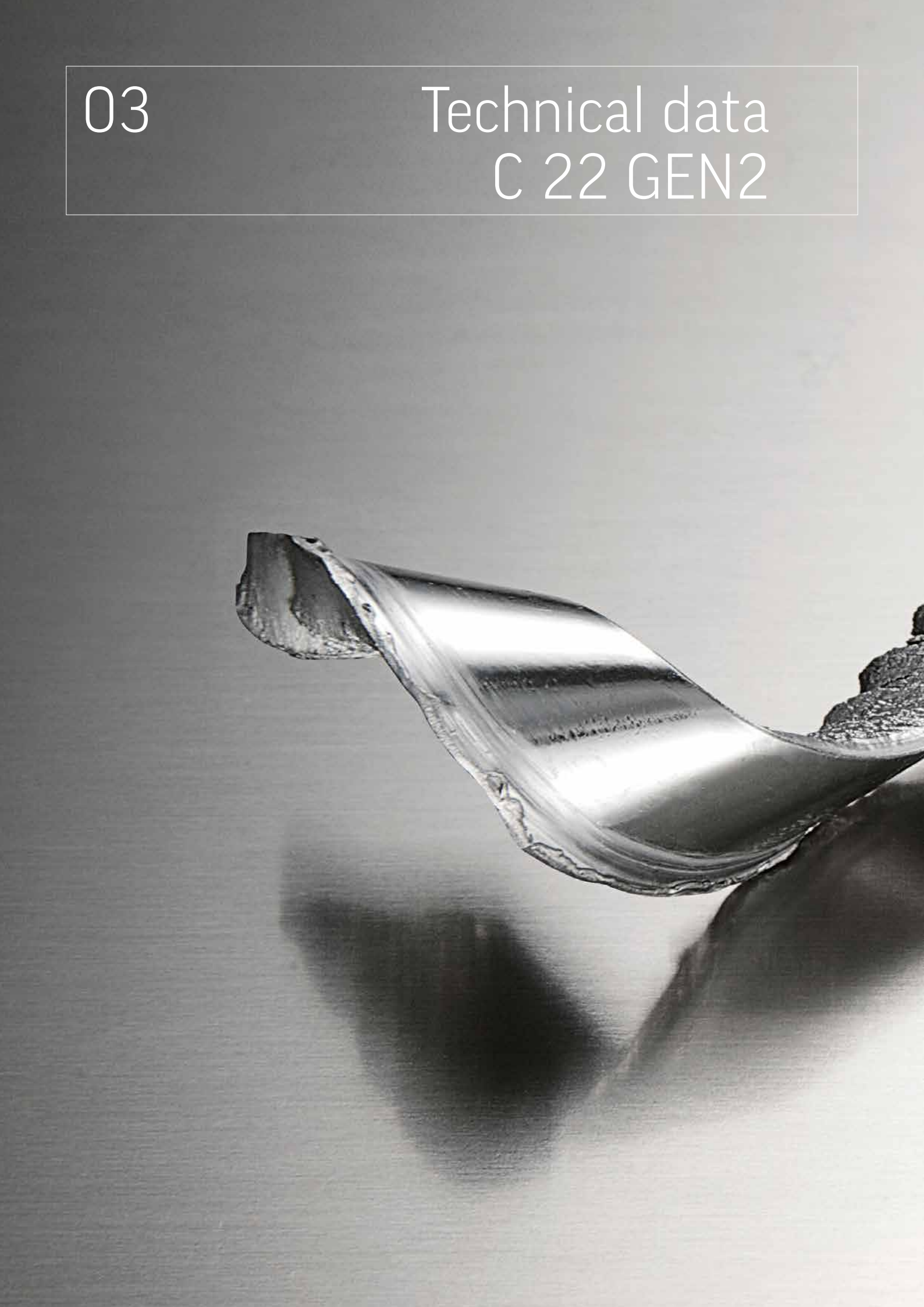
03 Technical data C 22 GEN2



03.1 Technical data C 22 GEN2

Working area

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/s²
Linear feed force	X-Y-Z	4500 N
Max. vertical table clearance	5-axis: 515 mm	MT: 500 mm
Max. workpiece diameter		Ø 450 mm
Max. workpiece height	5-axis: 415 mm	MT: 400 mm
Collision circle (A-axis) in 0° position		Ø 610 mm

