#### **Product Brochure**



All Geared & Hydraulic Universal / Horizontal Milling Machines



MILLING MACHINES
Powerful & Economical

www.bhambar.in



QR Code

#### ISO 9001 CERTIFIED



Robust Designed Headstock with Rigid Overarm, Arbor & Supports



Vertical Attachment with Hanger & D.R.O.



**Efficient Cutting Capacity** 

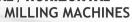


Distress Free Rapid - Feed Mechanism in XYZ Axis





# **ALL GEARED UNIVERSAL / HORIZONTAL**

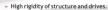












- Convenient Design.
- » Separate Drive for the spindle and the table movements.
- » Single lever control of feeds & rapid traverse.
- » Wide ranges of spindle speeds & feeds with high upper limits.
- » Casting is high tensile strength, graded & superior quality.
- » High rates of rapid table traverse while the spindle is running or at rest.
- » Large longitudinal & traverse movements of table.
- » Prolong Hardened Gears.
- » All Parts are Interchangeable.

	SPECIFICATION CHART FOR HYDRAULIC FEED MILLING MACHINES(in mn										
	Machine Type	HORIZONTAL MILLING MACHINE									
ı	MODEL	HM 500	HM 650								
	Table Size	1100 X 300	1300 X 300								
	T-Slots/ Width/ C.D.	3/17/65	3/17/65								
	X-Traverse (Longitudinal)	500 (Hyd.)	650 (Hyd.)								
	Y-Traverse (Cross Traverse)	200 (Manual)	240 (Manual)								
	Z-Traverse (Vertical Traverse)	300	350								
	Table Loading Capacity	200 Kgms.	350 Kgms.								
	Spindle Taper Standard	ISO 40	ISO 40								
	Spindle Speeds & Range	(45-1100 RPM's)	9 (45-1100 RPM's)								
	Arbor Diameter	25.40 mm/ As per req.	25.40 mm/ As per req.								
	Feed Range	Hydraulic Variable	Hydraulic Variable								
	Rapid	Quick	Quick								
	Milling Spindle Motor	2 HP (960 RPM's)	3 HP (960 RPM's)								
	Hydraulic Power Pack Motor	2 HP (1440 RPM's)	3 HP (1440 RPM's)								
	Coolant System, if Required	0.1 HP	0.1 HP								
	Approx. Weight (kgms)	1950	2250								



3 H.P. Power Pack / Oil Cooler is Optional (Extra)

B:蔬菜 Universal/Horizontal Milling Machine are normally used for Slitting/Side & Facing of such jobs & also used to make keyways, slots, auto-components, Agriculture Parts, Tractor & Truck Parts etc. It has rigid Overarm & cutters could be mounted in arbour or directly in spindle taper for facing. The table can be swivel 45 degrees in both sides. The Introduction Intelling machines are always have non swivel tables. The attachments like Vertical attachment, Rest Citting Attachment, Dividing Head, Machine Vice, Hobbing Attachment can also fit on Universal Milling Machine or on Horizontal Milling machine. The Horizontal Milling Machines are available in Hydraulic models. The Hydraulic Horizontal Milling Machine is used to do high production for many types of components with high rate rapid at 3800 mm/min & variable feed range. The BHAMBAR Brand has its speciality & long term experience with better results to manufacture accurate & quality milling machine apparts decades.

