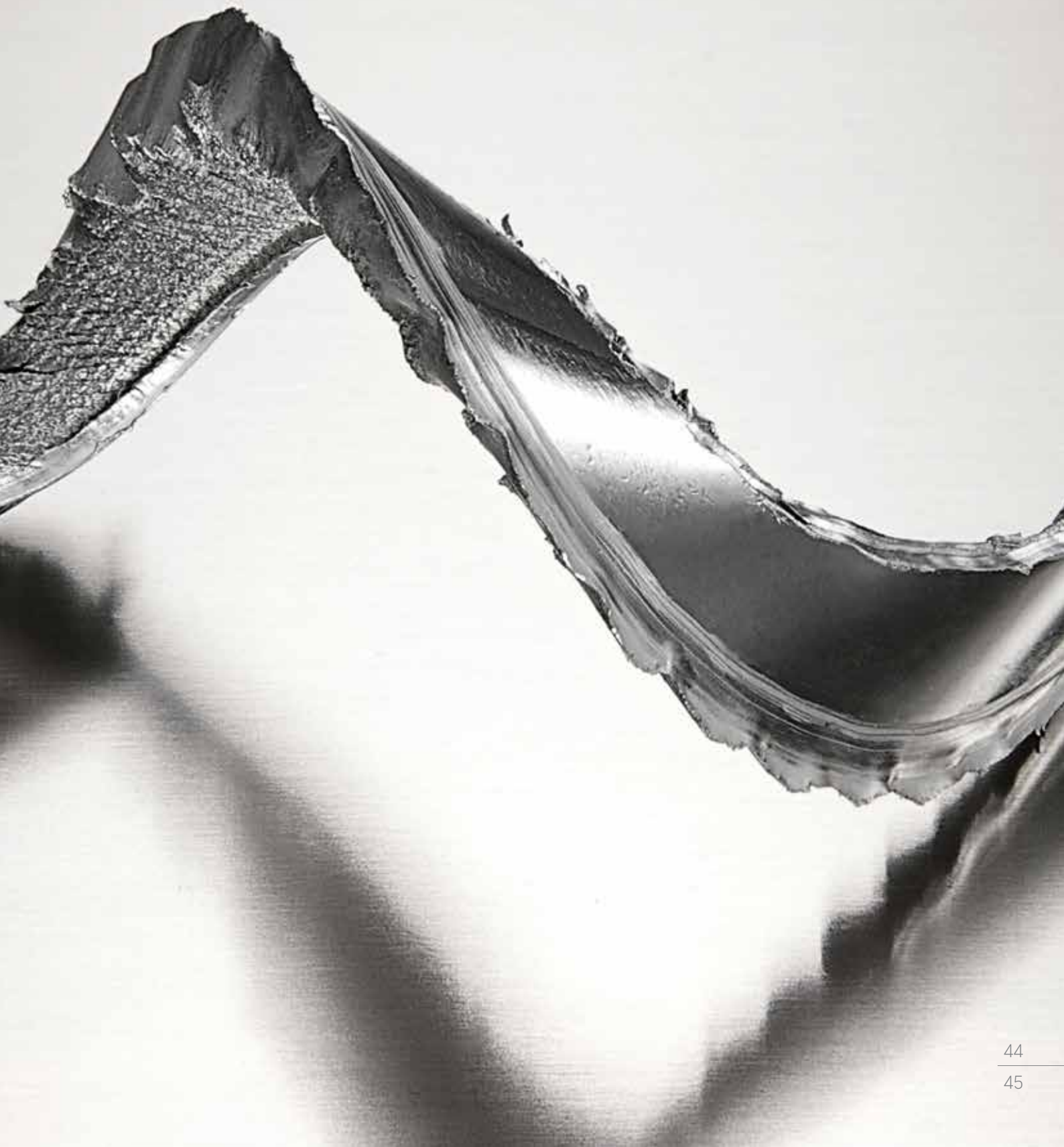


03

Technical data . C 42





03.1

Technical data . C 42

Working area	Traverse	X axis	800 mm
	Traverse	Y axis	800 mm
	Traverse	Z axis	550 mm
	Rapid linear traverse (dynamic)	X-Y-Z	45 - 45 - 40 m/min (60 - 60 - 60 m/min)
	Linear acceleration (dynamic)	X-Y-Z	6 (10) m/s ²
	Linear feed force	X-Y-Z	8500 N
	Max. vertical table clearance		700 mm
	Max. workpiece diameter		Ø 800 mm
	Max. workpiece height		560 mm
Main spindle drive	Speed	10000 rpm	SK 40 / HSK A 63 ●
	Main power/Torque	20% c.d.f.	29 kW / 200 Nm
	Speed	15000 rpm	SK 40 ○
	Main power/Torque	20% c.d.f.	20 kW / 180 Nm
	Speed	18000 rpm	HSK A 63 ○
	Main power/Torque	20% c.d.f.	20 kW / 180 Nm
	Speed	25000 rpm	HSK A 63 ○
Main power/Torque	20% c.d.f.	31 kW / 100 Nm	
Speed	42000 rpm	HSK E 40 ○	
Main power/Torque	20% c.d.f.	35 kW / 17,5 Nm	
Speed (MT variants)	18000 rpm	HSK A 63 / HSK T 63 ●	
Main power/Torque	20% c.d.f.	20 kW / 180 Nm	
Control unit	Heidenhain		iTNC 530 / TNC 640 ●
	Siemens		Sinumerik 840 D sl ●
Tool changer (pick-up)	Magazine pockets		42 items ●
	Chip-to-chip time*		approx. 4.5 s
	*(chip-to-chip times for 3-axis units in milling mode calculated in keeping with German standard VDI 2852, page 1)		
	Max. tool length		300 mm
	Max. tool diameter with empty adjacent pockets		Ø 80 mm Ø 125 mm
	Max. magazine load		168 kg
Extension of tool storage capacity	Additional magazine ZM 43		Additional 43 pockets ○
	Additional magazine ZM 87		Additional 87 pockets ○
	Additional magazine single ZM 192		Additional 192 pockets ○
	Additional magazine double ZM 462		Additional 462 pockets ○
	Max. tool diameter in the additional magazine		Ø 80 mm
	Maximum tool diameter with corresponding adjacent pocket allocation in additional magazine		Ø 125 mm
	Max. tool weight		8 kg

Table variants *

NC swivelling rotary table	Ø 800	Ø 800	Ø 440
Clamping surface	Ø 800 x 630 mm	Ø 800 x 630 mm	Ø 440 mm
Collision circle of the table plate	Ø 800 mm	Ø 800 mm	-
Swivelling range	+/- 130°	+/- 130°	+/- 130°
C-axis drive mode	Worm	Torque	Torque
Swivelling axis A speed			
One-sided drive	15 rpm	-	-
Tandem drive	-	25 rpm	55 rpm
Rotary axis C speed	25 rpm	65 rpm	65 rpm
Max. table load			
One-sided drive	850 kg	-	-
Tandem drive	-	1400 kg	450 kg
Parallel T grooves	9 / 14 H7	9 / 14 H7	5 / 14 H7
