

NEW



Index Table (option)

HBM-110P

STANDARDS

AUTOMATIC LUBRICATION SYSTEM
COOLANT SYSTEM
TOOL BOX WITH ADJUSTMENT TOOLS
LEVELING BLOCKS AND BOLTS

OPTIONAL

INDEX TABLE 800X800MM, 72 DIVISIONS
AIR POWER DRAW-BAR
DIGITAL READ OUT

SPECIFICATION **ALL SERIES**

ITEM	UNIT	CS-HB140	CS-HB180	CS-HB-160R	HBM-110P
CAPACITY					
Table travel (X axis)	mm	1,400 (55-3/32 inch)	1,800 (70-13/16 inch)	1,600 (63 inch)	1,800 (70-13/16 inch)
Head travel (Y axis)	mm	1,200 (47-3/16 inch)	1,400 (55-3/32 inch)	1,160 (45-6/9 inch)	1,000 (39-3/8 inch)
Table travel (Z axis)	mm	1,100 (43-1/4 inch)	1,250 (49-3/16 inch)	1,250 (49-3/16 inch)	1,250 (49-3/16 inch)
W axis (Spindle axial)	mm				400 (15-3/4 inch)

Spindle center to table top	mm	0 ~ 1,200 (0 ~ 47-3/16 inch)	0 ~ 1,400 (0 ~ 55-3/32 inch)	0~1,160 (0~45-6/9 inch)	240~1,240 (9-3/7~48-4/5 inch)
Spindle end to table center	mm	255 ~ 1,355 (10 ~ 53-1/4 inch)	255 ~ 1,505 (10 ~ 59-1/4 inch)	276~1,526 (10-6/7~60 inch)	380~1,630 (15~64-1/5 inch)

TABLE

Table size overall	mm	1,100 x 800 (43-1/4 x 31-1/2 inch)	1,500 x 800 (59 x 31-1/2 inch)	1,000x800 (39-3/8 x 31-1/2 inch)	1,500x800 (59 x 31-1/2 inch)
T slot (Wide x No. x Pitch)	mm	20 x 7 x 100 (0.78 x 7 x 3-7/8 inch)	20 x 7 x 100 (0.78 x 7 x 3-7/8 inch)	22H8x7x100 (0.87x7x3-7/8 inch)	20x7x100 (0.78x7x3-7/8 inch)
Table indexing (360 degree)	degree	-	-	1 degree / division	-
Table load capacity max.	kg	1,400 (3,090 lbs)	2,000(4,400 lbs)	2,500(5,500 lbs)	3,000(6,620 lbs)

SPINDLE HEAD

Spindle nose		ISO R297 No.50	ISO R297 No.50	ISO R297 No.50	ISO R297 No.50
Spindle diameter	mm	-	-	-	110
Spindle speed	50Hz; 12 steps	rpm	35 ~ 1,250	35 ~ 1,250	20 ~ 1,000
	60Hz; 12 steps	rpm	45 ~ 1,500 (opt. 30 ~ 1000)	45 ~ 1,500 (opt. 30 ~ 1000)	

FEED / RAPID

X, Y, Z rapid	50Hz	mm/min	2,400 (94-7/16 ipm)	2,400 (94-7/16 ipm)	2,800 (110-1/4 ipm)	2,800 (110-1/4 ipm)
	60Hz	mm/min	2,880 (113-3/8 ipm)	2,880 (113-3/8 ipm)		
W rapid		mm/min	-	-	-	1,200
X, Y, Z auto feed	50Hz	mm/min	23 ~ 730 (15/16~28-3/4 ipm)	23 ~ 730 (15/16~28-3/4 ipm)	20 ~ 950 (3-4 ~ 37-3/8 ipm)	3 ~ 950 (1/8~37-3/8 ipm)

60Hz	mm/min	28 ~ 875 (1-1/8 ~ 34-7/16 ipm)	28 ~875 (1-1/8 ~ 34-7/16 ipm)		
W feed	mm/min	-	-	-	3 ~ 400
Change of feeds		-	-	Infinitely variable	Variable speed
Z axis boring feeds (12 steps)	mm/rev	0.028 ~ 0.875	0.028 ~ 0.875	-	-

MOTORS

Spindle motor	kW	AC 7.5 (10HP)-4P	AC 7.5 (10HP)-4P	AC 7.5 (10HP)-4P	AC15
Feed motor	kW	AC 1.5 (2HP)-4P	AC 1.5 (2HP)-4P	AC 2.9 (3.8HP) servo motor	-
Feed motor for X, Y, Z axis (Servo)	kW	-	-	AC2.9	AC2.9
Feed motor for W axis (Servo)	kW	-	-	-	1.3
Lube pump for headstock	kW	AC0.18-4P	AC0.18-4P	AC0.2-4P	AC0.2-4P
Lube pump for slideways	W	AC3.5	AC3.5	AC3.5-2P	AC3.5-2P
Coolant pump	kW	AC 0.12(1/6HP)-2P	AC 0.12(1/6HP)-2P	AC 0.12(1/6HP)-2P	AC 0.12(1/6HP)-2P
Hydraulic pump for axis clamp	kW	AC 1.5(2HP)-4P	AC 1.5(2HP)-4P	AC 1.5(2HP)-4P	AC 1.5(2HP)-4P

MACHINE SIZE

Machine height	mm	2,800(110 inch)	3,070(120-13/16 inch)	3,070(120-13/16 inch)	3,175(125 inch)
Floor space (Longitudinal x cross)	mm	3,606 x 3,600 (142 x 141-3/4 inch)	4,420 x 3,750 (174 x 147-5/8 inch)	3,874 x 4,373 (152-1/2x172 inch)	3,874 x 4,373 (152-1/2x172 inch)
	kg	8,400 (18,520 lbs)	11,500 (25,350 lbs)	11,200 (24,690 lbs)	12,500 (27,560 lbs)