

# MagVISE Workholding Systems

Magnetic Chucks



We Provide Turn-Key Magnetic Workholding Solutions

Contact us for solutions to your workholding bottlenecks.



Modular Chucks



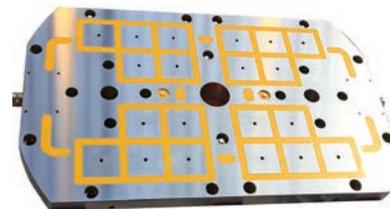
Horizontal Chucks



Indexing Chucks

Round Chucks

For vertical turning, grinding and 5-axis tables



Injection Mold Clamping

Magnetic Vises



Surface Grinding Chucks



Built for Speed.



View Magnetic Workholding videos at: <http://ow.ly/1L1Yo>

All Techniks products are backed by our 100% satisfaction guarantee!

# Customized Magnetic Workholding Solutions

## Engineered Turn-Key Solutions

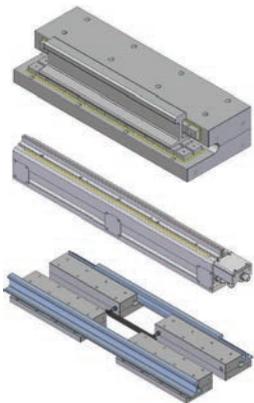
Since 2001, Techniks has designed, built and installed the best magnetic workholding solutions in the industry. We offer a wide range of standard magnetic chucks and vises. You also benefit from the expertise of our engineers, capable of creating solutions for all types of unique applications and parts.

Our engineers can duplicate your application using our in-house CNC Tech Center in order to provide turn-key solutions that easily integrate to your system and maximize production.

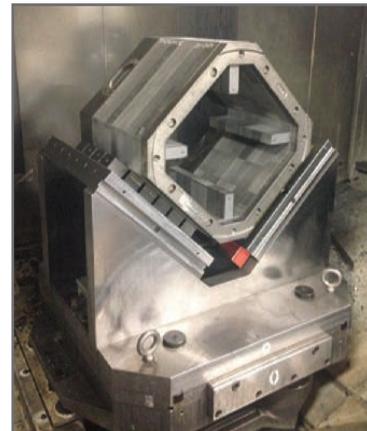


Large plate EPM customized to fit your system

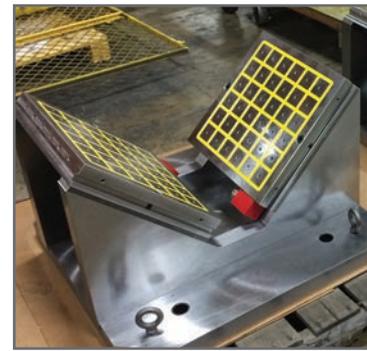
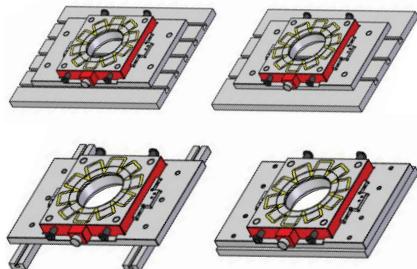
## Rail production



## Complex workpieces



## Automated pallet systems



# MagVISE EEPM Magnetic Workholding Chucks



EEPM chucks come with controller, a standard remote, and a touch-screen remote.

**MagVISE**  
WORKHOLDING

## Features:

- Up to 86,625 lbs holding power
- Turn chuck ON/OFF in only a few seconds – chuck will not lose magnetism if a power loss occurs
- Induction block and subplates provide additional setup options for small parts or wrapped stock

## Advantages:

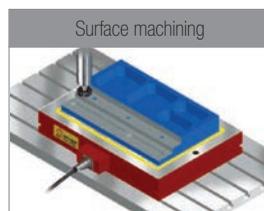
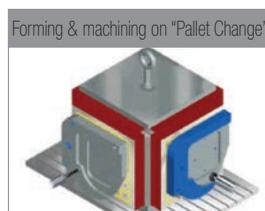
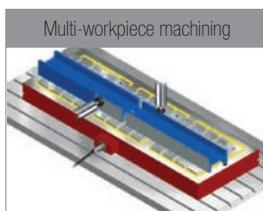
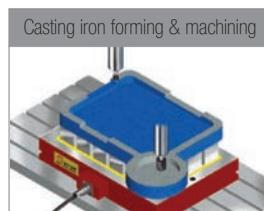
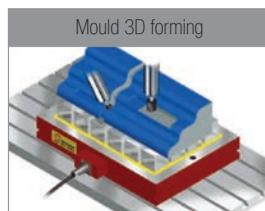
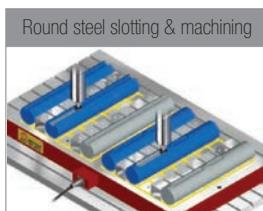
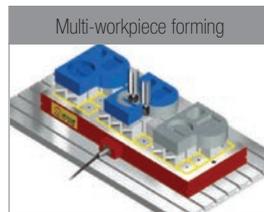
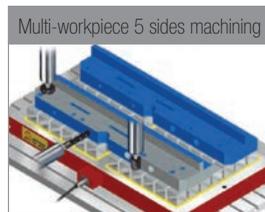
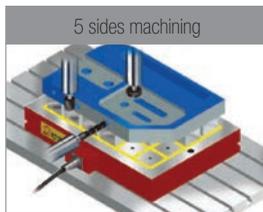
- Machine freely on 5-sides & top so you can cut the full part profile in only one operation
- Reduce setup & change-over time by 50% or more!
- Very uniform holding = No workpiece deformation

Compared to traditional fixturing methods, magnetic workholding frees up all five sides of your workpiece so you can machine an entire profile in one set-up. Magnetic workholding greatly reduces set up and part change-over time, giving your spindle more time to make chips.

Thick or thin, large or small – just about any ferrous material can be held and machined magnetically. Bigger parts are easier to hold because there is more metal for the magnetism to be attracted to.

For smaller parts, using work stops and nesting the part are options that work well. Magnetic workholding is used for just about any type of drilling, milling, and boring operation you can think of, on horizontal or vertical CNC machines.

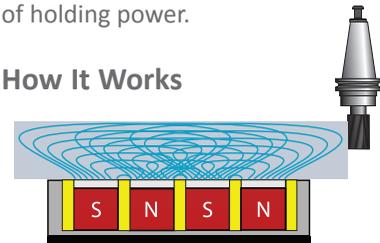
## Application Examples



## Holding Power Example

EEPM 3040W chuck (left) has 20 poles, and produces 16,500 ft/lbs of holding power.

## How It Works



In the ON state, alnico and rare-earth magnets alternate poles, creating a powerful magnetic attraction. Holding power varies with type of material being held, surface finish, and part thickness.

Minimum recommended part size is 5" x 5" x 3/8" thick, so a minimum of 4 magnetic poles are covered by the part. Workstops, pins or part nesting techniques ensure the ability to hold small, thin parts without movement.

## Induction Blocks & Subplates

We recommend using induction blocks or subplates at all times to preserve the precision ground finish and prevent damage to the face of the magnetic chuck.



Scan the QR code to view or View our Workholding videos at: <http://ow.ly/1L1Yo>



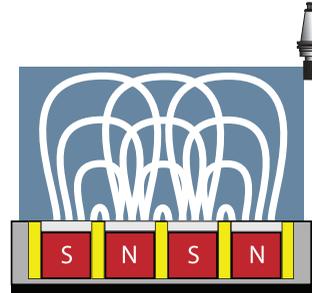
# NEW

## MagVISE For Large Workpieces



### 70MM Pole Features:

- Up to 98,767 lbs. holding power
- Reduce setup time by 50%
- Machine freely on 5-sides



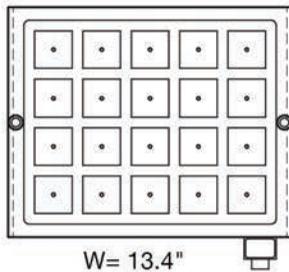
70mm pole chucks provide the most powerful flux lines with the deepest extension into the workpiece. Most effective for over-sized workpieces.

Our 70MM pole chucks provide the increased holding power needed for large workpieces, thick plates, blocks and molds. Great choice for drilling, milling, and boring operations on vertical or horizontal mills. They easily integrate with pallet changing and tombstone systems.

We stand behind our workholding solutions with full factory support to guarantee your satisfaction. Custom solutions built to your specifications are fully tested and are provided at no extra cost.

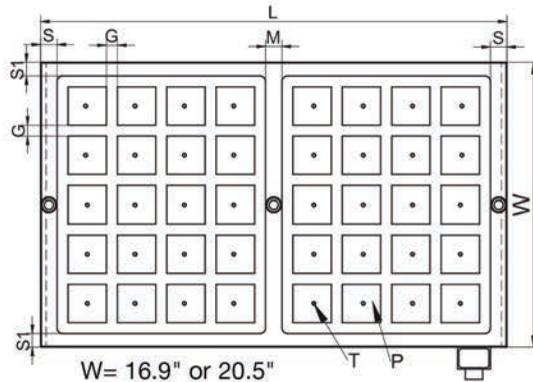
$$S = 1.2" \quad G = 0.78"$$

$$S1 = 1" \quad M = 1.2"$$



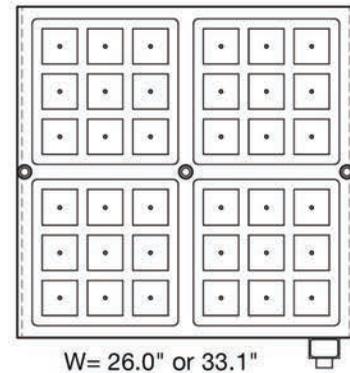
W= 13.4"

Figure 1



W= 16.9" or 20.5"

Figure 2



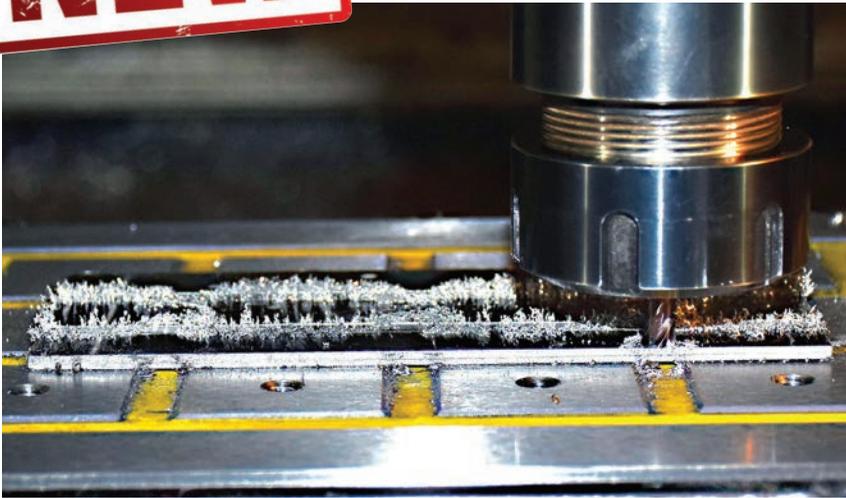
W= 26.0" or 33.1"

