

MCT.

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

The six MCT machining centres are designed specifically for multitasking applications. Milling, drilling, turning – all on one machining centre with high power density thanks to NC-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.

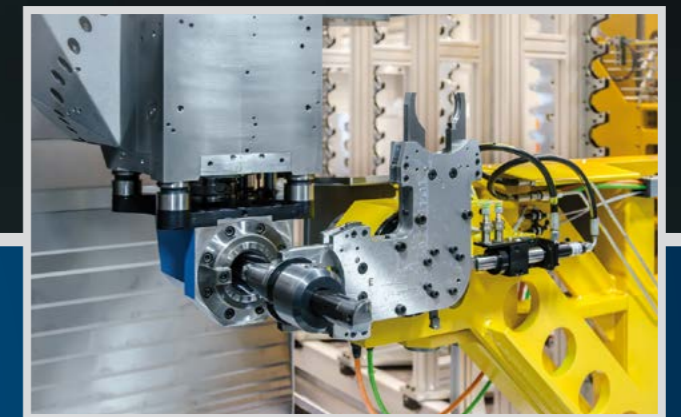


MAXIMUM EFFICIENCY THROUGH FLEXIBILITY.

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 pallets are used.



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



Holder is available on call from the standard magazine – Automatic loading of turning tool holder – Quadruple clamping – Loading of all turning tools in turning tool holder.

MCT – THE ULTRA-FLEXIBLE SERIES.

TECHNICAL DATA.

MCT (Metric System)	Unit	750	800	900	1000	1200	1250
							
Working range X Y Z (standard)	mm	1,100 900 1,250	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	1,100 1,100 1,400	1,250 1,200 1,400	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	1,400x1,300	1,500x1,300	1,600x1,750	2,300x1,900	2,500x2,100	2,800x2,500
Pallet size (standard)	mm	630x630	800x800	800x1,000	1,000x1,250	1,000x1,250	1,000x1,250
Pallet size (optional)	mm	630x800, 800x800	800x1,000	800x800	1,000x1,600	1,400x1,600	1,400x1,600
Pallet load milling turning	kg	1,500 1,500	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	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	65 65 65	50 60 60	50 50 50	50 50 50
Pa ¹ X Y Z	mm	0.005	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	360,000x0.001
Table speed milling turning	rpm	25 650	20 500	20 500	10 300	10 300	10 300
Tilting torque	Nm	30,000	30,000	30,000	45,000	45,000	45,000
Tangential torque	Nm	14,000	14,000	20,000	40,000	40,000	40,000
Table power 100% duty rating	kW	47	47	50	55	55	55
Table torque 100% duty rating	Nm	2,500	2,500	2,900	4,200	4,200	4,200
Spindle power 100% duty rating	kW	41	41	41	41	41	41
Spindle torque 100% duty rating	Nm	1,400	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	20 – 8,000
Gear steps		2	2	2	2	2	2
Bearing diameter main spindle	mm	110	110	110	110	110	110
Tool adapter (standard)		HSK-A 100	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	ISO 50
Number of tool pockets		128 – 608	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	125/350 (420/900) ²
Tool length (optional)	mm	600 (900)	600 (900)	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)	60 (75)
Machine control, Siemens Sinumerik		SIN 840D sl	SIN 840D sl	SIN 840D sl	SIN 840D sl	SIN 840D sl	SIN 840D sl
Floor space required, l x w x h approx.	mm	8,600 x 6,100 x 4,700	8,600 x 6,100 x 4,700	9,800 x 6,500 x 5,100	10,200 x 7,200 x 5,300	10,600 x 7,800 x 5,400	11,600 x 8,600 x 5,400
Weight approx.	kg	27,000	32,000	37,000	48,000	53,000	55,000

¹ according to VDI/DGQ 3441


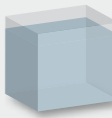
² bar tool

Technical specifications are subject to change without prior notice.



MCT – THE ULTRA-FLEXIBLE SERIES.

TECHNICAL DATA.

MCT (Imperial System)	Unit	750	800	900	1000	1200	1250	
								
Working range X Y Z (standard)	in	43.31 35.43 49.21	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	43.31 43.31 55.12	43.31 43.31 55.12		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	55.12x51.18	59.06x51.18		63.00x68.90	90.55x74.80	98.43x82.68	110.24x98.43
Pallet size (standard)	in	24.80x27.80	31.50x31.50		31.50x39.37	39.37x49.21	39.37x49.21	39.37x49.21
Pallet size (optional)	in	24.80x31.50, 31.50x31.50	31.50x39.37		31.50x31.50	39.37x63.00	55.12x63.00	55.12x63.00
Pallet load milling turning	lbs	3,307 3,307	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	4,047 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		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		0.000197	0.000276	0.000276	0.000276
B-axis	degrees	360,000x0.001	360,000x0.001		360,000x0.001	360,000x0.001	360,000x0.001	360,000x0.001
Table speed milling turning	rpm	25 650	20 500		20 500	10 300	10 300	10 300
Tilting torque	lb/in	265,522	265,522		265,522	398,284	398,284	398,284
Tangential torque	lb/in	123,910	123,910		177,015	354,030	354,030	354,030
Table power 100% duty rating	HP	63	63		67	74	74	74
Table torque 100% duty rating	lb/in	22,127	22,127		25,667	37,173	37,173	37,173
Spindle power 100% duty rating	HP	55	55		55	55	55	55
Spindle torque 100% duty rating	lb/in	12,391	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	20 – 8,000
Gear steps		2	2		2	2	2	2
Bearing diameter main spindle	in	4.3307	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	HSK-A 100
Tool adapter (optional)		ISO 50	ISO 50		ISO 50	ISO 50	ISO 50	ISO 50
Number of tool pockets		128 – 608	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	4.92 13.78 (16.54/35.43) ²
Tool length (optional)	in	23.62 (35.43)	23.62 (35.43)		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)	132.3 (165.3)
Machine control, Siemens Sinumerik		SIN 840D sl	SIN 840D sl		SIN 840D sl	SIN 840D sl	SIN 840D sl	SIN 840D sl
Floor space required, l x w x h approx.	in	339x240x185	339x240x185		386x256x201	402x284x209	417x307x213	457x339x213
Weight approx.	lbs	59,530	70,550		81,570	105,820	116,850	121,250

¹ according to VDI/DGQ 3441

² bar tool

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