
SARDA
MAGNETIC
TOOLS
Think Magnetic for
work holding
SARDA
EPM
ELECTRO PERMANENT CHUCK
50

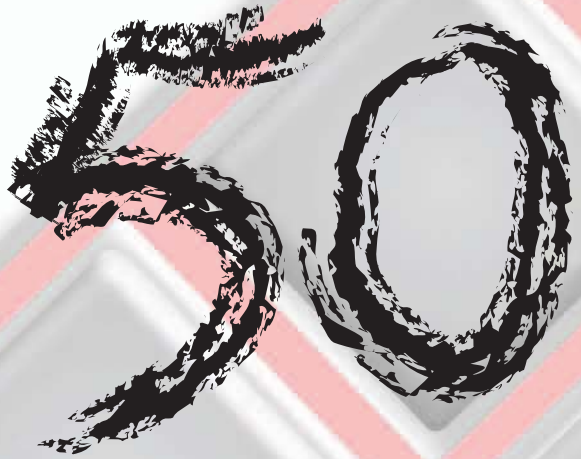
Introduction to ECEL

East Coast Enterprisers Ltd. is a flagship company of Sarda Group established in 1958 specializing in designing and manufacturing of SARDA brand magnetic work-holding, clamping, separation and lifting systems and other magnetic equipments. With advanced design, outstanding performance and unsurpassed reliability, our products can be compared with most western countries' products both in competitive prices & reliable quality.

Though we are a 50 year old company, we operate like entrepreneurs. We focus on continuously upgrading ourselves with new innovations in products and technology in order to stay ahead of our customer's changing needs.

East Coast Enterprisers Ltd developed for the first time in India the latest Electro Permanent Magnetic Chucks and lifters way back in 1990 and the Battery Operated EPM Lifting Magnets were the first of its kind in world. In 2006, we have applied PATENT for a revolutionary magnetic bed MAGNASLOT, a magnetic bed with T slots giving customers a work holding solution for all kinds of jobs.

The company has been receiving prestigious awards from the Engineering Export Promotion Council, Eastern Region, Kolkata since 1996 and has received the Best Exporters Shield for outstanding export performance.



Goals and Vision

It is the goal of the Company to be the leader in magnetic advancement and maintain the highest level of customer satisfaction. We are persistently striving to offer our customers superior quality and highly professional service as well as technical support.

In-house research plus innovative design has led to development of magnetic equipments using the latest technology available. Trained team of technicians and sales personnel are able to provide invaluable technical advice on magnet use and applications, as well as guiding customers on the best magnet material and construction for the devices they require.

It is the vision of the Company that by the year end of 2015 it becomes the leading manufacturers of industrial magnets with highest market share in Asia for its product.

INDEX

KALYANI

ART NO. 11101

Standard Pole Rectangular Magnetic Chuck

Features

- Perfect general purpose chuck having steel and aluminium set top plate.
- Meets IS:04816:87 specification.
- Poles are individually magnetised for full loading power.
- Detachable handle for easy use.

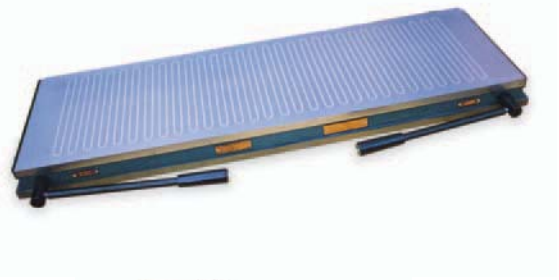
ECONOMY MODEL

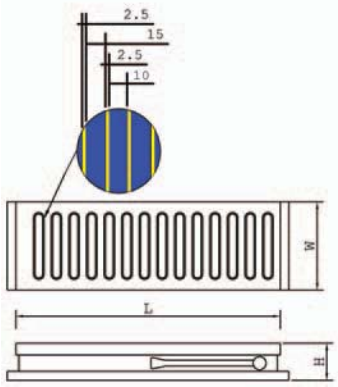
Applications

- Powerful and most suitable for grinding of medium and large components.
- Suitable for light milling and drilling operations.
- Supplied as OE in most surface grinding machines.

All dimensions are in mm.

Art No.	Top Plate		Pole Pitch	H
	W	L		
11101.01	125	250	30 (2.5+15+2.5+10)	63
11101.02	150	250		
11101.03		300		
11101.04		350		
11101.05		400		
11101.06		450		
11101.07	200	300		65
11101.08		350		
11101.09		400		
11101.10		450		
11101.11		500		
11101.12		600		
11101.13	250	450		
11101.14		600		
11101.15		750		
11101.16		1000*		
11101.17	300	450		68
11101.18		600		
11101.19		750		
11101.20		900*		70
11101.21		1000*		





- Due to continuous upgradation in design there could be changes in specifications.
- Larger(*) size chucks are made with two operating handles
- Other sizes on request.