Figure 3

Model	Fig	L x W x H	Poles	Holding Pwr.	Subplate	Single Phase	Control	Weight
EEPM-3060D-220	1	26.4" x 13.4" x 2.8"	18	27,778 lbs.	EEPM-3060DISP	220-480V	EEPM-C1	278 lbs.
EEPM-4050D-220	2	20.9" x 16.9" x 2.8"	20	30,864 lbs.	EEPM-4050DISP	220-480V	EEPM-C1	278 lbs.
EEPM-4060D-220	2	26.4" x 16.9" x 2.8"	24	37,037 lbs.	EEPM-4060DISP	220-480V	EEPM-C1	350 lbs.
EEPM-4080D-220	2	33.5" x 16.9" x 2.8"	32	49,383 lbs.	EEPM-4080DISP	220-480V	EEPM-C2	445 lbs.
EEPM-5060D-220	2	26.4" x 20.5" x 2.8"	30	46,297 lbs.	EEPM-5060DISP	220-480V	EEPM-C2	425 lbs.
EEPM-5080D-220	2	33.5" x 20.5" x 2.8"	40	61,729 lbs.	EEPM-5080DISP	220-480V	EEPM-C2	538 lbs.
EEPM-6060D-220	3	26.4" x 26.0" x 2.8"	36	55,556 lbs.	EEPM-6060DISP	220-480V	EEPM-C2	540 lbs.
EEPM-6080D-220	3	33.5" x 26.0" x 2.8"	48	74,075 lbs.	EEPM-6080DISP	220-480V	EEPM-C2	683 lbs.
EEPM-8080D-220	3	33.5" x 33.1" x 2.8"	64	98,767 lbs.	EEPM-8080DISP	220-480V	EEPM-C4	870 lbs.

# NEW

## MagVISE For Small or Thin Workpieces



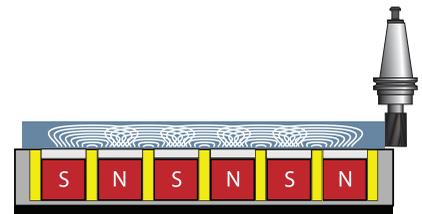
Our 35MM pole chucks are built specifically for the machining of thin workpieces. They are a great choice for drilling, milling, and boring operations on either vertical or horizontal mills. They easily integrate with pallet changing and tombstone systems.

We stand behind our workholding solutions with full factory support to guarantee your satisfaction. Custom solutions built to your specifications are fully tested and are provided at no extra cost.

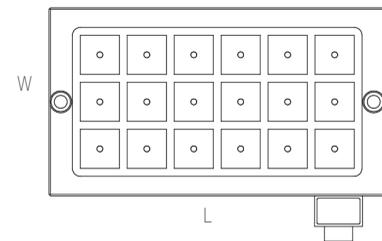


### 35MM Pole Features:

- Up to 34,524 lbs. holding power at 100% contact
- Reduce operations designed for thin material
- Reduce setup time by 50%



35mm pole chucks feature flux lines concentrated closer to the surface, providing more magnetic coverage of thin material.



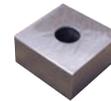
Model	L x W x H	Poles	Holding Power	Subplate	Power (single phase)	Controller	Weight
EEPM-1530A-220	12.6" x 7.3" x 1.9"	18	5,754 lbs.	EEPM-1530ISPA	220-480V	EEPM-C1	51 lbs.
EEPM-2540A-220	17.3" x 8.9" x 1.9"	32	10,229 lbs.	EEPM-2540ISPA	220-480V	EEPM-C1	86 lbs.
EEPM-2560A-220	24.0" x 8.9" x 1.9"	48	15,344 lbs.	EEPM-2560ISPA	220-480V	EEPM-C2	119 lbs.
EEPM-3030A-220	12.6" x 12.2" x 1.9"	36	11,508 lbs.	EEPM-3030ISPA	220-480V	EEPM-C1	86 lbs.
EEPM-3040A-220	17.3" x 12.2" x 1.9"	48	15,344 lbs.	EEPM-3040ISPA	220-480V	EEPM-C2	117 lbs.
EEPM-3060A-220	24.0" x 12.2" x 1.9"	72	23,016 lbs.	EEPM-3060ISPA	220-480V	EEPM-C2	163 lbs.
EEPM-4040A-220	17.3" x 17.1" x 1.9"	72	23,016 lbs.	EEPM-4040ISPA	220-480V	EEPM-C2	165 lbs.
EEPM-4050A-220	20.7" x 17.1" x 1.9"	90	28,770 lbs.	EEPM-4050ISPA	220-480V	EEPM-C4	198 lbs.
EEPM-4060A-220	24.0" x 17.1" x 1.9"	108	34,524 lbs.	EEPM-4060ISPA	220-480V	EEPM-C4	229 lbs.



# MagVISE EEPM Ordering Information

## Ordering EEPM Workholding Chucks and Subplates

- Select a chuck larger than your part for maximum holding power
- Subplates are sized to match the chuck but are 1" thick – See table below
- Control requires dedicated, 480v, single phase, 30A power



induction block



subplate

Use induction blocks or subplates at all times to preserve the precision ground finish and prevent damage to the face of the magnetic chuck.

$$S = 1.2" \quad S1 = 1" \quad G = 0.4 \quad M = 1.2"$$

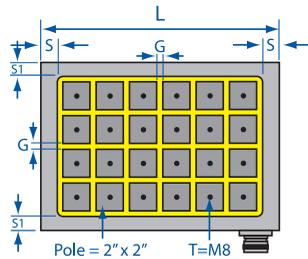


Fig. 1

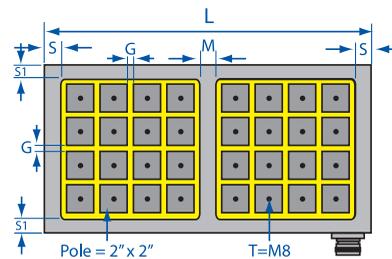


Fig. 2

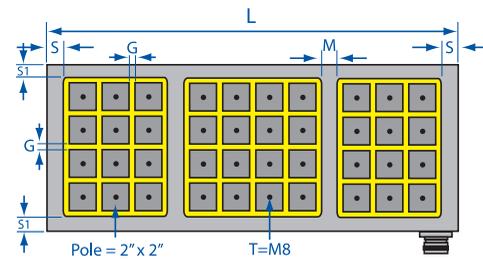


Fig. 3



Model	Fig	L x W x H	Poles	Holding Power	Chuck Weight	Subplate	Controller
EEPM-2540W-220	1	16.9" x 9.4" x 2.36"	18	12,375 lbs.	110 lbs.	EEPM-2540ISP	EEPM-C1
EEPM-2560W-220	2	23.2" x 9.4" x 2.36"	24	16,500 lbs.	152 lbs.	EEPM-2560ISP	EEPM-C1
EEPM-2580W-220	3	31.9" x 9.4" x 2.36"	33	22,687 lbs.	202 lbs.	EEPM-2580ISP	EEPM-C1
EEPM-2590W-220	3	34.3" x 9.4" x 2.36"	36	24,750 lbs.	216 lbs.	EEPM-2590ISP	EEPM-C2
EEPM-25100W-220	3	39.0" x 9.4" x 2.36"	42	28,875 lbs.	244 lbs.	EEPM-25100ISP	EEPM-C2
EEPM-3030W-220	1	12.2" x 11.8" x 2.36"	16	11,000 lbs.	97 lbs.	EEPM-3030ISP	EEPM-C1
EEPM-3040W-220	1	16.9" x 11.8" x 2.36"	24	16,500 lbs.	134 lbs.	EEPM-3040ISP	EEPM-C1
EEPM-3060W-220	2	23.2" x 11.8" x 2.36"	32	22,000 lbs.	180 lbs.	EEPM-3060ISP	EEPM-C1
EEPM-3080W-220	3	31.9" x 11.8" x 2.36"	44	30,250 lbs.	255 lbs.	EEPM-3080ISP	EEPM-C2
EEPM-3090W-220	3	34.3" x 11.8" x 2.36"	48	33,000 lbs.	271 lbs.	EEPM-3090ISP	EEPM-C2
EEPM-30100W-220	3	39.0" x 11.8" x 2.36"	56	38,500 lbs.	304 lbs.	EEPM-30100ISP	EEPM-C2
EEPM-4040W-220	1	16.9" x 16.5" x 2.36"	36	24,750 lbs.	185 lbs.	EEPM-4040ISP	EEPM-C1
EEPM-4050W-220	1	18.9" x 16.9" x 2.36"	42	28,875 lbs.	209 lbs.	EEPM-4050ISP	EEPM-C2
EEPM-4060W-220	2	23.2" x 16.5" x 2.36"	48	33,000 lbs.	255 lbs.	EEPM-4060ISP	EEPM-C2
EEPM-4080W-220	3	31.9" x 16.5" x 2.36"	66	45,375 lbs.	350 lbs.	EEPM-4080ISP	EEPM-C2
EEPM-4090W-220	3	34.3" x 16.5" x 2.36"	72	49,500 lbs.	372 lbs.	EEPM-4090ISP	EEPM-C2
EEPM-40100W-220	3	39.0" x 16.5" x 2.36"	84	57,750 lbs.	425 lbs.	EEPM-40100ISP	EEPM-C4
EEPM-5060W-220	2	23.2" x 18.9" x 2.36"	56	38,500 lbs.	284 lbs.	EEPM-5060ISP	EEPM-C2
EEPM-5080W-220	3	31.9" x 18.9" x 2.36"	77	52,937 lbs.	407 lbs.	EEPM-5080ISP	EEPM-C4
EEPM-5090W-220	3	34.3" x 18.9" x 2.36"	84	57,750 lbs.	431 lbs.	EEPM-5090ISP	EEPM-C4
EEPM-50100W-220	3	39.0" x 18.9" x 2.36"	98	67,375 lbs.	482 lbs.	EEPM-50100ISP	EEPM-C4
EEPM-6060W-220	2	23.2" x 23.6" x 2.36"	72	49,500 lbs.	363 lbs.	EEPM-6060ISP	EEPM-C2
EEPM-6080W-220	3	31.9" x 23.6" x 2.36"	99	68,062 lbs.	473 lbs.	EEPM-6080ISP	EEPM-C4
EEPM-6090W-220	3	34.3" x 23.6" x 2.36"	108	74,250 lbs.	528 lbs.	EEPM-6090ISP	EEPM-C4
EEPM-60100W-220	3	39.0" x 23.6" x 2.36"	126	86,625 lbs.	603 lbs.	EEPM-60100ISP	EEPM-C4
EEPM-8080W-220	3	31.9" x 29.7" x 2.36"	121	83,187 lbs.	596 lbs.	EEPM-8080ISP	EEPM-C4

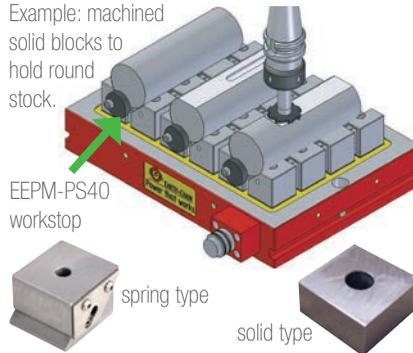
# MagVISE Induction Blocks & Subplates For EEPM

## Induction Blocks & Subplates

We recommend using induction blocks or subplates at all times to preserve the precision ground finish and prevent damage to the face of the magnetic chuck. Order subplates from the table on page 242.

