

Mag Vise Magnetic Workholding

EEPM

Electro-Permanent Magnetic Chuck

ECB

Permanent Magnetic Clamping Block

EARTH-CHAIN

EARTH-CHAIN ENTERPRISE CO., LTD.





Professional Manufacturer of Magnetic Tools

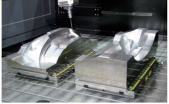
Established in 1988, Earth-Chain Enterprise Co., Ltd. is a professional manufacturer of magnetic tools. The MagVise Magnetic Workholding 'Electro-Permanent Magnetic Chuck EEPM Series' and New Dovetail Microinching Equipment was awarded 'Good Design Product Mark' by the Industrial Development Bureau, Ministry of Economic Affairs and the 18th Taiwan Excellence Award, the "Electro-Permanent Magnetic Chuck Connection Type EEPM-C Series" was awarded the 19th Taiwan SMEs Innovation Award and the 21st Taiwan Excellence Award, and the MagVise Magnetic Workholding 'Permanent Magnetic Clamping Block ECB Series' was awarded the 16th Taiwan Excellence Award. With ISO 9001:2015 and CE Certification as well as over 30 patents, Earth-Chain's private label 'E.C.E' is sold worldwide across five continents. Besides above mentioned products, there are also Lifting Magnet Series, Universal Arm Magnetic Stand Series, Drill Grinder & End Mill Re-Sharpener Series...etc. Earth-Chain is a professional magnetic system tool manufacturer with agents and distributors from over 40 countries.

Innovation, honesty, and responsibility are our business philosophies that we are truthfully fulfilling. By innovatively devoting our efforts in product developments, honestly responding to our customers, and responsibly engaging in sustainable operations and managements, we always strive to improve our working processes, enhance our quality control and improvement ability, and develop products that constantly exceed customers expectations. Not only do we aim to achieve the objective- making the proven that works, the leading brand in the field of magnetic vise clamping systems, but we also set a high expectation for ourselves to create glories in the machining and metalworking industry.

Magnetic Workholding

INDEX









2 EEPM-A

3 EEPM-B

4 EEPM-D

5 EEPM-E

Electro-Permanent Magnetic Chuck EEPM-A Series Pole Size 35X35 mm, Flux Line 15 mm

2

Electro-Permanent Magnetic Chuck EEPM-B Series Pole Size 50X50 mm, Flux Line 25 mm

3

Electro-Permanent Magnetic Chuck EEPM-D Series Pole Size 70X70 mm, Flux Line 40 mm

4

Electro-Permanent Magnetic Chuck EEPM-E Series

Pole Size 92X92 mm, Flux Line 50 mm

Induction Block EEPM-IB Series

Suitable for Increased using life of magnetic chuck

6

Induction Block EEPM-IBT Series

Suitable for slope finishing of workpeice machining

R

Spring Block EEPM-SP Series

Suitable for clamping on iron cast, irregular form and flexuous workpieces

9

Induction Sub Plate EEPM-ISP Series

Suitable for quantity of irregular and smaller workpiece

9

Other Option Accessonies

10





















	a a
15	EEPM-V

17 **EEPM-IT**

19 **EEPM-CIT**

EEPM-CIR 21

Electro-Permanent Magnetic Chuck EEPM-SL/TA Series Can be use together with mechanical clamping tools

14

Electro-Permanent Magnetic Chuck EEPM-V Series Suitable for CNC horizontal machining center

15

Electro-Permanent Magnetic Chuck EEPM-IT Series

Suitable for horizontal milling & boring machine on precision machining of divison.

17

Electro-Permanent Magnetic Chuck EEPM-CIT Series

Suitable in use for combine with CNC 4 Axis Index Device

19

Electro-Permanent Magnetic Chuck EEPM-CIR Series

Suitable for use on Vertical Lathe, CNC 5 Axis Machining Center ...etc

21

Custom-Made EEPM Chucks

Custom-chucks built to yor specification

32

Electro-Permanent Magnetic Chuck-Connection Type EEPM-C Series

Suitable for use on large Vertical Lathe, Double Column Machining Center and CNC Machining Center ...etc.

34

Permanent Magnetic Clamping Block ECB Series

Suitable for use on large Vertical Lathe, Double Column Machining Center and CNC Machining Center ...etc.

42

Permanent Magnetic Clamping Block ECB-120V12 Series

Suitable for use on CNC Horizontal Machining Center.

45



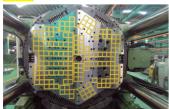




ECB



ECB-120V12









Electro-Permanent Magnetic Chuck EEPM-A \ EEPM-B \ EEPM-D \ EEPM-E Series

Magnetic Workholding Suitable for CNC Vertical machining center (Can do 5 sides machining)

Features:

- 1. 1-2 seconds control for power ON & OFF. No electric power supply required to keep magnetic chuck ON and provides maximized safety in case of power failure. Never get temperatures to affect the accuracy of workpieces.
- 2. With 8 Magnetic levels for different workpiece size and application to avoid sticking the iron chip.
- 3. Capable for 5 sides machining and un-obstructed cutter movement during machining. Allow workpiece machining finished in one cycle, while still achieving best machining accuracy and highly increased working efficiency.
- 4. Easy and convenient to clamp a workpiece, shortens clamping time.
- 5. Minimum size of workpiece required as 4 alternate magnetic square poles and above contacts is necessary for optimum clamping.
- 6. More functions for cooperate with Induction Block and Spring Block. (See the detail of Option Accessories)

Specification of poles size & Height of magnetic field (Flux Line):

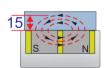
EEPM Chucks are designed for different mold thickness. Specify the mold to be Large, Medium and Small sizes make 4 poles sizes, bigger pole size with higher flux line. Different pole sizes have different magnetic field height (flux line) to ensure mold clamping safety.

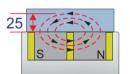
EEPM-A Series Flux Line 15 mm

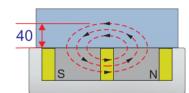
EEPM-B Series Flux Line 25 mm

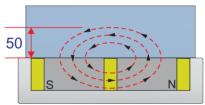
EEPM-D Series Flux Line 40 mm

EEPM-E Series Flux Line 50 mm









Model No.	pole size	Flux line	Workpiece	Application	Magnetic force
EEPM-A	35X35 mm	15 mm	Thin, small		580 ±5% Kgf/4 poles
EEPM-B	50X50 mm	25 mm	Small, medium	Cutting milling	1250 ±5% Kgf/4 poles
EEPM-D	70X70 mm	40 mm	Medium, large	Cutting, milling	2800 ±5% Kgf/4 poles
EEPM-E	92X92 mm	50 mm	Large		4800 ±5% Kgf/4 poles





Electro-Permanent Magnetic Chuck EEPM-A Series



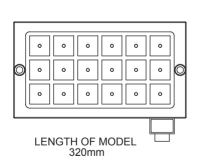
Suitable for CNC Vertical machining center (Can do 5 sides machining)

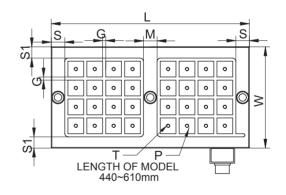


Pole 35X35 mm, Flux Line 15 mm, Magnetic Force 580±5% kgf/4 Poles

Applications:

- 1. Suitable for thin, small and medium workpiece on light duty machining.
- 2. Suitable for thin, small and medium workpiece of the drilling and finishing machining.
- 3. Minimum size of workpiece required as 4 alternate magnetic square poles and above contacts is necessary for optimum clamping.
- 4. More functions for cooperate with Induction Block and Spring Block. (See the detail of Option Accessories)





Unit:mm

MODELNIO			D	IMENSIO	N			PITCH	POLE	NO. OF	Unipolar	TOTAL HOLDING	CHUCK	VOLTAGE	CURRENT	CONTROLLER
MODEL NO.	W	L	S	S1	М	Т	Н	G	Р	POLE	suction kgf ±5%	POWER kgf ±5%	N.W.	(Single Phase)	AMP	(included)
EEPM-1530A	185	320	30.5	26	-					18		2610	23kg		18A	C1
EEPM-2540A	225	440	30	25	30					32		4640	39kg		30A	C1
EEPM-2560A	225	610	31	25	30					48		6960	54kg		26A	C2
EEPM-3030A	310	320	30.5	25.5	-					36		5220	39kg	AC	26A	C1
EEPM-3040A	310	440	30	25.5	30	M6	50	7	35×35	48	145	6960	53kg	220V	25A	C2
EEPM-3060A	310	610	31	25.5	30					72		10440	74kg	480V	31A	C2
EEPM-4040A	435	440	30	25	30					72		10440	75kg		31A	C2
EEPM-4050A	435	525	30.5	25	30					90		13050	90kg		24A	C4
EEPM-4060A	435	610	31	25	30					108		15660	104kg		26A	C4

Custom-made is available.

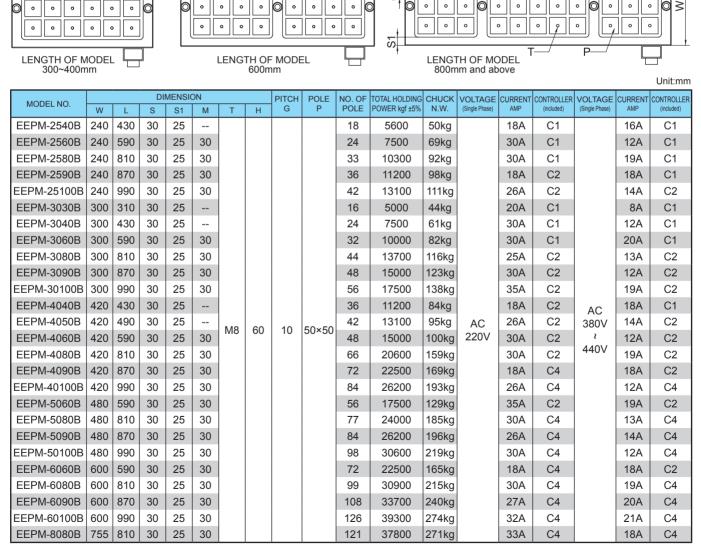
Electro-Permanent Magnetic Chuck EEPM-B Series

Magnetic Workholding Suitable for CNC Vertical machining center (Can do 5 sides machining)





Pole 50X50 mm, Flux Line 25 mm, Magnetic Force 1250±5% kgf/4 Poles



Custom-made is available.

,M,

Electro-Permanent Magnetic Chuck EEPM-D Series



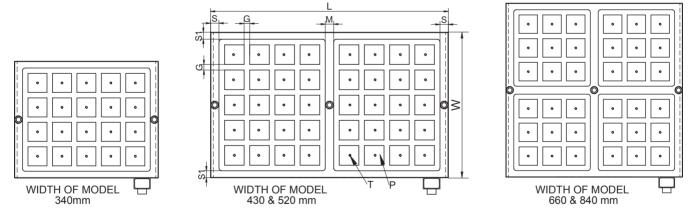
Suitable for CNC Vertical machining center (Can do 5 sides machining)



Pole 70X70 mm, Flux Line 40 mm, Magnetic Force 2800±5% kgf/4 Poles

Applications:

- 1. Suitable for medium and large workpiece on heavy duty machining.
- 2. Suitable for medium and double column machining center.
- 3. Minimum size of workpiece required as 4 alternate magnetic square poles and above contacts is necessary for optimum clamping.
- 4. More functions for cooperate with Induction Block and Spring Block. (See the detail of Option Accessories)



Unit:mm

MODELNIO			DI	MENS	ION			PITCH	POLE	NO. OF	Unipolar	TOTAL HOLDING	СНИСК	VOLTAGE	CURRENT	CONTROLLER	VOLTAGE	CURRENT	CONTROLLER
MODEL NO.	W	L	S	S1	М	Т	Н	G	Р	POLE		POWER kgf ±5%	N.W.	(Single Phase)	AMP	(included)	(Single Phase)	AMP	(included)
EEPM-3060D	340	670	30	25	30					18		12600	126kg		24A	C2		25A	C1
EEPM-4050D	430	530	30	25						20		14000	126kg		13A	C2		22A	C1
EEPM-4060D	430	670	30	25	30					24		16800	159kg		24A	C2		29A	C1
EEPM-4080D	430	850	30	25	30					32		22400	202kg		16A	C4	AC	27A	C2
EEPM-5060D	520	670	30	25	30	M10	70	20	70×70	30	700	21000	193kg	AC 220V	19A	C2	380V	17A	C2
EEPM-5080D	520	850	30	25	30					40		28000	244kg		13A	C4	440V	22A	C2
EEPM-6060D	660	670	30	25	30					36		25200	245kg		15A	C4		25A	C2
EEPM-6080D	660	850	30	25	30					48		33600	310kg		24A	C4		29A	C2
EEPM-8080D	840	850	30	25	30					64		44800	395kg		32A	C8		27A	C4

Custom-made is available.

