

GROMAX Powerful-Hydraulic Radial Drilling Machine



Features:

- Machine made of Meehanite casting with rib striped structure for extra rigidity to handle heavy-duty operation
- All Gears are made of chrome-molybdenum alloy, hardened and ground, to ensure a durable gearbox
- Hydraulic clamping system: Easier to operate (simply push a button, stronger and quicker to hold or release)
- Speed Preset: Preset the spindle speed for the next operation while machining
- Base plate has T-slots and drain channels
- Built-in coolant system

PH-1312DH shown

Specification		PH-812DS	PH-1312DH	PH-1612DH
Capacity (Cast iron/Steel)	-Drilling	2" / 1-1/2"	2-3/8" / 2"	2-5/8" / 2-1/4"
	-Tapping	1" / 3/4"	2-3/8" / 2"	2-3/8" / 2"
	-Boring	4-1/8" / 2-3/4"	7" / 4-3/4"	7-3/8" / 5"
Spindle Stroke		8-1/4"	11-13/16"	11-13/16"
Spindle Bore		No. 4	No. 5	No. 5
Spindle Motor		2 HP	5 HP	7.5 HP
Spindle speed/step		88-1500/6	30-1580/12	30-1580/12
Spindle Feed/step		0.003-0.009"/3	0.0023-0.044"/12	0.0023-0.044"/12
Column Diameter		7-7/8"	13-25/32"	13-25/32"
Column Height		76-1/8"	106-1/8"	106-1/8"
Distance between center of spindle and column	Max.	36-5/8"	59-7/16"	71-1/4"
	Min.	12-13/64"	21-1/16"	21-1/16"
Distance between Spindle nose and base	Max	42-1/8"	54-7/8"	54-7/8"
	Min	12"	15-5/32"	15-5/32"
Size of Table		35-5/32x24-13/16"	58-17/64x32-1/2"	68-7/8" x 32-1/2"
Size of Base		53-1/2" x 25-5/8"	82-5/8" x 33-1/8"	94-7/16" x 33-1/8"
Horizontal Headstock Travel		24-13/32"	38-3/8"	50-3/16"
Column Motor		1 HP	2 HP	2 HP
Coolant Motor		1/8 HP	1/8 HP	1/8 HP
Net Weight		2800 lbs.	7700 lbs.	8800 lbs.
Packing Dimensions		59 x30 x85"	91 x40 x101"	103 x40 x101"
Price		\$12,230.00	\$35,100.00	\$38,500.00

GROMAX Heavy Duty Upright Type Drilling Machine

Features:

- Rugged construction - ideal for medium to heavy-duty large holemaking production
- Large production grade work table: 25.5" x 20"
- 3HP Spindle motor
- Spindle Speed: 75-1525 RPM (12 speeds)
- Automatic feed: 3
- Speeds: 0.0039", 0.007", 0.0118"
- Column diameter: 6.69"
- 21.6" swing



Specification:

Model	GJ216		
Swing Span	21.6"		
Capacity	Drilling capacity	(steel) 1.57", (cast iron) 2"	
	Tapping capacity	(steel) 1", (cast iron) 1.18"	
Spindle	Distance from spindle end to work table/base	0.2" ~ 29.72" / 36" ~ 44.68"	
	Travel	Manual	8.66"
		Auto	7.08"
Taper	MT #4		
Base Size	19.68" x 35.43"		
Table	Travel	19.68"	
Height	86.6"		
Net WT.	1360 lbs.		
Your Cost	\$8,750.00		

GROMAX Portable- Omniversal Radial Drill

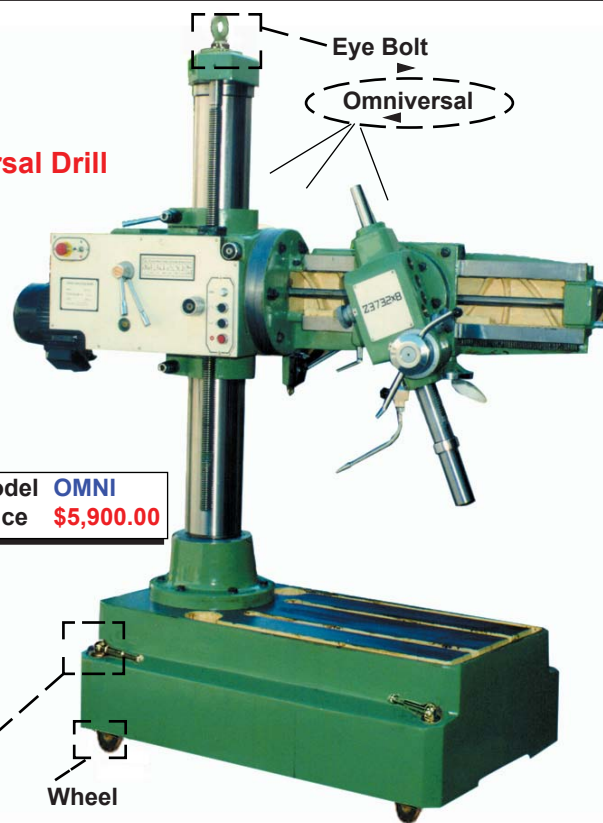
Features:

- 3-axis, 360° universal movements provide any possible compound angle set up
- Rollers on base plate provide mobility to wherever workpieces are located
- Spindle rotate 360° around radial arm
- Radial arm rotate 360° around headstock
- Headstock swivel 360° around column
- Internal coolant pump built-in
- Hardened and ground work table
- Motorized headstock travel on column
- Heavy ribbed casting body
- Work light
- Tolerance test sheet included

Specifications:

Model	OMNI	
Max. Drilling capacity	1 1/4" (in steel) / 1 3/8" (in cast iron)	
Tapping capacity	5/8" (in steel)	
Spindle taper	Morse No. 4	
Spindle travel	5 1/8"	
Distance between center line of spindle and column	max	31 1/2"
	min	12 3/4"
Distance between spindle nose and surface of base plate	max	31 1/2"
	min	1 1/2"
Base plate working surface	21 1/4" x 29 1/2"	
Spindle speed range	63 ~ 1120 rpm / 6 steps	
Spindle auto feed range	.07, .1, .15, .22, .28, .42 / 6 steps	
Spindle motor	2 HP / 220V Prewired / 60HZ / 3φ	
Overall dimension	65" x 28" x 78"	
Net weight	2200 Lbs	
Price	\$5,900.00	

360° Universal Drill



Model **OMNI**
Price **\$5,900.00**

GROMAX Vertical Turret Milling Machine

Quality Machine Tool at Affordable Price

Feature:

- Hardened & Ground with Turcite B coating guide way.
- C7 Double nut precision acme lead screws for high accuracy and long lasing
- FC30 Meehanite castings main frame with annealed & stress relieved for long term reliability
- Anti rust Chrome quill
- Heavy duty dovetail slideway on X, Y & Z axis
- Precision APEC Class 7 spindle bearing to ensure spindle run out within 0.0002"
- Built in work Light
- One Shop lubrication system
- Standard way cover on three axis
- Tool box & Tool

MV949 shown
3HP
9"x42" Table
Travel: 30"x12"x16"

MV1054 shown
3HP
10"x54" Table
Travel: 38"x16"x17.5"





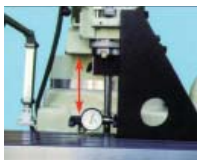




Gromax Package Special Includes:

- 2-axis DRO system
- Longitudinal power feed (AL-235X)
- Installation

Specifications: All machines in stock. Ready to go!! Call for details.

Model	MS949 Step Pulley A	MV949 Variable Speed B	MV1054 Variable Speed C	MK1054 Variable Speed D
Work table	9" x 49"	9" x 49"	10" x 54"	10" x 54"
T-Slot Size	5/8"	16mmx3x64mm	16mmx3x65mm	5/8"
Longitudinal travel (X)	30"	36"	36.37"	38"
Cross travel (Y)	12"	12"	15.75"	16"
Knee travel (Z)	16"	16"	16"	17 1/2"
Quill travel	5"	5"	5"	5"
Ram travel	12"	12"	19"	20"
Quill diameter	3-3/8"	3.37"	3.37"	4 1/8"
Spindle taper	R8	R8 (NST30)	R8 (NST30)	N.S.T. 40
Spindle speed range	80~5440 RPM (16 steps)	70~4200 RPM	70~4200 RPM	70~3600 RPM
Auto Quill feed	0.0015 - 0.003 - 0.006 per rev.	0.002" - 0.004" - 0.006 per rev.	0.002 - 0.004 - 0.006 per rev.	0.0015 - 0.003 - 0.006 per rev.
Spindle Motor	3 HP	3 HP	3 HP	5 HP
Electrical supply	60 Hz/ 3 phase/ 220 V prewired	60 Hz/ 3 phase/ 220 V prewired *440 V available upon request	60 Hz/ 3 phase/ 220 V prewired *440 V available upon request	60 Hz/ 3 phase/ 220 V prewired *440 V available upon request
Load Capacity		600 Lbs	704 Lbs	
Packing Dimension		77"x65"x82"	87"x72"x87"	
Weight	2200 lbs	2200 lbs	2900 lbs	3800 lbs
Price (mill only)	MS949 \$5,820.00	MV949 \$6,960.00 \$6275.00	MV1054 \$7,860.00 \$7705.00	MK1054 \$ POR
Price (with package)	MS949P \$7,380.00	MV949P \$6,875.00	MV1054P \$8,305.00	MK1054P \$ POR
EVS-Mill (with package) (mill with EVS head)	-	MV949E \$7,675.00	MV1054E \$9,105.00	MK1054E \$ POR

Single-Phase Head add **\$350.00**

 Run out of the spindle taper 0.00015"	 Parallelism of the table top with: A) Transverse movement 0.0008"/ in 12" B) Longitudinal movement 0.0008"/ in 12"	 Transverse of the column, perpendicularity in A and B plan: A) 0.0008" B) 0.0008"	 Ram transverse with table top: 0.0008"/ in 12"
 Perpendicularity of the table way to saddle movement 0.0008"/ in 12"	 Runout of Spindle: A) 0.0004" B) 0.0008"	 Perpendicularity of the spindle with table top (sweeping) A) 0.0008" B) 0.0008"/ in 12"	

GROMAX E.V.S. Head

NEW!!

