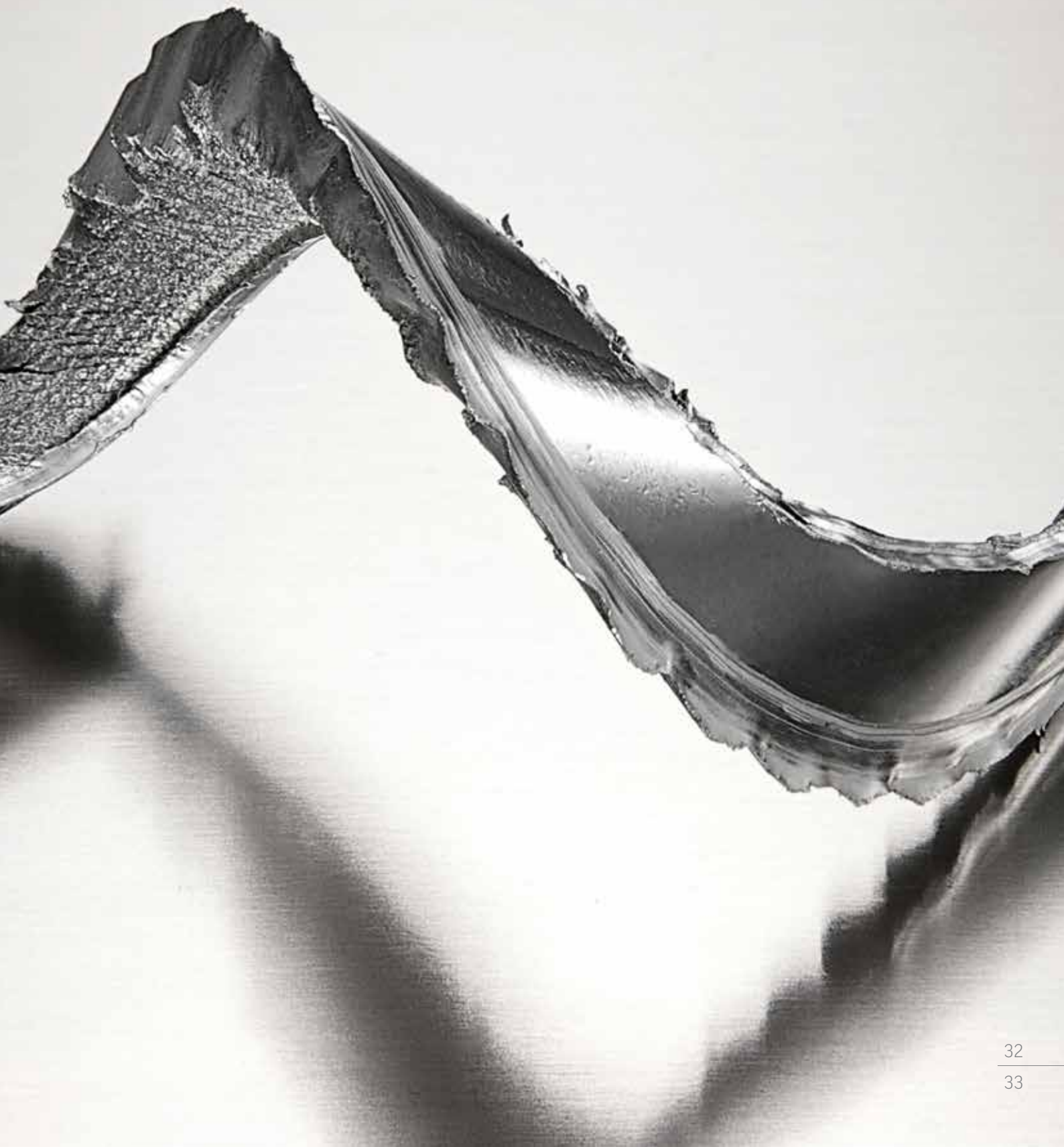


03

Technical data . C 22





# 03.1

## Technical data . C 22

<b>Working area</b>	Traverse	X axis	450 mm	
	Traverse	Y axis	600 mm	
	Traverse	Z axis	330 mm	
	Rapid linear traverse (dynamic)	X-Y-Z	30 (50) m/min.	
	Linear acceleration (dynamic)	X-Y-Z	8 (15) m/s <sup>2</sup>	
	Linear feed force	X-Y-Z	4500 N	
	Max. vertical table clearance		470 mm	
	Max. workpiece diameter		Ø 450 mm	
	Max. workpiece height		370 mm	
	Collision circle (A axis) in 0° position		Ø 610 mm	
<b>Main spindle drive</b>	Speed	15000 rpm	SK 40 ○	
	Main power/Torque	20% c.d.f.	31 kW / 98 Nm	
	Speed	18000 rpm	HSK A 63 ●	
	Main power/Torque	20% c.d.f.	31 kW / 98 Nm	
	Speed	25000 rpm	HSK A 63 ○	
	Main power/Torque	20% c.d.f.	37 kW / 35 Nm	
	Speed	30000 rpm	HSK A 50 ○	
	Main power/Torque	20% c.d.f.	37 kW / 32 Nm	
	Speed	42000 rpm	HSK E 40 ○	
	Main power/Torque	20% c.d.f.	35 kW / 17.5 Nm	
<b>Control unit</b>	Heidenhain		TNC 640 ●	
	Siemens		Sinumerik 840 D sl ○	
<b>Tool changer (pick-up)</b>	Interface	SK 40 / ○ HSK A 63 ●	HSK A 50 ○	HSK E 40 ○
	Magazine pockets	55	65	65
	Chip-to-chip time*	approx. 4.5 s	approx. 4.5 s	approx. 4.5 s
	Max. tool length	250 mm	250 mm	250 mm
	Max. tool diameter with corresponding adjacent pocket allocation	Ø 80 mm Ø 125 mm	Ø 65 mm Ø 125 mm	Ø 65 mm Ø 125 mm
	Max. magazine load	220 kg	195 kg	163 kg
	Max. tool weight	8 kg	6 kg	2.5 kg

<b>Extension of tool storage capacity</b>				
Additional tool magazine ZM 50 (SK 40 / HSK A 63 / HSK A 50 / HSK E 40)		Additional 50 pockets ○		
Additional tool magazine ZM 88 k (SK 40 / HSK A 63 / HSK A 50 / HSK E 40)		Additional 88 pockets ○		
Additional tool magazine single ZM 216 (HSK A 63)		Additional 216 pockets ○		
Additional tool magazine double ZM 528 (HSK A 63)		Additional 528 pockets ○		
Interface	SK 40 / HSK A 63	HSK A 50	HSK E 40	
Max. tool length	250 mm	250 mm	250 mm	
Max. tool diameter with corresponding adjacent pocket allocation	Ø 80 mm Ø 125 mm	Ø 65 mm Ø 125 mm	Ø 65 mm Ø 125 mm	
