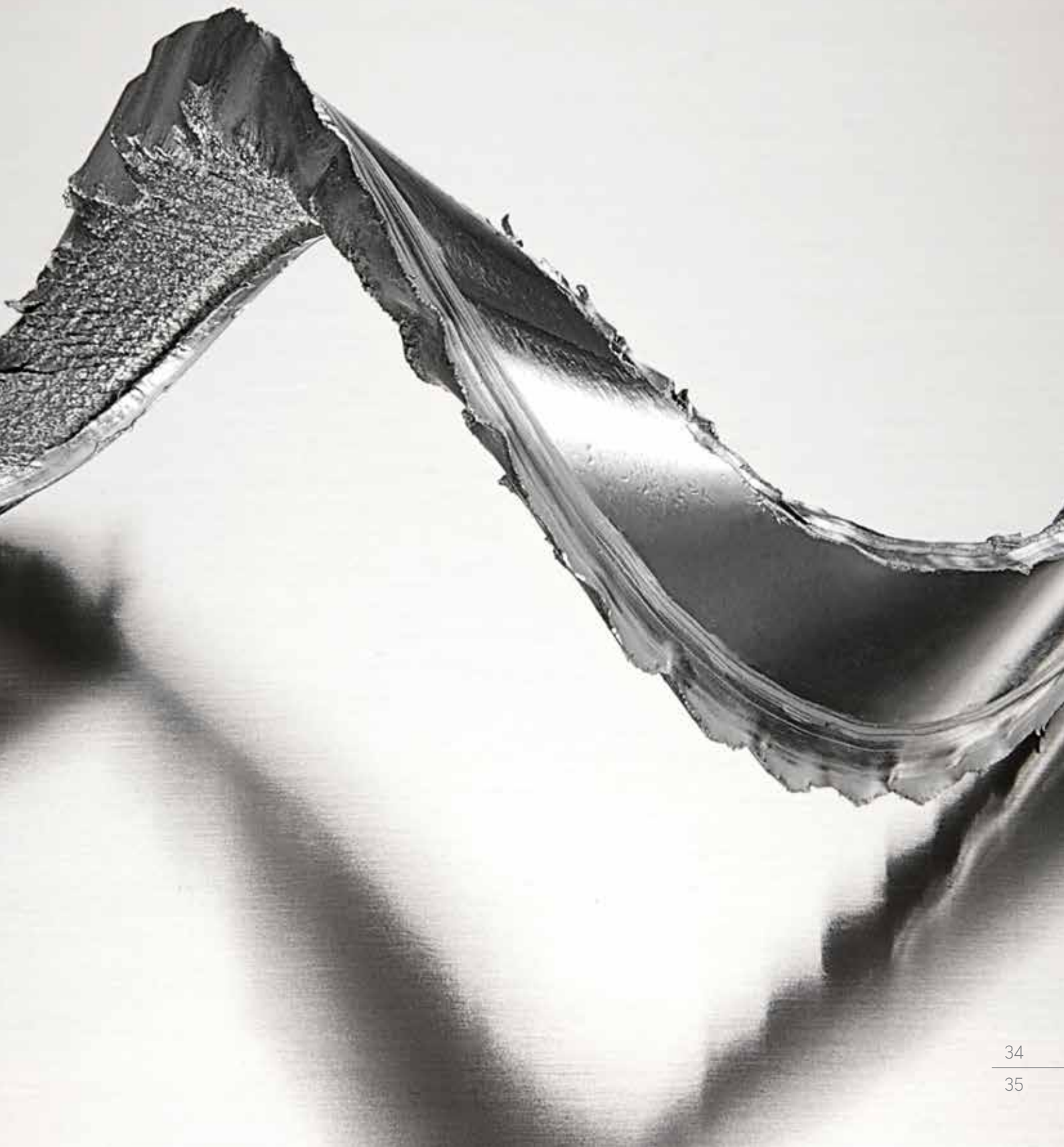


03

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
	Collision circle (A axis) in 0° position		Ø 990 mm
Main spindle drive	Speed	15000 rpm	HSK A 63 ○
	Main power/Torque	20% c.d.f.	31 kW / 194 Nm
	Speed	15000 rpm	SK 40 ○
	Main power/Torque	20% c.d.f.	42 kW / 148 Nm
	Speed	16000 rpm	HSK A 63 ●
	Main power/Torque	20% c.d.f.	42 kW / 148 Nm
	Speed	20000 rpm	HSK A 63 ○
	Main power/Torque	20% c.d.f.	42 kW / 148 Nm
	Speed	25000 rpm	HSK A 63 ○
Main power/Torque	20% c.d.f.	31 kW / 98 Nm	
Speed	42000 rpm	HSK E 40 ○	
Main power/Torque	20% c.d.f.	35 kW / 17,5 Nm	
Speed (MT variants)	15000 rpm	HSK T 63 ○	
Main power/Torque	20% c.d.f.	31 kW / 194 Nm	
Speed (MT variants)	18000 rpm	HSK T 63 ●	
Main power/Torque	20% c.d.f.	42 kW / 148 Nm	
Control unit	Heidenhain		TNC 640 / TNC7 ●
	Siemens		Sinumerik 840 D sl ○
Tool changer (pick-up)	Interface	SK 40 / HSK A/T 63 ●	HSK E 40 ○
	Magazine pockets	42 items	42 items
	Chip-to-chip time	approx. 4.5 s	approx. 4.5 s
	Max. tool length	300 mm	300 mm
	Max. tool diameter with corresponding adjacent pocket allocation	Ø 80 mm Ø 125 mm	Ø 80 mm Ø 125 mm
	Max. tool weight	8 kg	2.5 kg
	Max. magazine load	168 kg	105 kg