3 HP



D

MK1054 shown
5HP
10"x54" Table
Travel: 38"x16"x17.5"

Model (220V)	Price
MH-E300R8	\$3,900.00
MH-E300NT	\$4,840.00

10 Great Reasons to Go EVS-Mill

1. 3HP high efficient motor for high torque output
2. Infinite 0-4500 RPM constant spindle speed. Change in no time (0-4 sec.)
3. C.N.C. vector type A.C. Frequency drive
4. Machine can run on single or three phases without changing the wiring
5. Low maintenance and down time cost because of no plastic insert, key and moving pulley.
6. No RPM changer break down, but accurate reading on RPM to prolong tool life
7. Electronic and mechanical brake for fast spindle stop
8. No belt slippage for high efficient torque output
9. Boring and tapping application
10. Save energy costs up to 35%

GROMAX Precision Vertical Milling Machine

CNC Ready With All Ball Screws
Digital Frequency Drive System

Features:

- Squareways Y & Z axes, hardened & ground to RC52°
- Rubber way cover for knee and crossfeed way
- Precision rolled ball screws
- Licensed Meehanite casting
- BIJUR autolube system
- Chrome satin dials
- Dish-in coolant base
- All-fuse breakers

AC-3KV shown
3HP/ 10"x54" Table
Travel: 36"x16"x16"



AC-3KV F shown
3HP/ 10"x54" Table
Travel: 36"x16"x16"

Specifications:

Model	AC-3KV	AC-3KV F
Working surface	10x54"	10x54"
Longitudinal travel	36"	36"
Cross travel	16"	16"
Vertical knee travel	16"	16"
Ram travel	20"	20"
T-slot number, size	3, 5/8"	3, 5/8"
Main motor	3HP	3HP
Head moves (right to left)	90°	90°
Head tilts (front to back)	45°	45°
Spindle drive	Variable	Variable
Spindle speed		50~4500rpm
Spindle taper	R-8	R-8
Power quill feeds (in./rev.)	0.0015", 0.003", 0.006"	0.0015", 0.003", 0.006"
Quill diameter (chromed)	3 3/8"	3 3/8"
Quill travel	5"	5"
Weight approx.	3050 Lbs.	3300 Lbs.
Price	\$9,600.00	\$11,400.00

Hydraulic Tapping Machine



Features:
Rapid positioning and high machinery speed increase productivity
Lower tap damage plate, higher thread accuracy
Tap shall never break for tapping through-hole or blind-hole
Tapping for heavier work piece requires large work area
Lower machining cost than by CNC machine, drilling tapping machine or manual tapping operation
Easy operation, no experience required

Standard Accessories:

Hydraulic Tapping Spindle	Parallel Arm
Radial Jib	Table Mounting Column
Choose any six Safety Clutch Tapping Adapters	Work Table and Cart
Hydraulic Motor, Pump and Box	Computer-Controlled Device

Specifications:

Model	HM-22	HM-32	HM-50
For Tap	M3~M22	M4~M32	M8~M60
Speed	150~400rpm	0~200rpm	0~100rpm
Work Range	Max. Radius	59.06"	59.06"
	Min. Radius	7.87"	7.87"
Power Supply	3~x380V; 50Hz	3~x380V; 50Hz	3~x380V; 50Hz
Motor	5HP	5HP	7.5HP
Hydraulic Pressure	2030 Lb/inch	2030 Lb/inch	2030 Lb/inch
Weight	660 Lbs.	715 Lbs.	770 Lbs.
Price	\$9,000.00	\$11,000.00	\$13,400.00

Air Tapping Machine



AE Series: Portable Type	AE-08-700	AE-12-700	AE-16-700
For Tap	M2~M8	M3~M12	M3~M16
Speed	700rpm	400rpm	400rpm
Work Range (Max. Radius)	27.56"	27.56"	27.56"
Weight	26.4 Lbs.	26.4 Lbs.	33.0 Lbs.
Price	\$1,200.00	\$1,200.00	\$1,900.00



AS Series: Short-Arm	AS-08/II	AS-12/II	AS-16/II
For Tap	M2~M8	M3~M12	M3~M16
Speed	700rpm	400rpm	400rpm
Work Range	Max. Radius		
	Min. Radius		
Weight			
Price	\$1,350.00	\$1,350.00	\$2100.00



AT-I Series: Simple	AT-08/I	AT-12/I	AT-16/I
For Tap	M2~M8	M3~M12	M3~M16
Speed	700rpm	400rpm	400rpm
Work Range	Max. Radius	63"	63"
	Min. Radius	19.7"	19.7"
Weight	39.6 Lbs.	39.6 Lbs.	44 Lbs.
Price	\$1,300.00	\$1,300.00	\$2,000.00

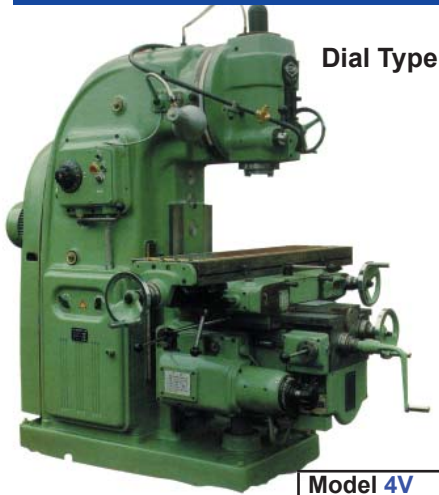


AT-II Series: Long-Arm	AT-08/II	AT-12/II	AT-16/II
For Tap	M2~M8	M3~M12	M3~M16
Speed	700rpm	400rpm	400rpm
Work Range	Max. Radius	74.8"	74.8"
	Min. Radius	7.87"	7.87"
Weight	44 Lbs.	44 Lbs.	48.4 Lbs.
Price	\$1,400.00	\$1,400.00	\$2,200.00



AT-20/AT-22: Heavy-Duty	AT-20/II	AT-22/II
For Tap	M4~M20	M4~M22
Speed	150/400rpm	90/250rpm
Work Range	Max. Radius	74.8"
	Min. Radius	7.87"
Weight	68.2 Lbs.	68.2 Lbs.
Price	\$2,700.00	\$2,990.00

GROMAX Vertical Knee Mill



Dial Type

Model 4V
Price \$21,300.00

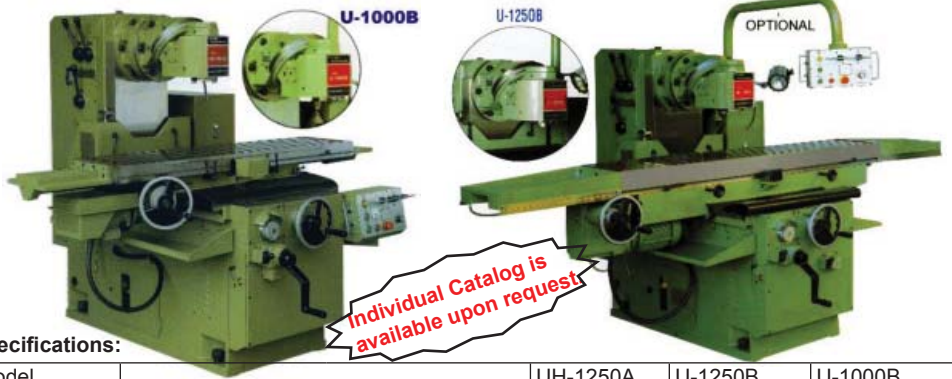
Specifications:

Model Machine Size	4V
Table size	12.6" x 52"
Longitudinal travel (manual/ power)	27.6" / 26.8"
Cross travel (manual/ power)	10" / 9.5"
Vertical travel (manual/ power)	14.3" / 13.8"
No. of spindle speeds	18
Ranges of spindle speeds	30 - 1500 rpm
Taper of spindle	NT50
Bore of spindle	1.14"
Quill movement of spindle	2.8"
Max. swivel of milling head	±45°
Dist. spindle nose to table (min./max.)	2.4" / 16.9"
No. of table feeds	18
Range of longitudinal table feeds	1 - 50" / min
Range of cross table feeds	1 - 50" / min
Range of vertical table feeds	0.4 - 20" / min
Table rapid traverse (longitudinal/cross)	94.5" / min
Table rapid traverse (vertical)	38" / min
Spindle drive motor power	10HP
Feed drive motor power	2HP
Weight of the machine	6160 LB
Overall dimensions (L x W x H)	91" x 69.7" x 80.7"

Optional Accessories: 4V

1. 12" Rotary Table **\$760.00**
2. Transmission Box of Rotary Table **\$330.00**
3. Dividing Head **\$1,330.00**
4. Machine Vise **\$195.00**

GROMAX Bed Type Universal Milling Machine



Specifications:

Model	UH-1250A	U-1250B	U-1000B		
Working table	Work Table WxL	14.4"x72"	14.4"x72"	14.4"x72"	
	Longitudinal travel	50"	50"	50"	
	Spindle nose to table	2~20.8"	2~20.8"	2~20.8"	
	Spindle center to table (Horizontal)	Arbor arm is used	2~20.8"	2~20.8"	2~20.8"
		Arbor arm isn't used	14.4~31.6"		
	Cross travel	21.6"	21.6"	21.6"	
	Feed speed changing (X, Y)	Stepless changing			
	Longitudinal & cross feed speed	0.64~48"/min			
	Longitudinal & cross rapid speed	100"/min			
	Tslot (WxNo.xL)	0.72"x4x3.2"			
Table load max.		2200 Lbs.	2200 Lbs.	2200 Lbs.	
Spindle	Spindle taper	NT #50			
	Number of steps to changes speed	12			
	Spindle speeds (R.P.M.)	40, 55, 80, 115, 160, 225, 315, 440, 620, 880, 1240, 1750			
Column	Vertical travel	18.8"	18.8"	18.8"	
	Number of steps to change vertical feed speed	Stepless changing			
	Vertical feed speed	0.32~18"/min			
	Vertical rapid speed	40"/min			
	Spindle center to column (Vertical)	20"	16.8"	16.8"	
	Spindle nose to column front (Horizontal)	20"	16.8"	16.8"	
	Motor	Spindle motor	4P-7.5HP		
Feed motor		Longitudinal feed	2 HP		
		Cross feed	2 HP		
		Vertical feed	2 HP		
Note: When feed motor has specified servo motor, it is a special attachment.					
Coolant pump		2P-1/8 HP			
Lubricating oil pump		6P-5 HP			
Dimensions of the machine	LengthxWidthxHeight	120"x86"x73.2"	120"x86"x73.2"	120"x86"x73.2"	
	Floor space	170"x86"	170"x86"	170"x86"	
	Net weight (approx.)	7040 Lbs.	7040 Lbs.	7040 Lbs.	
Price	\$60,300.00	\$58,880.00	\$56,240.00		

GROMAX Universal Milling Machine

Features:

- Medium size universal mill model 2HU, suitable for milling flat, inclined, slots by employing various types of cutters.
- Vertical milling attachment available for milling operation
- Table and saddle feeds may be operated manually or under powerfeed depending on operator preference. A 12 steps range of speeds and feeds allows the operator to choose between low-speed deep cuts and high speed finishing cuts
- Internal coolant pump • Tolerance test sheet included

Specifications:

Model Machine	2HU	
Table size	10" x 35 1/2"	
No. of T-slot	3	
Width of T-slot	9/16"	
Longitudinal Travel (x)	19 5/8"	
Cross Travel (y)	6 1/2"	
Knee Travel (z)	11 13/16"	
Spindle Taper	NT 30	
Spindle Speed Range	32 - 1250 rpm (12 steps)	
Table powerfeed range	(X)	1/4" ~ 7 1/2"
	(Y)	1/2" ~ 18 1/4"
	(Z)	5/32" ~ 4 7/8"
Min distance from centerline of spindle to table	2 3/8"	
Max. Table Swivel	±45°	
Spindle motor	5 HP/ 220 prewired/ 60HZ/ 3φ	
Overall dimensions (LxWxH)	55" x 52" x 58"	
Net Weight	2860 lbs	

Model 2HU

Spindle Motor: 5HP
Table Size: 10"x35 1/2"
Travel: 19 5/8"x6 1/2"x11 13/16"
Price \$9,650.00

Special \$7,950.00

Optional Accessories:

1. 10" Rotary Table **\$360.00**
2. Dividing Head **\$750.00**
3. Vertical Milling Head **\$860.00**
4. Machine Vise **\$100.00**
5. Milling Chuck **\$320.00**

Optional accessories shown, sold separately!

- ▶ **Best Tool for Helical Machining**
- ▶ **All 3 Axes under Powerfeed**



Universal Table Swivel ±45°

GROMAX HIGH SPEED PRECISION MACHINING AND ENGRAVING HS SERIES



Fully Enclosed Splash Guard

The HS Machine is purpose built for outstanding HSC performance which is required in today's modern mold making environment. The machine is designed to achieve very high "G" values and low harmonic vibrations ensuring ultra fast corner transitions, extremely high accuracy and duper fine surface finishes. All components used are of the highest quality and designed for a long service life.