PERMAMAX

ART NO. 11102

Universal Pole Rectangular Magnetic Chuck

Features

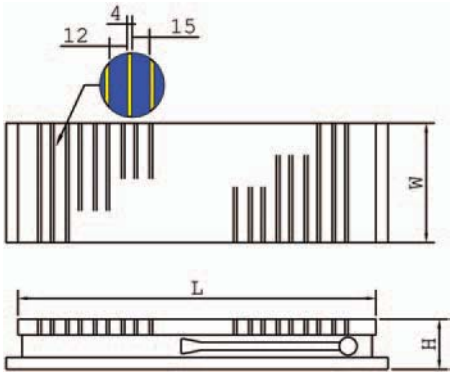
- Steel and brass laminated top plate.
- Accurate and stable working face.
- Fully extended pole with minimum loss of working area.
- Made with high power permanent magnets.
- Handle pivots 180°.

All dimensions are in mm.

Art No.	Top Plate		Pole Pitch	H
	W	L		
11102.01	115	180	31 (15+4+12)	60
11102.02		215		
11102.03	135	260		63
11102.04		280		
11102.05		315		
11102.06	155	280		65
11102.07		315		
11102.08		360		
11102.09		415		
11102.10		460		
11102.11		500		
11102.12		610		
11102.13	200	280		
11102.14		315		
11102.15		360		
11102.16		415		
11102.17		460		
11102.18		500		
11102.19		610		
11102.20		800		
11102.21		1000*		
11102.22	250	500		68
11102.23		610		
11102.24		750		
11102.25	300	500		
11102.26		600		
11102.27		800		

Applications

- Ideal for grinding of hardened jobs.
- Powerful and most suitable for medium and large components for grinding, light milling and shaping operations.
- Useful for grinding and drilling with laminated transfer blocks.



- Larger(*) size chucks are made with two operating handles.
- Due to continuous upgradation in design there could be changes in specifications.
- Other sizes on request.

PERMAFINE

ART NO. 11103

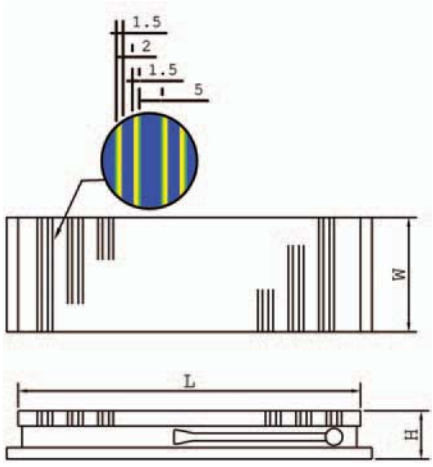
Fine Pole Rectangular Magnetic Chuck

Features

- Steel and brass laminated top plate.
- Poles individually magnetized.
- Double magnet system for maximum power.
- Use of ferrite magnets ensures that the magnetic force will always remain.
- Low magnetic field - no magnetization of tools.
- Smooth and simple actuating mechanism.
- Rugged construction - exceptional longevity.

Applications

- Ideal for tool room applications.
- Provides powerful holding for thin and thick work pieces.
- Suitable for grinding and light to medium milling operations.
- Adaptable to wide range of work pieces.



All dimensions are in mm.

Art No.	Top Plate		Pole Pitch	H
	W	L		
11103.01	115	180	10 (5+1.5+2+1.5)	70
11103.02		215		
11103.03	135	260		
11103.04		280		
11103.05		315		
11103.06	155	280		73
11103.07		315		
11103.08		360		
11103.09		415		
11103.10		460		
11103.11		500		
11103.12		610		
11103.13	200	280		75
11103.14		315		
11103.15		360		
11103.16		415		
11103.17		460		
11103.18		500		
11103.19		610		
11103.20		800*		80
11103.21		1000*		

- Larger(*) size chucks are made with two operating handles
- Due to continuous upgradation in design there could be changes in specifications.
- Other sizes on request.