Electro-Permanent Magnetic Chuck EEPM-E Series

Magnetic Workholding Suitable for CNC Vertical machining center (Can do 5 sides machining)

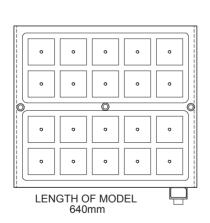


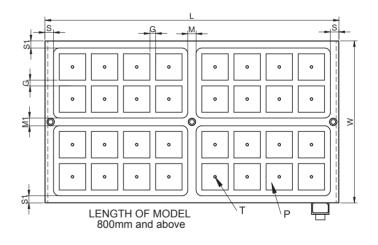


Pole 92X92 mm, Flux Line 50 mm, Magnetic Force 4800±5% kgf/4 Poles

Applications:

- 1. Suitable for large and high-thickness workpiece
- 2. Minimum size of workpiece required as 4 alternate magnetic square poles and above contacts is necessary for optimum clamping.
- 3. More functions for cooperate with Induction Block and Spring Block. (See the detail of Option Accessories)





Unit:mm

MODEL NO.				DIMEN	NSION				PITCH	POLE	NO. OF	Unipolar suction	TOTAL HOLDING	CHUCK	VOLTAGE	CURRENT	CONTROLLER
WODEL NO.	W	L	S	S1	М	M1	Т	Н	G	Р	POLE	kgf ±5%	POWER kgf ±5%	N.W.	(Single Phase)	AMP	(included)
EEPM-6060E	565	640	30	25		27					20		24000	214kg		24A	C2
EEPM-60100E	565	1025	30	25	29	27					32		38400	343kg	AC	13A	C4
EEPM-60120E	565	1250	30	25	30	27	M10	70	20	92×92	40	1200	48000	418kg	380V	24A	C4
EEPM-8080E	790	800	30	25	28	28	IVITO	70	20	92^92	36	1200	43200	374kg		26A	C4
EEPM-80100E	790	1025	30	25	29	28					48		57600	480kg	440V	19A	C4
EEPM-80120E	790	1250	30	25	30	28					60		72000	585kg		15A	C8

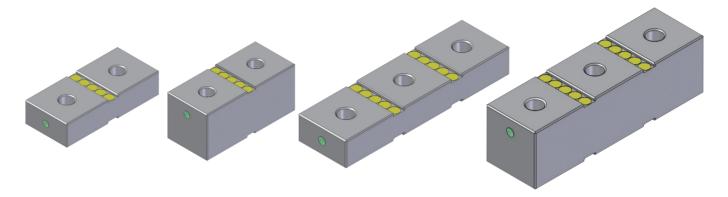
Custom-made is available.



Option Accessories-Induction Block EEPM-IB Series



Suitable for use on EEPM Series of Electro-Permanent Magnetic Chuck.

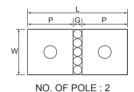


Features:

- 1. Induction Block EEPM-IB series are use with EEPM chucks, can be increased to more functions on workholding.
- 2. Increased using life of magnetic chuck: We suggest always use induction block to clamp workpieces, due to workpiece will not touch to the surface of chucks it can be keep chucks always be new.
- 3. Convenience and Accuracy: Induction Block are interchanging & consuming accessories, you can machining surface or forming induction blocks for the workpiece required by the machine directly, so the parallelism of induction block will always 100% match to the machine.
- EEPM-IBA Suitable for use on EEPM-A Series Chucks.

Unit:mm

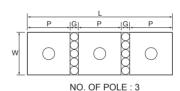
MODEL NO.	NO. OF POLE	W	L	HEIGHT	Р	G
EEPM-IB215A	2	35	77	15	35	7
EEPM-IB315A	3	35	119	15	35	7



EEPM-IBB Suitable for use on EEPM-B Series Chucks.

Unit:mm

MODEL NO.	NO. OF POLE	W	L	HEIGHT	Р	G
EEPM-IB225B	2	50	110	25	50	10
EEPM-IB325B	3	50	170	25	50	10
MODEL NO.	NO. OF POLE	W	L	HEIGHT	Р	G
EEPM-IB250B	2	50	110	50	50	10
EEPM-IB350B	3	50	170	50	50	10



EEPM-IBD Suitable for use on EEPM-D Series ChUuncikt:sm.

Unit:mm

MODEL NO.	NO. OF POLE	W	L	HEIGHT	Р	G
EEPM-IB225D	2	70	160	25	70	20
EEPM-IB325D	3	70	250	25	70	20

EEPM-IBE Suitable for use on EEPM-E Series Chucks.

Unit:mm

MODEL NO.	NO. OF POLE	W	L	HEIGHT	Р	G
EEPM-IB225E	2	92	204	25	92	20
EEPM-IB325E	3	92	316	25	92	20

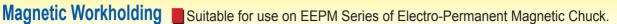
Relative magnetic force and height of EEPM-IB percentage table

Height of Induction Block	0	25mm	50mm
Holding Power Kgf %	100 %	82 %	60 %

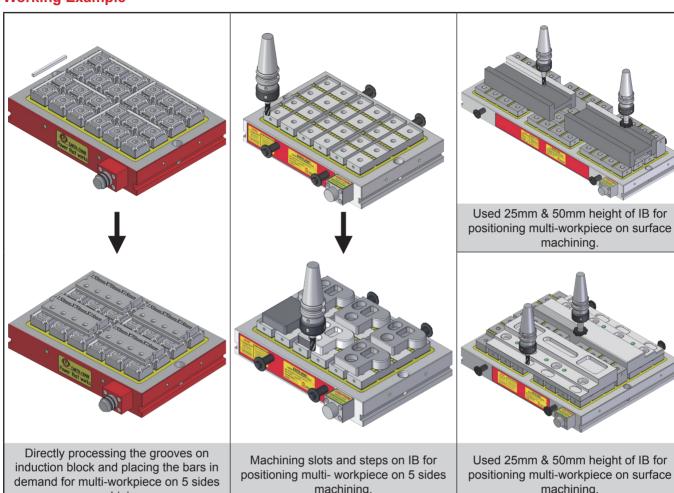
Example:

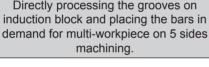
EEPM chuck	Induction Block	Total Holding Power
EEPM-2560B	None	7,500±5% kgf
EEPM-2560B	IB225B x 24pcs	6,150±5% kgf (7,500x82%)

Option Accessories-Induction Block EEPM-IB Series



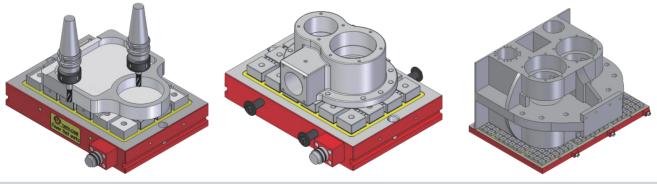




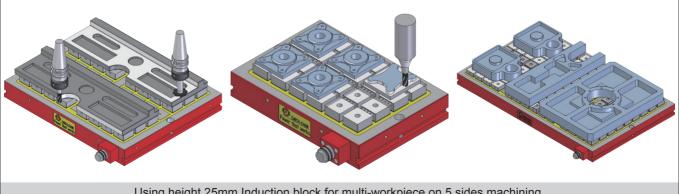


machining.

machining.



Using height 25mm induction block for irregular workpiece on 5 sides machining.



Using height 25mm Induction block for multi-workpiece on 5 sides machining.

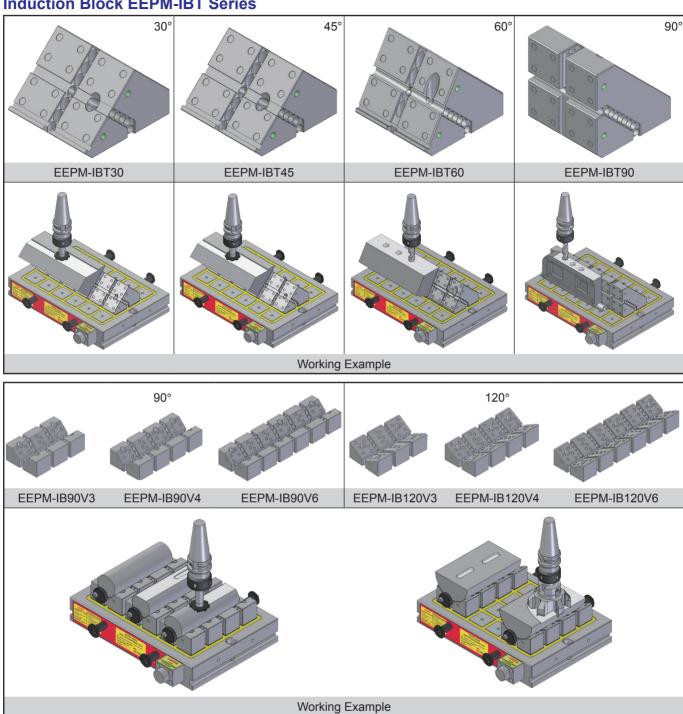


Option Accessories

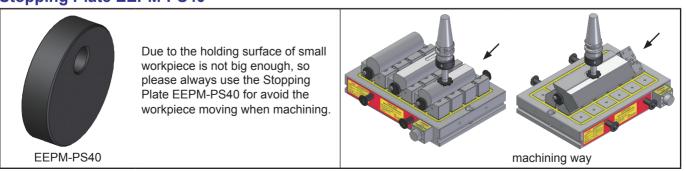


Power that works. Suitable for use on EEPM Series of Electro-Permanent Magnetic Chuck.

Induction Block EEPM-IBT Series



Stopping Plate EEPM-PS40

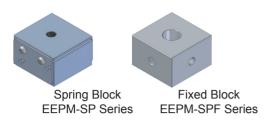


Option Accessories

Magnetic Workholding Suitable for use on EEPM Series of Electro-Permanent Magnetic Chuck.

Spring Block EEPM-SP Series

Suitable for clamping on iron cast, irregular form and flexuous workpieces, it will not be out of shape the workpiece after machining.



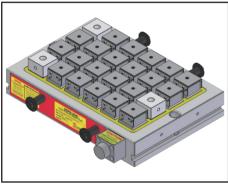
Features:

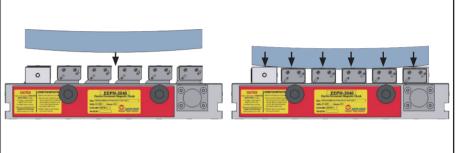
- Suitable for clamping on iron cast, irregular form and flexuous workpieces, it will not be out of shape of the workpiece after machining.
- 2. 3 Fixed Blocks is necessary for each workpiece clamping, it could be makes a basic surface for the workpiece touch to the Spring Blocks.
- 3. Elasticity: Each 2.5 mm for up and down.

MODEL NO.	L	W	Н	SUITABLE
EEPM-SP35	35	33.6	21	EEPM-A
EEPM-SPF35	35	35	23	Series

MODEL NO.	L	W	Н	SUITABLE
EEPM-SP	48	48	30	EEPM-B
EEPM-SPF	50	50	32.5	Series

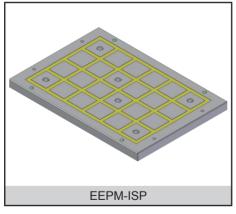
MODEL NO.	L	W	Н	SUITABLE
EEPM-SP70	68	68	30	EEPM-D
EEPM-SPF70	70	70	32.5	Series





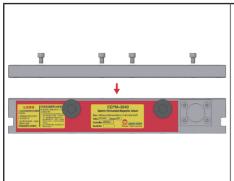
Induction Sub Plate EEPM-ISP Series

Suitable for quantity of irregular and smaller workpiece. It can be machining multi-workpiece at same time easily.

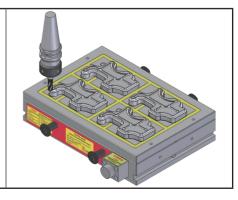


Features:

- 1. Suitable for quantity of irregular and smaller workpiece. It can be machining multi-workpiece at same time easily.
- 2. One EEPM chuck can be use several Induction Sub Plate exchangeability for machining different kind of workpiece.
- 3. Operation:Set up the Induction Sub Plates to the EEPM chucks first, then machining forms (Around 1-2mm depth) on ISP to match the workpiece by the machine directly. Start to clamp workpieces for machining.
- 4. Please advise the model No. of EEPM chuck which you want to combine for, when purchased.









Option Accessories

Power that works. Suitable for use on EEPM Series of Electro-Permanent Magnetic Chuck.

Induction block with raise pin structure (EEPM-S50T)

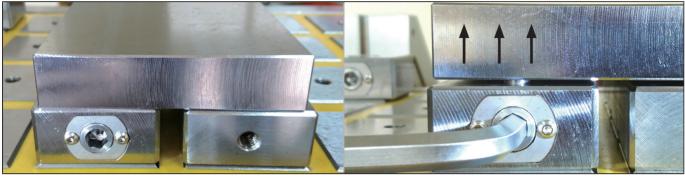
Suitable for high-carbon steel workpiece





Features:

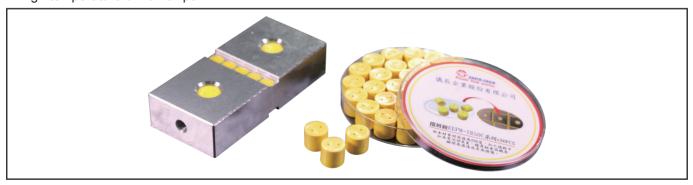
- 1. Since the high-carbon materials, the workpiece might be unable to be instantly released after machining cycle is completed due to residual magnetism.
- 2. The high-carbon steel parts are difficult to remove after the magnetization using induction block with raise pin structure can easily remove the workpiece.