The highly rigid machine structure allows the High-Dynamic AC drive system to be turned to a high state ensuring that maximum performance is achieved.



HIGH SPEED SPINDLES



CONTROL CIRCUIT



Fanuc controller



Protected automatic toolchanger



BALLSCREW PROTECTION

The Gromax HS series is suitable for machining a wide range of materials from hardened steels to graphite, brass, copper, aluminum, ABS plastics and more. From shoe mold production to automotive and aerospace the HS machine is a dynamic performer.

HS SERIES SPECIFICATION:

Model	HS-500		HS-800		HS-1000		
Travel							
X,Y,Z Axis travel	500x400x400mm 19.68x15.7x15.7"		800x600x400mm 31.49x23.62x15.50"		1000x800x500mm 39.37x31.49x19.68"		
Distance from spindle nose to work table	120~520mm 4.72~20.47"		100~500mm 3.94~19.68"		100~600mm 3.94~23.62"		
Table							
Table sizes	600x500mm 23.62x19.68"		920x720mm 36.22x28.35"		1100x800mm 43.30x31.49"		
T-slot (W x Pitch x Numbers)	17x110mmx4		17x100mmx7		17x118mmx7		
Max. Table load	350kgs/ 770 lbs		700 kgs/ 1540 lbs		1000 kgs/ 2200 lbs		
Feed							
X,Y,Z axis drive	AC servo motor		AC servo motor		AC servo motor		
X,Y,Z axis rapid traverse	10000~20000 mm/ min 393.7~787.4 inch/min		10000~20000 mm/ min 393.7~787.4 inch/min		10000~20000 mm/ min 393.7~787.4 inch/min		
Spindle							
Spindle motor	2.8kw	8kw	8kw	17kw	8kw	15kw	17kw
Max. spindle speed	45000rpm	30000rpm	30000rpm	15000rpm	30000rpm	16000rpm	15000rpm
Spindle taper	ISO 10~25	HSK-40E	HSK-40E	HSK-63E	HSK-40E	BT-40	HSK-63E
Automatic tool changer							
Numbers of tool	16 tools		16 tools		16 tools		
Control							
	FANUC		FANUC		FANUC		
Miscellaneous							
Air Supply	5 kg/cm ²		5 kg/cm ²		5 kg/cm ²		
Power requirement	7KVS		15KVA		15KVA		
Machine weight	2500 kgs/ 5500 lbs		5000 kgs/ 11000 lbs		7000 kgs/ 15400 lbs		
Price	\$POR		\$POR		\$POR		

***Design and specifications are subject to change without prior notice.

Standard Accessories

1. Spindle cooling system
2. Heat exchanger
3. Work light
4. Alarm lamp
5. Fully enclosed splash guard
6. Tool box & tools

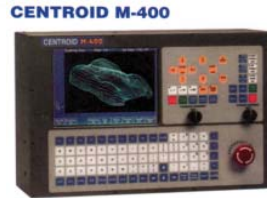
Optional Accessories:

1. 4th axis rotary table
2. Linear scale
3. Automatic tool length measuring device
4. Increased spindle size
5. Tool arbor and collet chuck
6. Dust suction device
7. Voltage stabilizer
8. Chip conveyor

GROMAX Bed-Type Mill With CENTROID Control System

Features
220 Volt/3-Phase
One Year Warranty
National Dealer Network
On-site or Classroom
Training Available
Financing

Please visit
www.gromax-usa.com
www.gromaxonline.com
for more bed-type models



Standard Features:
Heavy-duty meehanite castings
Hardened & ground square ways
Turcite-coated surfaces
Hardwheels for all axis
Manual or automatic quill
Easy to use control with Mastercam
Auto lubrication
Power draw bar
Halogen work light
Coolant system
Table top enclosure
Base chip coolant drop pan

Optimal Equipment:
Fully Closed Way Covers on Column
Rear Column Chip Guard
4th Axis Drive Interface
Rotary Table(s)
Tooling Package
Clamping System
Precision CNC Vises
Pallet Vises
Disitizing and Probing Packages
TT-1 Touch-off Kit
Second Language
Engraving Software
40"/LB Motor Upgrade
MPG Handwheel

CENTROID M-400 CONTROL WITH CONVERSATIONAL AND G-M CODE PROGRAMMING. CENTROID M-15 AND M39 CONTROL ALSO AVAILABLE

Three Axis Simultaneous
10" Color LCD Screen With Graphics
Pentium Processor
Floppy Drive
Ethernet Card
RS-232 Communication
Hard Drive
Mastercam Level 1
Expandable to 4th Axis*
Teach Mode
2 & 3D Graphics
Math Help

Canned Cycles
Fast Setup Parts
32 Bit PC Based DSP Technology
Coolant Controls**
Output For Auto Lube
Programmable Spindle
M400 Console With Scaled Keyboard
M15 Console With Alpha Numeric Keypad
M400 Runs On 220V AC 3-Phase Power
M15 Runs On 110V AC Power
Notes: *Marked item is not available on M15
**Marked items are optional on M15

Features and Specifications:

Table	B2VS	B3VS
Working Surface	10"x54"	12"x60"
X Axis Travel	30"	41"
Y Axis travel	18"	20"
Table Load Capacity	1500 LBS	2200LBS
Spindle Head		
Spindle Motor	5HP	5HP
Spindle Drive	AC Programmable	AC Programmable
Spindle Taper	NT30/40 or R8	NT40 or CAT40
Spindle Speeds	130-5160 rpm	130-5160 rpm
Spindle Head Travel - Z Axis	19"	23"
Quill Diameter	3-3/8"	4-1/8"
Quill Travel	5"	5"
Machine Net Weight	4500 LBS	6500 LBS
Performance		
Servo Motors Per Axis	29"/LB.DC	29"/LB.DC
Resolution	0.0001"	0.0001"
Rapid Traverse (x,y,z)	150 IPM	150 IPM
Price (with M400 controller)	#40 \$39,300.00	\$41,300.00

Design and specifications are subject to change without notice

B3VS W/3 AXIS M400S CONTROL \$41300.00

12X60" TABLE, CAT40 OR NT40 spindle, 5HP inverter drive, electric spindle brake, power draw bar, harden and ground ways, Turcite B coolant system, stainless steel, way cover on Y axis rear splash guard, table chip enclosure, base chip coolant drop pan, auto lubrication w.cnc alarm, halogen work light, programmable spindle speed control

B2VS#40 W/ 3 AXIS M400S CONTROL \$39300.00

#40 SPINDLE, 10x54" TABLE, DITTO

B5VS W/3 AXIS CNC M400S \$50700.00

#40 SPINDLE, 16-3/4"X62", 7.5 HP

Other models are available and shown as bellow:

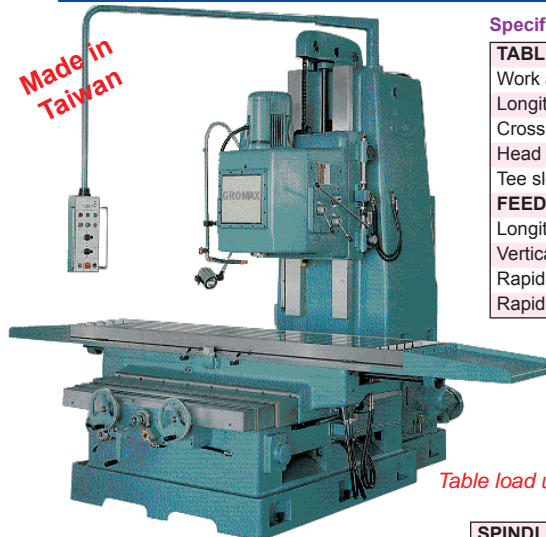
BED TYPE MILLING MACHINE WITH FACTORY INSTALLED POWERFEEDS (40 TAPER)

BPV-B2V40	TAIWAN	same as above but with 5HP vari-speed head (40 Taper)	\$23070.00
BPV-B2V40F	TAIWAN	same as BPV-B2V40, but inverter drive speeds from 70-50,000rpm	\$25070.00
BPV-B4VF	TAIWAN	15X60" INVERTER VARI-DRIVE, HARDENED AND GROUND WAYS, 40 TAPER SPINDLE COOLANT SYSTEM, 5HP wired 220V/3HP/60HZ	\$30670.00

NEW LONG BED TYPE MILLING MACHINE

BPV-B5VF	TAIWAN	16-3/4" X 62" TABLE, 47-1/4x23"x23-1/2" travel, 7-1/2HP, inverter drive, power feeds, coolant system w/base pan, work light, turcite B coating, auto lube, speeds 70-5,000 rpm	\$37330.00
----------	--------	--	-------------------

GROMAX King Size Vertical Milling Machine



Made in Taiwan

Specifications

TABLE	
Work area (LxW)	106" x 25.5"
Longitudinal travel--X	86.6"
Cross travel --Y	31.5"
Head vertical travel--Z	35.5"
Tee slots--(6)	0.787"
FEEDS	
Longitudinal and cross in/min	0.5"-19.9"
Vertical (8 steps) I.P.M	0.2" - 9.8"
Rapid feed/ Longitudinal & cross	80"/ min
Rapid feed/ Vertically	40"/ min

Table load up to 6000 lbs

Model **G800**
Price **\$84,000.00**

Superior Features:

- Square guideways for Y-Z axes
- Heavy duty telescoping way covers
- Extra wide saddle support
- Extra wide base
- Power draw bar
- Halogen work lamp
- Manual and power feeds

SPINDLE	
Spindle speed(12 steps)	30 ~ 1165 rpm
Taper in the nose	NST50
MOTOR	
Main spindle motor	15HP
Table feed motor	2 HP
Coolant pump motor	1/4 HP
Lubricating pump motor	1/2 HP
OVERALL DATA	
Height of floor to table top	40"
Required installation area	107" x 59"
Net weight	30,800LB.

GROMAX CNC Vertical Machining Center

Features:

- The major parts are manufactured from Meehanite cast iron, heat treated for deformation free performance.
- High precision C3 class, $\phi 40$ mm Ballscrew, combined with preloaded double nuts for high positioning accuracy.
- Fully enclosed chip guard
- The square slideways are hardened, precision ground and coated with Turcite-B for smooth traverse and maximum wear resistance.
- The spindle is driven by a powerful 7.5 kw motor.
- General type automatic tool change system.
- Magazine loading capacity is 16 tools. (24 tools option)
- Telescopic guards on three axes provide dependable protection.
- Drawer type chip pan provides convenient chip handling.
- All axes are laser calibrated and ball bar tested, accuracy charts are supplied with each machine.
- CE compliant versions.

Magazine Loading Capacity: 16 Tools



Standard Accessories:

- Tool box & tools
- Leveling blocks & bolts
- A.T.C. equipment (Geneva type)
- Coolant unit
- Full enclosed splash guard
- Central lubrication
- Quartz work light
- Spindle air blast
- Alarm lamp
- 220/3/60 electrics
- Rigid tapping

Optional Accessories:

- 4th axis rotary table
- Chip conveyor
- Transformer
- 20 Tools ATC (Geneva type)
- 24 Tools ATC (Arm type)
- Coolant through spindle
- Graphic (FANUC)
- Spindle speed/Lad meter
- Liquid cooled spindle
- 10,000 RPM spindle

Model	Price	
GMV8550M	\$POR	with Mitsubishi Controller
GMV8550F	\$POR	with FANUC Controller
GMV8550BS	\$POR	Machine Base Only



Wide Opening Doors
Front sliding doors open wide to allow easy access to work area



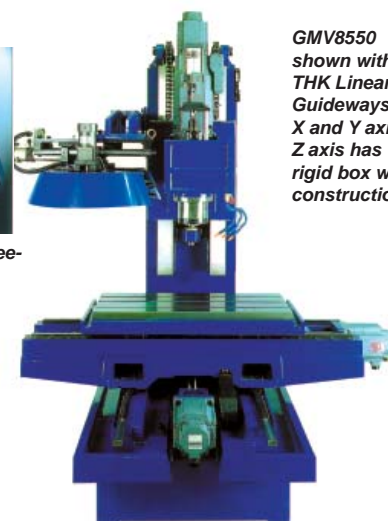
Linear Guideways
Optional THK "NR" type linear guideways



Meehanite construction
of all axes and heavy duty components ensure high rigidity for stable cutting.