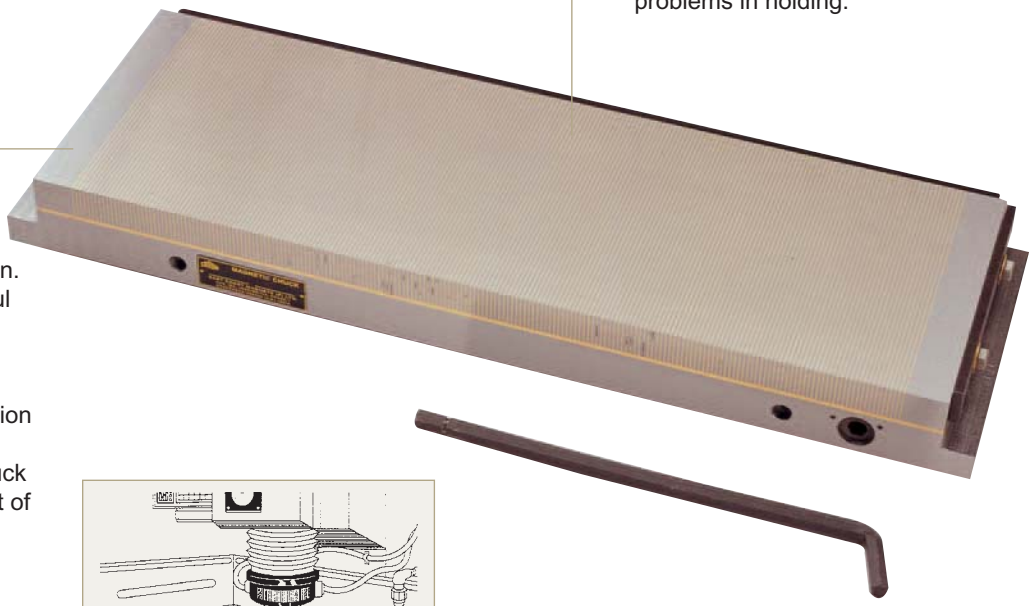
MICROFINE

ART NO. 11104

Microfine Pole Rectangular Magnetic Chuck

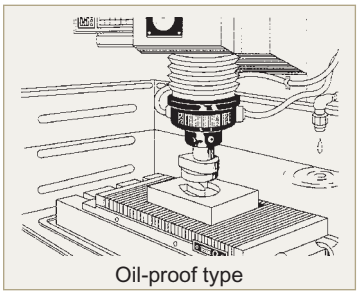
Applications

- Most suitable for EDM, Wire Cut and similar applications.
- Enables grinding of thin and small work pieces that hitherto presented problems in holding.



Features

- Steel and brass laminated top plate.
- Extremely low height for better job accommodation.
- Made with super powerful NdFeB new generation magnets.
- Variable power can be obtained by varying rotation of handle.
- Unique design of the chuck eliminates the movement of top plate when switched On/Off resulting in better job accuracy.
- Stable magnet grid movement provides high precision in grinding.

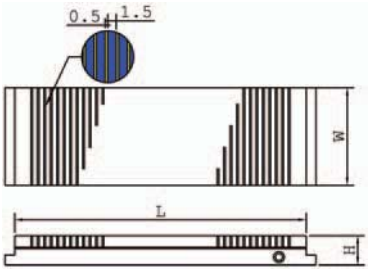


Oil-proof type

• Chuck with height 32 mm can also be made with On/Off mechanism from top and its ordering code is 11109

All dimensions are in mm.

Art No.	Top Plate		Pole Pitch	H
	W	L		
11104.01	100	150	2 (1.5+0.5)	45
11104.02	115	185		
11104.03	125	250		
11104.04	150	300		
11104.05		350		
11104.06		400		
11104.07		450		
11104.08	200	300		
11104.09		400		
11104.10		450		
11104.11		500		
11104.12		600		
11104.13	250	450		
11104.14		500		
11104.15		600		
11104.16	300	450		
11104.17		500		
11104.18		600		



• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

NEOMAX

ART NO.11105

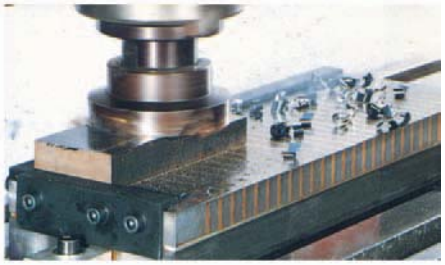
Powerful Rectangular Magnetic Chuck

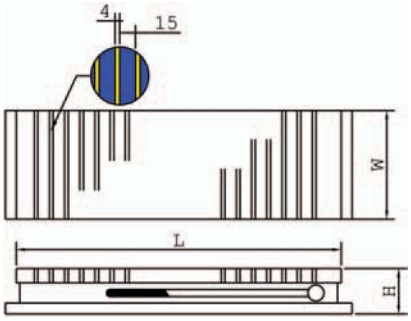
Features

- Made with super powerful NdFeB magnets.
- Steel and brass laminated top plate
- Rigid construction.
- Accurate and stable working face.
- Incorporates universal pole pitch to accommodate variety of work pieces.