Tap of Induction block screw hole (EEPM-IBC50 Series)

Features:

- 1. 1.Put the EEPM-IBC50 into Induction block screw hole, to avoid the iron chip fall in the induction block screw holes when machining, can be save the time for chips clear.
- 2.Maximum temperature is 200 degrees, if without cooling device the surface of EEPM-IBC50 will be damage by high temperature of iron chips.



Induction block guards: EEPM-IBS50

Features:

- 1. Put the EEPM-IBS50 into Induction block gap, to avoid the iron chip fall in the induction block gaps when machining, can be save the time for clear.
- 2.Maximum temperature is 200 degrees, if without cooling device the surface of EEPM-IBS50 will be damage by high temperature of iron chips.



Electro-Permanent Magnetic Chuck EEPM Series









Human Machine Interface controller EEPM-HMI Series



ver that works. Suitable for use on EEPM Series of Electro-Permanent Magnetic Chuck.

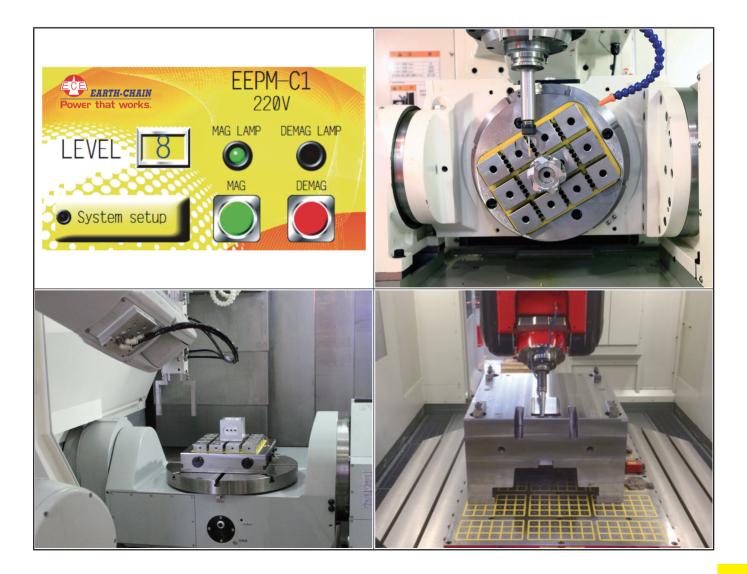


Features:

- 1.HMI touch screen can be set the screen brightness, key sound, language...etc.
- 2. Display the abnormal status, such as the chuck cable unconnected, and instruction the troubleshooting.
- 3. Can detect low voltage abnormal situation, to avoid the insufficient magnetic force situation.

Example description:

Develop Human Machine Interface touch screen system, feedback operation status from screen page, and the devices could be drive by pre-set program and parameter.



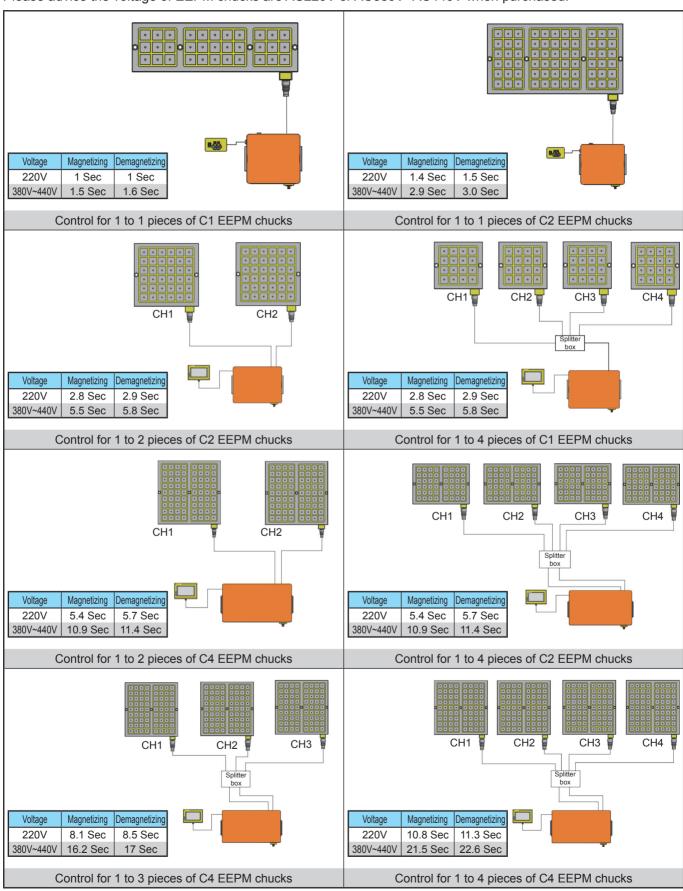
Magnetic Workholding

Option Controller EEPM-C Serise



Option controller available for control multi-EEPM chuck.

Please advice the voltage of EEPM chucks are AC220V or AC380V~AC440V when purchased.

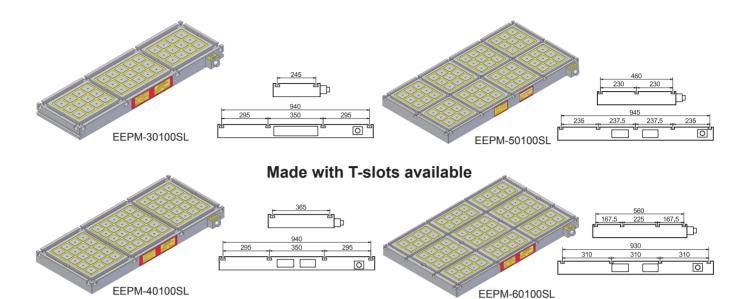




Electro-Permanent Magnetic Chuck EEPM-SL / TA Series

Suitable for all size of workpiece, can be use together with mechanical clamping tools.





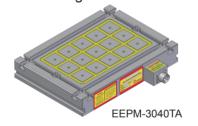
With multi-functions of machine table, clamping plate and magnetic chuck

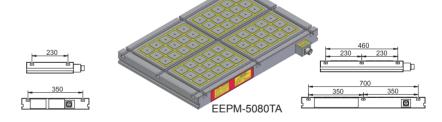
Unit:mm

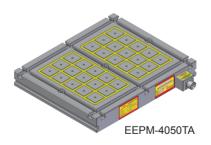
					,			0					
MODEL NO.	DIMENSION L×W×H	PITCH	POLE	NO. OF POLE		TOTAL HOLDING POWER kgf ±5%	CHUCK N.W.	VOLTAGE (Single Phase)	CURRENT AMP	CONTROLLER (included)	VOLTAGE (Single Phase)	CURRENT AMP	CONTROLLER (included)
EEPM-30100SL	990×300×70	10	50×50	39	13	12100	160kg		24A	C2	AC	16A	C2
EEPM-40100SL	990×420×70	10	50×50	65		20300	225kg	AC	30A	C2	380V	13A	C2
EEPM-50100SL	990×500×70	10	50×50	72		22500	260kg	220V	14A	C4	₹ 1	14A	C2
EEPM-60100SL	990×600×70	10	50×50	84	- 23	26200	320kg		22A	C4	440V	9A	C4

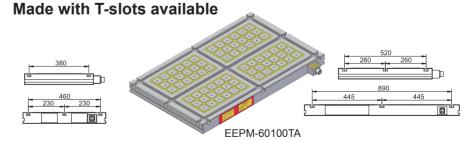
Custom-made is available.

Suitable for big size of workpiece only, use together with mechanical clamping tool for heavy duty machining.









Lower price for big size of workpiece only.

Unit:mm

				ower pr	100 101	big bize	or workpr	COC OIII	у.					•
	MODEL NO.	DIMENSION L×W×H	PITCH	POLE	NO. OF POLE		TOTAL HOLDING POWER kgf ±5%	CHUCK N.W.	VOLTAGE (Single Phase)	CURRENT AMP	CONTROLLER (included)	VOLTAGE (Single Phase)	CURRENT AMP	CONTROLLER (included)
ı	EEPM-3040TA	420×300×70	10	50×50	15	13.	4600	50kg		17A	C1	AC	14A	C1
ı	EEPM-4050TA	530×440×70	10	50×50	30		9300	80kg	AC	33A	C1	380V	16A	C1
I	EEPM-5080TA	790×530×70	10	50×50	60		18700	180kg	220V	32A	C2	₹ 1	14A	C2
١	EEPM-60100TA	990×600×70	10	50×50	72	- 23 -	22500	240kg		23A	C4	440V	13A	C2

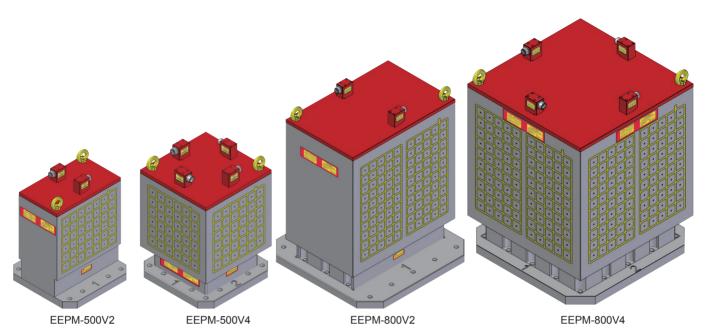
Custom-made is available.

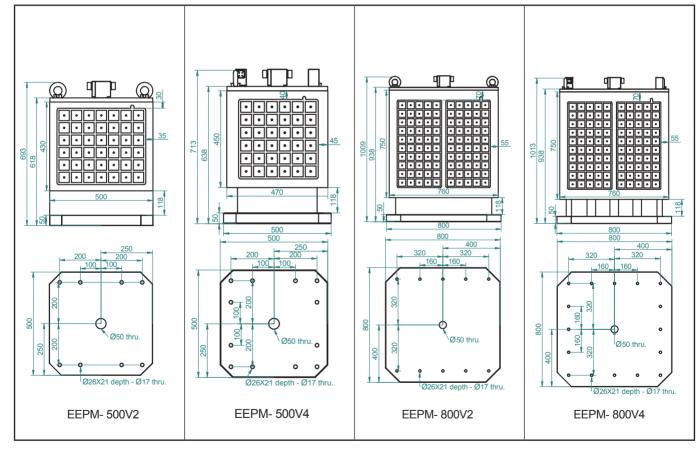
Mag Vise Magnetic Workholding

Electro-Permanent Magnetic Chuck EEPM-V Series



Suitable for CNC horizontal machining center





- 11	ni	+٠	m	n
U	ш	ι.	111	ш

MODEL NO.	DIMENSION	PITCH	POLE	NO. OF POLE	TOTAL HOLDING POWER kgf ±5%	CHUCK N.W.	VOLTAGE (Single Phase)	CURRENT AMP	CONTROLLER (included)	VOLTAGE (Single Phase)	CURRENT AMP	CONTROLLER (included)
EEPM-500V2	430×500	10	50×50	42×2	13100	480kg		30A	C2	AC	14A	C2
EEPM-500V4	450×470	10	50×50	36×4	11200	510kg	AC	20A	C2	380V	13A	C1
EEPM-800V2	750×760	10	50×50	100×2	31200	760kg	7.0	22A	C4		10A	C4
EEPM-800V4	750×760	10	50×50	100×4	31200	810kg		22A	C4	440V	10A	C4

Custom-made is available.



Electro-Permanent Magnetic Chuck EEPM-V Series

Suitable for CNC horizontal machining center

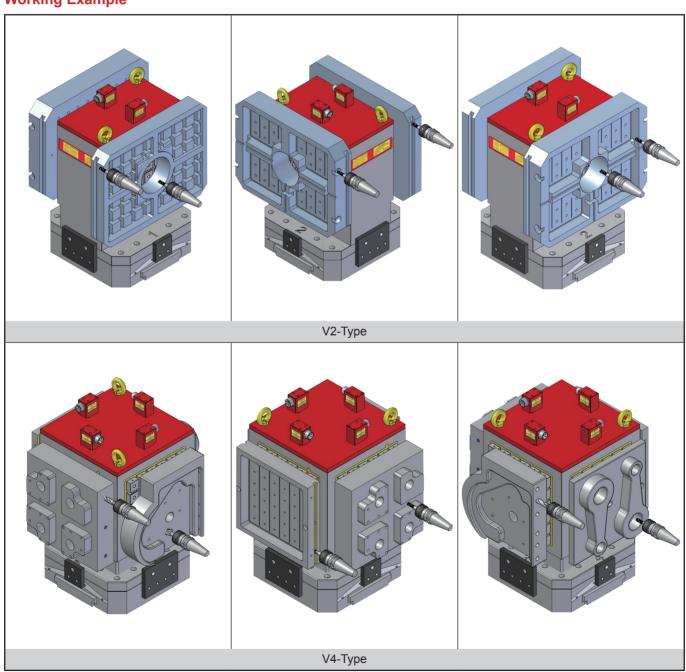
Features:

- 1. Super power magnetic force 1250kgf/100cm2 ±5%. (4 Poles)
- 2. Control each working face for ON and OFF, so it can be load and unload the workpiece on each working face. 3~10 seconds control for power ON and OFF.
- 3. Each EEPM-V type can be clamp multi-workpiece machining, instead of multi-pallet exchange.
- 4. Can do 5 sides machining, un-obstructed movement of cutters during machining.