#### SPECIFICATION FOR ALL GEARED UNIVERSAL / HORIZONTAL MILLING MACHINES

TABLE           Working Surface         1200x300         1350x300         1450x350         1650x360         1900 x 400         2100 x 450         2300 x 500           Swivel         ± 45°         ± 45°         ± 45°         ± 45°         ± 45°         ± 30°         Fix           T-Slot Nos/Size         3/17         3/17         3/17         3/17         5/17         5/20         5/20           T-Slot Centre         60         65         80         90         80         90         95           Dist. From Spindle max/min         350-0         410-0         475-0         500-50         550-50         600 - 50         650 - 50           X-Longitudinal Travel         550         700         800         900         1100         1250         1300           Y-Cross Travel         180         220         265         325         450         500         550           Z-Vertical Travel         300         410         475         550         600         650         700           Table Loading Capacity in (kgms)         200         300         500         800         1100         1200         2500           FEEDS         No. Of Feeds         9	MODEL	M-1B	M-2B	M-3B	M-4B	M-5B	M-6B	M-7B
Swivel         ±45°         ±45°         ±45°         ±45°         ±45°         ±45°         ±45°         pure fix           T-Slot Nos/Size         3/17         3/17         3/17         3/17         5/17         5/20         5/20           T-Slot Centre         60         65         80         90         80         90         95           Dist. From Spindle max/min         350-0         410-0         475-0         500-50         550 - 50         600 - 50         650 - 50           X-Longitudinal Travel         550         700         800         900         1100         1250         1300           Y-Cross Travel         180         220         265         325         450         500         550           Z-Vertical Travel         300         410         475         550         600         650         700           Table Loading Capacity in (kgms)         200         300         500         800         1100         1200         2500           FEEDS           No. Of Feeds         9         18         18         18         18         18         18         18         18         18         18         18         18	TABLE							
T-Slot Nos/Size 3/17 3/17 3/17 3/17 5/17 5/20 5/20 T-Slot Centre 60 65 80 90 80 90 95 Dist. From Spindle max/min 350-0 410-0 475-0 500-50 550 50 600 - 50 650 - 50 X-Longitudinal Travel 550 700 800 900 1100 1250 1300 Y-Cross Travel 180 220 265 325 450 500 550 Z-Vertical Travel 300 410 475 550 600 650 700 Table Loading Capacity in (kgms) 200 300 500 800 1100 1200 2500  FEEDS  No. Of Feeds 9 18 18 18 18 18 18 18 18 18 18 18 18 18	Working Surface	1200x300	1350x300	1450x350	1650x360	1900 x 400	2100 x 450	2300 x 500
T-Slot Centre	Swivel	±45°	±45°	±45°	±45°	± 45°	± 30°	Fix
Dist. From Spindle max/min   350-0   410-0   475-0   500-50   550 - 50   600 - 50   650 - 50	T-Slot Nos/Size	3/17	3/17	3/17	3/17	5/17	5/20	5/20
X-Longitudinal Travel 550 700 800 900 1100 1250 1300 Y-Cross Travel 180 220 265 325 450 500 550 Z-Vertical Travel 300 410 475 550 600 650 700 Table Loading Capacity in (kgms) 200 300 500 800 1100 1200 2500  FEEDS  No. Of Feeds 9 18 18 18 18 18 18 18 18 18 18 18 18 18	T-Slot Centre	60	65	80	90	80	90	95
Y-Cross Travel         180         220         265         325         450         500         550           Z-Vertical Travel         300         410         475         550         600         650         700           Table Loading Capacity in (kgms)         200         300         500         800         1100         1200         2500           FEEDS           No. Of Feeds         9         18	Dist. From Spindle max/min	350-0	410-0	475-0	500-50	550 - 50	600 - 50	650 - 50
Z-Vertical Travel   300	X-Longitudinal Travel	550	700	800	900	1100	1250	1300
Table Loading Capacity in (kgms) 200 300 500 800 1100 1200 2500    FEEDS	Y-Cross Travel	180	220	265	325	450	500	550
No. Of Feeds   9	Z-Vertical Travel	300	410	475	550	600	650	700
No. Of Feeds 9 18 18 18 18 18 18 18 18 18 18 18 18 18	Table Loading Capacity in (kgms)	200	300	500	800	1100	1200	2500