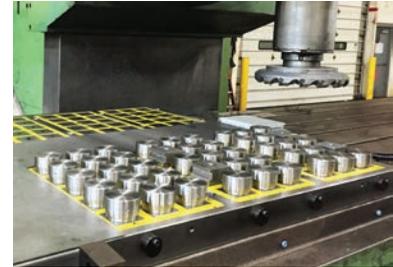
## Individual Induction Blocks

Use induction blocks to raise the workpiece above the surface of the magnet and permit machining 5 sides and thru-hole drilling. Individual induction blocks provide maximum flexibility for creating custom setups for holding difficult workpieces and warped stock.



## Round Fixed & Spring-loaded Blocks

**NEW**



Part No.	Description	L	W	H
EEPM-SP	spring loaded (2 piece set, 8mm screw)	1.89"	1.89"	1.41"
EEPM-SPF	solid, machinable (8mm screw)	1.97"	1.97"	1.23"

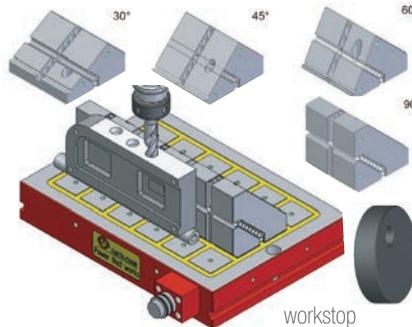
## Connected Induction Blocks

Makes setups faster and easier when large numbers of induction blocks are required. Choose from 2, 3, 4, or 6 pole configurations.



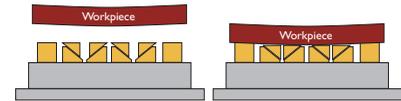
Part No.	Desc.	L	W	H
EEPM-IB225	2-pole block	4"	1.97"	.98"
EEPM-IB325	3-pole block	6"	1.97"	.98"
EEPM-IB425	4-pole block	8"	1.97"	.98"
EEPM-IB625	6-pole block	12"	1.97"	.98"

## Angled Induction Blocks & Workstop



Part No.	Desc.
EEPM-IBT30	30° angle, 4-pole induction block
EEPM-IBT45	45° angle, 4-pole induction block
EEPM-IBT60	60° angle, 4-pole induction block
EEPM-IBT90	90° angle, 4-pole induction block
EEPM-PS40	round workstop (replacement)

## Holding Warped Material



Use EEPM-SPF induction blocks on the corners and EEPM-SP spring loaded blocks everywhere else so the induction blocks adjust to match the warped stock.

## Part Nesting Techniques



For machining small, thin, or irregular parts that do not have much metal to attract the magnet, you can create a shallow nest, or pocket in a subplate or induction blocks to secure the part and prevent lateral movement. For part nests that you will use over-and-over again on repeat jobs use subplates to save setup time.

## Setup Notes

Always make sure you read, understand and follow all the Owner's Manual instructions and CAUTIONS that come with your EEPM Magnetic Chuck before setting it up and using it.

After installing your induction blocks we recommend cleanup milling the surface of your induction blocks before loading your work piece to insure that the surface height is uniform and parallel to the spindle. Subplates are precision ground and do not require cleanup milling.

Please note that the spring loaded induction blocks are NOT machineable, but the solid blocks are able to be drilled and machined as required.



# MagVISE EEPM-C Modular Workholding Chucks



For workholding of ferrous materials only.

## Features:

- Modular connectivity capable of conforming multiple chucks to your unique part and set up
- Operate as many as 16 chucks with 1 control
- 8,250 lbs. holding power (each chuck)\*

## Advantages:

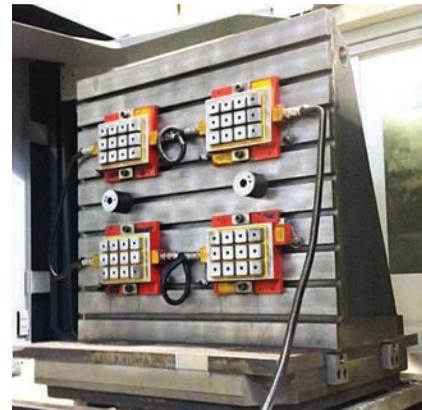
- Easy to setup and adjust for large or irregular parts
- Reduced investment versus larger EEPM chucks
- Easy to move and setup from machine to machine

EEPМ-C chucks provide almost unlimited flexibility to hold workpieces of varying sizes. Use toe-clamps or bolts to position EEPМ-C magnets anywhere on your machine bed or pallet to fit your workpiece.

\*Holding power varies with material being held, surface finish, and part thickness.



Use for fast setups on plate stock



Configure multiple chucks to a variety of setups



Large tooth sprocket being machined



Modular setups adjust easily to part

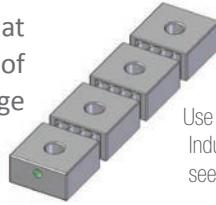
**MagVISE**  
WORKHOLDING

# MagVISE EEPM-C Ordering Information

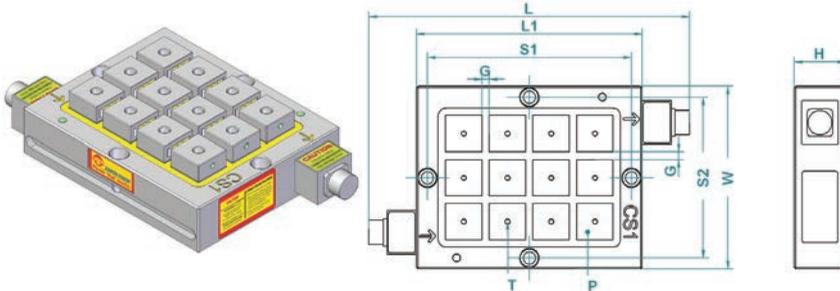
## Ordering EEPM-C Modular Chucks

- Select the number of chucks required
- Select the control required to operate the number of chucks needed
- Select the number and length of connection cables required

We recommend using induction blocks at all times to preserve the surface finish of your magnetic chuck, and prevent damage to the face of the magnetic chuck.



Use with EEPM-IB425 Induction Blocks see page 243



Chuck	L	W	H	L1	S1	S2	Poles	Power*
EEPM-2530C	16.75"	9.84"	2.36"	12.25"	11.0"	8.66"	12	8,250 lbs.

\*Holding power varies with type of material being held, surface finish, and part thickness.

Control requires a dedicated 480V single phase, 30A power supply

C4 control features 4 channels to control up to 16 chucks. Control each channel independently.



Control	Description	L x W x H	Channels	Qty. Chucks
EEPM-C4C	Control for 1-16 EEPM-C magnetic chucks	10.6" x 7" x 5"	4	1-16



Connection Cables	Length
EEPM-CC05	19.6"
EEPM-CC10	39.37"
EEPM-CC15	59"



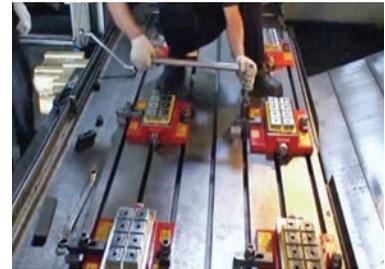
## Installation Example



Up to 16 chucks can be operated from 1 control.



Position the chucks on the machine bed.



Lock them in position using bolts provided.



Connect the control cables to chucks and control



Position workpiece and start machining.



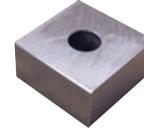
# MagVISE EEPM-V For Horizontal Machining

## Features:

- Up to 68,640 lbs. holding power\*
- Choose from 2 or 4 sided chucks
- 36, 42, or 100 pole chucks, 16.9" to 29.9"

## Advantages:

- Reduce setup & change-over time by 50% or more!
- Machine freely on all 5-sides to reduce operations
- Very uniform holding = No workpiece deformation

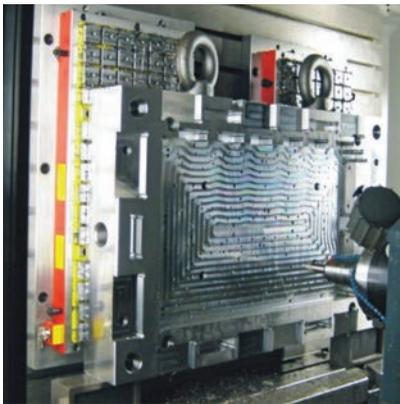


Induction Blocks  
see page 243.

## Induction Blocks & Subplates

We recommend using induction blocks or subplates at all times to preserve the precision ground finish and prevent damage to the face of the magnetic chuck. For more information see page 243.

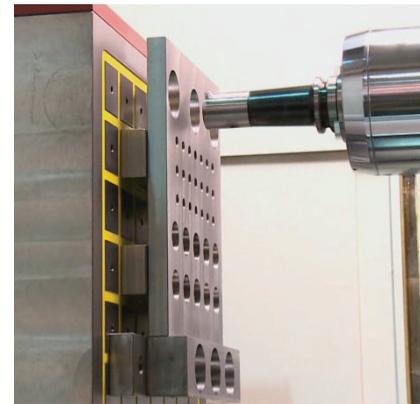
\*4 sizes available  
For workholding of ferrous materials only.  
See page 247 for holding power ratings.