 One cycle to finish a workpiece, helps in achieving best machining accuracy and increases efficiency a lot.

Applications:

- 1. Suitable for CNC horizontal machining center.
- 2. EEPM-V2 with 2 working faces suitable for bigger workpiece. EEPM-V4 with 4 working faces suitable for medium workpiece.
- 3. More functions for cooperate with Induction Block and Spring Block. (See the detail of Option Accessories)



Mag Vise Magnetic Workholding

Electro-Permanent Magnetic Index Table EEPM-IT Series

Suitable for horizontal milling & boring machine on precision machining of divison.





Traditional Milling Machine can do 5 sides machining too. PATENT NO.350429

Features:

- 1. We changed traditional clamping way of Index Table. Made with Electro-Permanent Magnetic Chuck, can do 5 side machining, without any obstructed movement of cutters during machining.
- 2. Super magnetic force 1250kgf/100cm2 ±5%.
- 3. Structure of Electro-Permanent Magnetic Chuck, 3~10 seconds control for power ON & OFF.

 No electric power supply required to keep the chuck ON. So no electric cable disturbed, can be turning freely.
- 4. Magnetic power adjustable.
- 5. Pneumatic system to rotate and fix the table, Easy and convenient to operate.
- 6. Heavy Duty construction, built of FC35 cast iron. Suitable for heavy duty machining.

Applications:

- 1. Suitable for horizontal milling, boring machine on precision machining of division.
- 2. More functions for cooperate with Induction Block and Spring Block. (See the detail of Option Accessories)

Unit:mm

MODE	EL NO.	EEPM-300IT	EEPM-470IT	EEPM-600IT	EEPM-800IT					
LX	(W	300×300	470×470	600×600	800×800					
HEI	GHT	193	187	226	302					
DRIVING	FLOATATION		Air Pressure	5~8 kg/cm ²						
DRIVING	REVOLVING		Mar	nual						
MAX. LOAD WEIGHT	VERTICAL IN THEORY	1200kg	2400kg	3400kg	4500kg					
ALLOWABLE I	LOAD WEIGHT	500kg	1000kg	2000kg	3000kg					
TABLE R	OTATION	Clockwise & anticlockwise								
DIVIS	SION	Standard 24T~15° Option 72T~5°	Standard $(21 \sim 5^{\circ})$ (Intion 3601 $\sim 1^{\circ}$							
NET W	/EIGHT	104kg	223kg	453kg	983kg					
DIMENTIO	N OF POLE	50×50								
NO. OF	F POLE	16	48	72	144					
TOTAL HOLDING	POWER kgf ±5%	5000	15000	22500	45000					
VOLTAGE ((Single Phase)		AC 2	220V						
CURRE	NT (AMP)	15A	23A	23A	18A					
CONTROLL	ER (included)	C1	C2	C4	C8					
VOLTAGE ((Single Phase)		AC 380	V~440V						
CURRE	NT (AMP)	13A	10A	18A	18A					
CONTROLL	ER (included)	C1	C2	C2	C4					



Electro-Permanent Magnetic Index Table EEPM-IT Series

Suitable for horizontal milling & boring machine on precision machining of divison.



單位:mm

MODE	EL NO.	EEPM-300IT	EEPM-470IT	EEPM-600IT	EEPM-800IT				
SQUARENES	SS OF TABLE	0.01	0.015	0.02	0.02				
REPEAT F	ROTATION	0.01	0.01	0.015	0.015				
PARALLELIS	SM OF TABLE	0.01	0.015	0.02	0.02				
BASIC SIDE S	SQUARENESS	0.015 0.015 0.02 0.02							
DIVISION	DIVIDING 4	±2"							
(SECOND)	DIVIDING 72		±3"						

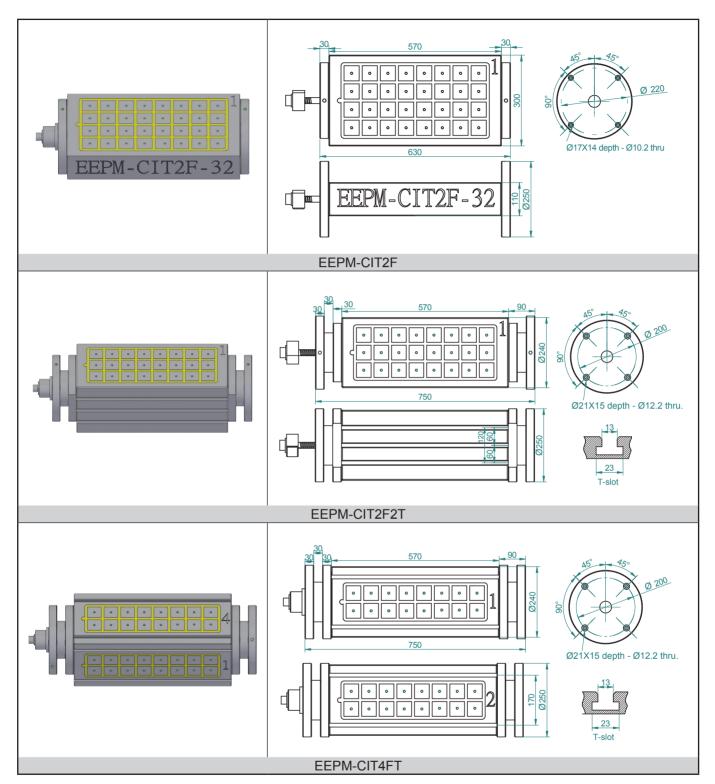


Mag Vise Magnetic Workholding

Electro-Permanent Magnetic Chuck EEPM-CIT Series



Suitable in use for combine with CNC 4 Axis Index Device



Unit:mm

MODEL NO.	DIMENSION	PITCH	POLE	NO. OF POLE	TOTAL HOLDING POWER kgf ±5%	CHUCK N.W.	VOLTAGE (Single Phase)	CURRENT AMP	CONTROLLER (included)	VOLTAGE (Single Phase)	CURRENT AMP	CONTROLLER (included)
EEPM-CIT2F	300×570	10	50×50	32×2	10000	141kg		30A	C2	AC	30A	C2
EEPM-CIT2F2T	240×570	10	50×50	24×2	7500	228kg	AC 220V	23A	C2	380V ≀	18A	C2
EEPM-CIT4FT	240×570	10	50×50	16×4	5000	219kg		20A	C4	440V	18A	C4

Custom-made is available.



Electro-Permanent Magnetic Chuck EEPM-CIT Series



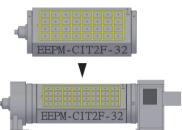
Suitable in use for combine with CNC 4 Axis Index Device

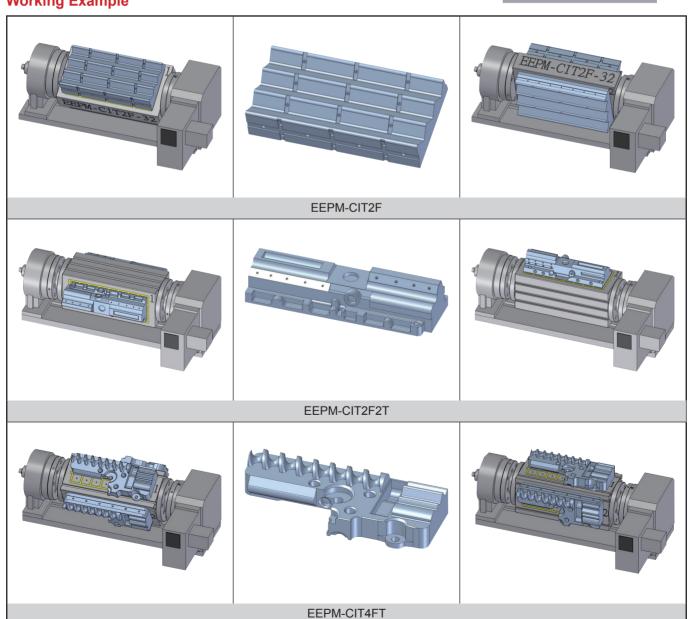
Features:

- 1. Super power magnetic force 1250kgf/100cm2 ±5%. (4 Poles)
- 2. Control each working face for ON and OFF, so it can be load and unload the workpiece on each working face. 3 seconds control for power ON and OFF.
- 3. EEPM-CIT2F with 2 magnetic working face, can be clamp 2 workpiece for machining. Suitable for bigger workpiece machining.
- 4. EEPM-CIT2F2T with 2 magnetic working face and 2 T-slot working face, can be clamp both of magnetic and nonmagnetic material of workpiece machining. Suitable for smaller workpiece machining.
- 5. EEPM-CIT4FT with 4 magnetic working face and T-slots available. Suitable for smaller workpiece machining.
- 6. Without any obstructed movement of cutters during machining. Can be use all the functions of CNC 4 Axis Index Device completely.

Applications:

- 1. Suitable in use for combine with CNC 4 Axis Index Device.
- 2. Minimum size of workpiece required as 4 alternate magnetic square poles and above is necessary for optimum clamping.

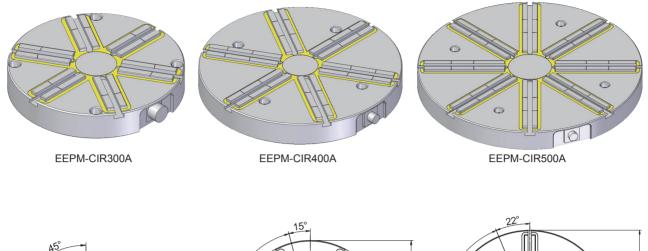


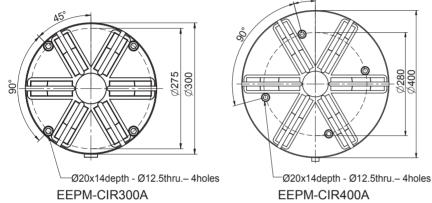


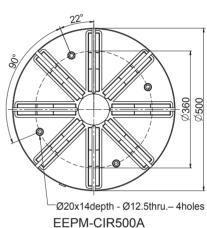
Electro-Permanent Magnetic Chuck EEPM-CIR Series

Magnetic Workholding Suitable for use on Vertical Lathe, CNC 5 Axis Machining Center ...etc.









Features:

- 1. Round type and radiate magnetic poles, suitable for clamping round type and any form of workpiece machining.
- 2. Workpieces can be touch to all poles of Magnetic Chuck, super power magnetic force as minimum of 300Kgf (0.30tons) ±5% and maximum of 2375Kgf (2.38 tons)±5%, it depends on size of workpiece and magnetic chuck. (Please refer to the spec. list)
- 3. 1 ~ 10 seconds control for power ON & OFF. No electric power supply required to keep the magnetic chuck ON, cable can be taken off for turning chuck freely while machining.
- 4. Un-obstructed movement of cutters during machining, the really functions of 5 side machining on workholding.
- 5. Design of Electric-Permanent, never gets temperature to effect the accuracy of workpieces.

Applications:

- 1. Suitable in use for combine with Vertical Lathe, CNC 5 Axis Index Device, CNC 5 Axis Machining Center ...etc.
- 2. Minimum dimension of workpiece required as: EEPM-CIR300- φ 300mm; EEPM-CIR400- φ 360mm; EEPM-CIR 500- φ 500mm or same dimensions of any other forms of workpiece.
- 3. More functions for cooperate with induction plate, can do positioning on workholding.

Panted Patent No:M358689

Unit:mm

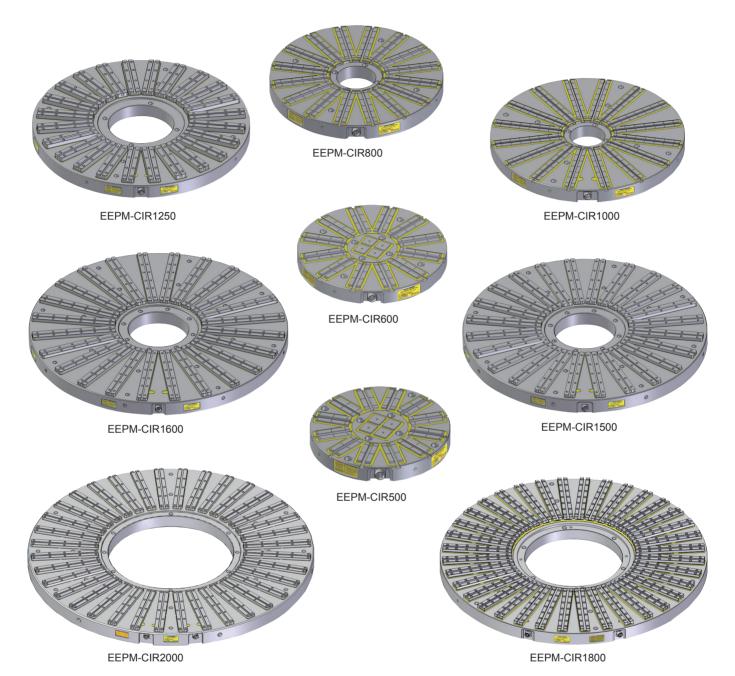
i antoa i atoni i		000								
MODEL NO.	D	IMENSIO	N	NO. OF	T-slot	MAGNETIC FORCE	CHUCK	VOLTAGE	CURRENT	CONTROLLER
MODEL NO.	OD	ID	HEIGHT	POLE	1-SIOU WAGNETIOT ONCE		N.W.	(Single Phase)	AMP	(included)
EEPM-CIR300A	φ300	0	55	6	-11-	1600kgf±5%	30kg	AC	7A	C1
EEPM-CIR400A	φ400	0	55	6		2480kgf±5%	55kg	220V ≀	18A	C1
EEPM-CIR500A	φ500	0	55	8	19 -	4400kgf±5%	85kg	440V	22A	C1



Electro-Permanent Magnetic Chuck EEPM-CIR Series



Suitable for use on Vertical Lathe, CNC 5 Axis Machining Center ...etc.