Applications

- Ideal for milling applications.
- Through drilling with laminated blocks is also possible.





All dimensions are in mm.

Art No.	Top Plate		Pole Pitch	H
	W	L		
11105.01	100	150	34 (15+4+15)	70
11105.02	115	185		75
11105.03	125	250		
11105.04	150	300		
11105.05		350		
11105.06		400		
11105.07		450		
11105.08	200	300		
11105.09		400		78
11105.10		450		
11105.11		500		
11105.12		600		

- Due to continuous upgradation in design there could be changes in specifications.
- Larger size chucks are made with two operating handles.
- Other sizes on request.

POWERMILL

ART NO. 11106

Powermill Chuck

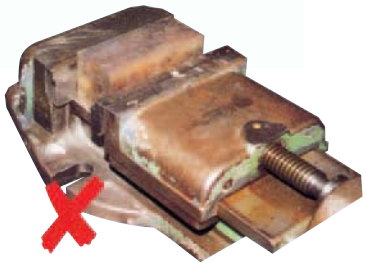
Features

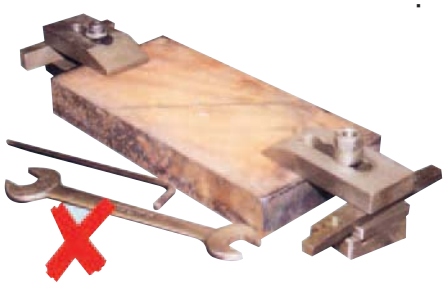
- Approximately 3 times more powerful than any other permanent magnetic chuck.
- Minimizes clamping time, ensures better dimensional accuracy and surface finish.
- Increases tool life.
- Made with super powerful new generation NdFeB magnets.
- Smooth and simple actuating mechanism.
- Rugged construction-exceptional longevity.

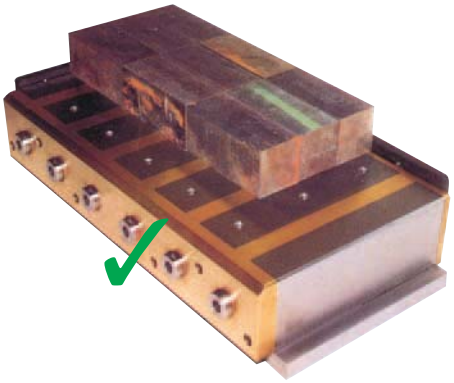
NEW PRODUCT

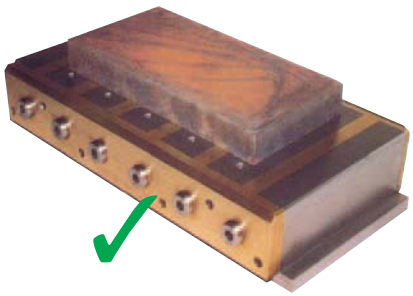
Applications

- Ideal for heavy duty milling applications.
- Machining of five face milling in one setting is possible.









All dimensions are in mm.

Art No.	Working Size		H
	W	L	
11106.01	200	430	95
11106.02	300	600	95

- Due to continuous upgradation in design there could be changes in specifications.
- Other sizes on request.

UDAYAN

ART NO. 11201

Standard Pole Round Magnetic Chuck

Features

- Perfect general purpose chuck having steel and aluminium set top plate.
- Meets IS:04816:87 specification .
- Parallel pole heavy duty chuck with high holding power.
- Concentric grooves in the chuck surface assist in clamping parts concentrically.

Applications

- Powerful and most suitable for grinding of medium and big components.
- Useful for Rotary grinding machines and lathes.

All dimensions are in mm.

Art No.	D	Pole Pitch	H
11201.01	130	30 (2.5+15+2.5+10)	63
11201.02	160		
11201.03	200		
11201.04	225		
11201.05	250		
11201.06	315		65
11201.07	350		
11201.08	400		
11201.09	450		68
11201.10	500		
11201.11	600		70