Main spindle drive

Speed Main power/Torque	15000 rpm 20% c.d.f.	SK 40 ○ 31 kW / 98 Nm
Speed Main power/Torque	16000 rpm 20% c.d.f.	HSK A 63 ● 31 kW / 98 Nm
Speed Main power/Torque	20000 rpm 20% c.d.f.	HSK A 63 ○ 38 kW / 94 Nm
Speed (MT variants) Main power/Torque	20000 rpm 20% c.d.f.	HSK T 63 ○ 38 kW / 94 Nm
Speed Main power/Torque	25000 rpm 20% c.d.f.	HSK A 63 ○ 37 kW / 35 Nm
Speed Main power/Torque	30000 rpm 20% c.d.f.	HSK A 50 ○ 37 kW / 35 Nm
Speed Main power/Torque	42000 rpm 20% c.d.f.	HSK E 40 ○ 35 kW / 17.5 Nm

Control unit

Heidenhain	TNC7 ●
Siemens	SINUMERIK ONE ○

Tool changer (pick-up)

Interface	SK 40 / HSK A 63 / HSK T 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 70 mm Ø 125 mm	Ø 70 mm Ø 125 mm
Max. tool weight	8 kg	6 kg	2.5 kg
Max. magazine load	220 kg	195 kg	163 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 A 50 / HSK E 40)	Additional 50 pockets ○
Additional tool magazine ZM 88 k (SK 40 / HSK A 63 / HSK T 63 / HSK A 50 / HSK E 40)	Additional 88 pockets ○
Additional tool magazine single ZM 216 (HSK A 63 / HSK T 63 / HSK A 50)	Additional 216 pockets ○
Additional tool magazine double ZM 528 (HSK A 63 / HSK T 63 / HSK A 50)	Additional 528 pockets ○

Interface	SK 40 / HSK A 63 / HSK T 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 70 mm Ø 125 mm	Ø 70 mm Ø 125 mm
Max. tool weight	8 kg	6 kg	2.5 kg

*Table variants**

Swivelling rotary table	Ø 320 ○	Ø 320 ○	system table plate 14 (MT variant) ●
Clamping surface	Ø 320 mm	Ø 320 mm	Ø 320 mm
Swivelling range	+/- 135°	+/- 135°	+/- 135°
C-axis drive mode	worm	torque	torque
Swivelling axis A speed One-sided drive Tandem drive	 25 rpm -	 25 rpm 55 rpm	 - 55 rpm
Rotary axis C speed Milling Turning	 40 rpm	 80 rpm	 80 rpm HDH: 1.500 rpm Siemens: 1.450 rpm
Max. table load Milling Turning	 300 kg -	 150 kg -	 300 kg 150 kg
T grooves star-shaped	4 units / 14 H7	4 units / 14 H7	
Clamping surface	Ø 450 x 360 mm	-	-
Automatic system / Zero-point system / pallet clamping system	○	○	○

System table option	system table plate worm	system table plate torque	system table plate 140 MT
System table (can be extended with table plate)	Ø 320 mm / Ø 450 x 360 mm	Ø 320 mm	Ø 320 mm
Installation clamping device	SK 50 / HSK 100	-	SK 50/ HSK 100
Automatic system / Zero-point system / pallet clamping system	○	○	○
Rigid clamping table	●		
Clamping surface	600 x 630 mm		
Max. table load	750 kg		
T grooves parallel	10 units / 14 H7		

*All machining tables available on demand

Positioning uncertainty	A in X-Y-Z axes according to ISO 230-2 (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 slide	Space-saving mounting on the left or right	●
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 with chip chute	210 l ●
	Capacity of standard tank with chip conveyor	280 l ○
Internal cooling lubricant supply with Paper band filter	Capacity of standard tank chip conveyor left/right	40 l ○
	Capacity of standard tank chip conveyor back	160 l ○
	Capacity of cooling lubricant tank	800 l
	Pressure (manually adjustable up to)	max. 40 bar / 27 l/min max. 80 bar / 12 l/min
	Mains connection (ICS)	400 V / 50 Hz | 460 V / 60 Hz
	Power consumption (ICS)	up to 12,5 kVA
	Power consumption (ICS with temperature controller)	up to 6,0 kVA
Hydraulics	Operating pressure	120 bar ●
Central lubrication	Minimum grease lubrication quantity	●
Connected loads (machine)	Mains connection	400 V / 50 Hz | 460 V / 60 Hz
	Power consumption	up to 68 kVA
	Compressed air	6 bar
Weight	(standard version without optional extras, workpieces and cooling lubricant)	Approx. 9 t

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