Panted Patent No: M358689

Panted Patent N	anted Patent No.:N/358689												
MODEL NO.		IMENSIOI		NO. OF	T-slot	MAGNETIC FORCE	CHUCK	VOLTAGE		CONTROLLER		CURRENT	CONTROLLER
	OD	ID	HEIGHT	POLE			N.W.	(Single Phase)	AMP	(included)	(Single Phase)	AMP	(included)
EEPM-CIR500	φ500	0	70	12/4		6650kgf±5%	104kg		35A	C1		15A	C1
EEPM-CIR600	φ600	0	70	12/4		9500kgf±5%	148kg		23A	C2		15A	C2
EEPM-CIR800	Φ800	φ250	85	16		15200kgf±5%	302kg		30A	C2		28A	C2
EEPM-CIR1000	φ1000	φ250	85	16		19000kgf±5%	471kg		24A	C4		20A	C4
EEPM-CIR1250	φ1260	Φ500	110	24	-11-l	28500kgf±5%	828kg		33A	C4	AC	18A	C4
EEPM-CIR1500	φ1520	φ500	120	24		39900kgf±5%	1325kg	AC 220V	24A	C8	380V	25A	C8
EEPM-CIR1600	φ1630	φ500	120	24		45600kgf±5%	1507kg		24A	C8	440V	20A	C8
EEPM-CIR1800	φ1820	Φ800	120	36		59850kgf±5%	2290kg		33A	C8		28A	C8
EEPM-CIR2000	φ2050	φ1000	130	36		59850kgf±5%	2490kg		33A	C8		28A	C8
EEPM-CIR2600													
EEPM-CIR3000													

Custom-made is available.

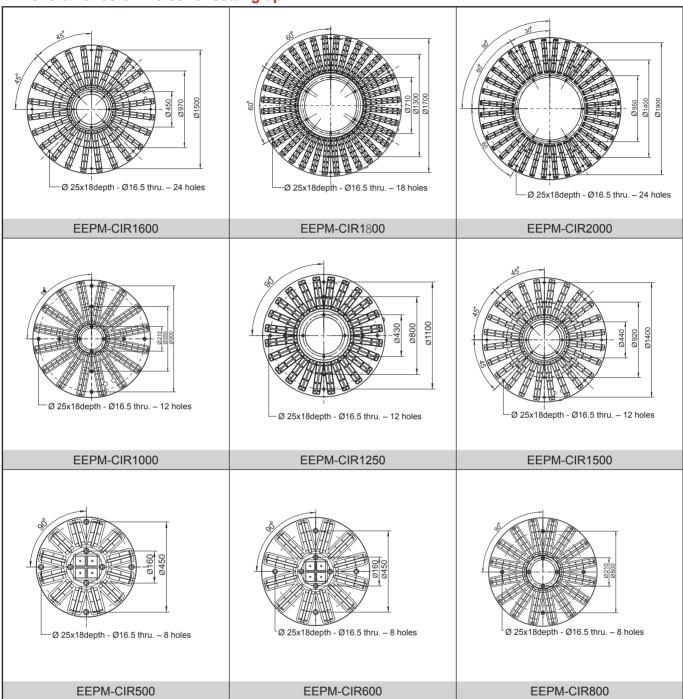
Electro-Permanent Magnetic Chuck EEPM-CIR Series

Magnetic Workholding Suitable for use on Vertical Lathe, CNC 5 Axis Machining Center ...etc.



Dimension of screw holes for setting up

Panted Patent No:M358689

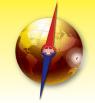


Features:

- 1. Round type and radiate magnetic poles, suitable for clamping round type and any form of workpiece machining.
- 2. Workpieces can be touch to all poles of Magnetic Chuck, super power magnetic force as minimum of 1340Kgf (I.34tons) ±5% and maximum of 60,400Kgf (60 tons)±5%, it depends on size of workpiece and magnetic chuck. (Please refer to the spec. list)
- 3. 1~10 seconds control for power ON & OFF. No electric power supply required to keep the magnetic chuck ON, cable can be taken off for turning chuck freely while machining.
- 4. Un-obstructed movement of cutters during machining, the really functions of 5 side machining on workholding.
- 5. Design of Electric-Permanent, never gets temperature to effect the accuracy of workpieces.



Electro-Permanent Magnetic Chuck EEPM-CIR Series



I Init:mm

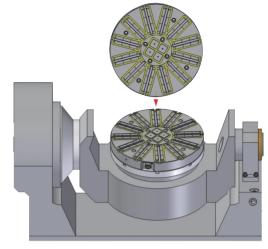
Suitable for use on Vertical Lathe, CNC 5 Axis Machining Center ...etc.

Applications:

- 1 .Suitable in use for combine with Vertical Lathe, CNC 5 Axis Index Device, CNC 5 Axis Machining Center ...etc.
- 2. Minimum dimension of workpiece required as:

 $\begin{array}{lll} {\sf EEPM-CIR500-}\,\phi\,300{\sf mm} & : {\sf EEPM-CIR600-}\,\phi\,360{\sf mm} \\ {\sf EEPM-CIR800-}\,\phi\,500{\sf mm} & : {\sf EEPM-CIR1000-}\,\phi\,500{\sf mm} \\ {\sf EEPM-CIR1250-}\,\phi\,850{\sf mm} & : {\sf EEPM-CIR1500-}\,\phi\,850{\sf mm} \\ {\sf EEPM-CIR1600-}\,\phi\,1200{\sf mm} & : {\sf EEPM-CIR1800-}\,\phi\,1200{\sf mm} \\ {\sf or same dimensions of any other forms of workpiece.} \end{array}$

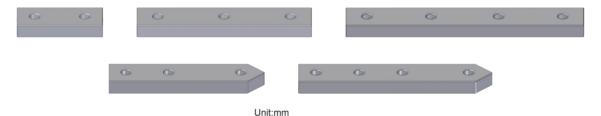
3. More functions for cooperate with induction plate, can do positioning on workholding.



Option Accessories-Induction Block

Features:

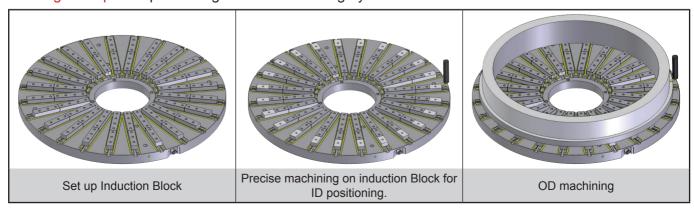
- 1. Induction Block EEPM-CIRIB series are use for EEPM-CIR chucks, can do many more functions on workholding.
- 2. Convenience and Accuracy: Induction Block are interchanging & consuming accessories, you can machining surface or forming induction blocks for the workpiece required by the machine directly, so the parallelism of induction block will always 100% match to the machine.



INDUCTION BLOCK	L	W	Н	SUITABLE
EEPM-CIRIB96A	96	35	15	EEPM-CIR300A
EEPM-CIRIB145A	145	35	15	EEPM-CIR400A
EEPM-CIRIB181A	181	35	15	EEPM-CIR500A

				Officiality
INDUCTION BLOCK	L	W	Н	SUITABLE
EEPM-CIRIB120	120	50	20	EEPM-CIR500
EEPM-CIRIB170	170	50	20	EEPM-CIR600
EEPM-CIRIB245	245	50	20	EEPM-CIR800
EEPM-CIRIB335	335	50	20	EEPM-CIR1000
EEPM-CIRIB220	220	50	20	EEPM-CIR500
EEPM-CIRIB270	270	50	20	EEPM-CIR600

Working Example: ID positioning and OD machining by Induction Block.

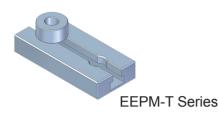


Electro-Permanent Magnetic Chuck EEPM-CIR Series



Magnetic Workholding Suitable for use on Vertical Lathe, CNC 5 Axis Machining Center ...etc.

T Fixed Slide Block

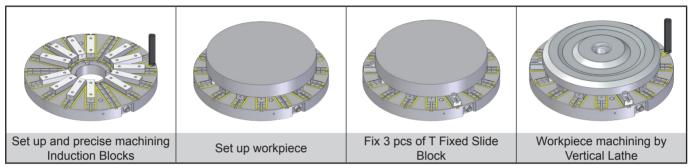


Features:

- 1. T-fixed slide block can do base points for workpiece positioning.
- 2. Due to the holding surface of small workpiece is not big enough, so please always use the T fixed slide Block to avoid the workpiece moving when machining.

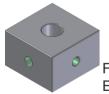
MODEL NO	L	W	Н	SUITABLE
EEPM-15T	77	35	15	EEPM-CIRA Series
EEPM-20T	120	50	20	EEPM-CIR Series

Working Example: Vertical Lathe machining by Induction Block with T Fixed slide Block



Spring Block > Fixed Block





Fixed Block **EEPM-SPF Series**

Features:

- 1. Suitable for clamping on iron cast and flexuous workpieces, it will not be out of shape of the workpiece after machining.
- 2. 3 Fixed Blocks is necessary for each workpiece clamping, it could be makes a basic surface for the workpiece touch to the Spring Blocks.
- 3. Elasticity: Each 2.5 mm for up and down.

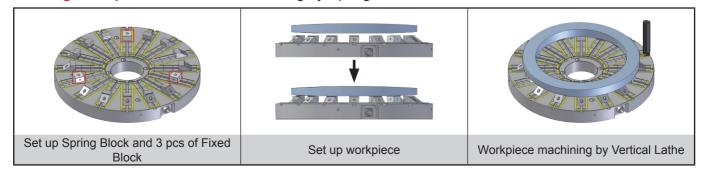
Unit:mm

MODEL NO	L	W	Н	SUITABLE
EEPM-SP35	35	33.6	21	EEPM-CIRA
EEPM-SPF35	35	35	23	Series

Unit:mm

MODEL NO	L	W	Н	SUITABLE
EEPM-SP	48	48	30	EEPM-CIR
EEPM-SPF	50	50	32.5	Series

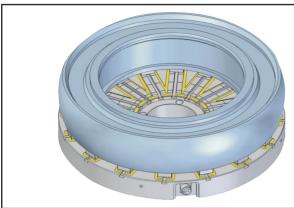
Working Example: Vertical Lathe machining by Spring Block with Fixed Block



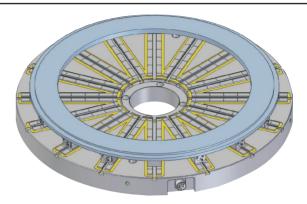
EElectro-Permanent Magnetic Chuck EEPM-CIR Series



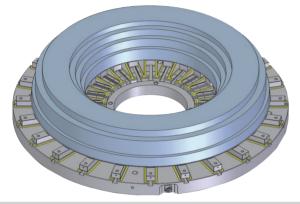
Suitable for use on Vertical Lathe, CNC 5 Axis Machining Center ...etc.



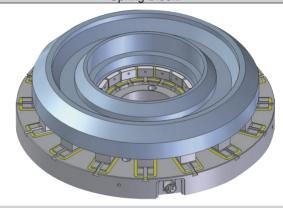
Round type workpiece for surface, ID and OD machining by Induction Block.



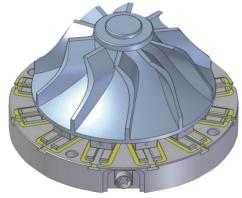
Irregular and thin workpiece for ID and OD machining by Spring Block.



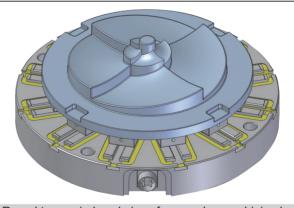
Round type workpiece positioning by OD for ID machining by Induction Block.



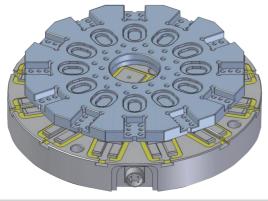
Round type workpiece positioning by ID for OD machining by Induction Block.



Round type spiral workpiece for complex machining by Induction Block.



Round type spiral workpiece for complex machining by Induction Block.



Multi-angle workpiece for 5 sides complex machining by Induction Block.



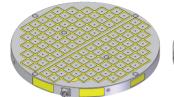
Round type gear workpiece for 5 sides complex machining by Induction Block.

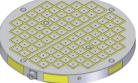
Mag Vise Magnetic Workholding

Electro-Permanent Magnetic Chuck EEPM-CIRS Series

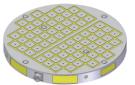
Suitable in use for combine with Rotary type Surface Grinding Machine, CNC 5 Axis Machining Center ... etc.