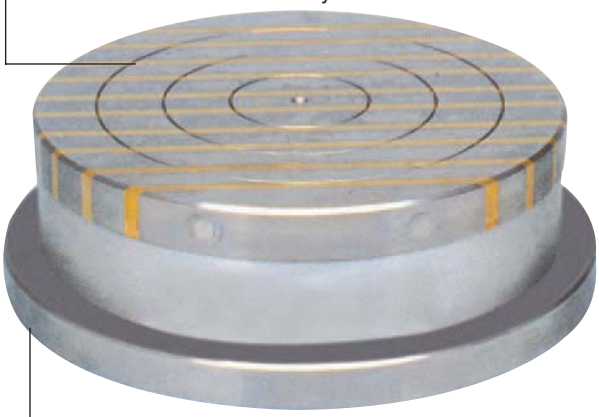
PERMAMAX

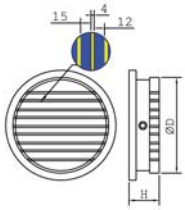
ART NO. 11202

Universal Pole Round Magnetic Chuck

Features

- Steel and brass laminated top plate.
- Fully extended poles - minimum loss of working area.
- Made with high power permanent magnets.
- Detachable handle for easy use.





Applications

- Most suitable for medium and big components for grinding and light turning operations.

All dimensions are in mm.

Art No.	D	Pole Pitch	H
11202.01	100	31 (15+4+12)	70
11202.02	120		
11202.03	150		
11202.04	180		
11202.05	200		
11202.06	250		
11202.07	300		73
11202.08	350		
11202.09	400		

• Back plate with tapped hole can be made on request.

• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

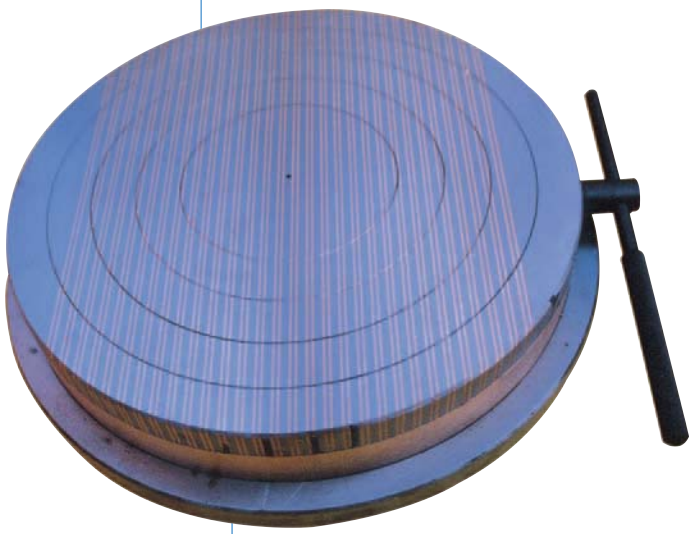
PERMAFINE

ART NO. 11203

Fine Pole Round Magnetic Chuck

Features

- Steel and brass laminated top plate.
- Poles individually magnetized.
- Double magnet system for maximum power.
- Magnetic force will not weaken with long use.
- Low magnetic field - no magnetization of tools.
- Simple and smooth actuating mechanism.
- Rugged construction - exceptional longevity.

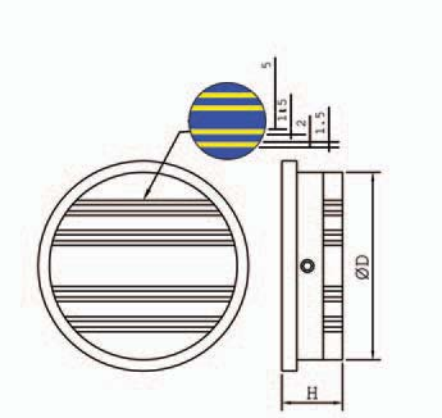


- Back plate with tapped hole can be made on request.

All dimensions are in mm.

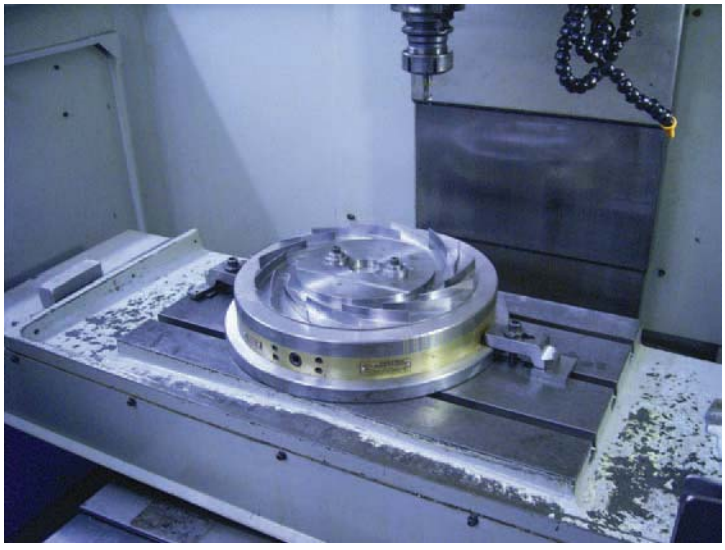
Art No.	D	Pole Pitch	H
11203.01	200	10 (5+1.5+2+1.5)	78
11203.02	250		80
11203.03	300		
11203.04	350		83
11203.05	400		
11203.06	450		

- Due to continuous upgradation in design there could be changes in specifications.
- Other sizes on request.



