

03

Technical data . C 650



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	SK 40 ○ / HSK A 63 ●
Main power/Torque		20% c.d.f.	42 kW / 148 Nm	
Speed		18000 rpm	HSK A 63 ○	
Main power/Torque		20% c.d.f.	42 kW / 148 Nm	
Control unit	Heidenhain		TNC 640 ●	
Tool changer (pick-up)	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. magazine load		168 kg	
Extension of tool storage capacity	Additional tool magazine ZM 50		additional 50 pockets ○	
	Additional tool magazine ZM 88 k		additional 88 pockets ○	
	Max. tool diameter with corresponding adjacent pocket allocation in additional tool magazine		Ø 80 mm Ø 125 mm	
	Max. tool weight		8 kg	
Chip drawer	Removable chip drawer			●
Chip conveyor	Scraper belt or hinged belt conveyor			○
	Ejection height		at least 940 mm	
	Chip cart		450 l	○
Internal cooling lubricant supply with paper band filter	Capacity of standard tank		375 l	●
	Capacity of cooling lubricant tank	1100 l with 80 bar / 570 l with 40 bar		
	Pressure (manually adjustable up to) (over Variovalve)		max. 40 bar / 27 l/min max. 80 bar / 22 l/min	○

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	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 ●
Hydraulics	Operating pressure	120 bar ●
Central lubrication	Minimum grease lubrication quantity	●
Connected loads (machine)	Mains connection	400 V / 50/60 Hz
	Power consumption	max. 50 kVA
	Compressed air	6 bar
Weight	(standard version without optional extras, attachments, work- pieces and cooling lubricant)	approx. 15,0 t

- Included in standard delivery
- Available upon request