Range of Longitudinal Feed/min 18-260 18-400 18-400 18 to 400 13 to 305 13 to 305 13 to 305 Range of Cross Feed / min 18-260 18-400 18-400 18 to 400 13 to 305 13 to 305 13 to 305 Range of Vertical Feed / min 6-120 3.5 to 90 3.5 to 90 2.5 to 62 2.5 to 62 4 to 90 No. Of Rapid Feeds   1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	FEEDS							
Range of Cross Feed / min 18-260 18-400 18-400 18 to 400 13 to 305 13 to 305 13 to 305 Range of Vertical Feed / min 6-120 3.5 to 90 3.5 to 90 2.5 to 62 2.5 to 62 4 to 90 No. Of Rapid Feeds 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	No. Of Feeds	9	18	18	18	18	18	18
Range of Vertical Feed / min 6-120 3.5 to 90 3.5 to 90 2.5 to 62 2.5 to 62 4 to 90  No. Of Rapid Feeds 1 2 2 2 2 2 2 2  Longitudinal Rapid Feeds / min 900 900, 1500 900, 1500 735, 1065 735, 1065 500, 735  Cross Rapid Feeds / min 900 900, 1500 900, 1500 900, 1500 735, 1065 735, 1065 500, 735  Vertical Rapid Feeds / min 310 225, 365 225, 365 225, 365 147, 210 147, 210 165, 250  SPINDLE  No. Of Spindle Speeds 9 or 12  Range of Spindle Speeds (RPM) 45-1120 45-11	Range of Longitudinal Feed/min	18-260	18-400	18-400	18 to 400	13 to 305	13 to 305	13 to 305
No. Of Rapid Feeds 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Range of Cross Feed / min	18-260	18-400	18-400	18 to 400	13 to 305	13 to 305	13 to 305
Longitudinal Rapid Feeds / min 900 900, 1500 900, 1500 900, 1500 735, 1065 735, 1065 500, 735 Cross Rapid Feeds / min 900 900, 1500 900, 1500 900, 1500 735, 1065 735, 1065 500, 735 Vertical Rapid Feeds / min 310 225, 365 225, 365 225, 365 147, 210 147, 210 165, 250 SPINDLE  No. Of Spindle Speeds 9 or 12 Range of Spindle Speeds (RPM) 45-1120	Range of Vertical Feed / min	6-120	3.5 to 90	3.5 to 90	3.5 to 90	2.5 to 62	2.5 to 62	4 to 90
Cross Rapid Feeds / min         900         900, 1500         900, 1500         900, 1500         735, 1065         735, 1065         500, 735           Vertical Rapid Feeds / min         310         225, 365         225, 365         225, 365         147, 210         147, 210         165, 250           SPINDLE           No. Of Spindle Speeds         9 or 12         45-1120	No. Of Rapid Feeds	1	2	2	2	2	2	2
Vertical Rapid Feeds / min         310         225, 365         225, 365         225, 365         147, 210         147, 210         165, 250           SPINDLE           No. Of Spindle Speeds         9 or 12	Longitudinal Rapid Feeds / min	900	900, 1500	900, 1500	900, 1500	735, 1065	735, 1065	500, 735
SPINDLE           No. Of Spindle Speeds         9 or 12         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-	Cross Rapid Feeds / min	900	900, 1500	900, 1500	900, 1500	735, 1065	735, 1065	500, 735
No. Of Spindle Speeds         9 or 12         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120         45-1120 </td <td>Vertical Rapid Feeds / min</td> <td>310</td> <td>225, 365</td> <td>225, 365</td> <td>225, 365</td> <td>147, 210</td> <td>147, 210</td> <td>165, 250</td>	Vertical Rapid Feeds / min	310	225, 365	225, 365	225, 365	147, 210	147, 210	165, 250
Range of Spindle Speeds (RPM)         45-1120         4	SPINDLE							
Spindle Taper         ISO 40         ISO 40         ISO 40         ISO 40         ISO 40         ISO 40         ISO 50         ISO 50           Arbour Diameter         25.4	No. Of Spindle Speeds	9 or 12	9 or 12	9 or 12	9 or 12	9 or 12	9 or 12	9 or 12
Arbour Diameter 25.4 25.4 25.4 25.4 25.40 40 50	Range of Spindle Speeds (RPM)	45-1120	45-1120	45-1120	45-1120	45-1120	45-1120	45-1120
	Spindle Taper	ISO 40	ISO 40	ISO 40	ISO 40	ISO 40	ISO 50	ISO 50
ELECTRICAL	Arbour Diameter	25.4	25.4	25.4	25.4	25.40	40	50
	The state of the s							
Main Motor 3H.P. 3H.P. 5H.P. 5 H.P. 960 RPM 7.5 H.P. 10 H.P. 10 H.P.		3H.P.	3H.P.	5H.P.	5 H.P. 960 RPM	7.5 H.P.	10 H.P.	10 H.P.
Feed Motor 2 H.P. 2 H.P. 2 H.P. 3 H.P. 3 H.P. 3 H.P. 3 H.P.	Feed Motor	2 H.P.	2 H.P.	2 H.P.	2 H.P.	3 H.P.	3 H.P.	3 H.P.
Coolant Motor 0.1 H.P.	Coolant Motor	0.1 H.R	0.1 H.P.	0.1 H.P.	0.1 H.P.	0.1 H.P.	0.1 H.P.	0.1 H.P.
DIMENSIONS	DIMENSIONS							
Overall Length 1600 1850 2000 2100 2500 2700 2800	Overall Length	1600	1850	2000	2100	2500	2700	2800
Overall Width         1400         1600         1750         1950         2500         2600         2700	Overall Width	1400	1600	1750	1950	2500	2600	2700
Overall Height 1550 1680 1800 1880 2400 2700 2800	Overall Height	1550	1680	1800	1880	2400	2700	2800
Net Weight kg 2000 2600 3300 3700 4200 5000 7000	Net Weight kg	2000	2600	3300	3700	4200	5000	7000
Gross Weight kg. 2200 2900 3600 4000 4600 5700 8500	Gross Weight kg.	2200	2900	3600	4000	4600	5700	8500