Max. tool weight	8 kg	6 kg	2.5 kg	
<b>Table variants*</b>				
Swivelling rotary table		Ø 320	Ø 320	
Clamping surface		Ø 320 mm	Ø 320 mm	
Swivelling range		+/- 135°	+/- 135°	
C-axis drive mode		torque	worm	
Swivelling axis A speed				
One-sided drive		25 rpm	25 rpm	
Tandem drive		55 rpm	-	
Rotary axis C speed		80 rpm	40 rpm	
Max. table load		150 kg	300 kg	
T grooves star-shaped		4 units / 14 H7	4 units / 14 H7	
Clamping surface		-	Ø 450 x 360 mm	
System table (can be extended with table plate)		Ø 320 mm	Ø 320 mm / Ø 450 x 360 mm	
Zero-point system / pallet clamping system				
Installation clamping device		-	SK 50	
Installation clamping device		-	HSK 100	
Rigid clamping table			●	
Clamping surface			600 x 630 mm	
Max. table load			750 kg	
T grooves parallel			10 units / 14 H7	

● Included in standard delivery  
○ Available upon request

\*All machining tables available on demand

<b>Positional uncertainty</b>	P 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	●
<b>Chip slide</b>	Space-saving mounting on the left or right Capacity	210 l	●
<b>Chip conveyor</b>	Scraper belt		○
	Chip conveyor, left or right (short version) Capacity	280 l	
	Chip conveyor to the rear (long version) Capacity	280 l	
	Chip conveyor ejection height	at least 940 mm	
	Chip cart	450 l	
<b>Internal cooling lubricant supply with Paper band filter</b>	Capacity of standard tank	100 l	100 l ○
	Capacity of cooling lubricant tank	570 l	750 l
	Pressure (manually adjustable up to)	max. 40 bar / 27 l/min	max. 80 bar / 11 l/min
	Mains connection (ICS)	-	400 V / 50 Hz
	Power consumption (ICS)	-	up to 20 kVA
<b>Hydraulics</b>	Operating pressure	120 bar	●
<b>Central lubrication</b>	Minimum grease lubrication quantity		●
<b>Connected loads (machine)</b>	Mains connection	400 V / 50 Hz	
	Power consumption	up to 55 kVA	
	Compressed air	6 bar	
<b>Weight</b>	(standard version without optional extras, workpieces and cooling lubricant)	Approx. 8.7 t	

● Included in standard delivery

○ Available upon request