Mold making application



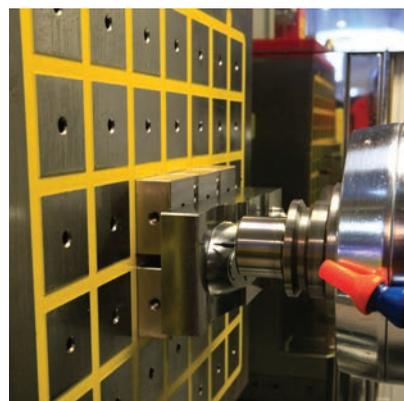
2-sided EEPM on palletized system



Hole-making applications are no problem



Complex part shapes - 5 sides machining



Finish pass using small tools



Palletized horizontal workholding chuck

**MagVISE**  
WORKHOLDING

# MagVISE EEPM-V Ordering Information

## Ordering EEPM-V Chucks

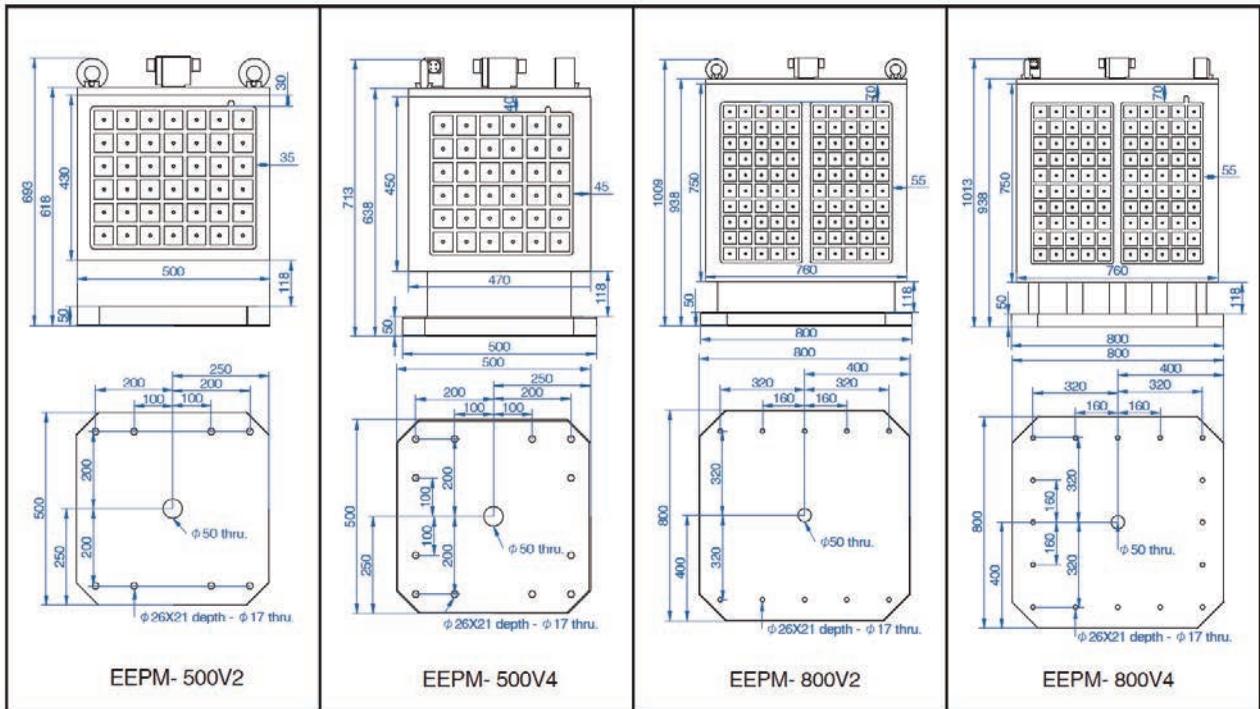
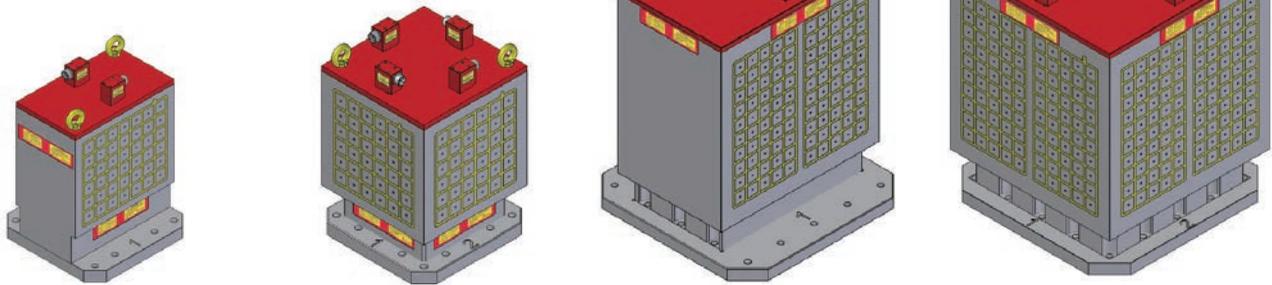
- Select the number of faces and chucks required
- Control is included with chuck
- Order induction blocks from page 243

## We Manufacture Custom Tombstones

- Built to your specifications.  
Call us to discuss your needs.
- (800) 597-3921 or local (317) 803-8000



EEPM chucks includes controller and remote.  
Control requires a dedicated 480V single phase, 30A power supply



Model	Face (L x W)	No. Faces	No. Poles	Holding Power / Face	Chuck Wt.	Controller
EEPM-500V2	16.9" x 19.68"	2	42	28,820 lbs.	1,058 lbs.	EEPM-C2
EEPM-500V4	17.7" x 18.5"	4	36	24,640 lbs.	1,124 lbs.	EEPM-C2
EEPM-800V2	29.5" x 29.9"	2	100	68,640 lbs.	1,675 lbs.	EEPM-C2
EEPM-800V4	29.5" x 29.9"	4	100	68,640 lbs.	1,786 lbs.	EEPM-C2



# MagVISE EEPM-CIR for Vertical Turning & 5-Axis

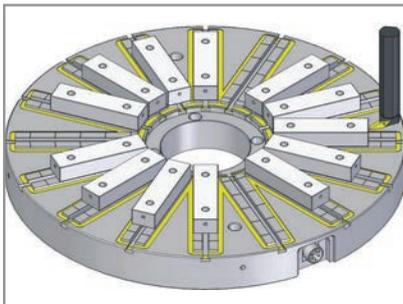


## Advantages:

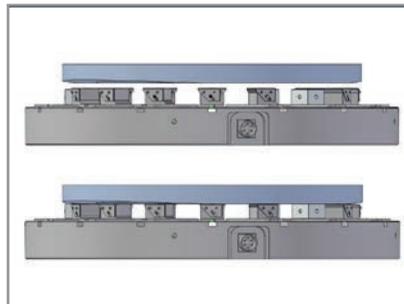
- Reduce setup & change-over time by 50% or more!
- Machine freely on all 4-sides & top so you can cut the full part profile in only 1 operation
- Very uniform holding = No workpiece deformation

EEPM-CIR chucks are a powerful and fast workholding solution optimized for horizontal or vertical turning centers and 5-axis machining. Using magnetic workholding you can clamp/un-clamp the part in only seconds. Reduce setup down-time to increase machine up-time. Control is included with chuck.

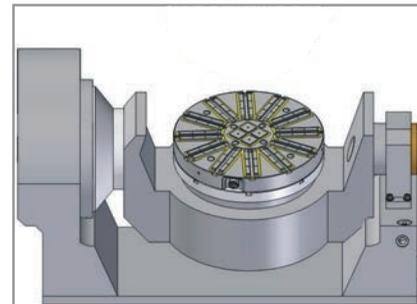
For workholding of ferrous materials only.  
9 sizes to choose from. Custom sizes available. includes controller and remote



Machine induction blocks for easy part positioning



Use with EEPM-SP blocks to hold warped stock



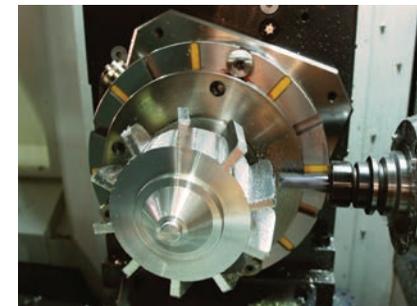
Speed up setups for 5-axis tables



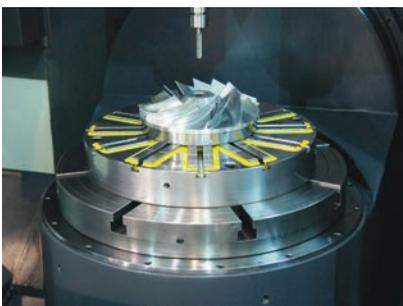
3, 4, and 5-axis applications



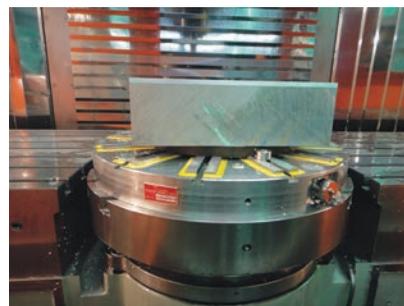
Even workholding - no part distortion



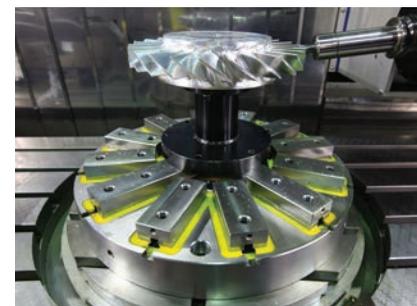
Off-axis rotation on horizontal mill



Holds very small or very large parts



Custom chucks available to suit your machine



Hold complex parts without complicated setups!