Applications

- Adaptable to wide range of work pieces.
- Ideal for many tool room applications.
- Provides powerful holding power for thinner work pieces as well as for thicker work pieces.
- Powerful and most suitable for grinding and turning operations.
- Milling of thin jobs can also be done.



RADIAL

ART NO. 11206

Radial Pole Round Magnetic Chuck

Applications

- Ideal for discs and ring shaped components.
- Powerful and suitable for components of all sizes for grinding, light turning and Cylindrical Grinders.
- Made with centre through holes for internal grinding and boring operations.

Features

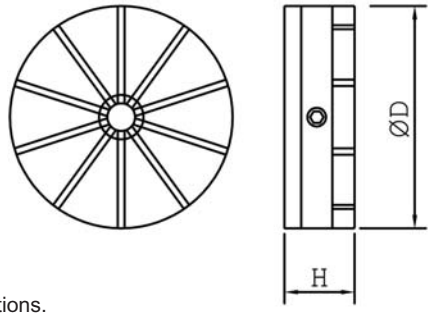
- Homogeneous magnetic field throughout the top plate.
- The power is adjustable from 0% to 100% by positioning the handle.
- Top plate is machinable upto 8 mm.
- Detachable handle for easy use.

• Can be made with slots to accommodate radially adjustable pole shoes.
• Auxiliary top plates (adapter plates) available for fixturing.

Typical Turning Operation

All dimensions are in mm.

Art No.	D	No. Of Poles	H
11206.01	100	6	54
11206.02	130	8	
11206.03	160	10	
11206.04	200	14	
11206.05	225		
11206.06	250		
11206.07	300	18	
11206.08	350		60
11206.09	400		
11206.10	450	20	
11206.11	500		
11206.12	600	30	



• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

MICROFINE

ART NO. 11204

Microfine Round Magnetic Chuck

Features

- Steel and brass laminated top plate.
- Fully extended poles - minimum loss of working area.
- Detachable handle for easy use.
- Extremely low profile for more wheel area.
- Made with super powerful NdFeB new generation magnets.
- Variable power can be obtained by varying rotation of handle.
- Unique design of the chuck minimizes the deflection of top plate when switched On/Off, resulting in better job accuracy.

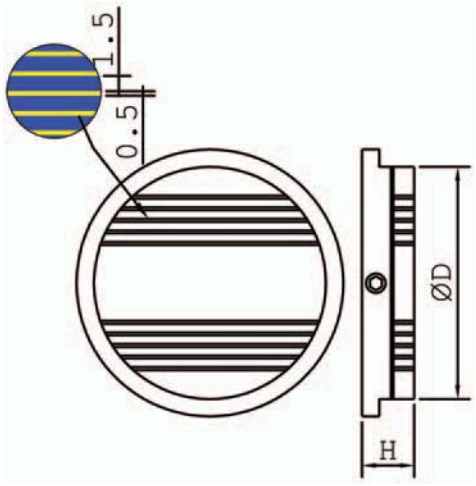
Applications

- Ideal for many tool room applications.
- Enables the grinding of thin objects and small objects that has hitherto been difficult.
- Most suitable for grinding applications, for small to large and thin to thick workpieces.

- Attached to rotary grinders for operation.
- Back plate with tapped hole can be made on request.

All dimensions are in mm.

Art No.	D	Pole Pitch	H
11204.01	100	2 (1.5+0.5)	45
11204.02	130		
11204.03	160		
11204.04	200		
11204.05	250		
11204.06	300		
11204.07	350		
11204.08	400		48
11204.09	450		
11204.10	500		



- Due to continuous upgradation in design there could be changes in specifications.
- Other sizes on request.

Features

- Large effective area is provided for machining the work pieces.
- Positive locking at all angles without any distortion.
- Constructed of hardened alloy tool steel.
- Angle precision 0.007/ 100mm.
- Low height for more wheel clearance.

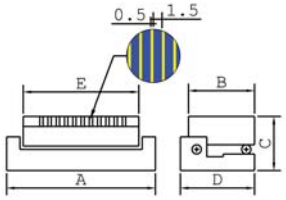
MICROSINE

ART NO. 11107

Single Angle Sine Table

Applications

- Flat type for wide range of uses.
- Ideal for high accuracy grinding operations.