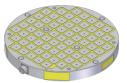


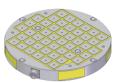




EEPM-CIRS550A







EEPM-CIRS600A

EEPM-CIRS500A

EEPM-CIRS450A

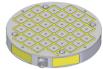
EEPM-CIRS400A











EEPM-CIRS150A

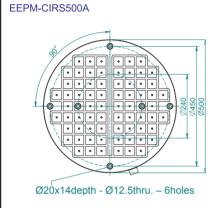
EEPM-CIRS200A

EEPM-CIRS250A

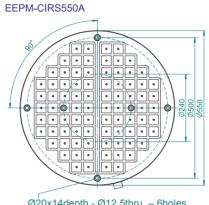
EEPM-CIRS300A

EEPM-CIRS350A

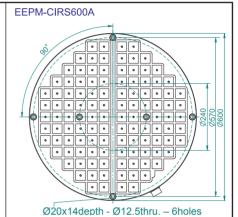
Dimension of screw holes for setting up



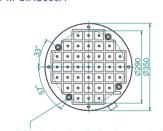




Ø20x14depth - Ø12.5thru. - 6holes



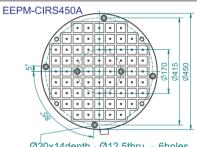
EEPM-CIRS350A



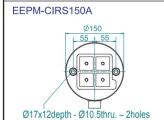
Ø20x14depth - Ø12.5thru. - 4holes

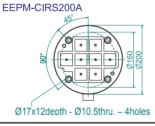
EEPM-CIRS400A

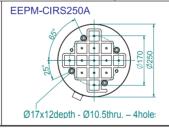
Ø20x14depth - Ø12.5thru. - 6holes

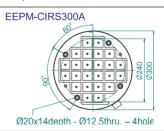


Ø20x14depth - Ø12.5thru. - 6holes









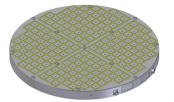
MODEL NO	DIME	NSION	PITCH	POLE	NO. OF	CHUCK	VOLTAGE	CURRENT	CONTROLLER
MODEL NO	D HEIGHT PITCH POLE POLE	N.W.	(Single Phase)	AMP	(included)				
EEPM-CIRS150A	ϕ 150	50	7		4	6kg		20A	C1
EEPM-CIRS200A	ϕ 200	50	7	8		11kg		10A	C1
EEPM-CIRS250A	ϕ 250	50	7		13	17kg	AC	25A	C1
EEPM-CIRS300A	ϕ 300	50	7	35×35 24 37	24	25kg		10A	C1
EEPM-CIRS350A	ϕ 350	50	7		34kg	220V	26A	C1	
EEPM-CIRS400A	ϕ 400	50	7	35^35	46	44kg	480V	14A	C2
EEPM-CIRS450A	ϕ 450	50	7		67	55kg		21A	C2
EEPM-CIRS500A	ϕ 500	50	7		70 84			26A	C2
EEPM-CIRS550A	ϕ 550	50	7					15A	C4
EEPM-CIRS600A	ϕ 600	50	7		114	99kg	-	23A	C4



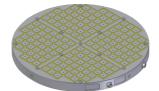
Electro-Permanent Magnetic Chuck EEPM-CIRS Series

EARTH-CHAIN Suitable in use for combine with Rotary type Surface Grinding Machine, CNC 5 Axis Machining Center ... etc.

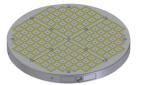








EEPM-CIRS1000



EEPM-CIRS900



EEPM-CIRS800



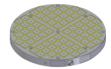


EEPM-CIRS300



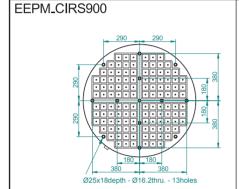


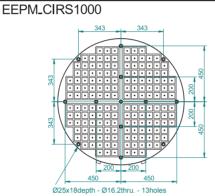
EEPM-CIRS600

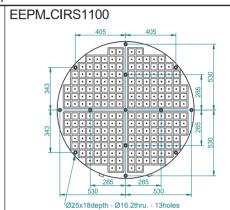


EEPM-CIRS700

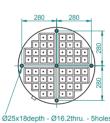
Dimension of screw holes for setting up



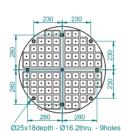




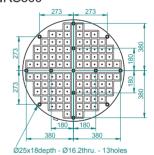
EEPM_CIRS600



EEPM_CIRS700



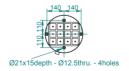
EEPM_CIRS800



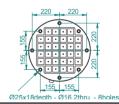
EEPM_CIRS200



EEPM_CIRS300



EEPM_CIRS500



Unit:mm

MODEL NO	MODEL NO DIMENSION PITCH	DITCH	POLE	NO. OF	CHUCK	VOLTAGE	CURRENT	CONTROLLER	VOLTAGE	CURRENT	CONTROLLER	
MODEL NO	D	HEIGHT	PITCH	POLE	POLE	N.W.	(Single Phase)	AMP	(included)	(Single Phase)	AMP	(included)
EEPM-CIRS200	φ203	70	10	50×50	4	16kg		15A	C1	AC 380V 440V		
EEPM-CIRS300	φ320	70	10		12	35kg		20A	C1		5A	C1
EEPM-CIRS500	φ500	70	10		32	97kg		30A	C1		15A	C1
EEPM-CIRS600	φ620	70	10		52	150kg	AC 220V	21A	C2		22A	C2
EEPM-CIRS700	φ720	70	10		76	191kg		21A	C4		10A	C4
EEPM-CIRS800	φ820	70	10		96	262kg	2200	23A	C4		9A	C4
EEPM-CIRS900	ϕ 900	80	10		120	362kg		33A	C4		18A	C4
EEPM-CIRS1000	φ1020	80	10		164	464kg		29A	C8		27A	C8
EEPM-CIRS1100	φ1106	80	10		204	546kg		28A	C8		11A	C8

Magnetic Workholding

Electro-Permanent Magnetic Chuck EEPM-CIRS Series

Suitable in use for combine with Rotary type Surface Grinding Machine, CNC 5 Axis Machining Center ... etc.

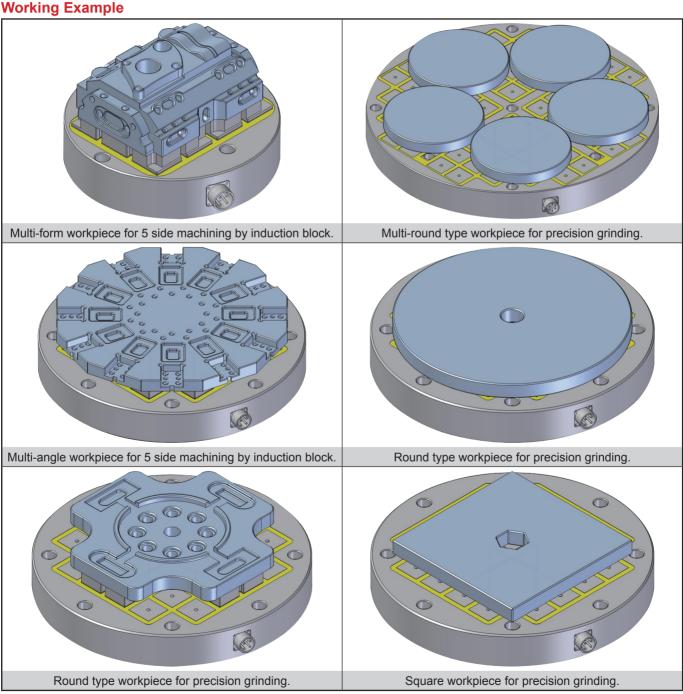


Features:

- 1. 1~10 seconds control for power ON & OFF. No electric power supply required to keep the magnetic chuck ON, cable can be taken off for turning chuck freely while machining.
- 2. Un-obstructed movement of cutters during machining, the really functions of 5 side machining on workholding.

Applications:

- 1. EEPM-CIRSA: Suitable for thin & small workpiece.(Pole Size 35X35 mm, Magnetic Force 580 kgf/4 Poles).
- 2. EEPM-CIRS: Suitable for thin & medium workpiece. (Pole Size 50X50 mm, Magnetic Force 1250 kgf/4 Poles).
- 3. Minimum size of workpiece required as 4 alternate magnetic square poles and above contacts is necessary for optimum clamping.
- 4. More functions for cooperate with Induction Block and Spring Block. (See the detail of Option Accessories).





Electro-Permanent Magnetic Chuck EEPM-CIR & EEPM-CIRS Series



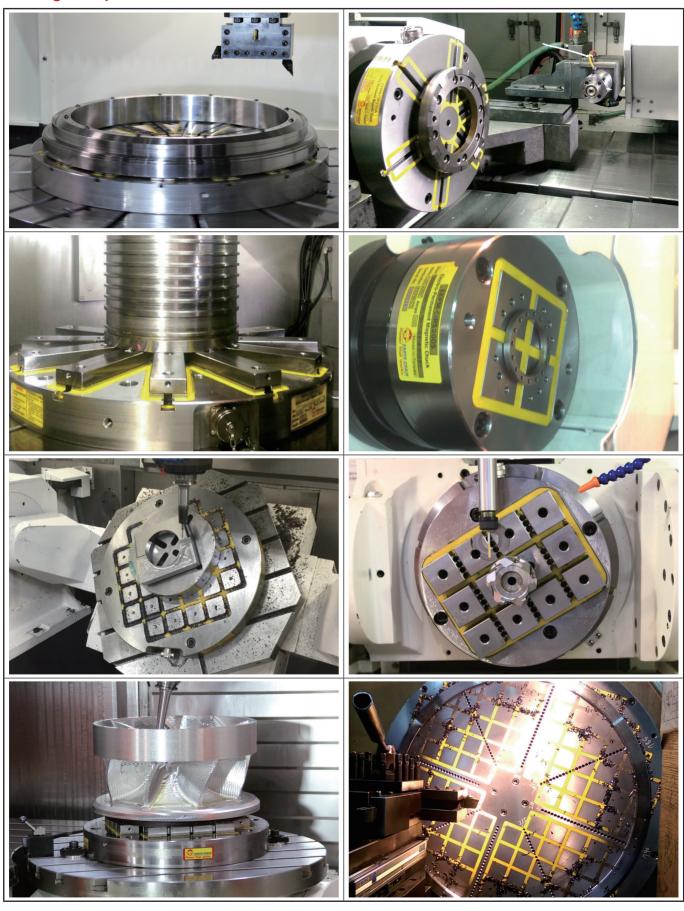
Power that works. Suitable for use on Vertical Lathe, CNC 5 Axis Machining Center ...etc.



Electro-Permanent Magnetic Chuck EEPM-CIR & EEPM-CIRS Series

Magnetic Workholding Suitable for use on Vertical Lathe, CNC 5 Axis Machining Center ...etc.







Custom-Made EEPM Chucks



Custom-chucks built to your specification.

We made special EEPM chucks required from customers. Customer can be purchase special EEPM chuck depends on the functions of the machine, workpiece and applications for increase efficiency and quality on machining.

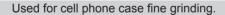
Example of Custom-Made EEPM Chucks

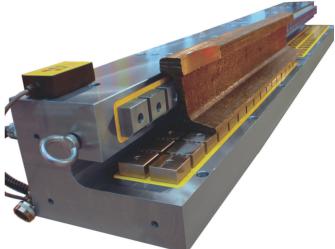




Used for Linear Guideway grinding.







Used on Wire Cutter for positioning mould clamping.



Used on Double Column Machining Center for machining big & multi-medium workpiece 5 sides machining.

Mag Vise

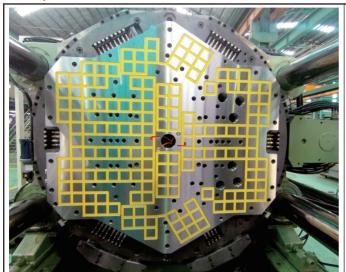
Magnetic Workholding

Custom-Made EEPM Chucks

Custom-chucks built to your specification.

We made special EEPM chucks required from customers. Customer can be purchase special EEPM chuck depends on the functions of the machine, workpiece and applications for increase efficiency and quality on machining.

Example of Custom-Made EEPM Chucks





Used for Quick Mold Change System of Plastic Injection Machines





Used on Shearing Machine for positioning mould clamping.



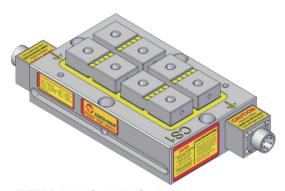
Used on Double Column Machining Center for machining big & multi-medium workpiece 5 sides machining.



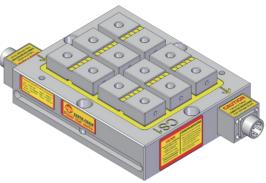
ARTH-CHAIN Suitable for use on large Vertical Lathe, Double Column Machining Center that works. and CNC Machining Center ...etc.