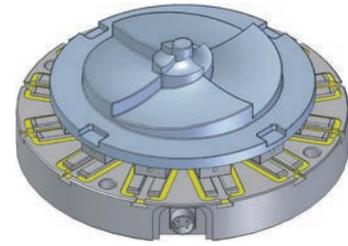
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# MagVISE EEPM-CIR Ordering Information

## Select the Chucks From Tables Below

- We build custom chucks for your specific needs. Call us to discuss.
- (800) 597-3921 or local (317) 803-8000

EEPM chucks includes controller and remote  
Control requires a dedicated 480V single phase,  
30A power supply



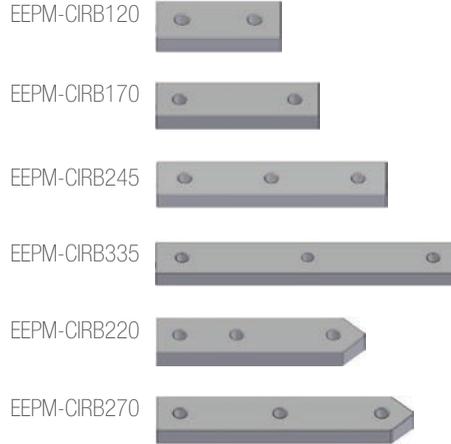
step and slope milling for an impeller

## Induction Blocks & T-Slot Sliding Blocks for EEPM CIR Chucks



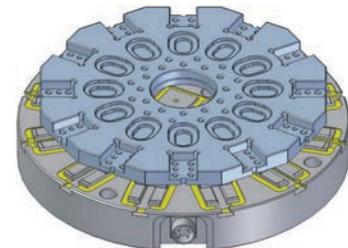
Use induction blocks to preserve the precision ground finish and prevent damage to the face of the chuck. Induction blocks to raise the workpiece above the surface of the magnet and permit machining 5 sides and thru-hole drilling.

Use T-Slot Sliding Blocks as adjustable workstops for part alignment. See pg. 219 for more induction block options and ideas.



circular chuck setup for gear cutting

Part No.	Description	L	W	H
EEPM-SP	spring loaded (2 piece set, 8mm screw)	1.89"	1.89"	1.41"
EEPM-SPF	solid, machinable (8mm screw)	1.97"	1.97"	1.23"
EEPM-20T	sliding T-slot for use with EEPM-SPF	4.72"	1.97"	.78"
EEPM-30T	sliding T-slot for use with EEPM-SP blocks	4.72"	1.97"	1.18"
EEPM-CIRB120	induction block for CIR500 chuck	4.72"	1.97"	.78"
EEPM-CIRB170	induction block for CIR600 chuck	6.69"	1.97"	.78"
EEPM-CIRB245	induction block for CIR800 chuck	9.64"	1.97"	.78"
EEPM-CIRB335	induction block for CIR1000 chuck	13.18"	1.97"	.78"
EEPM-CIRB220	induction block for CIR500 chuck	8.66"	1.97"	.78"
EEPM-CIRB270	induction block for CIR600 chuck	10.62"	1.97"	.78"

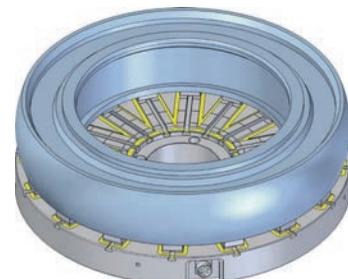


pocket milling and face milling

Model	Dim. (O.D. x I.D. x H)	No. Poles	Holding Power	Weight	Control
EEPM-CIR500	19.7" x 0" x 2.75"	12 + 4	12,345 lbs.	229 lbs.	C1
EEPM-CIR600	23.6" x 0" x 2.75"	12 + 4	17,636 lbs.	326 lbs.	C2
EEPM-CIR800	31.5" x 9.84" x 3.34"	16	28,219 lbs.	665 lbs.	C2
EEPM-CIR1000	39.4" x 9.84" x 3.34"	16	42,328 lbs.	1,038 lbs.	C4
EEPM-CIR1250	49.6" x 19.68" x 4.33"	24	52,910 lbs.	1,825 lbs.	C4
EEPM-CIR1500	59.0" x 19.68" x 4.72"	24	74,075 lbs.	2,921 lbs.	C8
EEPM-CIR1600	64.2" x 19.68" x 4.72"	24	84,657 lbs.	3,322 lbs.	C8
EEPM-CIR1800	71.6" x 31.49" x 4.72"	36	111,112 lbs.	5,048 lbs.	C8
EEPM-CIR2000	80.7" x 39.37" x 5.11"	36	111,112 lbs.	5,489 lbs.	C8



5-axis turbine blade machining



round part turning O.D. and I.D.



# MagVISE EEPM-CIRS for Machining & Grinding



For workholding of ferrous materials only.

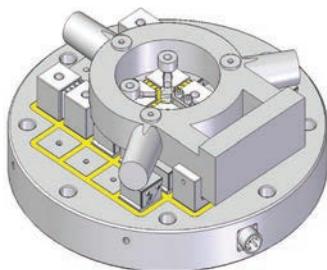
EEPm chucks includes controller and remote. Control requires a dedicated 480V single phase, 30A power supply

## Advantages:

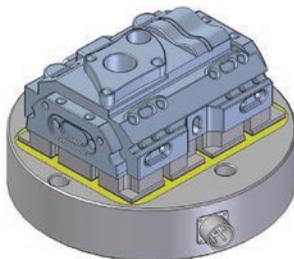
- Versatile round chucks to fit a variety of applications
- Reduce setup & change-over time by 50% or more!
- Machine freely on 5-sides so you can cut the full part profile in only one operation

There are 9 stock sizes of EEPm-CIRS chucks to choose from (see table below). We also can build custom chucks for your machine.

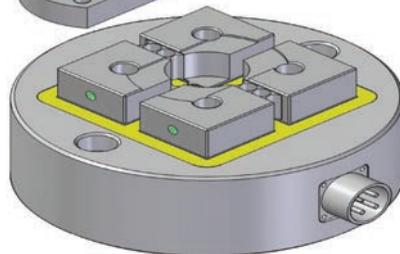
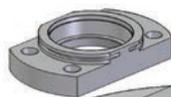
We recommend using induction blocks at all times to preserve the precision ground finish and prevent damage to the face of the chuck. You can easily modify induction blocks to your part requirements. Use EEPm-SP induction blocks for holding warped stock.



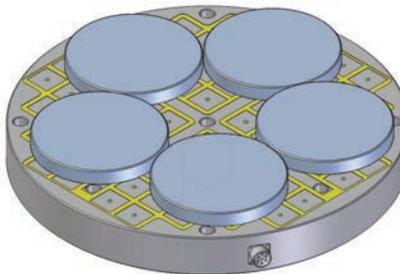
Use induction blocks as workstops to hold hard parts



Machine full 5 sides using induction blocks



Machine nests to hold smaller parts

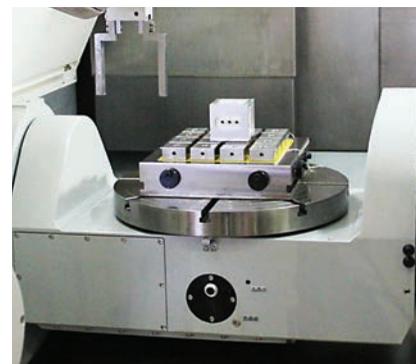


Gang parts together on larger chucks for efficiency

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WORKHOLDING



Honing application



Easy integration with 5-axis tables

Model	Dim. (O.D. x H)	No. Poles	Holding Power	Weight	Control
EEPm-CIRS200	7.99" x 2.75"	4	2,204 lbs.	35 lbs.	C1
EEPm-CIRS300	12.0" x 2.75"	12	6,612 lbs.	77 lbs.	C1
EEPm-CIRS500	19.68" x 2.75"	32	17,632 lbs.	214 lbs.	C1
EEPm-CIRS600	24.4" x 2.75"	52	28,652 lbs.	330 lbs.	C2
EEPm-CIRS700	27.55" x 2.75"	76	41,876 lbs.	421 lbs.	C4
EEPm-CIRS800	32.28" x 2.75"	96	52,896 lbs.	578 lbs.	C4
EEPm-CIRS900	35.82" x 3.14"	120	66,120 lbs.	798 lbs.	C4
EEPm-CIRS1000	40.15" x 3.14"	164	90,364 lbs.	1,022 lbs.	C8
EEPm-CIRS1100	45.54" x 3.14"	204	112,404 lbs.	1,203 lbs.	C8

# MagVISE EEPM-IT Index Table

## Features:

- Pneumatic table makes rotation easy
- Indexed in 5 degree increments
- Full 360° rotation either left or right

## Advantages:

- Add indexing capability to your horizontal mill
- Machine 5-sides freely and reduce setup time 50%
- Very uniform holding = No workpiece deformation



For workholding of ferrous materials only.

includes C4 control and remote



Pull the black knob out to un-clamp table and rotate part. Push knob in to clamp. Index table requires 90 psi shop air for rotation.

We recommend using induction blocks or subplates at all times to preserve the precision ground finish and prevent damage to the face of the magnetic chuck.

For more information see page 243.



Use EZ-Lift lifting magnet to quickly load your workpiece

Scan QR code above or visit: <http://goo.gl/fb4nkk>



Pull knob to rotate part up to 360 degrees



Use induction blocks to machine full 5 sides freely

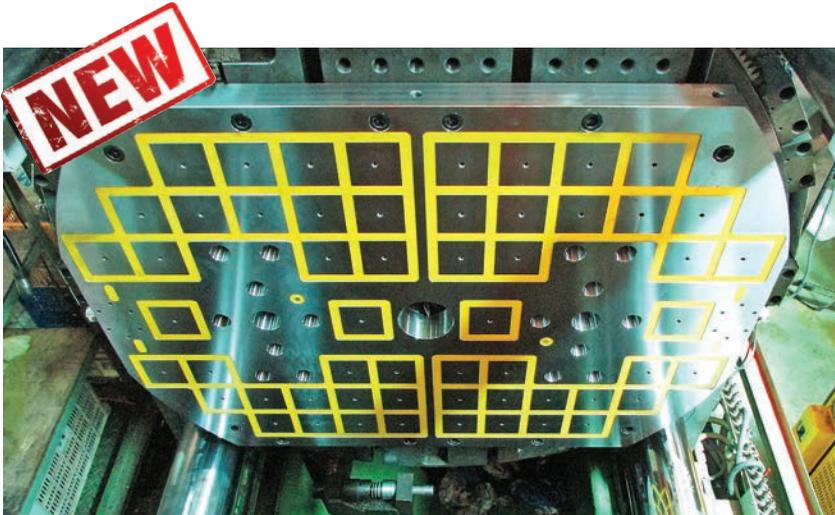


Add indexing capability to your mill

Model	Face (L x W x H)	Max. Load	No. Poles	Holding Power	Squareness	Repeatability	Weight
EEPM-300IT	11.81" x 11.81" x 7.59"	1,100 lbs.	16	11,023 lbs.	.0004"	.0004"	229 lbs.
EEPM-470IT	18.5" x 18.5" x 7.36"	2,200 lbs.	49	33,730 lbs.	.0005"	.0004"	490 lbs.
EEPM-600IT	23.6" x 23.6" x 8.89"	4,400 lbs.	72	49,604 lbs.	.0007"	.0005"	996.5 lbs.
EEPM-800IT	31.5" x 31.5" x 11.88"	6,600 lbs.	144	99,208 lbs.	.0007"	.0005"	2,162.5 lbs.