All dimensions are in mm.

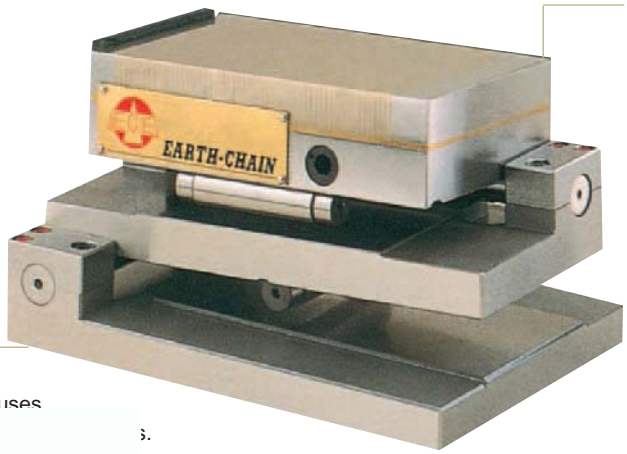
Art No.	A	B	C	D	E	Pole Pitch	Angle
11107.01	225	100	82	75	175	2 (1.5+0.5)	0°-60°
11107.02	200	150	82	100	150		
11107.03	350	150	87	100	300		
11107.04	500	150	88	100	450		
11107.08	660	300	100	150	600		

MICROSINE

ART NO. 11108

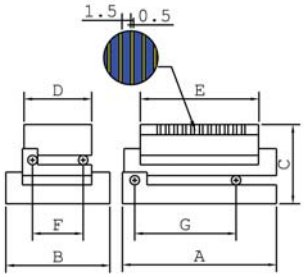
Compound Angle Sine Table

• **Sine table with other style of chuck is also made.**



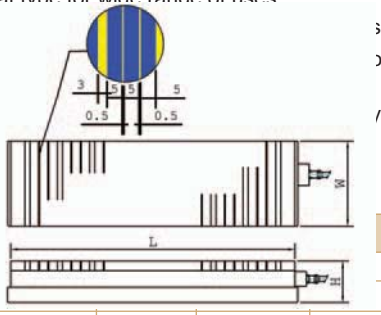
Features

- Positive locking at all angles without any distortion.
- Large effective area is provided for machining the work pieces.
- Constructed of hardened alloy tool steel.
- Double way sine plate; can grind two way angle at the same time.
- Angle precision - 0.007/100mm.



Applications

- Flat type for wide range of uses
- I s.
- S on a
- V y tilting in length,



All

A				D	E	F	G	Pole Pitch	Angle
				100	175	75	150	2 (1.5+0.5)	0°-60°
				150	150	100	100		
11108.03	355	200	125	150	300	100	250		
11108.04	505	200	125	150	450	100	350		

• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

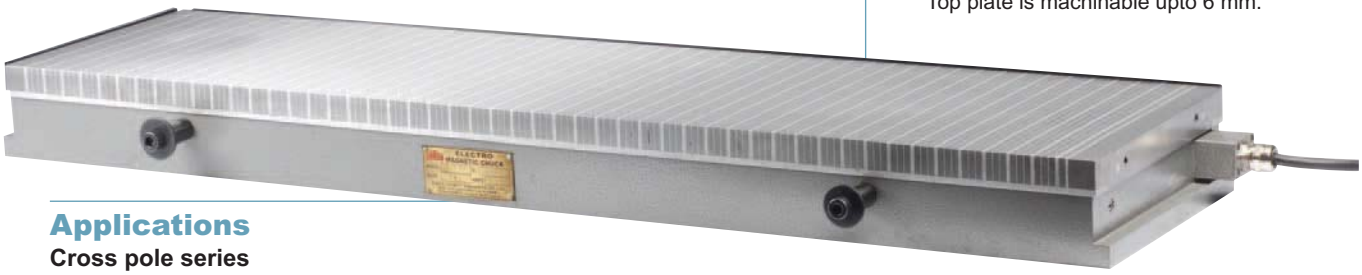
E M A X

ART 12101

Standard Pole Rectangular Magnetic Chuck

Features

- Has steel and aluminium set top plate.
- Has high mechanical rigidity and proven robustness.
- Guaranteed water proof.
- Full extended pole for maximum effective clamping area.
- Multicoil design for maximum power.
- Top plate is machinable upto 6 mm.