Fully ribbed and gusseted FC30 Meehanite casting



GMV8550 shown with THK Linear Guideways on X and Y axis, Z axis has rigid box way construction.

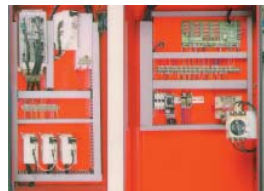


Heavy duty 5 bearing spindle

MITSUBISHI / FANUC FANUC Controller

Mitsubishi M-530 CNC Controller

- 3 axes + spindle 4th axis option
- Tool offsets
- Canned cycles
- Mirror image
- Linear angle
- Exact stop check mode
- Sub program call
- Program error display
- Tool length compensation



FANUC 0-M CNC Controller

- 3 axes + spindle 4th axis option
- Auto Accel/Decel
- Manual continuous feed
- Auto coordinate system
- EIA/ISO auto recognition
- Mirror image
- Tool offsets
- Tool length compensation



Specifications

		GMV8550	
TABLE	Table Size	42.5"x20"	
	Travel ranges (X/Y/Z)	33.4"/19.6"/19.6"	
	Spindle nose to table top	5.9"-25.6"	
	Column surface to center of table	9.4"-29.11"	
	Max. load capacity	990 lbs.	
SPINDLE	Spindle taper	CAT40	
	Spindle speed (RPM)	80-8000	
	Spindle center to column front surface	18.8"	
MOTORS	Spindle motor	10 HP	
	Feed motors X & Y axes	MITSUBISHI	2KW 2000 r/min
		FANUC	1KW 2000 r/min
	Feed motors Z axis	MITSUBISHI	2KW 2000 r/min
		FANUC	1KW 2000 r/min
	Coolant pump	1/4HP	
	Lubrication pump	100 Watt	
AUTOMATIC TOOL CHANGER	No. of tools	16 Tools	
	Max. tool diameter	3.1"	
	Max. tool length	9.8"	
	Max. tool weight	15.4 lbs	
MISCELLANEOUS	Air supply	85 psi	
	Power requirement (KVA)	15	
	Machine dimensions	119.9"x92.3"x98.4"	
	Machine weight	13668 lbs.	

GROMAX Cartridge Spindle

AS Series For CNC Machining Center

Highest spinning speed: 6000/8000/10000 rpm
 Wimble holde diameter: BT40/CAT40/DIN40
 Power: 7.5kw/ 11kw
 Bearing diameter: 7014CP4x3pcs,7012CP4x2pcs
 Accuracy: Testing bar 300mm/0.008mm
 Temperature: Room Temperature +15°C

Model	Taper	Max. Speed (rpm)	Motor (HP)	Pulley	Runout Accuracy Test Bar/300mm (µm)	Max. Temperature Rise (°C)	Price
AS-CAT40A-075-6	CAT40	6000	10	8YUx40T	8	15	\$3,000.00
AS-CAT40A-075-8	CAT40	8000	10	8YUx40T	8	15	\$3,260.00
AS-CAT40A-075-10	CAT40	10000	10	8YUx40T	8	15	\$4,200.00
AS-CAT40A-110-6	CAT40	6000	10	8YUx40T	8	15	\$3,000.00
AS-CAT40A-110-8	CAT40	8000	10	8YUx40T	8	15	\$3,260.00
AS-CAT40A-110-10	CAT40	10000	10	8YUx40T	8	15	\$4,200.00
AS-CAT40B-075-6	CAT40	6000	10	8YUx40T	8	15	\$3,000.00
AS-CAT40B-075-8	CAT40	8000	10	8YUx40T	8	15	\$3,260.00
AS-CAT40B-075-10	CAT40	10000	10	8YUx40T	8	15	\$4,200.00
AS-CAT40B-110-6	CAT40	6000	10	8YUx40T	8	15	\$3,000.00
AS-CAT40B-110-8	CAT40	8000	10	8YUx40T	8	15	\$3,260.00
AS-CAT40B-110-10	CAT40	10000	10	8YUx40T	8	15	\$4,200.00
AS-CAT40C-075-6	CAT40	6000	10	8YUx40T	8	15	\$3,000.00
AS-CAT40C-075-8	CAT40	8000	10	8YUx40T	8	15	\$3,260.00
AS-CAT40C-075-10	CAT40	10000	10	8YUx40T	8	15	\$4,200.00
AS-CAT40C-110-6	CAT40	6000	10	8YUx40T	8	15	\$3,000.00
AS-CAT40C-110-8	CAT40	8000	10	8YUx40T	8	15	\$3,260.00
AS-CAT40C-110-10	CAT40	10000	10	8YUx40T	8	15	\$4,200.00



AS-BT40-A-110-6 SHOWN
\$3000.00



AS-BT40-B-110-6 SHOWN
\$3200.00



AS-BT40-C-110-6 SHOWN
\$4900.00

Please visit our website at www.gromax-usa.com for more details

BS Series For CNC Machining Center

Highest spinning speed: /5000/6000/8000 rpm
 Wimble holde diameter: BT50
 Power: 15kw/ 22kw
 Bearing diameter: 7020x4pcs,7018x2pcs
 Accuracy: Testing bar 300mm/0.01mm
 Temperature: Room Temperature +20°C



BS-BT50-150-5 SHOWN
\$9300.00

DS Series For CNC Milling Machine

Highest spinning speed: 10000/12000/15000 rpm
 Wimble holde diameter: BT30/CAT30/DIN30
 Power: 1.75kw
 Bearing diameter: 7008CP4x4pcs



DS-BT30-0175-8 SHOWN
\$2450.00

DM4500 Series For CNC Milling Machine



DM-4500-50-8 SHOWN
\$2600.00

Highest spinning speed: 8000/10000/12000 rpm
 Wimble holde diameter: BT40/CAT40/DIN40
 Power: 5kw/ 7.5kw
 Bearing diameter: 7012CP4x2pcs,7010CP4x2pcs
 Accuracy: Testing bar 300mm/0.008mm
 Temperature: Room Temperature +15°C

PB Series For Surface Grinder



PB-614A-10 SHOWN
\$1200.00

PB-618A-20 SHOWN
\$1350.00

Standard spindle speed: 3600 rpm
 Conoid diameter: 1/4
 Power: 1HP (PB-614), 1.5HP/2HP (PB-618)
 Bearing diameter: NN3006KP4X1pcs (PB-614)
 NN3006KP4X1pcs ,7208CP4x2pcs (PB-618)
 Accuracy: Runout (in Taper) 1.5 µ
 Temperature: Room Temperature +12°C

PF Series For Surface/Cylindrical Grinder



PF-80A-10-36 SHOWN
\$950.00

Spindle Speed: 1200~6000rpm
 Conoid diameter: 1/5 External threads
 Power: 1HP/ 2HP
 Bearing diameter: 7206CP4x4pcs
 Accuracy: Runout (in Taper) 1.5 µ
 Temperature: Room Temperature +10°C

KE Series For Surface/Cylindrical Grinder



KE-80A-10-60 SHOWN
\$900.00

Spindle Speed: 1200~6000rpm
 Conoid diameter: 1/4 internal threads
 Power: 1HP/2HP
 Bearing diameter: 7206CP4x4pcs
 Accuracy: Runout (in Taper) 1.5 µ
 Temperature: Room Temperature +10°C

DM-80 Series For Tool & Cutter Grinder



DM-80-05 SHOWN
\$990.00

Spindle Speed: 800~8000rpm double spinning
 Conoid diameter: 1/4
 Power: 1/2HP~2HP
 Bearing diameter: 7206CP4
 Accuracy: Runout (in Taper) 2 µ
 Temperature: Room Temperature +12°C

J Series For CNC Turning Center



J270A2-6-110-40 SHOWN
\$6800.00

Highest spinning speed: 4000rpm
 Chuck diameter: 8"
 Power: 11kw/15kw/22kw
 Bearing diameter: NN3020K,234420
 Accuracy: Runout (in Spindle Nose) 3 µ
 Temperature: Room Temperature +20°C

Please visit our website at www.gromax-usa.com for more details

Multi-Purpose Milling & Drilling Machine

Features:
Versatile use:
milling, drill and tapping;
Sturdy construction not limited to skilled operators;
Adjustable headstock can be swung 360° up or down to meet various requirements;
Bronze adjustable lead screw nuts;
9" x 30" table,
12 speed,
2 HP, 1 PH Motor



Model RF-31

Standard Accessories:

- 3 1/2" Angle mill vise
- 3" Face Cutter
- 5/8" Drill Chuck
- R8 Arbor Set

Model	Wt.	Price
RF-30B	660Lbs	\$1,190.00
RF-31 (with stand)		\$1,390.00

Optional Accessories

- RF-30B.1 Power Table Feed **\$325.00**
- RF-30B.2 Floor Stand **\$200.00**
- AL-99 Power Feed **\$325.00**

Universal Right Angle Attachment



Features:
• Fits all mills with 3-3/8" quill diameter and R8 spindle taper
• Converts a vertical mill into a horizontal mill
• Concave & convex groove
• Made of heat treated alloy steel
• Set includes: right angle head, arbor support & milling arbor

R8 Spindle

Description	Model	Price
Complete Set	URAMHR8	\$565.00

Individual components

Right Angle Head	URAMHC	\$350.00
Arbor Support	URAMHE	\$145.00
Milling Arbor	URAMHG	\$110.00

NT Spindle

Description	Model	Price
Complete Set	URAMHNT30	\$740.00
	URAMHNT40	\$740.00 (100mm)
	URAMHNT41	\$740.00 (105mm)
	URAMHNT42	\$740.00 (110mm)

Individual components

Right Angle Head	URAMHD	\$595.00
Arbor Support	URAMHF	\$185.00
Milling Arbor	URAMHH	\$145.00

1" R8 Stub Arbor \$35.00



Vertical Slotting Head

Features:
Forms intricate shapes, extruded dies and complex patterns;
Mounts on the rear of the V-Ram (suitable for any Bridgeport type mills);
Easy adjustment to make any key or groove on cone or tilted surface;
Vise-type clamping flange (Easy mounting and discharging);
Swings the turret 180° to position if over the table and ready to work;
Uses a vertical tool motion to shape and slot.



VSH-100

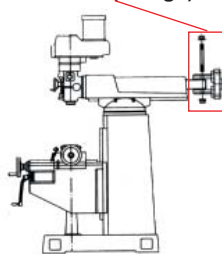
Model	Price
VSH-100 (head)	\$2,450.00
VSH-100A (cutter set)	\$280.00
VSH-100B (flange)	\$280.00

VSH-100A(Cutter Set)



Sizes: 4mm, 5mm, 6mm, 7mm, 8mm, 10mm

VSH-100B(Flange)



VSH-100(Tool Cutter)

Specification:

Stroke:
0-5"

Strokes per minute @60HZ
35, 54, 79, 112, 160

Motor:

3/4 HP 3 phase,
220V/60HZ

Motor Speed:
1370 rpm

Portable Electro Magnetic Drill & Tapping Stand

Specifications:

Model	MDT-930A
Drill Capacity	1/4"~1 1/4" 6φ~32φ
Tapping Capacity	3/8"~1 1/8" 10φ~30φ
Power	220V 3-Phase
Motor (HP)	2
Speed (R.P.M.)	756/456/303/186/127/51
Max. Depth	4.33"
Body Movable Size	5.91"
Y-Axis Transversal Move	0.79"
Turning Degree	330°
Electro. Magnetic Size	5.31"X11.02"
Electro. Magnetic Force	24500N
Height	22.83"
Torsion Fixture Standard Fitting	7
Drill Sleeve Standard Fitting	3
Machine Weight	155 lbs.