● Included in standard delivery

○ Available upon request

Extension of tool storage capacity			
Additional tool magazine ZM 50 (SK 40 / HSK A 63 / HSK T 63 / HSK E 40)		Additional 50 pockets	○
Additional tool magazine ZM 88 k (SK 40 / HSK A 63 / HSK T 63 / HSK E 40)		Additional 88 pockets	○
Additional tool magazine single ZM 216 (HSK A 63 / HSK T 63)		Additional up to 216 pockets	○
Additional tool magazine double ZM 528 (HSK A 63 / HSK T 63)		Additional up to 528 pockets	○
Interface	SK 40 / HSK A 63 / HSK T 63	HSK E 40	
Max. tool diameter in the additional tool magazine with corresponding adjacent pocket allocation	Ø 80 mm Ø 125 mm	Ø 80 mm Ø 125 mm	
Max. tool weight	8 kg	2.5 kg	

Table variants *			
Swivelling rotary table	Ø 440	Ø 440	Ø 800
Clamping surface	Ø 440 mm	Ø 440 mm	Ø 800 x 630 mm
Swivelling range	+/- 130°	+/- 130°	+/- 130°
C-axis drive mode	Worm	Torque	Worm
Swivelling axis A speed			
One-sided drive	25 rpm	-	15 rpm
Tandem drive	-	55 rpm	-
Rotary axis C speed	30 rpm	65 rpm	25 rpm
Max. table load			
One-sided drive	450 kg	-	850 kg
Tandem drive	-	450 kg	-
	-		
Parallel T grooves	5 / 14 H7	5 / 14 H7	9 / 14 H7
Secondary clamping plates	920 x 490 mm	920 x 490 mm	-
Parallel T grooves	7 / 14 H7	7 / 14 H7	-
Swivelling rotary table	Ø 800	MT variants	Rigid Clamping table
Clamping surface	Ø 800 x 630 mm	Ø 750 mm	1050 x 805 mm
Swivelling range	+/- 130°	+/- 130°	-
C-axis drive mode	Torque	Torque	-
Swivelling axis A speed with one-sided drive	-	-	-
Tandem drive	25 rpm	25 rpm	-
Rotary axis C speed	65 rpm	800 rpm	-
Max. table load			2000 kg
One-sided drive	-	-	-
Tandem drive milling	1400 kg	1400 kg	-
Tandem drive turning		700 kg	-
Parallel T grooves	9 / 14 H7	-	12 / 14 H7
Star-shaped T grooves		16 / 14 H7	
Secondary clamping plates	-	-	-
Parallel T grooves	-	-	-

*All machining tables available on demand

Positioning uncertainty	A 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.)	≤ 0.006 mm ●
Chip drawer	Removable chip drawer	●
Chip conveyor	Scraper belt conveyor	○
	Hinged belt conveyor	Advanced / Advanced 250 ○
	Chip conveyor ejection height	at least 940 mm
	Chip cart	450 l ○
External cooling lubricant supply	Capacity of standard tank	380 l ●
Internal cooling lubricant supply with paper band filter	Capacity of standard tank	80 l ○
	Capacity of cooling lubricant tank	1100 l at 80 bar / 570 l at 40 bar
	Pressure (adjustable up to)	max. 40 bar / 27 l/min max. 80 bar / 22 l/min
	Mains connection (ICS)	400 V / 50/60 Hz
	Power consumption (ICS)	up to 16.5 kVA
	Power consumption (ICS with temperature controller)	up to 22.5 kVA
Hydraulics	Operating pressure	120 bar ●
Central lubrication	Minimum grease lubrication quantity	●
Connected loads (machine)	Mains connection	400 V / 50/60 Hz
	Power consumption C 42	up to 53 kVA
	Power consumption C 42 MT	up to 57 kVA
	Compressed air	6 bar
Weight	(standard version without optional extras, attachments, workpieces and cooling lubricant)	Approx. 13.5 t

● Included in standard delivery

○ Available upon request

