

MCT.

MILLING, DRILLING AND TURNING – MCT SERIES MULTITASKING MACHINING CENTRES.

The five MCT machining centres are designed specifically for multitasking applications. Milling, drilling, turning – all on one machining centre with high power density thanks to CNC-controlled tilting spindle, strong turning tool holder and fast-turning torque table. Integrated horizontal and vertical turning replaces use of multiple additional lathes.



MCT – THE ULTRA-FLEXIBLE SERIES.

MAXIMUM EFFICIENCY THROUGH FLEXIBILITY.

BW's own rotary tables with powerful torque motors for turning and generously dimensioned holding brakes for milling and drilling permit demanding steel and cast-iron machining operations with maximum cutting performance. All BW options of other series are also available for the MCT series. The MCT machining centres can also be operated together with other BW machining centres in one system, because the same table clamping is used.



Robustly dimensioned tilting spindle with quadruple turn-tool holder clamping. Automatic changing of all turning tools from the standard magazine.



Automatic exchange of turn-tool holder in turn-tool adapter.

MCT – THE ULTRA-FLEXIBLE SERIES.

TECHNICAL DATA.

MCT (Metric System)	Unit	800	900		1000	1200	1250
							
Working range X Y Z (standard)	mm	1,250 1,000 1,250	1,600 1,400 1,800		2,200 1,400 1,800	2,500 1,800 2,100	2,800 2,200 2,100
Working range X Y Z (optional)	mm	1,600 1,200 1,600	1,800 1,500 1,800		2,200 1,500 1,800		2,800 2,200 2,500
Workpiece swing diameter Ø x h	mm	1,500x1,300	1,600x1,750		2,300x1,900	2,500x2,100	2,800x2,500
Pallet size (standard)	mm	800x800	800x1,000		1,000x1,250	1,000x1,250	1,000x1,250
Pallet size (optional)	mm	630x800, 800x1,000	800x800		1,000x1,600	1,400x1,600	1,400x1,600
Pallet load milling turning	kg	2,500 2,000	3,500 2,500		5,000 4,000	7,000 4,000	7,000 4,000
Feed force X Y Z	kN	18 18 18	20 20 20		30 20 20	30 30 30	30 30 30
Rapid traverse X Y Z (standard axis travel)	m/min	65 65 65	65 65 65		50 60 60	50 50 50	50 50 50
Pa ¹ X Y Z	mm	0,005	0,005		0,007	0,007	0,007
B-axis	degrees	360,000x0.001	360,000x0.001		360,000x0.001	360,000x0.001	360,000x0.001
Table speed milling turning	rpm	20 500	20 500		10 300	10 300	10 300
Tilting torque	Nm	30,000	30,000		45,000	45,000	45,000
Tangential torque	Nm	14,000	20,000		40,000	40,000	40,000
Table power 100 % duty rating	kW	47	50		55	55	55
Table torque 100 % duty rating	Nm	2,500	2,900		4,200	4,200	4,200
Spindle power 100 % duty rating	kW	41	41		41	41	41
Spindle torque 100 % duty rating	Nm	1,400	1,400		1,400	1,400	1,400
Spindle speed	rpm	20 – 8,000	20 – 8,000		20 – 8,000	20 – 8,000	20 – 8,000
Gear steps		2	2		2	2	2
Bearing diameter main spindle	mm	110	110		110	110	110
Tool adapter (standard)		HSK-A 100	HSK-A 100		HSK-A 100	HSK-A 100	HSK-A 100
Tool adapter (optional)		ISO 50	ISO 50		ISO 50	ISO 50	ISO 50
Number of tool pockets		128 – 608	128 – 608		128 – 608	128 – 608	128 – 608
Tool diameter	mm	125 / 350 (420 / 900) ²	125 / 350 (420 / 900) ²		125 / 350 (420 / 900) ²	125 / 350 (420 / 900) ²	125 / 350 (420 / 900) ²
Tool length (optional)	mm	600 (900 / 1,200)	600 (900 / 1,200)		600 (900 / 1,200)	600 (900 / 1,200)	600 (900 / 1,200)
Tool weight (optional)	kg	60 (75)	60 (75)		60 (75)	60 (75)	60 (75)
Machine control, Siemens Sinumerik		SIN 840D sl	SIN 840D sl		SIN 840D sl	SIN 840D sl	SIN 840D sl
Floor space required, LxWxH, approximately	mm	9,300x6,700x4,300	10,400x7,600x5,200		11,000x9,300x5,200	11,700x9,900x6,000	11,700x9,900x6,000
Weight approximately	kg	36,000	42,000		50,000	57,000	60,000
Compatible machining units		HVP, HVC, A	HVP, HVC, A		HVP, HVC, A	HVP, HVC, A	HVP, HVC, A

¹ according to VDI/DGQ 3441

² bar tool

Technical specifications are subject to change without prior notice.