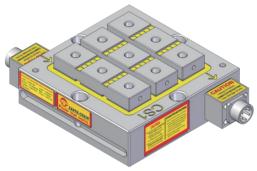
Each voltage with two specifications can be choice:



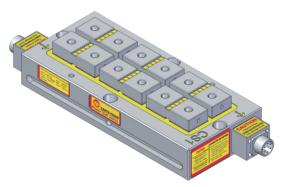
EEPM-2030C-220V Series



EEPM-2530C-380V~440V Series



EEPM-2525C-220V Series



EEPM-2040C-380V~440V Series

Features:

- 1. Super power magnetic force 1250 kgf/100 cm (4 poles), can meet various machining process.
- 2. Structure of Electro-Permanent Magnetic Chuck, no electric power supply required to keep the chuck On, it could be used for long time and never get temperatures to affect the accuracy of workpiece.
- 3. Using innovation series and parallel connection modular system, EEPM-C provides a more economic solution to hold various size workpiece. Flexible units could be deployed with various quantities, locations, and distance to each other depending on customers' various workpiece shapes. Save time and cost during machining and increase the accuracy that makes the goods have higher quality and value.
- 4. According to the size of the workpiece [point] hold the workpiece, changing the magnetic fixture [surface] clamp the workpiece, 100% use of the chuck in an all-round way. Can reduce equipment costs and increase more profits.
- 5. Without any obstructed movement of cutters during machining. Can do 5-sides machining, drilling, tapping, grooving and forming can be done all in one cycle. This greatly enhances work efficiency, and reduces repeated positioning tolerances to achieve best machining accuracy.

How to choose:

According application requirement can choose EEPM-C Series as following steps:

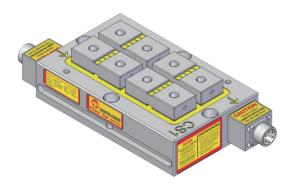
- 1. Choose number of chucks according to Voltage and workpiece required.
- 2. Choose Chuck Controller.
- 3. Choose the length of Chuck Connection Cables.
- 4. Choose the Screw Size.
- 5. Choose the length of Power Cord.

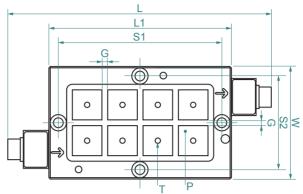
Note: A maximum of 16 chucks can be connected to one controller. If the workpiece dimension requests more than 16 chucks please use two groups of chucks unit.

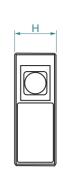
Electro-Permanent Magnetic Chuck-Connection Type Voltage 220V Series

Suitable for use on large Vertical Lathe, Double Column Machining Center and CNC Machining Center ...etc.





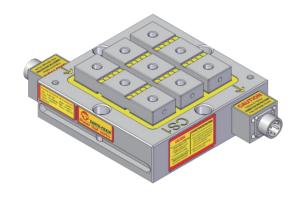


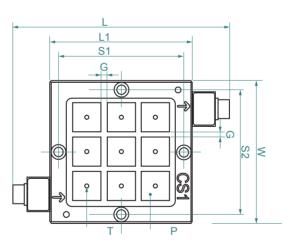


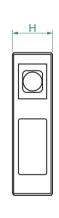
EEPM-2030C-220V Series

Unit: mm

MODEL NO	VOLTAGE			D	IMENSIO	N			PITCH	POLE	NO. OF	HOLDING	CHUCK
WODEL NO	(Single Phase)	W	L	L1	S1	S2	Н	Т	G	Р	POLE	POWER	N.W.
EEPM-2030CS1													
EEPM-2030CS2	DC	100	440	240	200	400	70	N40	40	F0F0		2500.50/	00 Ele
EEPM-2030CS3	220V	190	440	310	280	160	70	M8	10	50×50	8	2500±5%	ээ.экд
EEPM-2030CS4													







EEPM-2525C-220V Series

Unit: mm

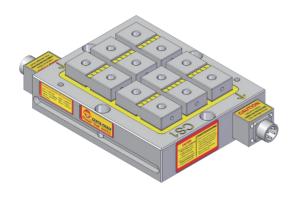
MODEL NO	VOLTAGE			С	IMENSIO	N			PITCH	POLE	NO. OF	HOLDING	CHUCK
MODEL NO	(Single Phase)	W	L	L1	S1	S2	Н	Т	G	Р	POLE	POWER	N.W.
EEPM-2525CS1													
EEPM-2525CS2	DC	250	380	250	220	220	70	M8	10	50×50		2800±5%	25 Oka
EEPM-2525CS3	220V	250	360	250	220	220	70	IVIO	10	50×50	9	2000±3%	35.0kg
EEPM-2525CS4													

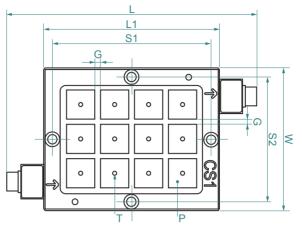
Electro-Permanent Magnetic Chuck-Connection Type Voltage 380V~440v Series

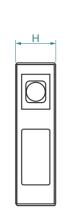


EARTH-CHAIN Suitable for use on large Vertical Lathe, Double Column Machining Center and CNC Machining Center ...etc.





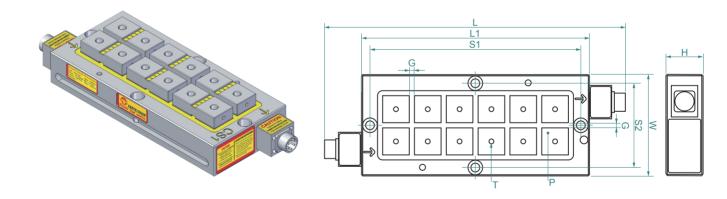




EEPM-2530C-380V~440V Series

Unit: mm

MODEL NO	VOLTAGE			D	IMENSIO	N			PITCH	POLE	NO. OF	HOLDING	CHUCK
MODEL NO	(Single Phase)	W	L	L1	S1	S2	Н	Т	G	Р	POLE	POWER	N.W.
EEPM-2530CS1	DC												
EEPM-2530CS2	380V	250	440	310	280	220	70	M8	10	50×50	12	3750±5%	44.0kg
EEPM-2530CS3	110)/	230	440	310	200	220	/0	IVIO	10	30^30	12	3730±3%	44.0kg
EEPM-2530CS4	440V												



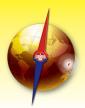
EEPM-2040C-380V~440V Series

Unit: mm

													•
MODEL NO	VOLTAGE			С	IMENSIO	N			PITCH	POLE	NO. OF	HOLDING	CHUCK
MODEL NO	(Single Phase)	W	L	L1	S1	S2	Н	Т	G	Р	POLE	POWER	N.W.
EEPM-2040CS1	DC												
EEPM-2040CS2	380V	190	560	430	400	160	70	M8	10	50×50	12	3750±5%	41 Oka
EEPM-2040CS3	₹ 1400.4	190	560	430	400	160	/0	IVIO	10	50×50	12	3/30±3%	41.0kg
EEPM-2040CS4	440V												

Electro-Permanent Magnetic Chuck-Connection Type EEPM-C Series

Suitable for use on large Vertical Lathe, Double Column Machining Center and CNC Machining Center ...etc.



Chuck Controller EEPM-C4C



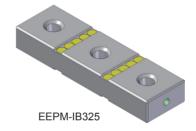
The controller EEPM-C4C can be controlled for 1 to 4 piece of EEPM-CS1 \ CS2 \ CS3 \ CS4 at same time and with detection abnormal function.

Unit: mm

ĺ	MODEL NO	VOLTAGE (Single Phase)	DI	MENSIC	N	CONNECTION AVAILABLE					
	MODEL NO	VOLTAGE (Single Phase)	L	L W H		CONNECTION AVAILABLE					
	EEPM-C4C	AC 220V / AC 380V~440V	370	220	125	3~16 Chucks (CS1x1~4 pcs, CS2x1~4 pcs, CS3x1~4 pcs, CS4x1~4 pcs)					

Standard Accessories: Induction soft block





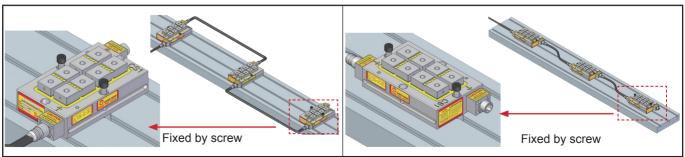
Convenience and Accuracy:

The induction blocks screwed on the magnetic chuck are replaceable and consumable accessories. You can fine grinding the surface or forming induction blocks according to requirements of workpiece by the machine directly that the parallelism of induction blocks can be 100% with the machine and the 5-sided machining can be easily conducted.

Standard accessories (Screw Size)

T-Slot	A	В	С	D	F	Thread
18	18 ⁺⁰ _{-0.3}	20	11	28	32	5/8"-11
22	20 +0 -0.3	26	14	32	38	5/8"-11
28	26 ⁺⁰ _{-0.3}	26	16	41	40	5/8"-11

Chuck installation direction:



Electro-Permanent Magnetic Chuck-Connection Type EEPM-C Series



Suitable for use on large Vertical Lathe, Double Column Machining Center and CNC Machining Center ...etc.



Chuck Connection Cable

Standard Accessories - (Iron Flexible Conduit)

Suitable for general machining.

Optional Accessories - (Stainless Steel Flexible Conduit)

Suitable for long time heavy duty machining. With high toughness and high strength preventing iron chips cut off the wire.





MODEL NO	LENGTH
EEPM-CC03	300mm
EEPM-CC05	500mm
EEPM-CC10	1000mm
EEPM-CC15	1500mm

MODEL NO	LENGTH
EEPM-CC05B	500mm
EEPM-CC10B	1000mm
EEPM-CC15B	1500mm

CONNECTION TABLE

MODEL NO	Е	EPM-2030C 220V		E	EEPM-2525C 220V		E	EEPM-2530C 380V~440V		E	EEPM-2040C 380V~440V	
CHUCK NOS.	HOLDING POWER OF EACH CHUCK	TOTAL HOLDING POWER kgf ±5%	CURRENT A MP	HOLDING POWER OF EACH CHUCK	TOTAL HOLDING POWER kgf ±5%	CURRENT A MP	HOLDING POWER OF EACH CHUCK	TOTAL HOLDING POWER kgf ±5%	CURRENT A MP	HOLDING POWER OF EACH CHUCK	TOTAL HOLDING POWER kgf ±5%	CURRENT A MP
3		7500	7A		8400	7A		11250	8A		11250	8A
4		10000	9A		11200	9A		15000	10A		15000	10A
5		12500	11A		14000	10A		18750	12A		18750	12A
6		15000	12A		16800	11A		22500	13A		22500	13A
7		17500	14A		19600	12A		26250	16A		26250	16A
8		20000	16A		22400	14A		30000	18A		30000	18A
9	2500±5%	22500	17A	2800±5%	25200	15A	3750±5%	33750	19A	3750±5%	33750	19A
10	2500±5%	25000	19A	2000±5%	28000	17A	3730±3%	37500	21A	3730±3%	37500	21A
11		27500	20A		30800	19A		41250	23A		41250	23A
12		30000	22A		33600	20A		45000	25A		45000	25A
13		32500	24A		36400	22A		48750	27A		48750	27A
14		35000	26A		39200	23A		52500	29A		52500	29A
15		37500	27A		42000	24A		56250	30A		56250	30A
16		40000	29A		44800	26A		60000	33A		60000	33A
	If the workpiece dimension requests more than 16 chucks, please use two groups of chuck unit.											

Notice:

- 1. EEPM-C Series each voltage has two specifications can be choose, each specification has four models EEPM-CS1, CS2, CS3 and CS4 can be connected but each model can be up to 4 units only.
- 2. The controller EEPM-C4C can be controlled EEPM-CS1, CS2, CS3 and CS4 each of them 4 pieces at same time.
- 3. Maximum distance required:

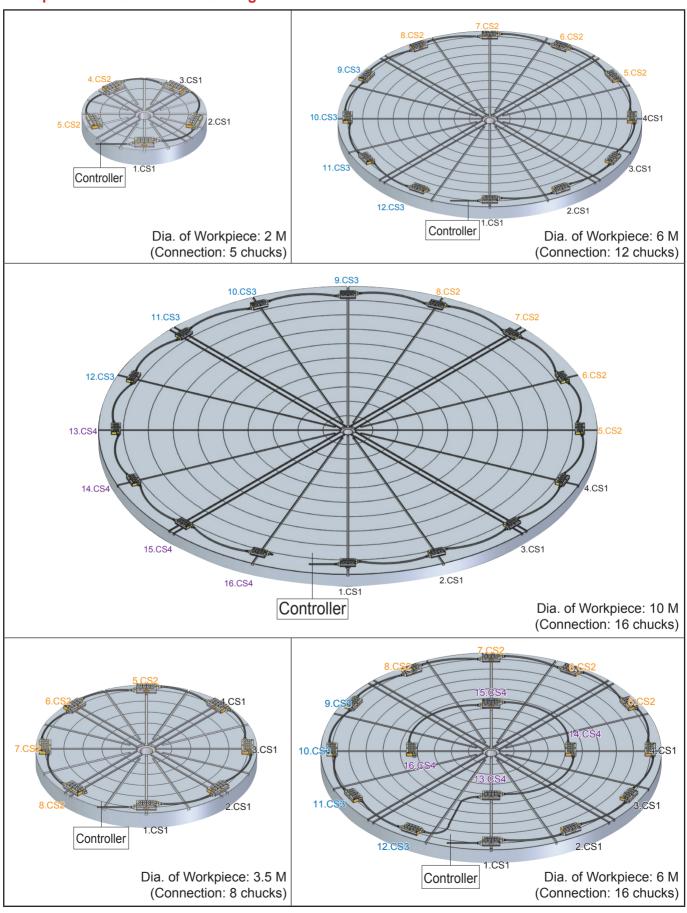
No. of EEPM-CS	3-4 Chucks	5-10 Chucks	11-16 Chucks
Max. Distance Between Chucks	800 mm	1000 mm	1500 mm

Electro-Permanent Magnetic Chuck-Connection Type EEPM-C Series

Suitable for use on large Vertical Lathe, Double Column Machining Center and CNC Machining Center ...etc.



