

03

Technical data . C 650 GEN2



03.1

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Working area	Traverse	X-axis	1050 mm
	Traverse	Y-axis	900 mm
	Traverse	Z-axis	600 mm
	Rapid linear traverses	X-Y-Z	35 - 35 - 35 m/min
	Linear acceleration	X-Y-Z	6 m/s ²
	Linear feed force	X-Y-Z	7000 N
	Max. vertical table clearance		775 mm
	Max. workpiece diameter		Ø 900 mm
	Max. workpiece height		600 mm
	Collision circle (A-axis) in 0° position		Ø 1100 mm
	Main spindle drive	Speed	15000 rpm
Main power/Torque		20% c.d.f.	20 kW / 173 Nm
Speed		16000 rpm	HSK A 63 ●
Main power/Torque		20% c.d.f.	20 kW / 173 Nm
Speed		20000 rpm	HSK A 63 ○
Main power/Torque		20% c.d.f.	42 kW / 148 Nm
Control unit	Heidenhain		TNC7 ●
Tool changer (pick-up)	Interface		SK 40 / HSK A 63 ●
	Magazine pockets		42 items
	Chip-to-chip time		approx. 6 s
	Maximum tool length		350 mm
	Max. tool diameter with corresponding adjacent pocket allocation		Ø 80 mm Ø 125 mm
	Max. tool weight		8 kg
	Max. magazine load		168 kg
	Extension of tool storage capacity	Additional tool magazine ZM 50 (SK 40 / HSK A 63)	
Additional tool magazine ZM 88 k (SK 40 / HSK A 63)			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 ○
Max. tool diameter with corresponding adjacent pocket allocation in additional tool magazine			Ø 80 mm Ø 125 mm
Max. tool weight			8 kg

- Included in standard delivery
- Available upon request

Chip drawer	Removable chip drawer	●	
Chip conveyor	Scraper belt conveyor	○	
	Hinged belt conveyor	Advanced / Advanced 250 ○	
	Ejection height	at least 940 mm	
	Chip cart	450 l	
External cooling lubricant supply	Capacity of standard tank	315 l ●	
Internal cooling lubricant supply with paper band filter	Capacity of standard tank	110 l ○	
	Capacity of cooling lubricant tank	860 l with 80 bar / 860 l with 40 bar	
	Pressure (adjustable up to)	max. 40 bar / 27 l/min max. 80 bar / 22 l/min ○	
	Power consumption (ICS)	up to 12.5 kVA	
	Power consumption (temperature controller)	up to 6,0 kVA	
Table variants		Swivelling rotary table	Rigid clamping table
	Clamping surface	Ø 900 x 750 mm	1250 x 982 mm
	Swivelling range	+ / -115°	-
	C-axis drive mode	Worm	-
	Swivelling axis A speed: Tandem drive	25 rpm	-
	Speed rotary axis C:	25 rpm	-
	Max. table load	1500 kg	3000 kg
	T grooves parallel	7 / 18 H7	9 / 18 H7
Positional 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 ●	
Hydraulics	Operating pressure	120 bar ●	
Central lubrication	Minimum grease lubrication quantity	●	
Connected loads (machine)	Mains connection	400 V / 50/60 Hz	
	Power consumption	up to 49 kVA	
	Compressed air	6 bar	
Weight	(standard version without optional extras, attachments, work-pieces and cooling lubricant)	approx. 15,4 t	