*Portable!
Magnetic Base!!*

Model	Weight	Price
MDT-930A	155Lbs.	\$2,360.00

Features: Heavy-Duty Gear Head

- All the safety torque fixtures and drill sleeves are designed with rapid adaptor. This makes it more convenient to change the cutters. With the safety torque device on the tap fixtures can adjust to various needs. Different materials and sizes need different torque and this can prevent the tap from being damage.
- The revolving speed can be changed during machining. The reducer is made with synchronizing gears and the gears are absolutely safe.
- The control panel is located on the top of the machine. This can prevent from damage if the machine falls to the ground.
- Having six-step variable speed (max.756 rpm & min. 51rpm) offers various selections to cut different materials and different sizes of hole.
- The total height is 22.5" and the center of gravity is only 11.0". Having a low center of gravity makes the machine stable and secure.

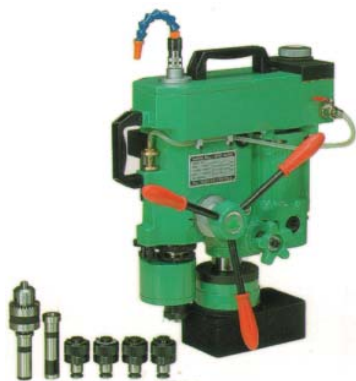
Portable Magnetic Drilling/Tapping Stand

Features:

- * All the drill-sleeves, tapper set, and the clamp set of hole cutter are designed with a rapid adaptor to streamline production
 - * It is designed for tapping, perforating, and drilling by using twisting-drill and center-free-drill.
- With these 3 functions are very convenient for outdoor work
- * Most suitable for cutting workpieces that are not easily to be moved. Workpieces are like large steel plate, steel skeleton of building and bridge, heavy- duty machine ...etc.

Specifications:

Model	PM-A22S
Power (AC)	110V, 50/60Hz
Motor Rated Output	1350W
Motor Rated Ampere	12A
Speed without Load	300/750rpm
Drill Capacity	1/16"~7/8"
Drill Hole Travel	31/4"
Body Movable Size	315/16"
Turning Degree	60°
Y-Axis Transversal Move	0.39"
Magnetic Size	4.13"x7.09"x2.76"
Magnetic Force	8820N
Height	18.11"
Machine Weight	60 Lbs.
Price	\$2,350.00



Portable Magnetic Cutting Unit

Features:

- * This drilling machine has 2 speed rates for different sizes of cutting
- * The coolant tank is built-in the machine body. It reduces the damage of the machine and increases work efficiency
- * The cutter-lifting unit is designed with a spindle cylinder which is more durable than conventional slide plate
- * Most suitable for drilling steel skeleton of building, large steel plate, steam furnace...etc

Specifications:

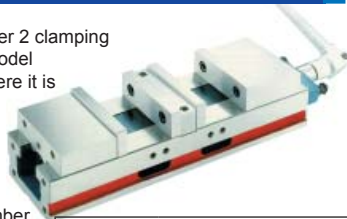
Model	PM-50G
Power (AC)	110V, 50/60Hz
Motor Rated Output	1350W
Motor Rated Ampere	12A
Speed without Load	300/750rpm
Hole Capacity	5/8"~131/32"
Magnetic Size	3.94"x7.87"x3.03"
Magnetic Force	11760N
Height	18.11"
Machine Weight	56 Lbs.
Price	\$1,890.00



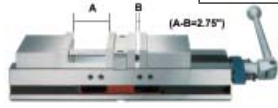
Precision Double Clamping Vise

Features:

- This twin vise offer 2 clamping stations, 6"x4" model
- Ideal for jobs where it is necessary to maximize the number of parts in the work envelop and increase the number of machining sequences in a single setup
- .0002" accuracy



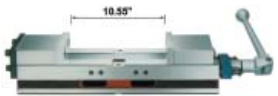
Model	Wt.(Lb)	Price
DL44 (4")	44	\$999.00
DL64 (6")	101	\$1150.00



In case of different sizes for two work-pieces, the clamping operation can still be performed when the length difference is less than 2.76".



Once the center stationary jaw is removed, this vise become a center clamping angle lock vise.

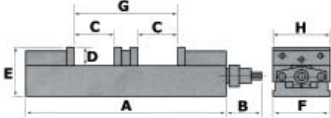


This vise can be change into a super open vise by removing the center stationary jaw and then fixing the rear movable jaws.

Specifications: UNIT: (Inch)

Model	A	B	C	D	E	F	G
DL44	15-5/8	3-3/8	3	1-1/4	3-11/16	4	7-7/8"
DL64	20-1/2	4	3-15/16	1-3/4	4-7/8	6	10-9/16"

LBS	
H	Wt.
3-15/16	44
5-15/16	101



GROMAX Hydraulic Machine Vise

Feature:

- Spring-disc cylinder absorbs vibration in cutting process
- Alloy steel jaws hardened & ground
- High tensile strength cast iron body
- Hardened & ground slide way
- Adjustable clamping force
- Enable rigid clamping

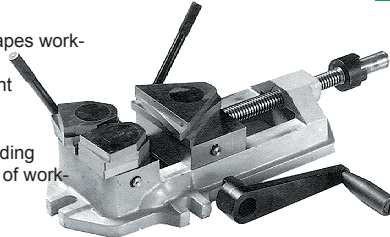


Model	HH100	HH150	HH200
Jaw width	3.94"	5.91"	7.87"
Jaw height	1.42"	2.00"	2.44"
Jaw open	6.69"	11.81"	11.81"
Total length	16.93"	24.41"	27.56"
Total height	3.70"	5.24"	6.30"
WT(lbs)	60	175	265
Price	\$505.00	\$595.00	\$1,005.00

Multi-Purpose Fixture Vise

Feature:

- Holds odd shapes work-piece;
- Positive 3-point gripping jaws adjusts jaws position according to the shaped of work-piece



Specification:

Model	AK 70	AK140
Jaw opening	3"	6"
Jaw width	2.76"	5.51"
Overall length	14.7"	25.1"
Overall height	3.27"	5"
Weight	20 Lbs	80 Lbs
Price	\$185.00	\$255.00

GROMAX Super Lock Vise

Features:

- Material is highest quality ductile iron 80,000 psi, flame hardened bed, standard swivel base, hardened & ground jaw plates, screws hardened & threads ground
- 1 lb. of force horizontally, 1/2 lb. of force vertically pushes jaw downward
- Coolant through & enclosed lead screw
- Removable hinged handle for fast locking
- Provides better clamping pressure
- Eliminates hammering

HAV-6.5 has 8" bigger jaw opening than HAV-6 (with the same jaw width, depth and overall length)

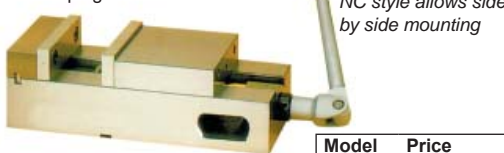


Model (Taiwan/China)	HAV-4	HAV-6T/HAV-6C	HAV-6.5	HAV-8	HAV-12
Jaw Opening	4 3/16"	5 1/2"	8" New	8 5/16"	13 3/8"
Jaw Width	4 1/16"	6"	6"	8"	12 1/2"
Jaw Depth	1 1/4"	1 1/2"	1 1/2"	2"	5 1/4"
Overall Length	13"	8 1/4"	8 1/4"	11"	27 1/2"
Weight	46.3 lbs	138 lbs	150 lbs	195 lbs	320 lbs
Price (Taiwan/China)	\$207.00	\$260.00	\$385.00	\$517.00	\$1229.00
		\$150.00	N/A	N/A	N/A

GROMAX 6" NC Machine Vise

Features:

- Flatness of all sides to .001" guaranteed modes, upright, left and right side.
- Up to 15,000 lbs. clamping force.



Model	Price
HMC-6	\$395.00
HMC-8	\$680.00

Specifications:

Model	Jaw Width	Total Height	Max. Opening	Overall Length	Gross Weight
HMC-6	6"	4.45"	6-1/4"	17-1/2"	68 Lbs.
HMC-8	8"	7.68"	8-1/4"	23-5/8"	172 Lbs.

GROMAX Universal Tilting Rotary Table

Feature:

- Extra deep coolant channel
- 10 second vernier reading, 2 minute tilt reading
- Satin chrome dials
- Super low profile
- Heavy duty construction
- Hardened & ground worm gear



Model	Wt.	Price
HUT300	204 Lbs	\$2,150.00

Specifications:

Table diameter	12"
Table height (horizontal x vertical)	7.25" x 14.57"
Center hole/ height (vertical)	MT5/ 8.19"
Direct indexing	24 DIV
Gear ratio	90:1
Accuracy:	
Surface to center hole squareness	0.0008"
Surface to base parallelism	0.0008"
Clamping surface flatness	0.0006"
Tapered center bore concentricity	0.0008"
Max. cumulative spacing error	45 seconds

GROMAX Horizontal and Vertical Rotary Table

Max. Variation

- Flatness Of Clamping Surface (concave): .0006" Inch
- True Running of Cylindrical Center Bore: .0008"
- True Running of Tapered Center Bore: .0008"
- Parallelism Of Clamping Surface To Base: .0008"



Model	6"	8"	10"	12"	14"
	HHV-150	HHV-200	HHV-250	HHV-300	HHV-350
Center Hole	MT-2	MT-3	MT-3	MT-4	MT-4
WT. (Lbs)	36	77	117	180	225
Price	\$310.00	\$426.00	\$510.00	\$644.00	\$820.00

GROMAX Super Index Spacer Type CS-8"

Can be used as a dividing header or a rotary table & has the feature of milling, drilling, jig boring & many other common machine shop applications.

Standard Accessories:

1. 8" 3-Jaw chuck
2. 6 Division Masking Plates (2,3,4,6,8,12)
3. 10" Face Plate



Model	Wt	Price
CS-8	180 Lbs	\$910.00

Optional Accessories

CS-8.1 Tail Stock	\$159.00
CS-8.2 Dividing Plate	\$99.00

Specification:

Chuck capacity	8"
Indexing accuracy	25 sec. (2 pcs set)
Squareness (Base to chuck)	.0008" Max.
Parallelism over face	.0006" Max.
Concentricity of mounting flange	.0008" T.I.R.
Concentricity of chuck	.0005" T.I.R.

Boring Head C-Type

Features:

The direct reading adjusting screw is ground after hardening and a plainly marked dial face in non-reflecting stain chrome allows easy reading and adjustments of 0.0005" or less; With a variety of shanks, this model takes a 1-1/2"-18 threaded shank.



