

# Technical data

Working area	Traverse	X axis	850 mm	
	Traverse	Y axis	700 mm	
	Traverse	Z axis	500 mm	
	Linear rapid traverse	X-Y-Z	35 m/min	■
	Linear acceleration	X-Y-Z	6 m/s <sup>2</sup>	
	Linear feed force	X-Y-Z	7000 N	
Main spindle drive	Speed	15,000 rpm.	SK 40 / HSK A 63	■
	Main power / torque	20 c.d.f.	20 kW/180 Nm	
	Speed	18,000 rpm.	HSK A 63	●
	Main power / torque	20 c.d.f.	20 kW/180 Nm	
Control unit	Heidenhain		iTNC 530	■
Tool changer (pick-up)	Magazine pockets		38	■
	Chip-to-chip time*		approx. 6 s	
	*(chip-to-chip times were determined in accordance with VDI 2852, sheet 1 in a 3-axis design)			
	Maximum tool length		300 mm	
	Maximum tool diameter		Ø 80 mm	
	Maximum tool diameter with corresponding adjacent pocket allocation		Ø 125 mm	
	Maximum magazine load at 38 units		152 kg	
Extension of tool storage	Additional magazine		87	●
	Maximum tool diameter in additional magazine		Ø 80 mm	
	Maximum tool diameter with corresponding adjacent pocket allocation in additional magazine		Ø 125 mm	
	Maximum tool weight		8 kg	
Connection-values (machine)	Mains connection		400 V / 50 Hz	
	Power consumption		43 kVA	
	Compressed air		6 bar	
Weight	(Standard version)		approx. 9.5 t	

Hermle AG reserves the right to carry out modifications without prior notification, which may lead to deviating technical data.

Table variants	NC-controlled swivelling rotary table	Ø 650	●
	Clamping surface flattened to	650 x 540 mm	
	Collision circle of the table plate	Ø 650 mm	
	Swivel range	+91° / - 139°	
	Swivel range swivelling axis A	one side	
	Speed - swivelling axis A	25 rpm.	
	Type of drive rotary axis C	worm	
	Speed rotary axis C	35 rpm.	
	Maximum table load	600 kg	
	T-grooves parallel	7 / 14H7	
	Rotary feedthrough	Sixfold	

	Rigid clamping table		●
	Clamping surface	1,070 x 700 mm	
	Maximum table load	2,000 kg	
	T-grooves parallel	10 / 14H7	

Position measuring system direct	Resolution	0.0001 mm	■
----------------------------------	------------	-----------	---

Position tolerance	Tp in X-Y-Z axis keeping with German standard VDI/DGQ 3441 <small>(determined at 20° Celsius +/- 1° Celsius constant ambient temperature. Our products are subject to German export laws and exports have to be approved as the achievable accuracy may be smaller / equal than 6 µm.)</small>	0.008 mm	■
--------------------	---	----------	---

Coolant system	Amount of coolant	350 l	■
----------------	-------------------	-------	---

Through the spindle coolant supply with paper tape filter	Amount of coolant	570 l	●
	Pressure (infinitely variable manual)	max. 40 bar / 27 l/min	

Chip pan	Removable chip pan		●
----------	--------------------	--	---

Chip conveyor	Scraper belt conveyor		●
	Ejection height of chip conveyor	1,100 mm	
	Chip cart	450 l	●

Hydraulic system	Operating pressure	120 bar	■
------------------	--------------------	---------	---

Central lubrication system	Minimum quantity lubrication		■
----------------------------	------------------------------	--	---

#### Options

Electrical heat compensation	●
Electrical hand-held control module	●
Touch probe including preparation	●
Preparation for touch probe	●
Tool breakage monitoring / measuring system	●
Coolant nozzle	●
Air blast through the spindle centre	●
BDE signal	●
Emulsion mist extraction	●
Air purge for linear scales	●