

Technical Data / SPECHT® DUO

Machine type	SPECHT 450 DUO		SPECHT 500 DUO		SPECHT 500 DUO+		SPECHT 600 DUO		
	Ball screw	Linear motor	Ball screw	Linear motor	Ball screw	Linear motor	Ball screw		
Linear axes									
Spindle distance	mm	540		720		720		810	
Working range X	mm	510		630		630		800	
Working range Y	mm	600		630		730		730	
Working range Z	mm	660 (A-axis) 700 (B-axis)		860 (A-axis) 900 (B-axis)		860 (A-axis) 900 (B-axis)		860 (A-axis) 900 (B-axis)	
Axis speed max.	m/min	70		70	120	70	120	70	120
Axis acceleration X / Y / Z	m/s ²	6		6	10	6	10	6	10 / 10 / 9
Axis acceleration X / Y / Z with speed package	m/s ²	9		-	-	-	-	-	-
Rotary axes									
A-axis interference Ø max.	mm	Ø 800		Ø 900		Ø 1100		Ø 1100	
Workpiece / fixture width max.	mm	1230		1520		1520		1780	
A-axis load max.	kg	2 x 450		2 x 600		-		2 x 600	
A-axis speed max.	rpm	50		80		50		50	
B-axis interference Ø max.	mm	2 x Ø 535		2 x Ø 710		-		2 x Ø 805	
B-axis workpiece height max.	mm	750		850		-		950	
B-axis surface Ø	mm	2 x Ø 450		2 x Ø 500		-		2 x Ø 500	
B-axis load max.	kg	2 x 350		2 x 600		-		2 x 600	
B-axis speed max.	rpm	80		80		80		80	
A/B-axis interference Ø max.	mm	800 (A-axis) / 2 x 535 (B-axis)		900 (A-axis) / 2 x 700 (B-axis)		1100 (A-axis) / 2 x 710 (B-axis)		1100 (A-axis) / 2 x 805 (B-axis)	
A/B-axis workpiece height max.	mm	490		540		640		640	
B-axis surface Ø / pallet	mm	2 x Ø 450		2 x Ø 450		400 x 400		2 x Ø 450	
A/B-axis load max.	kg	2 x 200		2 x 300		2 x 290		2 x 300	
B-axis speed max.	rpm	80		80		80		80	
Main spindle									
Motor spindle (HSK-A63)	rpm	18 000 / 16 000 / 10 000		18 000 / 16 000 / 10 000		18 000 / 16 000 / 10 000		18 000 / 16 000 / 10 000	
Spindle power (40% ED)	kW	42 / 52 / 39		42 / 52 / 39		42 / 52 / 39		42 / 52 / 39	
Spindle torque (40% ED)	Nm	67 / 123 / 180		67 / 123 / 180		67 / 123 / 180		67 / 123 / 180	
Front bearing diameter	mm	Ø 80		Ø 80		Ø 80		Ø 80	
Motor spindle (HSK-A100)	rpm	-		8000 / (10 000)		8000 / (10 000)		8000 / (10 000)	
Spindle power (40% ED)	kW	-		52		52		52	
Spindle torque (40% ED)	Nm	-		250		250		250	
Front bearing diameter	mm	-		Ø 100		Ø 100		Ø 100	
Motor spindle (HSK-A100)	rpm	-		8000		8000		8000	
Spindle power (40% ED)	kW	-		38		38		38	
Spindle torque (40% ED)	Nm	-		378		378		378	
Front bearing diameter	mm	-		Ø 100		Ø 100		Ø 100	
Motor spindle – draw-bar spindle									
(HSK-A100)	1/min	-		6000		6000		6000	
Spindle power (40% ED)	kW	-		52		52		52	
Spindle torque (40% ED)	Nm	-		250		250		250	
Front bearing diameter	mm	-		Ø 100		Ø 100		Ø 100	

Subject to change without notice

Machine type		SPECHT 450 DUO	SPECHT 500 DUO	SPECHT 500 DUO+	SPECHT 600 DUO
Tool magazines					
Tool magazine L-chain + 2 Discs		L-chain 96 positions + 2 discs per 8 positions	L-chain 96 positions + 2 discs per 8 positions	L-chain 96 positions + 2 discs per 8 positions	L-chain 96 positions + 2 discs per 8 positions
Storage capacity (HSK-A63)		112	112	112	112
Tool Ø max. – full	mm	Ø 75	Ø 75	Ø 75	Ø 75
Tool Ø max. – adjacent empty positions	mm	Ø 140	Ø 230	Ø 230	Ø 230
Tool length max. (Workpiece loading)	mm	550 (Front loading) 335 (Top loading)	550	550	550
Tool weight max.	kg	12	12	12	12
Chip-to-chip time Ball screw Limo	s	2.5	3.3 2.8	3.3 2.8	3.6 3.0
Tool magazine L-chain + 2 Discs		-	L-chain 60 positions + 2 discs per 6 positions	L-chain 60 positions + 2 discs per 6 positions	L-chain 60 positions + 2 discs per 6 positions
Storage capacity (HSK-A100)		-	72	72	72
Tool Ø max. – full	mm	-	Ø 115	Ø 115	Ø 115
Tool Ø max. – adjacent empty positions	mm	-	Ø 230	Ø 230	Ø 230 / 250
Tool length max.	mm	-	550	550	550
Tool weight max.	kg	-	18	18	18
Chip-to-chip time Ball screw Limo	s	-	3.5 3.0	3.5 3.0	3.8 3.2
Machine dimensions					
Machine width	mm	3100	3560 (A-axis) 3410 (B-axis)	3560 (A-axis) 3410 (B-axis)	3900 (A-axis) 3750 (B-axis)
Machine length	mm	4150	4450 / 4950	5250 / 5650	4450 / 4950
Machine height	mm	3470	3650	3800	3700
Machine weight	kg	16 000 – 18 000	20 000 – 23 000	23 000 – 26 000	21 000 – 24 000
Electrical system					
Connection load	KVA	40	40	40	40
Machine type					
SPECHT 700 TWIN					
Axis drive	X/Y/Z	2 linear drives / 2 ball screw drives / 2 ball screw drives			
Spindle distance	mm	380 – 580			
Working range X	mm	870 – 670			
Working range Y	mm	730			
Working range Z (A-axis)	mm	860			
Working range Z (B-axis)	mm	900			
Axis speed max. X/Y/Z	m/min	70 / 70 / 60			
Axis acceleration X/YZ	m/s ²	6			
Rapid traverse A/B/BA-axis	rpm	50 / 80 / 80			
Axis load max.	kg	A: 1200 / B: 1200 (2000) / AB: 600 (800)			
A-axis	mm	ø 900 / length max.: 1520			
B-axis	mm	ø 1400 / height max.: 850			
A/B-axis	mm	ø 1100 / height max.: 640			
Spindle		HSK 100			
Spindle torque (40% ED)	Nm	50 – 126 / 200 – 289			
Speed	rpm	8000 – 10 000			
Tool magazine		L-chain 60 positions + 2 discs per 8 positions			
Tool length max.	mm	550			
Chip-to-chip time	s	3.8			

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