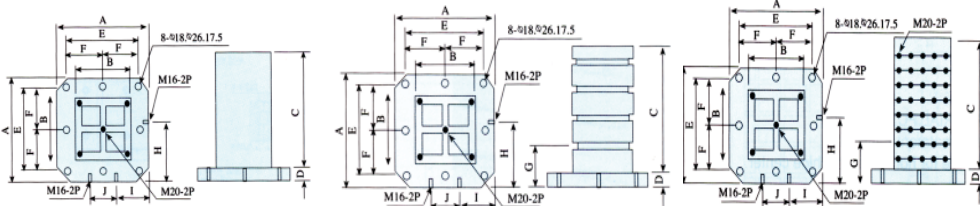
Model	BC2	BC3	BC4
Price	\$59.00	\$89.00	\$120.00
Actual Size	2" dia	3" dia	4" dia
Overall length	2-13/32"	3-5/32"	3-1/2"
Boring bar	1/2"	3/4"	1"
Hole Center Dist. Between Holes	5/8"	15/16"	1-1/4"
Cross hole dia.	1/2"	3/4"	1"
Offset	5/8"	1"	1-1/16"
Weight	2Lbs	5Lbs	7Lbs

Straight Shank

Shanks and Adapters

Model	Dia	Price	Model	Price	Model	Price
BC-1/2	1/2"	\$15.00	BC.R8	\$25.00	BC.MT#3	\$25.00
BC-3/4	3/4"	\$15.00	BC.NT30	\$32.00	BC.MT#4	\$30.00
BC-1	1"	\$15.00	BC.NT40	\$40.00	BC.MT#5	\$65.00
BC-1-1/4	1-1/4"	\$22.00	BC.NT50	\$75.00		

GROMAX MC Universal Blocks Series (4 Faces Type T Slots)



BJB Type

HIB Type

HIC Type

Model	A	B	C	D	E	F	G	H	I	J	K	Price
BJB500X300B	500	300	550	50	400	200		275	175	150		PQR
SIZE up to 800x550												
HIB500X300T	500	300	550	50	400	200	150	275	175	150	18	PQR
SIZE up to 800x550												
HJC500X300T	500	300	550	50	400	200	150	275	175	150	M16	PQR
SIZE up to 800x550												

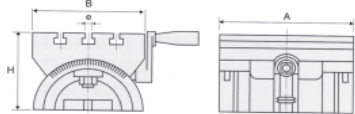
Unit: mm, Inch Available

Please Call 1800-343-3508 for more details.

GROMAX Tilting Table

Features:

Worm and crank handle for easy adjustment.
 Low profile design.
 Adjustable 45 degrees both right and left
 Angle markings are accurate and easy to read
 Swivel base available

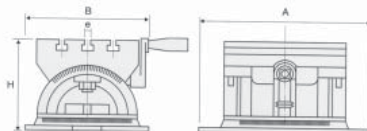


Model	B	A	H	T-SLOT e	Weight	Price
HAP-180	5.1"	7.1"	3.6"	0.4"	16.5 Lbs.	\$380.00
HAP-250	7.0"	9.8"	5.2"	0.5"	49.5 Lbs.	\$475.00
HAP-380	10.2"	15.0"	7.3"	0.6"	151.8 Lbs.	\$680.00
HAP-600	12.2"	23.6"	8.1"	0.7"	290.4 Lbs.	\$1,545.00

GROMAX Tilting Table with Swivel Base

Features:

Worm and crank handle for easy adjustment
 Low profile design
 Adjustable 45 degrees both right and left
 Angle markings are accurate and easy to read
 Swivel Base attached



MODEL	B	A	H	T-SLOT e	Weight	Price
HAP-180S	8.7"	10.4"	5.3"	0.4"	26.4 Lbs.	\$426.00
HAP-250S	12.0"	13.8"	7.3"	0.5"	88.0 Lbs.	\$680.00
HAP-380S	17.2"	19.3"	9.5"	0.6"	220.0 Lbs.	\$960.00

GROMAX Pneumatic Vise

Features:

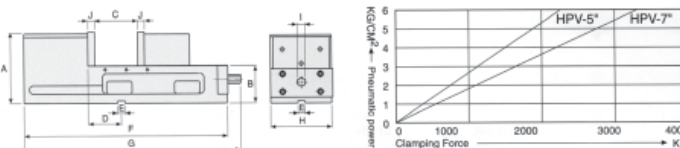
Quick operation.
 Stable and rigid design.
 Extremely high clamping force.
 High accuracy and repeatability.
 Reduces production costs.



Pneumatic power source 8kg/cm²

This vice can be operated both manually and pneumatically. The pneumatic power enables rapid strong clamping of the workpiece which significantly improves productivity. Super-Lock Mechanism ensures jaws are parallel during clamping and eliminates deformation ensuring firm and accurate work holding. Design is compact and very simple to operate requiring almost no maintenance. The combination of Pneumatic over Hydraulic Power provides both high speed and extremely high clamping force. These vices are supplied with a mechanical push button valve as standard. A Solenoid Valve is also available for use in automated or unmanned production situations.

DIMENSIONS

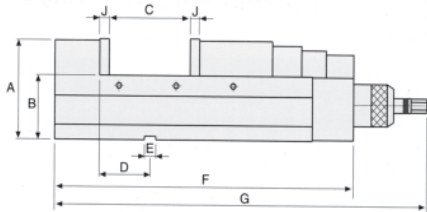


Model	A	B	C	D	E	F	G	Weight	Price
HPV-5	6.3"	6.5"	19.0"	20.4"	3.3"	6.3"	5.3"	92.4 Lbs	\$1,480.00
HPV-7	7.1"	7.3"	22.6"	24.0"	4.5"	7.1"	7.0"	182.6 Lbs	\$1,675.00

GROMAX CNC Multi power Fixed Super Vise

Features:

One-Piece Construction provides high rigidity and super precision.
 Heat Treated Slideways.
 Super-Lock System holds Jaw down on slideways and prevents Jaw deformation.
 The vise has 4 reference-surfaces for mounting horizontally sideways or vertically.
 The patented Multi-Power System built of HIGH GRADE BEARING STEEL provides extremely high clamping pressure. The pressure is more consistent and eliminates all leakage and maintenance problems associated with hydraulic vises.



*Fixed Hight makes several vises can be used together.
 This product is suitable for multi-unit applications on both horizontal and vertical CNC Machining Centers as well as Conventional Milling Machines where heavy duty machining requires a very high clamping force.*

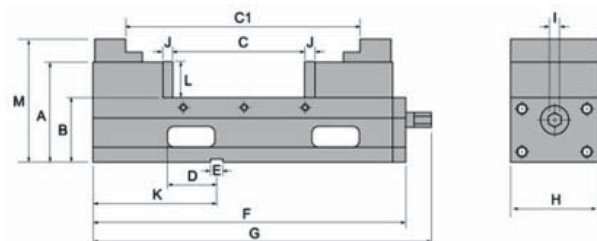


SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness HRC 50°)

Unit: mm

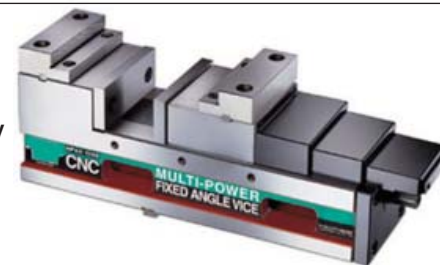
MODEL	A	B	D	E	F	G	H	I	J	C1	C2	C3	Weight(kg)	Price
HPAC-130	147	95+0.01	80+0.02	18	440	520	131	19	15	70-260	115-305	185-375	47	\$1,196.00
HPAC-160	160	105+0.01	80+0.02	18	525	564	161	19	15	85-325	140-375	220-460	65	\$1,358.00
HPAC-200	170	110+0.01	100+0.02	18	600	680	201	19	18	90-380	155-440	240-530	95	\$1,746.00

GROMAX MULTI-POWER CNC PRECISION



FEATURES

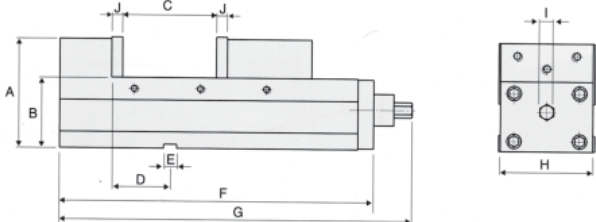
- Shortest Length with Big Jaw Opening
- Extremely High Accuracy and Repeatability
- Special MULTI-POWER design enhances clamping force of 0 ~ 6000 KG



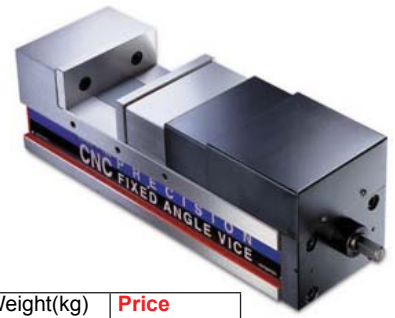
SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness HRC 50°) Unit: mm

MODEL	A	B	C	C1	D	E	F	G	Max. clamping Force	H	I	J	K	L	M	Weight(kg)	Price
HPAC-130S	147	95+0.01	0-190	155-340	75+0.02	18	42	500	6000 kg	131	19	15	178	55	181	46.5	\$1,358.00

GROMAX CNC PRECISION FIXED VISE



This vise has the same features as model HPAV above, but has standard screw clamping instead of the MULTI-POWER SYSTEM.

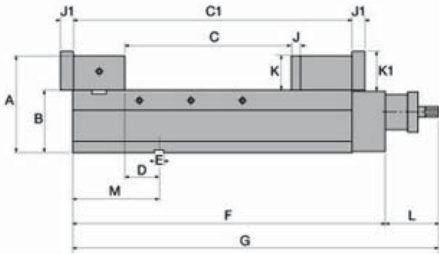


SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness HRC 50°)

Unit: mm

MODEL	A	B	D	E	F	G	H	I	J	C1	C2	C3	Weight(kg)	Price
HPAV-130	147	95+0.01	80+0.02	18	440	520	131	19	15	70-260	115-305	185-375	47	\$892.00
HPAV-160	160	105+0.01	80+0.02	18	525	564	161	19	15	85-325	140-375	220-460	65	\$1,190.00
HPAV-200	170	110+0.01	100+0.02	18	600	680	201	19	18	90-380	155-440	240-530	95	\$1,430.00

GROMAX MULTI-POWER CNC SUPER VISE



FEATURES

- Shortest length with big jaw opening.
- Extremely high accuracy and repeatability.
- Special Multi-power Design enhances clamping forces of 0 ~ 8000 kg

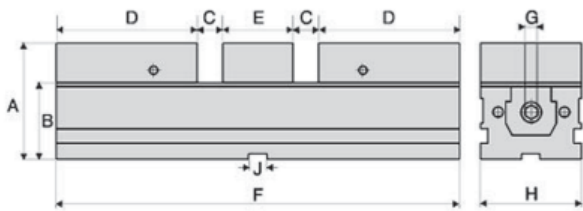


SPECIFICATIONS (Material: FCD 60 Ductile Iron. Hardness HRC60°)

Unit: mm

MODEL	A	B	C	C1	D	E	F	G	Max. clamping Force	H	I	J	J1	K	K1	L	M	Weight(kg)	PRICE
HPAQ-160	168	115+0.01	300	195-490	57+0.02	18	560	670	800 kg	168	19	15	21	53	63	110	145	73	\$1,720.00
HPAQ-200	187	120+0.01	320	220-540	66+0.02	18	607	717	800 kg	200	19	18	25	66	75	110	168	115	\$2,130.00
HPAQ-250	187	120+0.01	350	220-580	66+0.02	18	646	756	800 kg	250	19	18	25	66	75	110	168	156	\$2,890.00

GROMAX ALUMINUM VISE



The vise body is made from high tensile aluminum alloy and designed for continuous, heavy-duty operation. It is suitable for use with the groove and hole systems of CNC machining centers and milling machines.