Secondary clamping plates	-	-	920 x 490 mm
Parallel T grooves	-	-	8 / 14 H7
NC swivelling rotary table	Ø 420	MT variants	Rigid Clamping table
Clamping surface	Ø 420 mm	Ø 750 mm	1050 x 805 mm
Swivelling range	+/- 130°	+/- 130°	-
C-axis drive mode	Worm	Torque	-
Swivelling axis A speed with one-sided drive	25 rpm	-	-
Tandem drive	-	25 rpm	-
Rotary axis C speed	35 rpm	800 rpm	-
Max. table load			2000 kg
One-sided drive	400 kg	-	-
Tandem drive milling	-	1400 kg	-
Tandem drive turning	-	700 kg	-
Parallel T grooves	5 / 14 H7	-	12 / 14 H7
Star-shaped T grooves		16 / 14 H7	
Secondary clamping plates	930 x 490 mm	-	-
Parallel T grooves	8 / 14 H7	-	-

*All tables available on demand

- Included in standard delivery
- Available upon request

Position measuring system, direct	Resolution	0.0001 mm	●
Positional tolerance	Tp in X-Y-Z axes according to VDI/DGQ 3441 (calculated at a constant ambient temperature of 20 °C +/-1 °C. Our products are subject to the German Export Law and require authorization since the attainable precision may be less/greater than 6 µm.)	0.008 mm	●
Chip drawer	Removable chip drawer		●
Chip conveyor	Scraper belt or hinge conveyor ejection height	1100 mm	○
	ejection height chip cart	450 l	○
External cooling lubricant supply	With chip drawer and cooling lubricant tank		●
	Cooling lubricant tank capacity	390 l	
	Cooling system without high-pressure pump with sieve basket		○
	Capacity of standard tank	100 l	
	Capacity of cooling lubricant tank	570 l	
	Cooling system without high-pressure pump with paper band filter		○
	Capacity of standard tank	100 l	
	Capacity of cooling lubricant tank	570 l	
Internal cooling lubricant supply with paper band filter	Capacity of standard tank	100 l	100 l ○
	Capacity of cooling lubricant tank	570 l	1000 l
	Pressure (manually adjustable up to)	max. 40 bar / 20 l/min	max. 80 bar / 29 l/min
	Mains connection (ICS)	-	400 V / 50 Hz
	Power consumption (ICS)	-	17 kVA
Hydraulics	Operating pressure	120 bar	●
Central lubrication	Minimum grease lubrication quantity		●
Connected loads (machine)	Mains connection	400 V / 50 Hz	
	Power consumption	45 kVA	
	Compressed air	6 bar	
Weight	(standard version without optional extras, attachments, workpieces and cooling lubricant)	Approx. 13.0 t	

- Included in standard delivery
- Available upon request