STANDARD EQUIPMENTS : Electrical, Control Panel, Arbour with Hardened Bushes.

OPTIONAL EQUIPMENTS : Vertical Attachment, Ram Type Vertical Head, Side Vertical Head, Duplex Attachment, Slotting Attachment, Rack Cutting
Attachment, Universal Dividing Head, Rotary Table, Milling Machine Vice, Machine Lamp, Electric Coolant Pump.

Note: 1 All specifications are subject to change without prior notice.

- 2 Picture are illustrative only. Parts shown may not be part of standard equipment.
- 3 User have option to select the spindle speed among 9 or 12 before placing the order.





#### RAM TYPE VERTICAL GEARED HEAD

Spindle Taper ISO 40
Quill Travel Manual 100mm
No. of Speeds 9

Speed Range 45-1120 RPM

Head Tilt in Vertical Plane ± 45°

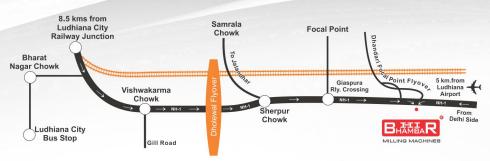


### Company Profile

Bhambar Engineers (Regd.) Is an ISO 9001 certified unit which is taking lead under the dynamic leadership of Mr. Harvinder Singh Bhambar. The unit is known for its best quality milling machines with total customer satisfaction. The company has experience of five decades in manufacturing of All Geared Universal, Vertical, Ram Turret, Hydraulic Type, Duplex Type & other special Purpose Milling Machines with different type of attachments. Our machines are working successfully in Forgings, Plastic Molding, Hand Tools, Pattern Making, Sheet Metal components, Dog Chuck, Auto Parts & other different type units or tool room. We are assuring that HI-BHAMBAR milling machines will provide 100% value for your money.

#### A SHORT PREVIEW OF OUR FACTORY (INFRASTRUCTURE)





## BHAMBAR ENGINEERS (Regd.)

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