FEATURES

- Quick change jaws
- Double and centralized chucking in one system
- Centralized chucking for high precision

Standard accessory:

Extra 2 PC of Moveable Jaw & 1 PC of Fixed Jaw

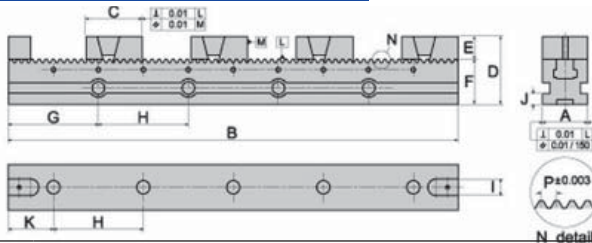
Moveable Jaw and Fixed Jaw are Available for being Ordered Separately.



SPECIFICATIONS (Material: Alloy Aluminum, Durable hard anodized vice body) Unit: mm

MODEL	A	B	C	D	E	F	G	H	I	J	Weight(kg)	Price
crownflex4010	115	76	25	140	70	400	12	100	14	18	12.5	\$2,280.00
crownflex5015	144	95	25	185	80	500	14	150	22	18	30	\$3,230.00

GROMAX CNC VISE IN-ROW



FEATURES

HRV-series' VISE IN-ROW is a kind of multiple clamp vise. Full set of this vise is made from Tool Steel with heat treatment more than HRC 60° of hardness and then ground precisely ensures long life. It enlarges clamping dimension. No matter what shape of working piece, such as square, round, cylindrical or any irregular shapes can be positioned quickly. Precision gear locating datum plane is adjustable so working piece can be fixed easily. This vise is suitable for CNC Machining Centers and Surface Grinder, ..etc.



SPECIFICATIONS (Material: Tool Steel, Hardness over HRC 60°) Unit: mm

MODEL	Price	A	B	C	D	E	F	G	H	I	J	K	P	KG
HRV-5030	\$1,350.00	50	300	66	75	25	50	70	80	18	10	30	1.5	7
HRV-5040	\$1,460.00		400					80				40		9
HRV-5050	\$1,630.00		500					90				50		10
HRV-5060	\$1,780.00		600					100				60		11
HRV-5070	\$2,020.00		700					110				70		12
HRV-7543	\$2,050.00	75	430	85	115	40	75	115	100	18	17	65	2	20
HRV-7553	\$2,400.00		530					115				65		25.5
HRV-7563	\$2,560.00		630					115				65		29.5
HRV-7573	\$2,730.00		730					65				115		33.5
HRV-10055	\$3,680.00	100	550	108	125	50	75	75	100	18	17	125	2.5	39.5
HRV-10065	\$4,060.00		650					125				75		44
HRV-10075	\$4,270.00		750					125				75		49

setup example



Single End Standard length Endmills

Series 330 Square End
330B Ball End • Two Flute



30° HELIX/RHS/RHC

Series 362 Square End
362B Ball End • Three Flute



Coated Code: TA (TiAlN) TC (TiCN) TN (TiN)

Series 320 Square End
320B Ball End • Four Flute



***Extended LOC is available.
***Metric sizes are also available.
Please call or visit our website at
www.gromax-usa.com for details.

Cutting Diam +.000/-.002

Shank Diam +.0000/-.0003

Diam	LOC	OAL	Shank	2 Flute Square End	3 Flute Square End	4 Flute Square End	Coated Square End	Coated Square End	2 flute Ball End	3 flute Ball End	4 flute Ball End	Coated Ball End	Coated Ball End
1/64"	3/64"	1-1/2"	1/8"	33001	36201	32001	\$12.46	\$14.55	33101	36301	32101	\$15.89	\$17.98
1/32"	3/32"	1-1/2"	1/8"	33002	36202	32002	\$9.23	\$11.33	33102	36302	32102	\$11.80	\$13.91
3/64"	3/16"	1-1/2"	1/8"	33003	36203	32003	\$9.23	\$11.33	33103	36303	32103	\$11.80	\$13.91
1/16"	3/16"	1-1/2"	1/8"	33004	36204	32004	\$8.59	\$10.69	33104	36304	32104	\$11.16	\$13.27
5/64"	1/4"	1-1/2"	1/8"	33005	36205	32005	\$8.59	\$10.69	33105	36305	32105	\$11.16	\$13.27
3/32"	3/8"	1-1/2"	1/8"	33006	36206	32006	\$8.37	\$10.47	33106	36306	32106	\$10.94	\$13.05
7/64"	1/2"	1-1/2"	1/8"	33007	36207	32007	\$8.37	\$10.47	33107	36307	32107	\$10.94	\$13.05
1/8"	1/2"	1-1/2"	1/8"	33008	36208	32008	\$7.51	\$9.62	33108	36308	32108	\$9.88	\$11.97
9/64"	1/2"	2"	3/16"	33009	36209	32009	\$11.60	\$14.17	33109	36309	32109	\$14.60	\$17.17
5/32"	9/16"	2"	3/16"	33010	36210	32010	\$11.60	\$14.17	33110	36310	32110	\$14.60	\$17.17
11/64"	9/16"	2"	3/16"	33011	36211	32011	\$11.60	\$14.17	33111	36311	32111	\$14.60	\$17.17
3/16"	5/8"	2"	3/16"	33012	36212	32012	\$10.74	\$13.31	33112	36312	32112	\$13.74	\$16.31
13/64"	5/8"	2-1/2"	1/4"	33013	36213	32013	\$14.60	\$19.53	33113	36313	32113	\$18.25	\$23.18
7/32"	5/8"	2-1/2"	1/4"	33014	36214	32014	\$14.60	\$19.53	33114	36314	32114	\$18.25	\$23.18
15/64"	3/4"	2-1/2"	1/4"	33015	36215	32015	\$14.60	\$19.53	33115	36315	32115	\$18.25	\$23.18
1/4"	3/4"	2-1/2"	1/4"	33016	36216	32016	\$12.88	\$17.81	33116	36316	32116	\$16.53	\$21.47
17/64"	3/4"	2-1/2"	5/16"	33017	36217	32017	\$20.39	\$26.40	33117	36317	32117	\$25.33	\$31.34
9/32"	3/4"	2-1/2"	5/16"	33018	36218	32018	\$20.39	\$26.40	33118	36318	32118	\$25.33	\$31.34
19/64"	13/16"	2-1/2"	5/16"	33019	36219	32019	\$20.39	\$26.40	33119	36319	32119	\$25.33	\$31.34
5/16"	13/16"	2-1/2"	5/16"	33020	36220	32020	\$18.03	\$24.04	33120	36320	32120	\$22.96	\$28.97
21/64"	13/16"	2-1/2"	3/8"	33021	36221	32021	\$24.90	\$31.34	33121	36321	32121	\$30.91	\$37.35
11/32"	13/16"	2-1/2"	3/8"	33022	36222	32022	\$24.90	\$31.34	33122	36322	32122	\$30.91	\$37.35
23/64"	1"	2-1/2"	3/8"	33023	36223	32023	\$24.90	\$31.34	33123	36323	32123	\$30.91	\$37.35
3/8"	1"	2-1/2"	3/8"	33024	36224	32024	\$21.47	\$27.91	33124	36324	32124	\$27.48	\$33.92
25/64"	1"	2-3/4"	7/16"	33025	36225	32025	\$33.06	\$41.43	33125	36325	32125	\$41.43	\$49.80
13/32"	1"	2-3/4"	7/16"	33026	36226	32026	\$33.06	\$41.43	33126	36326	32126	\$41.43	\$49.80
27/64"	1"	2-3/4"	7/16"	33027	36227	32027	\$33.06	\$41.43	33127	36327	32127	\$41.43	\$49.80
7/16"	1"	2-3/4"	7/16"	33028	36228	32028	\$30.49	\$38.85	33128	36328	32128	\$38.85	\$47.22
29/64"	1"	3"	1/2"	33029	36229	32029	\$38.21	\$46.80	33129	36329	32129	\$47.66	\$56.24
15/32"	1"	3"	1/2"	33030	36230	32030	\$38.21	\$46.80	33130	36330	32130	\$47.66	\$56.24
31/64"	1"	3"	1/2"	33031	36231	32031	\$38.21	\$46.80	33131	36331	32131	\$47.66	\$56.24
1/2"	1"	3"	1/2"	33032	36232	32032	\$35.42	\$44.01	33132	36332	32132	\$44.86	\$53.45
9/16"	1-1/4"	3-1/2"	9/16"	33034	36234	32034	\$61.18	\$73.42	33134	36334	32134	\$76.85	\$89.08
5/8"	1-1/2"	3-1/2"	5/8"	33036	36236	32036	\$67.61	\$80.93	33136	36336	32136	\$84.58	\$97.88
11/16"	1-1/2"	4"	3/4"	33038	36238	32038	\$101.96	\$117.63	33138	36338	32138	\$127.71	\$143.39
3/4"	1-1/2"	4"	3/4"	33040	36240	32040	\$94.45	\$110.12	33140	36340	32140	\$118.06	\$133.72
7/8"	1-1/2"	4"	7/8"	33044	36244	32044	\$149.18	\$167.21	33144	36344	32144	\$185.68	\$203.71
1"	1-1/2"	4"	1"	33048	36248	32048	\$155.62	\$178.17	33148	36348	32148	\$194.26	\$216.80
1-1/4"	2"	4-1/2"	1 1/4"	32080	32080	32080	\$440.04	\$482.53					

Code	Color	Type	Thickness	Hardness	Max. Temp.
TA (TiAlN)	purple-gray	PVD	2-5µm	3600HV 87HRC	850C 1560F
TC (TiCN)	red-brown	PVD	2-5µm	2800HV 84HRC	600C 1110F
TN (TiN)	gold	PVD	2-5µm	2700HV 83.5HRC	450C 840F

Applications
Sole choice for dry, semi-dry & HSM machining requirements. High hardness and heat resistance for machining toughest materials.
Very high hardness qualities with excellent lubricity. Multi-layered for higher heat resistance and toughness. Excellent for all kinds of steel. Excellent general purpose coating for all ferrous materials. Good combination of lubricity, heat resistance, and wear characteristics.

Corner Rounding Endmills

Specialty 4 Straight Flute Form-Relieved with Corner Radius Rounding Endmill



Series 235

Radius Mill specification:
Radius +/- 0.0005"
Pilot Diameter +/- 0.0005"

Model	Cutter Dia.	Radius	Pilot Dia.	Shank Dia.	OAL	Price	Coated Price
23500	3/16"	1/32"	1/8"	3/16"	2"	\$32.20	\$34.78
23501	1/4"	1/16"	1/8"	1/4"	2-1/2"	\$43.73	\$48.67
23502	3/8"	3/32"	3/16"	3/8"	2-1/2"	\$68.81	\$75.25
23503	1/2"	1/8"	1/4"	1/2"	3"	\$87.69	\$96.28
23514	3/4"	5/32"	7/16"	3/8"	2-3/4"	\$100.34	\$113.66
23504	3/4"	3/16"	3/8"	3/8"	2-3/4"	\$100.34	\$113.66
23515	1"	5/16"	3/8"	1/2"	3"	\$122.41	\$139.59
23505	1"	1/4"	1/2"	1/2"	3"	\$122.41	\$139.59
23506	1-1/4"	3/8"	1/2"	3/4"	3"	\$213.06	\$238.82

Specialty Endmills

Series 320-60 High-Helix 60 degree Helix



Series 320-60

This series is the preferred choice for tough milling jobs involving titanium, inconel, stainless, and steel alloys. Precision ground for maximum strength and resistance from chipping that only a premium sub-micron carbide can offer. The high-helix design improves surface finish and reduces relative cutting loads.