# MagVISE Injection Mold Clamping Magnets



Magnetic mold clamping is much faster than other methods to save machine time.

Injection-mold magnets are quickly replacing traditional mold clamping methods world-wide. The investment in PIM magnets is quickly repaid by faster mold setup and change-over

times. Also, machine capacity increases by an average of 20% because PIM magnets require less room in the machine cube. Call us for custom size magnets.

## Features

- Position & clamp in just minutes!
- Proximity sensors ensure position
- Dual controls lock-out machine during operation for safety

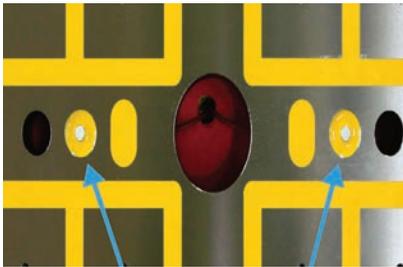
## Benefits

- Reduce setup & change-over time
- Increase machine capacity 20%
- Greatly increase productivity by just changing clamping method

**MagVISE**  
WORKHOLDING



Watch the video demo at this url:  
<http://ow.ly/tajls>



Proximity sensors ensure correct positioning.



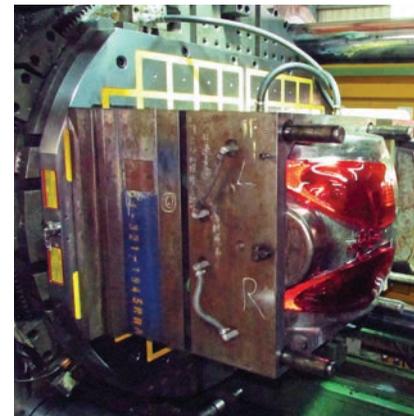
Controls require operator to use both hands.



Load and install PIM magnet with bolts



PIM & controls integrate with your machine.



Mold is held perfectly, & change-over is fast.

Model	Face (L x W x H)	Max Temp (F)	Holding Power	Pole Size (mm)	Power Supply
EEPM-1200PIM	59" x 59" x 2.75"	248°	185,188 lbs.	92 x 92	35A, 480V single phase
EEPM-950PIM	57" x 41.3" x 2.75"	248°	148,150 lbs.	92 x 92	30A, 480V single phase
EEPM-400PIM	41.3" x 25.6" x 2.75"	248°	52,910 lbs.	92 x 92	40A, 480V single phase

# MagVISE ECB Magnetic Workholding Vises



## Features

- Powerful rare-earth magnets for up to 4,620 lbs. holding power (per vise)
- Gang multiple vises together and increase holding power as needed
- Quickly and easily adjust size of setup and number of chucks as needed

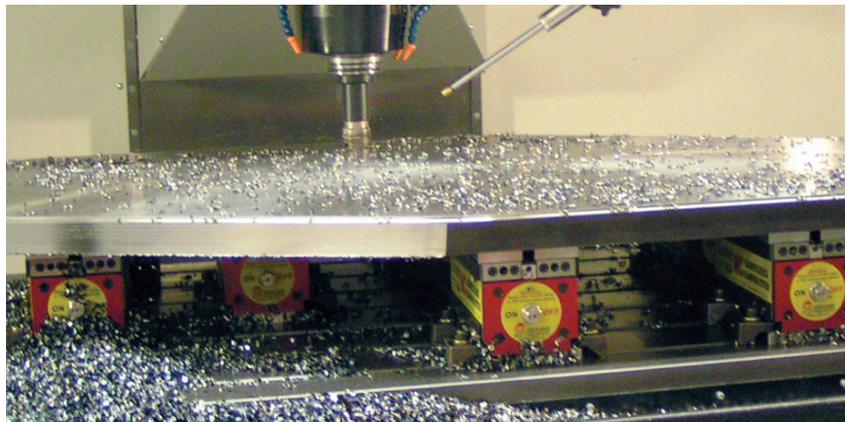
## Benefits

- Reduce setup & change-over time by 50% or more!
- Freely machine on all 5-sides to reduce operations
- No workpiece deformation

## 4 sizes available

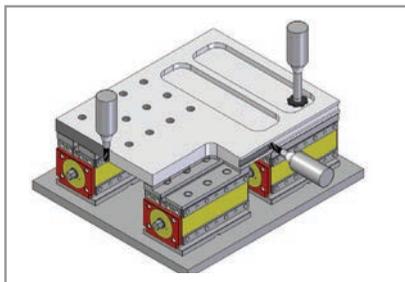
For workholding of ferrous materials only. Each ECB vise includes everything required to setup and begin workholding.

Scan the QR code  
or enter this link:  
<http://ow.ly/u21Nm>  
to view a video demo.

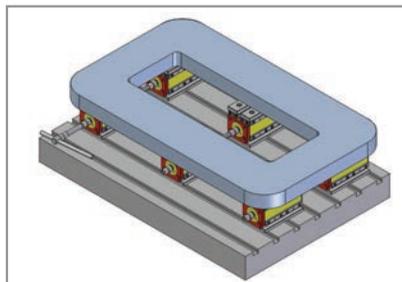


ECB Magnetic Vises provide fast, efficient workholding for all types of CNC machining applications. They are easy to install or move from machine to machine, and making changes to existing setups is fast.

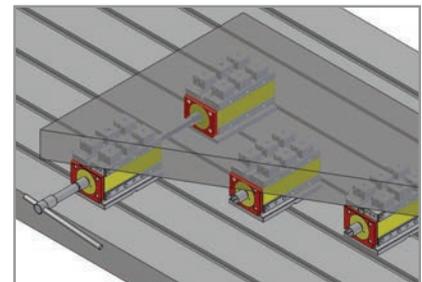
## Setup Examples



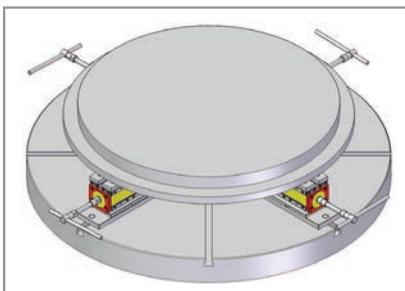
Machine freely on 5-sides using induction blocks



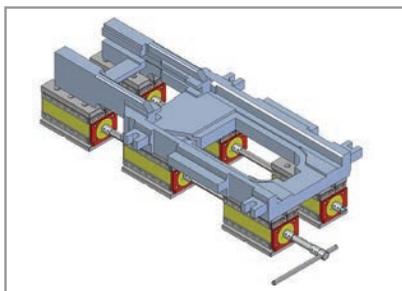
Switch-connect to turn ON/OFF multiple vises



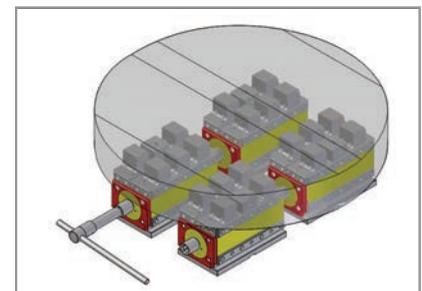
Position ECB vises just where you need them



Vertical turning setups are faster with ECB vises



Cut complex part shapes O.D. and I.D.



Hold large and small parts of all shapes



# MagVISE ECB Applications



You can use 1 ECB vise for each part...



...or use multiple ECB vises positioned as needed to hold large parts.



Machine freely on 5-sides



Switch-connect ECB vises to turn ON/OFF simultaneously



Tombstones for horizontal milling



ECB magnetic vises are easy to setup for vertical turning. Machine both O.D. and I.D.



ECB vises are used for large or small parts



Even huge workpieces like this one are easily held and can be machined on 5-sides.

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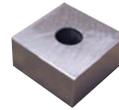
# MagVISE ECB Ordering Information



4 sizes available.  
Each ECB vise includes 2 machinable induction blocks, wrench, extension and socket, switch-connect socket assembly, 2 stop plates, and 4 toe clamps.



EEPM-SP spring type



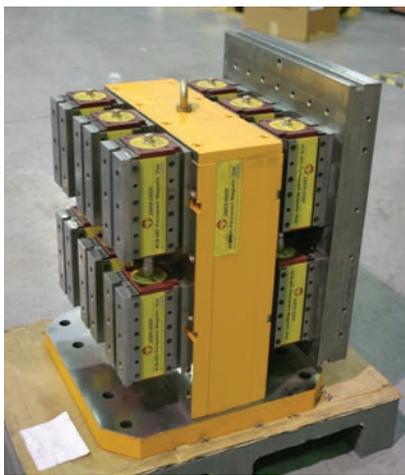
EEPM-SPF solid type



Use EEPM-SP spring-loaded induction blocks and EEPM-SPF blocks together to hold warped stock. See page 243.

Use induction blocks at all times to prevent damage to the face of the magnetic vise. You can easily modify induction blocks to adapt your setup to part requirements. Please note that the spring loaded induction blocks are NOT machine-able, but the solid blocks are able to be drilled and machined as required.

After installing your ECB vise we recommend cleanup milling the surface of your induction blocks before loading your work piece to insure that the surface height is uniform and parallel to the spindle.



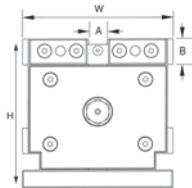
ECB magnetic vises easily integrate with pallet changing and tombstone systems used in production cells. Call us at (800) 597-3921 or (317) 803-8000 for a fast quote.



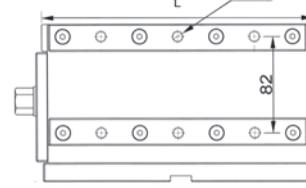
Induction blocks and work stops are included.



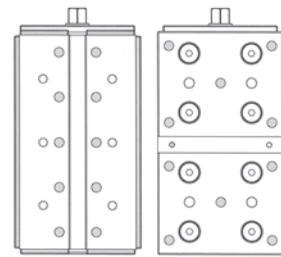
Switch-connect vises to turn them ON/OFF in unison.



end view



side view



top and bottom view



## Ordering Information

Part No.	L x W x H	A	B	Min. Stock Thickness	Holding Power	Weight
ECB-050	5" x 3" x 3"	.47"	.47"	0.4"	1,100 lbs.	15 lbs.
ECB-075	6.8" x 3" x 3"	.47"	.47"	0.4"	1,650 lbs.	19 lbs.
ECB-120	7.3" x 4.2" x 4.2"	.62"	.59"	0.6"	2,640 lbs.	40 lbs.
ECB-210	9.2" x 5.2" x 5.3"	.65"	.84"	0.8"	4,620 lbs.	80 lbs.