Example of Vertical Lathe on Setting:

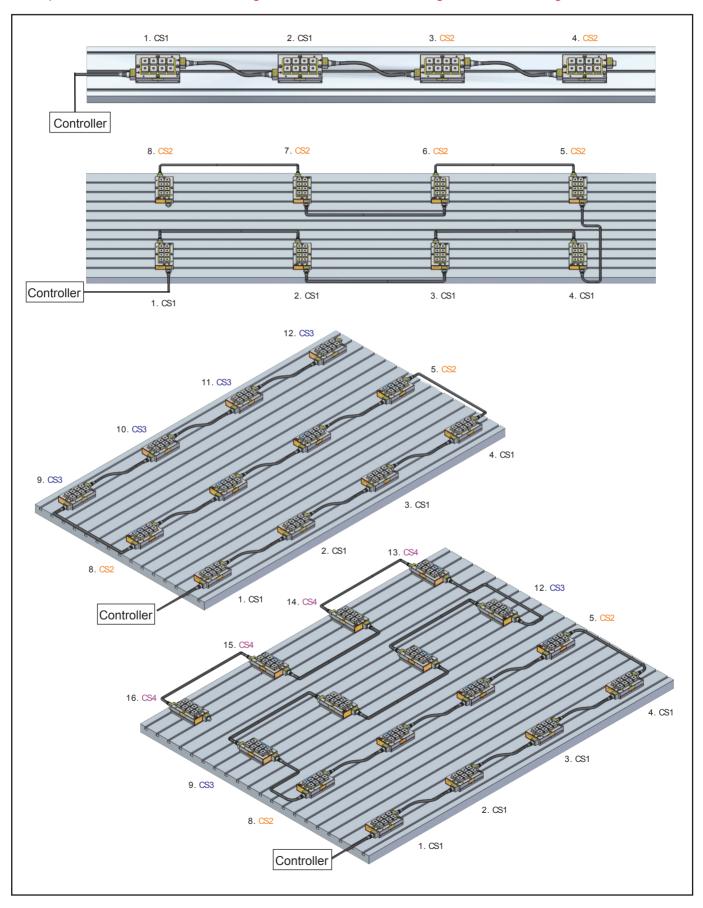


Electro-Permanent Magnetic Chuck-Connection Type EEPM-C Series





Example of Double Column Machining Center and CNC Machining Center on Setting



Electro-Permanent Magnetic Chuck-Connection Type EEPM-C Series

Suitable for use on large Vertical Lathe, Double Column Machining Center and CNC Machining Center ...etc.







Permanent Magnetic Clamping Block ECB Series

Suitable for medium & large workpiece. (Can do 5 sides machining).





Taiwan M258824, Italy / USA us7, 224, 251, B2 / Japan 3106264, / Korea 0366170, / Germany 20 2004 009 776.1 / China ZL2004 2 0067865.1

Induction soft block 1 set Handle 1 set Guide key 2 pcs

Switch connector 1 set

Standard Accessories

Features:

- 1. The all new model Magnetic Clamping Block ECB Series are a new sense of clamping way for metal working on CNC Machining Center and Milling Machine in quick clamp workpieces.
- 2. Free to set up position, numbers and distance of Magnetic Clamping Block according to the size of workpiece.
- 3. The ECB Series including changeable Induction Soft Block. It can be revised the surface to be 100% accuracy on the machine for clamp workpieces. Can be also cutting, drilling, tapping and slotting directly to the Induction Soft Block during machining workpiece. Multi-function of Induction Soft Block, the user can make it by themselves according to workpiece required.
- 4. Two machining circle for finish workpiece machining, increase a lot of machining efficiency and achieve accuracy required.

Applications:

- Most suitable for medium and large size of workpiece machining on milling machine and CNC machining center.
- 2. Minimum size of workpiece required as bigger than an area of two Magnetic Clamping Blocks.

3. The Magnetic Clamping Blocks are not suitable for

small workpiece clamping.



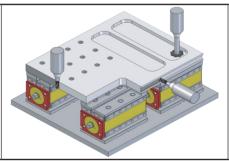
Note:

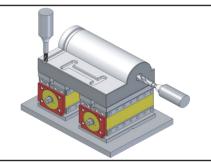
1. Please always make sure the Switch was in ON position before machining.

Stopping plate 1 set

- 2. The Magnetic Clamping Blocks are not suitable for non-magnetic material, such as brass, copper, aluminum and stainless steel, etc.
- The principle of Magnetic Clamping Blocks is magnetism of N. S. poles, so please always put the workpiece between N. S. poles. (The middle of top clamping range)







	MODEL NO	HOLDING POWER	MINIMUM THICKNESS OF WORKPIECE REQUIRED	G	G= +0 - 0.03	Н	H= +0 - 0.03	N.W.
ĺ	ECB-210	2100kgf±5%	30	115		134		36kg
ı	ECB-120	1200kgf±5%	20	92.5	Accuracy control	108	Accuracy control	18kg
ı	ECB-075	750kgf±5%	15	85	required	78	required	9.5kg
١	ECB-050	500kgf±5%	15	61		78		7kg

Mag Vise

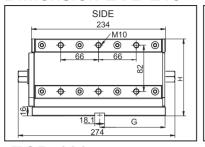
Permanent Magnetic Clamping Block ECB Series

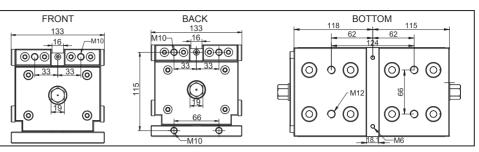
Magnetic Workholding

Suitable for medium & large workpiece. (Can do 5 sides machining).

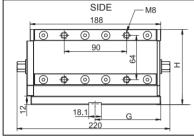


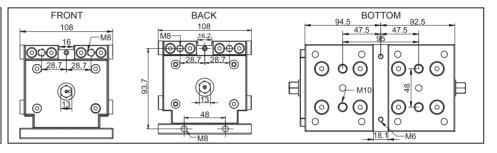
Dimension ECB-210



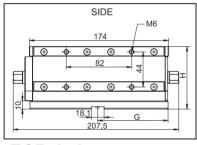


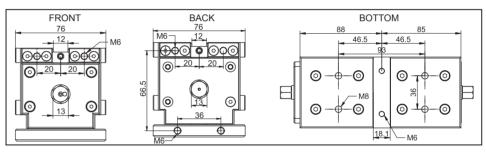
ECB-120



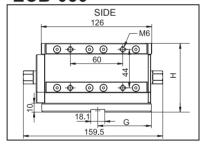


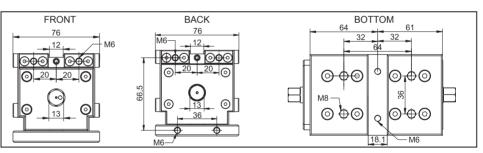
ECB-075



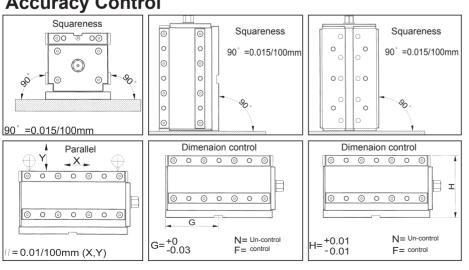


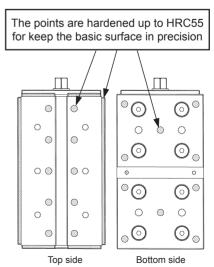
ECB-050





Accuracy Control







Permanent Magnetic Clamping Block ECB Series

Suitable for medium & large workpiece. (Can do 5 sides machining).

Customer can be makes switch connector by standard hexagon steel bar themselves for depends on length required. The dimension of hexagon bar required as ECB-210 --- 19mm,

300

ECB-210

100

1000

70

500

ECB-120, 075, 050 --- 13mm.

MODEL NO

SIDE DISTANCE

FRONT & BACK DISTANCE

Maximum & Minimum distance required

Min.

Max

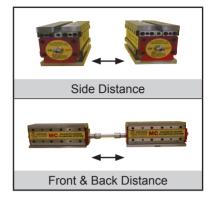
Min.

Max

		Unit:mm
ECB-120	ECB-075	ECB-050
60	25	25
600	400	400
40	40	40

200

200



Special made Induction Block:

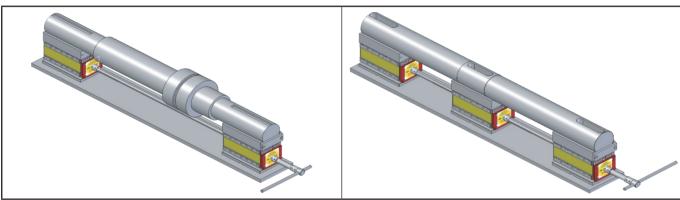
Customer can makes special induction block themselves for depends on the workpiece and application required.

(The material of induction block required as general and low carbon steel)





Example



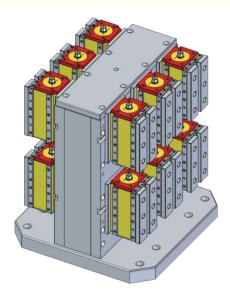


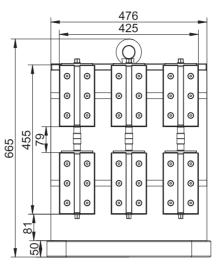
Mag Vise

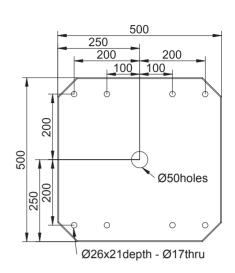
Magnetic Workholding

Permanent Magnetic Clamping Block ECB-120V12 Series

Suitable for use on CNC Horizontal Machining Center.







Features & Applications:

- 1. Each 6pcs of ECB-120 magnetic clamping block on 2 working face, each of 7200 kgf ±5% (1200kgfx6) holding power, can be clamping 2 big workpieces for machining at same time.
- 2. Customer can makes and assemble any type of clamping device themselves by ECB series for depends on workpieces required.
- 3. Suitable for use on CNC Horizontal Machining Center. (can do 5 sides machining.)

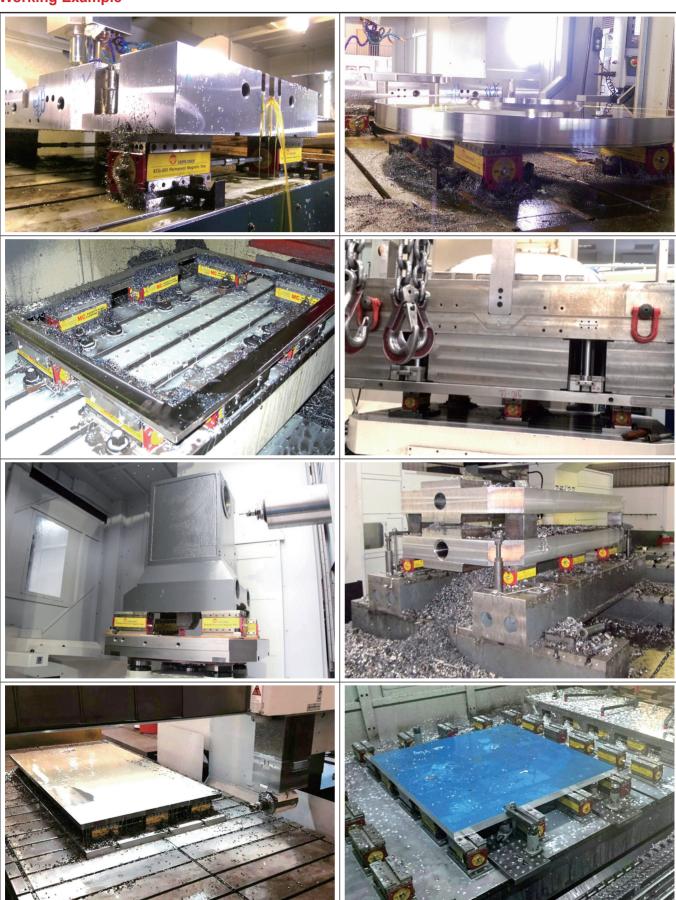




Permanent Magnetic Clamping Block ECB Series



Suitable for medium & large workpiece. (Can do 5 sides machining).









CNC Vertical/ Horizontal Machining Center
CNC Vertical/Horizontal Turning Lathes
Double Column Vertical Machining Center
CNC 4/5 Axis Machining Center

Quick Mold Change Systems for Plastic Injection Machine Lifting Magnet Series Universal Arm Magnetic Stand



Earth-Chain Enterprise Co., Ltd.

TeI:+886-4-2630-3737 http://www.earth-chain.com.tw Fax:+886-4-2630-3636 E-mail:ece@earth-chain.com.tw No. 551, Sec. 1, Gangbu Rd., Wu-Chi Dist., 43546 Taiwan