Specifications:
Cutting Diam +.0000/-.0020
Shank Diam +.0000/-.0003

Model	Dia.	LOC	OAL	Shank	Flutes	Price	Coated Price
31008	1/8"	1/2"	1-1/2"	1/8"	3	\$16.83	\$18.93
31012	3/16"	5/8"	2"	3/16"	3	\$19.92	\$22.50
31016	1/4"	3/4"	2-1/2"	1/4"	3	\$25.98	\$30.91
31020	5/16"	13/16"	2-1/2"	5/16"	3	\$34.13	\$40.15
31024	3/8"	7/8"	2-1/2"	3/8"	3	\$42.07	\$48.52
31032	1/2"	1"	3"	1/2"	3	\$66.33	\$74.92
31036	5/8"	1-1/2"	3-1/2"	5/8"	3	\$131.32	\$144.63
31040	3/4"	1-1/2"	4"	3/4"	3	\$183.74	\$199.41
31048	1"	1-1/2"	4"	1"	3	\$303.73	\$326.27

Sub-Miniature Endmills

Series 330SMS
Miniature Two Flute Endmills
1/8" Shanks • 1-1/2" OAL



Series 320SMS
Miniature Four Flute Endmills
1/8" Shanks • 1-1/2" OAL



Dia.	LOC	OAL	Shank	2 Flute Square End	4 Flute Square End	Square End	Coated Square End	2 flute ball end	4 flute ball end	Ball End	Coated Ball End
.010"	.015"	1-1/2"	1/8"	33244		\$16.53	\$18.64	33344		\$20.61	\$22.71
.011"	.017"	1-1/2"	1/8"	33245		\$16.53	\$18.64	33345		\$20.61	\$22.71
.012"	.018"	1-1/2"	1/8"	33246		\$16.53	\$18.64	33346		\$20.61	\$22.71
.013"	.020"	1-1/2"	1/8"	33247		\$16.53	\$18.64	33347		\$20.61	\$22.71
.014"	.021"	1-1/2"	1/8"	33298		\$16.53	\$18.64	33398		\$20.61	\$22.71
.015"	.023"	1-1/2"	1/8"	33249		\$16.53	\$18.64	33349		\$20.61	\$22.71
.016"	.024"	1-1/2"	1/8"	33250		\$16.31	\$18.42	33350		\$20.39	\$22.50
.017"	.026"	1-1/2"	1/8"	33251		\$16.31	\$18.42	33351		\$20.39	\$22.50
.018"	.027"	1-1/2"	1/8"	33252		\$16.10	\$18.20	33352		\$19.97	\$22.07
.019"	.029"	1-1/2"	1/8"	33253		\$16.10	\$18.20	33353		\$19.97	\$22.07
.020"	.030"	1-1/2"	1/8"	33254		\$16.10	\$18.20	33354		\$19.97	\$22.07
.021"	.032"	1-1/2"	1/8"	33255		\$16.10	\$18.20	33355		\$19.97	\$22.07
.022"	.033"	1-1/2"	1/8"	33256		\$15.89	\$17.98	33356		\$19.75	\$21.85
.023"	.035"	1-1/2"	1/8"	33257		\$15.89	\$17.98	33357		\$19.75	\$21.85
.024"	.036"	1-1/2"	1/8"	33258		\$15.89	\$17.98	33358		\$19.75	\$21.85
.025"	.038"	1-1/2"	1/8"	33259	32259	\$15.03	\$17.13	33359	32359	\$19.32	\$21.42
.026"	.039"	1-1/2"	1/8"	33260	32260	\$15.03	\$17.13	33360	32360	\$19.32	\$21.42
.027"	.041"	1-1/2"	1/8"	33261	32261	\$13.31	\$15.41	33361	32361	\$16.75	\$18.84
.028"	.042"	1-1/2"	1/8"	33262	32262	\$13.31	\$15.41	33362	32362	\$16.75	\$18.84
.029"	.044"	1-1/2"	1/8"	33263	32263	\$13.31	\$15.41	33363	32363	\$16.75	\$18.84
.030"	.045"	1-1/2"	1/8"	33264	32264	\$13.31	\$15.41	33364	32364	\$16.75	\$18.84
.031"	.047"	1-1/2"	1/8"	33265	32265	\$10.99	\$13.10	33365	32365	\$13.74	\$15.84
.035"	.053"	1-1/2"	1/8"	33266	32266	\$10.74	\$12.83	33366	32366	\$13.39	\$15.50
.040"	.060"	1-1/2"	1/8"	33267	32267	\$10.47	\$12.58	33367	32367	\$13.10	\$15.20
.047"	.071"	1-1/2"	1/8"	33268	32268	\$10.18	\$12.28	33368	32368	\$12.71	\$14.81
.050"	.075"	1-1/2"	1/8"	33269	32269	\$10.18	\$12.28	33369	32369	\$12.71	\$14.81
.055"	.083"	1-1/2"	1/8"	33270	32270	\$10.18	\$12.28	33370	32370	\$12.71	\$14.81
.060"	.090"	1-1/2"	1/8"	33271	32271	\$10.18	\$12.28	33371	32371	\$12.71	\$14.81

***Extended LOC is available. ***Metric sizes are also available.

Specialty Endmills

***2 Flute 45° RH Spiral Endmill (inch/metric)

***60° High-Helix Endmill

***4 Flute 30° RH Spiral Roughing Endmill (inch/metric)

***4 Flute Furnished with Corner Radius Endmill

***4 Straight Flute Form-Relieved with Corner Radius Rounding Endmill

Please call or visit our website at www.gromax-usa.com or www.gromaxonline.com for details.

Twist Drills

Fractional

Standard length.

25° Helix. 118° Four-Facet Point



Series 510

Model	Dia.	LOF	OAL	Price	Coated Price
51001	1/64"	1/4"	1-1/4"	\$13.39	na
51002	1/32"	5/16"	1-1/4"	\$8.24	na
51003	3/64"	3/4"	1-1/2"	\$8.24	\$10.18
51004	1/16"	3/4"	1-1/2"	\$8.41	\$10.35
51005	5/64"	7/8"	1-3/4"	\$8.68	\$10.77
51006	3/32"	1"	2"	\$8.98	\$11.08
51007	7/64"	1-1/4"	2-1/4"	\$10.01	\$13.00
51008	1/8"	1-1/4"	2-1/4"	\$10.30	\$13.31
51009	9/64"	1-3/8"	2-1/2"	\$11.85	\$15.50
51010	5/32"	1-3/8"	2-1/2"	\$13.74	\$17.39
51011	11/64"	1-5/8"	2-3/4"	\$15.28	\$18.93
51012	3/16"	1-5/8"	2-3/4"	\$15.45	\$19.11
51013	13/64"	1-3/4"	3"	\$18.47	\$23.40
51014	7/32"	1-3/4"	3"	\$20.43	\$25.37
51015	15/64"	2"	3-1/4"	\$22.11	\$28.33
51016	1/4"	2"	3-1/4"	\$23.62	\$29.83
51017	17/64"	2-1/8"	3-1/2"	\$27.13	\$34.86
51018	9/32"	2-1/8"	3-1/2"	\$29.71	\$37.43
51019	19/64"	2-3/8"	3-3/4"	\$31.72	\$39.45
51020	5/16"	2-3/8"	3-3/4"	\$34.17	\$41.90
51021	21/64"	2-1/2"	4"	\$36.87	\$45.29
51022	11/32"	2-1/2"	4"	\$40.65	\$49.03
51023	23/64"	2-3/4"	1-1/4"	\$45.29	\$58.17
51024	3/8"	2-3/4"	1-1/4"	\$44.65	\$57.53

Model	Dia.	LOF	OAL	Price	Coated Price
51025	25/64"	2-7/8"	4-1/2"	\$56.24	\$71.05
51026	13/32"	2-7/8"	4-1/2"	\$60.40	\$75.21
51027	27/64"	2-7/8"	4-1/2"	\$66.55	\$81.35
51028	7/16"	2-7/8"	4-1/2"	\$71.18	\$86.84
51029	29/64"	3"	4-3/4"	\$78.13	\$94.88
51030	15/32"	3"	4-3/4"	\$82.60	\$99.35
51031	31/64"	3"	4-3/4"	\$86.30	\$103.03
51032	1/2"	3"	4-3/4"	\$82.43	\$99.17
51033	17/32"	4"	6"	\$137.16	\$155.84
51034	9/16"	4"	6"	\$147.26	\$165.93
51035	19/32"	4"	6"	\$169.19	\$190.01
51036	5/8"	4"	6"	\$171.08	\$191.90
51037	21/32"	4"	6"	\$193.62	\$217.87
51038	11/16"	4"	6"	\$196.84	\$221.10
51039	3/4"	4"	6"	\$229.68	\$253.93
51181	13/16"	4"	6"	\$313.82	\$341.72
51182	7/8"	4"	6"	\$332.71	\$360.61
51183	15/16"	4"	6"	\$332.71	\$364.48
51184	1"	4"	6"	\$309.10	\$340.86

***Wire gage, Letter sizes, metric sizes are available.

Please call or visit our website at www.gromax-usa.com for details.

ATTENTION:

- Machine Shop Supply Buyer
- Tool & Die / Mold Shop Foremen
- Toolroom Manager
- Purchasing Personnel



From:

Gromax Enterprises Corp.

5442 Research Drive, Huntington Beach, CA 92649

Website: www.gromax-usa.com www.gromaxonline.com

E-Mail: info@gromax-usa.com

Toll Free: 1-800-343-3508

Los Angeles: 714-894-4401 Fax: 714-891-1037

To:

PRESORTED STANDARD
US POSTAGE PAID
HUNTINGTON BEACH CA
PERMIT NO 195



* All prices and specifications subject to change without notice.

GROMAX ENTERPRISES CORP.

GROMAX Milling Machine Head For Bridgeport or Bridgeport Type Taiwanese Mills



MH-V100
Variable Speed
(3HP/R8 spindle)



MH-V300
Variable Speed
(3HP/ R8 spindle)



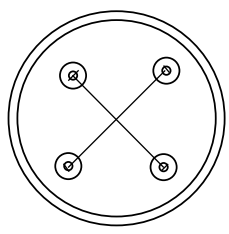
MH-V200
16 Speed
Step Pulley
(3HP/R8 Spindle)



MH-V400
Variable Speed
(5 HP/ NT40 spindle)

Mounting Data:

5 HP Milling head bolt circle is $\phi 6.5"$
3 HP Milling head bolt circle is $\phi 6.0"$



All other spare parts for Bridgeport or Bridgeport type Taiwanese mills are also available. Please call or fax your inquiry.

Features:

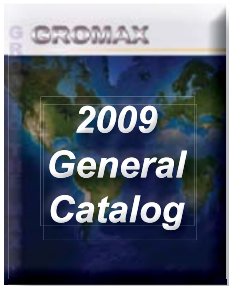
- Complete new mill head for your old machine body or special machinery.
- Chrome quill with super precision preloaded bearing.
- Spindle nose taper I.D. 0.0002" / 0.005mm T.I.R.
- Spindle Taper: R8.
- Quill power feed: 0.0015"/ 0.003"/ 0.006" rev
- Quill Travel: 5" / Quill diameter 3 3/8".
- Power output: Variable speed 220V/440V/3 ϕ Step pulley 220V / 3 ϕ



EVS Head
Model: **MH-E300R8**

Model	Spindle range	Price
MH-V100	Variable Speed 70~4200rpm	\$2,450.00
MH-V200	16 step Pulley 80~5600rpm	\$1,850.00
MH-V300	Variable Speed 70~4200rpm	\$2,250.00
MH-V400	Variable Speed 70~3600rpm	\$3,950.00
MH-E300R8	3HP EVS Head*	\$3,500.00
MH-E300NT	3HP EVS Head*	\$4,400.00

*220V price. Extra \$200 charge for 440V.
**5HP also available. Please call.



Download Catalog At:
www.gromaxonline.com
www.gromax-usa.com
Or to receive via Mail:
Call Gromax at 800-343-3508