Part No.	Description	L x W x H
EEPM-SPF	1, soft fixed induction block, 8mm screw - use with ECB-SP50 spring blocks.	1.97" x 1.97" x 1.23"
EEPM-SP	2, spring loaded induction block, 8mm screw - use with ECB-SPF50 on corners.	1.89" x 1.89" x 1.41"

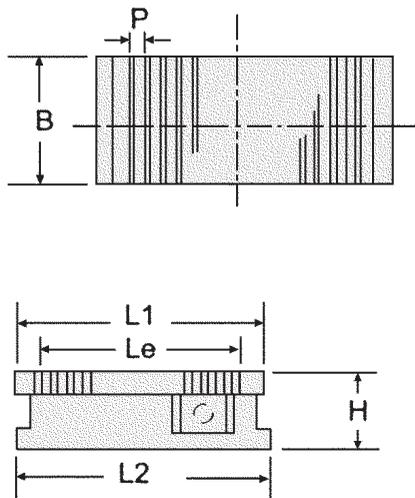
Note: Holding power depends on workpiece size, material, surface finish, contact area with magnet, and workpiece thickness. Always make sure you read, understand and follow the instructions that come with your ECB vise.



# MagVISE EDMT Surface Grinding Chucks



For induction blocks see page 243.

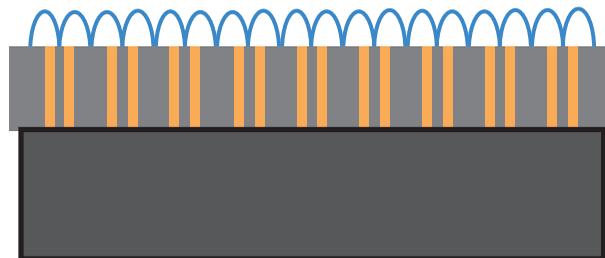


## EDMT (All-Purpose Variable Pole Design)

Alternating thick/thin magnetic poles provides best holding power for both thick and thin workpieces.

- *EDM-READY: fully submersible, brass welded faceplate which can be machined if needed, and protects the magnetic system from penetration of coolant.*
- *Needs no electricity. Provides a constant source of workholding power.*
- *Low-profile design increases Z-axis stroke*
- *Housing and bottom plate are free of magnetism —will not magnetize machine bed or bearings.*

## Variable Pole



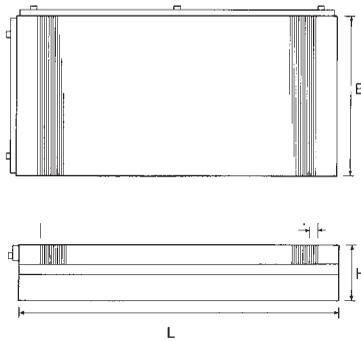
\*New variable pole design creates magnetic fields that hold both thin and thick workpieces equally well.

Model	Pole Pitch (P)	L x W x H	Weight
EDMT-1018	11.2 (1.6+2+1.6+6)	7" x 4" x 2.5"	16 lbs.
EDMT-1325	11.2 (1.6+2+1.6+6)	10" x 5" x 2.5"	23 lbs.
EDMT-1530	11.2 (1.6+2+1.6+6)	12" x 6" x 2.5"	33 lbs.
EDMT-1535	11.2 (1.6+2+1.6+6)	14" x 6" x 2.5"	38 lbs.
EDMT-1545	11.2 (1.6+2+1.6+6)	18" x 6" x 2.5"	44 lbs.
EDMT-2040	11.2 (1.6+2+1.6+6)	16" x 8" x 2.5"	57 lbs.
EDMT-2045	11.2 (1.6+2+1.6+6)	18" x 8" x 2.5"	66 lbs.
EDMT-2050	11.2 (1.6+2+1.6+6)	20" x 8" x 2.5"	79 lbs.
EDMT-2550	4 + 12	20" x 10" x 2.5"	130 lbs.
EDMT-3060	3 + 15	24" x 12" x 2.5"	198 lbs.

# MagVISE EDTW Fine Pole Surface Grinding Chucks



For induction blocks see page 243.



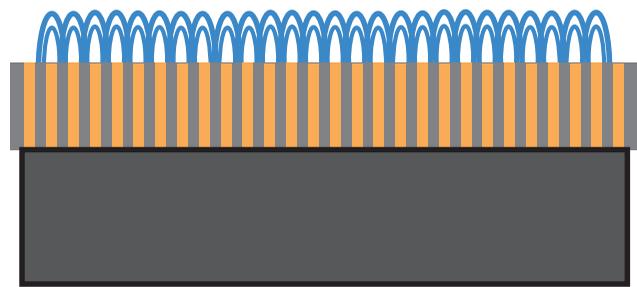
EDTW chucks have up to 15 tons of holding force. (150 lbs./inch<sup>2</sup>)

## EDTW (MicroPITCH Fine Pole Design)

Fine pole design provides best holding power for surface grinding of small or thin workpieces.

- Brass welded faceplate can be machined if needed, and protects the magnetic system from penetration of coolant.
- Needs no electricity. Provides a constant source of workholding power.
- Low-profile design increases Z-axis stroke
- Housing and bottom plate are free of magnetism —will not magnetize machine bed or bearings.

## Fine Pole



Fine pole magnets creates strongest magnetic field close to surface for holding thin workpieces.

Model	Pole Pitch (P)	L x W x H	Weight
EDTW-1018	2 (1+1)	7" x 4" x 2"	15 lbs.
EDTW-1325	2 (1+1)	10" x 5" x 2.25"	29 lbs.
EDTW-1515	2 (1+1)	6" x 6" x 2.25"	20 lbs.
EDTW-1530	2 (1+1)	12" x 6" x 2.5"	49 lbs.
EDTW-1535	2 (1+1)	14" x 6" x 2.5"	53 lbs.
EDTW-1545	2 (1+1)	18" x 6" x 2.5"	68 lbs.
EDTW-2040	2 (1+1)	16" x 8" x 2.5"	82 lbs.
EDTW-2045	2 (1+1)	18" x 8" x 2.5"	90 lbs.
EDTW-2050	2 (1+1)	20" x 8" x 2.5"	99 lbs.
EDTW-2550	2 (1+1)	20" x 10" x 2.5"	132 lbs.

# MagVISE EET Surface Grinding Chucks

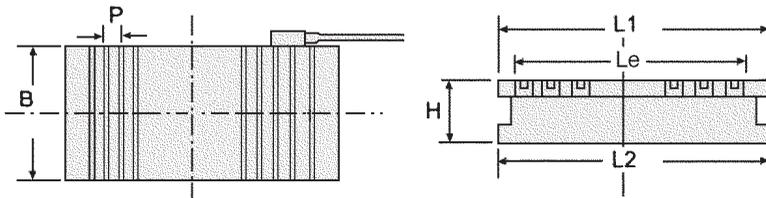


For induction blocks see page 243.

## EET (Wide Spaced Pole Design)

Wider spacing magnetic poles for general surface grinding of both thick and thin workpieces.

- Brass welded faceplate which can be machined if needed, and protects the magnetic system from penetration of coolant.
- More than 1,000 OHMs resistance
- Low-profile design increases Z-axis stroke
- Housing and bottom plate are free of magnetism —will not magnetize machine bed or bearings.



Model	Pole Pitch (P)	L x W x H	Volts	Amps	Weight
EET-1530	15 (3+12)	12" x 6" x 3"	DC90V	0.18	44 lbs.
EET-1535	15 (3+12)	14" x 6" x 3"	DC90V	0.19	53 lbs.
EET-1545	15 (3+12)	18" x 6" x 3"	DC90V	0.19	66 lbs.
EET-2040	15 (3+12)	16" x 8" x 3"	DC90V	0.28	84 lbs.
EET-2045	15 (3+12)	18" x 8" x 3"	DC90V	0.28	90 lbs.
EET-2050	15 (3+12)	20" x 8" x 3"	DC90V	0.36	99 lbs.
EET-2550	15 (3+12)	20" x 10" x 3"	DC90V	0.46	143 lbs.
EET-3060	15 (3+12)	24" x 12" x 3"	DC90V	0.86	179 lbs.
EET-3070	15 (3+12)	28" x 12" x 3"	DC90V	0.81	205 lbs.
EET-3090	15 (3+12)	35" x 12" x 3"	DC90V	1.05	276 lbs.
EET-4060	19 (3+16)	24" x 16" x 3.5"	DC90V	0.95	287 lbs.
EET-4070	19 (3+16)	28" x 16" x 3.5"	DC90V	1.21	333 lbs.
EET-4080	19 (3+16)	32" x 16" x 3.5"	DC90V	1.31	384 lbs.
EET-40100	19 (3+16)	40" x 16" x 3.5"	DC90V	1.33	487 lbs.
EET-50100	19 (3+16)	40" x 20" x 3.5"	DC90V	1.46	595 lbs.
EET-50150	19 (3+16)	60" x 20" x 3.5"	DC90V	3.37	893 lbs.
EET-60100	19 (3+16)	40" x 24" x 3.5"	DC90V	2.80	728 lbs.
EET-60150	19 (3+16)	60" x 24" x 3.5"	DC90V	2.85	1091 lbs.
EET-80100	19 (3+16)	40" x 32" x 3.5"	DC90V	3.80	970 lbs.

# MagVISE EET-W Fine Pole Surface Grinding Chucks

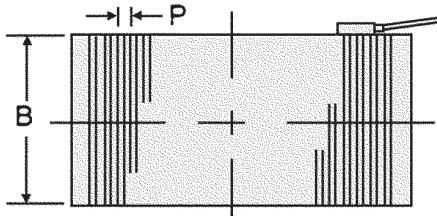
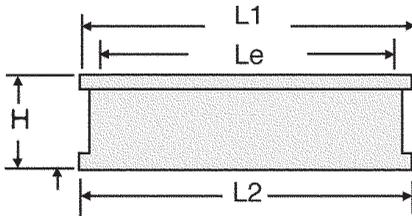


For induction blocks see page 243.

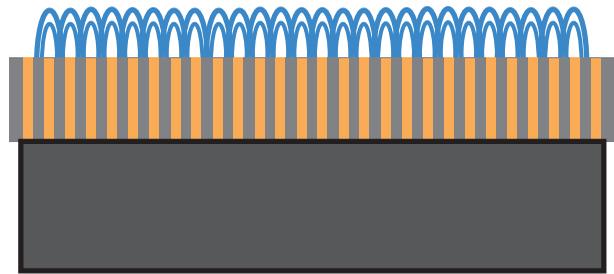
## EET-W (Fine Pole Design)

Fine pole design optimized for maximum holding power for surface grinding of thin workpieces

- Brass welded faceplate which can be machined if needed, protects the magnetic system from penetration of coolant
- More than 1,000 OHMs resistance
- Low-profile design increases Z-axis stroke
- Housing and bottom plate are free of magnetism —will not magnetize machine bed or bearings.