MCT – THE ULTRA-FLEXIBLE SERIES.

TECHNICAL DATA.

MCT (Imperial System)	Unit	800	900		1000	1200	1250
							
Working range X Y Z (standard)	in	49.21 39.37 49.21	63.00 55.12 70.87		86.61 55.12 70.87	98.43 70.87 82.68	110.24 86.61 82.68
Working range X Y Z (optional)	in	63.00 47.24 63.00	70.87 59.06 70.87		86.61 59.06 70.87		110.24 86.61 98.43
Workpiece swing diameter Ø x h	in	59.06x51.18	63.00x68.90		90.55x74.80	98.43x82.68	110.24x98.43
Pallet size (standard)	in	31.50x31.50	31.50x39.37		39.37x49.21	39.37x49.21	39.37x49.21
Pallet size (optional)	in	31.50x39.37	31.50x31.50		39.37x63.00	55.12x63.00	55.12x63.00
Pallet load milling turning	lbs	5,512 4,409	7,716 5,512		11,023 8,818	15,432 8,818	15,432 8,818
Feed force X Y Z	lb	4,047 4,047 4,047	4,496 4,496 4,496		6,744 4,496 4,496	6,744 6,744 6,744	6,744 6,744 6,744
Rapid traverse X Y Z (standard axis travel)	in/min	2,559 2,559 2,599	2,559 2,559 2,599		1,969 2,362 2,362	1,969 1,969 1,969	1,969 1,969 1,969
Pa ¹ X Y Z	in	0.000197	0.000197		0.000276	0.000276	0.000276
B-axis	degrees	360,000x0.001	360,000x0.001		360,000x0.001	360,000x0.001	360,000x0.001
Table speed milling turning	rpm	20 500	20 500		10 300	10 300	10 300
Tilting torque	lb/in	265,522	265,522		398,284	398,284	398,284
Tangential torque	lb/in	123,910	177,015		354,030	354,030	354,030
Table power 100 % duty rating	HP	63	67		74	74	74
Table torque 100 % duty rating	lb/in	22,127	25,667		37,173	37,173	37,173
Spindle power 100 % duty rating	HP	55	55		55	55	55
Spindle torque 100 % duty rating	lb/in	12,391	12,391		12,391	12,391	12,391
Spindle speed	rpm	20 – 8,000	20 – 8,000		20 – 8,000	20 – 8,000	20 – 8,000
Gear steps		2	2		2	2	2
Bearing diameter main spindle	in	4.3307	4.3307		4.3307	4.3307	4.3307
Tool adapter (standard)		HSK-A 100	HSK-A 100		HSK-A 100	HSK-A 100	HSK-A 100
Tool adapter (optional)		ISO 50	ISO 50		ISO 50	ISO 50	ISO 50
Number of tool pockets		128 – 608	128 – 608		128 – 608	128 – 608	128 – 608
Tool diameter	in	4.92 13.78 (16.54/35.43) ²	4.92 13.78 (16.54/35.43) ²		4.92 13.78 (16.54/35.43) ²	4.92 13.78 (16.54/35.43) ²	4.92 13.78 (16.54/35.43) ²
Tool length (optional)	in	23.62 (35.43/47.24)	23.62 (35.43/47.24)		23.62 (35.43/47.24)	23.62 (35.43/47.24)	23.62 (35.43/47.24)
Tool weight (optional)	lbs	132.3 (165.3)	132.3 (165.3)		132.3 (165.3)	132.3 (165.3)	132.3 (165.3)
Machine control, Siemens Sinumerik		SIN 840D sl	SIN 840D sl		SIN 840D sl	SIN 840D sl	SIN 840D sl
Floor space required, LxWxH, approximately	in	366x264x169	409x299x205		433x366x205	461x390x236	461x390x236
Weight approximately	lbs	79,360	92,590		110,230	125,660	132,270
Compatible machining units		HVP, HVC, A	HVP, HVC, A		HVP, HVC, A	HVP, HVC, A	HVP, HVC, A

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