 45 1.1191 (approx. 800 N/mm²)

	Unit	MIKRON VCE 600 to 1000 Pro	MIKRON VCE 1200 to 1600 Pro	MIKRON VCE 600 to 1600 Pro
Milling				
HM face mill / 5 inserts				
HM Tool		10,000 rpm Face mill 45°	10,000 rpm Face mill 45°	14,000 rpm Face mill 90°
Tool Diameter	mm	63	63	50
Cutting speed	m/min	160	160	250
Speed	rpm	809	809	1592
Feedrate	mm/min	809	809	1990
Depth of cut	mm	5.5	6	4
Radial depth of cut	mm	63	63	40
Chip volume	cm ³ /min	281	305	319
Spindle load	%	120	120	85
Drilling				
Insert tap / 2 plates / Ø 38 mm				
Cutting speed	m/min	10,000 rpm 220	10,000 rpm 220	14,000 rpm 220
Speed	rpm	1843	1843	1843
Feedrate	mm/min	221	221	221
Spindle load	%	80	65	90
Tapping				
HSS tap / M24				
Cutting speed	m/min	10,000 rpm 10	10,000 rpm 10	14,000 rpm 10
Speed	rpm	133	133	133
Feedrate	mm/min	398	398	398
Depth of cut	mm	36	36	36
Spindle load	%	45	40	60