Fine Pole



Fine pole magnets creates strongest magnetic field close to surface for holding thin workpieces.

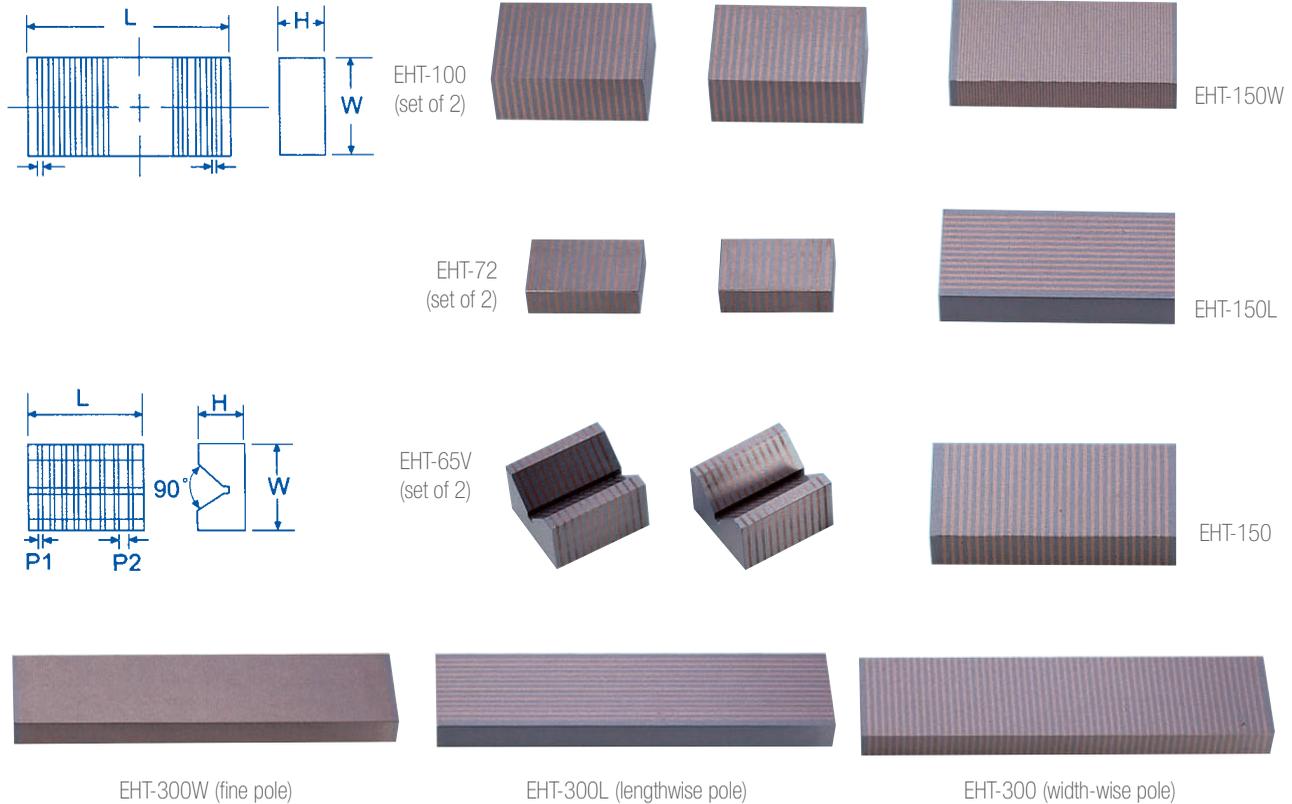
Model	Pole Pitch (P)	L x W x H	Volts	Amps	Weight
EET-1530W	4(1+3)	12" x 6" x 4.5"	DC90V	0.73	73 lbs.
EET-1535W	4(1+3)	14" x 6" x 4.5"	DC90V	0.61	88 lbs.
EET-1545W	4(1+3)	18" x 6" x 4.5"	DC90V	0.98	110 lbs.
EET-2040W	4(1+3)	16" x 8" x 4.5"	DC90V	1.10	139 lbs.
EET-2045W	4(1+3)	18" x 8" x 4.5"	DC90V	1.20	157 lbs.
EET-2050W	4(1+3)	20" x 8" x 4.5"	DC90V	1.40	176 lbs.
EET-2550W	4(1+3)	20" x 10" x 4.5"	DC90V	1.00	247 lbs.
EET-3060W	4(1+3)	24" x 12" x 4.5"	DC90V	1.50	331 lbs.

# MagVISE Induction Blocks for Surface Grinding

## EHT Induction Blocks:

- Extends magnetic force to hold bar, round, or irregular shapes
- EDM-READY: fully submersible, brass sealed
- For fine-pole and standard pole applications

Choose from lengthwise (L) or width-wise (W) pole direction

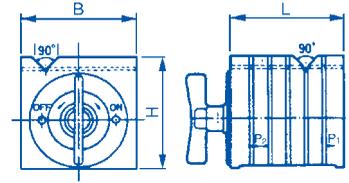


Model	Qty.	L x W x H	Pole Pitch P1	Pole Pitch P2	Weight
EHT-65V	2	2.5" x 2.5" x 1.5"	2	3	4 lbs. (x2)
EHT-72	2	3" x 2" x 1"	2	3	7 lbs. (x2)
EHT-100	2	4" x 3" x 1.5"	2	3	10 lbs. (x2)
EHT-150	1	6" x 3" x 1"	2	3	5 lbs.
EHT-300	1	12" x 3" x 1"	2	3	10 lbs.
EHT-150L	1	6" x 3" x 1"	2	3	5 lbs.
EHT-300L	1	12" x 3" x 1"	2	3	10 lbs.
EHT-150W	1	6" x 3" x 1"	1+1	1+1	5 lbs.
EHT-300W	1	12" x 3" x 1"	1+1	1+1	10 lbs.

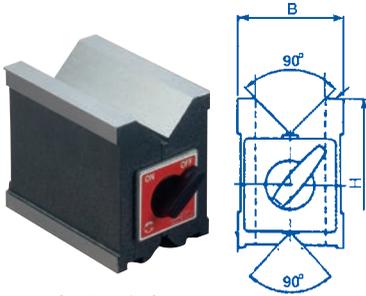
# MagVISE Magnetic V-Blocks

## ECE Magnetic Blocks

- Dozens of uses around the shop
- Fast setups of bar stock or round steel
- Powerful magnetic base, ON-OFF switch



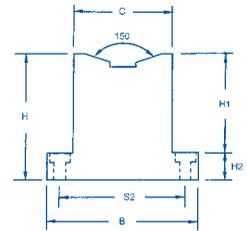
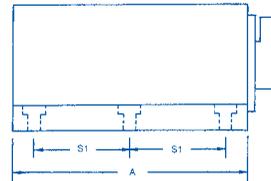
ECE-100 / ECE-150



ECE-208 / ECE-212



ECE-612



Model	Holding Power		Dimensions mm								Weight
	V-Face	Surface	B	L	H	C	H1	H2	S1	S2	
ECE-100	61 lbs.	88 lbs.	100	100	100	-	-	-	-	-	14.5 lbs.
ECE-150	110 lbs.	308 lbs.	150	150	150	-	-	-	-	-	53 lbs.
ECE-208	121 lbs.	154 lbs.	56	80	72	-	-	-	-	-	6.5 lbs.
ECE-212	198 lbs.	242 lbs.	75	115	100	-	-	-	-	-	11 lbs.
ECE-612	242 lbs.	350 lbs.	76	118	62	50	50	12	48	62	5.5 lbs.

## ECE Magnetic V-Block Sets

- For grinding, marking, measuring and other light machining operations
- Each pair made to identical dimensions
- Sold in pairs only

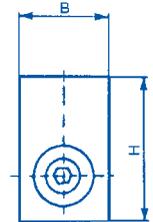
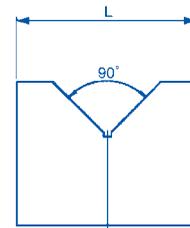


ECE-507



ECE-510

Model	Holding Power	Applicable Diameter mm	Dimension mm			Weight
			B	L	H	
ECE-507	33 lbs.	50	40	72	50	2.2 lbs. x 2
ECE-510	44 lbs.	80	50	100	80	6.6 lbs. x 2



# Chuck Controls and Demagnetizers

## ERD-505, 510, 515 Features:

- Work with any electromagnetic chucks
- Demagnetizing time is 6-15 seconds
- Precisely regulates the magnetic force

## ERD-520 Features:

- For larger, more powerful electromagnetic chucks
- Can operate two chucks at the same time
- Demagnetizing time is 8-15 seconds



ERD-505



ERD-510, ERD-515



ERD-520

Model	Input Voltage/Single Phase	Output Volts	Output Amps	Dim. L x W x H	Wt.
ERD-505-110	AC 110/220V	DC 0-100V	5A	8" x 5.5" x 5"	8 lbs.
ERD-510-220	AC 110/220/440V	DC 0-120V	10A	6" x 13" x 10"	33 lbs.
ERD-515-220	AC 220/440V	DC 0-120V	15A	6" x 13" x 10"	44 lbs.
ERD-520-220	AC 220/440V	DC 0-120V	20A	7" x 15" x 12"	71 lbs.

Please specify voltage when ordering.

## EDH Demagnetizers



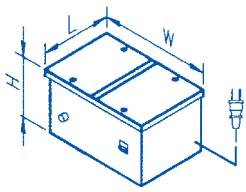
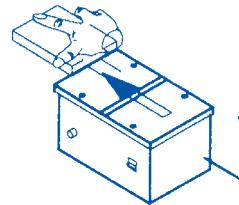
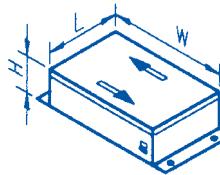
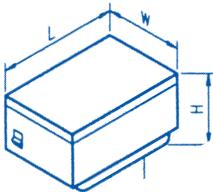
EDH-123



EDH-180



EDH-200



Model	Description	Power	Capacity	Duty Cycle	Dim. L x W x H	Wt.
EDH-123-110	Portable, light weight, for big machines	AC 110V	110VA	90%	123 x 83 x 83mm	4 lbs.
EDB-180-110	Up to 20 minutes continuous operation	AC 110/220V	220VA	50%	127 x 180 x 90mm	9 lbs.
EDS-200-110	Continuous operation, double-coil design	AC 110V	330VA	100%	150 x 200 x 100mm	19 lbs.