Applications

Cross pole series

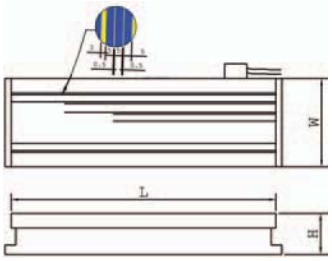
- They are powerful and most suitable for medium and big components, for grinding, planing, milling and various other operations.
- Knife grinding holding from sides.

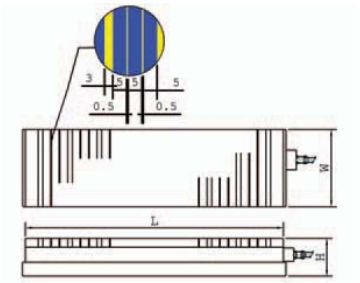
Long pole Series

- These chucks are best suited for long work pieces and are used in additional applications such as buff and belt grinding of large quantities of work pieces which are difficult to hold on cross pole magnetic chucks.
- Most suitable for holding hardened and small components positioned between alternate poles.

All dimensions are in mm.

Art No.	Top Plate		Pole Pitch	H	Controller
	W	L			
12101.01	150	300	19 (5+0.5+5+0.5+5+3)	75	92101.01
12101.02		450			
12101.03	200	500			
12101.04		600			
12101.05	250	600			
12101.06		750			
12101.07		1000			
12101.08		1500			
12101.09	300	600			
12101.10		750			
12101.11		900			
12101.12		1000			
12101.13		1200			92101.02
12101.14		1500			
12101.15	400	600			
12101.16		900			
12101.17		1000			
12101.18		1200			
12101.19	500	750		78	
12101.20		1000			
12101.21		1500			
12101.22		2000			92101.03
12101.23	600	750			
12101.24		1000			





- The operating voltage is 110 VDC upto 12101.18, beyond that 220 VDC.
- Can be designed for other operating voltages.
- Long pole chucks are also made and its ordering series for the same is 12102.
- Chuck with Brass separation is available at extra cost.

• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

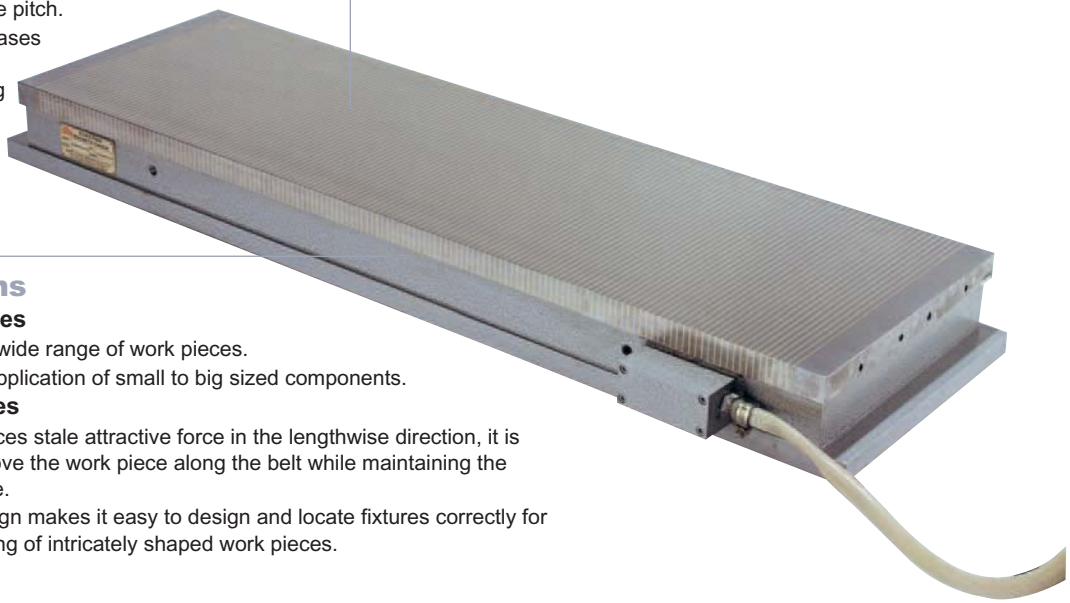
EFINE

ART 12103

Fine Pole Rectangular Magnetic Chuck

Features

- All metal, brass and steel laminated top plate.
- High resistance to coolant and corrosion.
- High mechanical rigidity and proven robustness.
- Guaranteed water proof.
- These chucks have a multi energized magnetic circuit, consisting of a number of adjacent, reversed coils making up a magnetizing core which has a small pole pitch.
- The multitude of exciting windings increases dissipation of electrical energy which becomes magnetic energy, while limiting both temperature rise caused by Joule effect and distortion of the chuck.
- Top plate is machinable upto 8 mm.



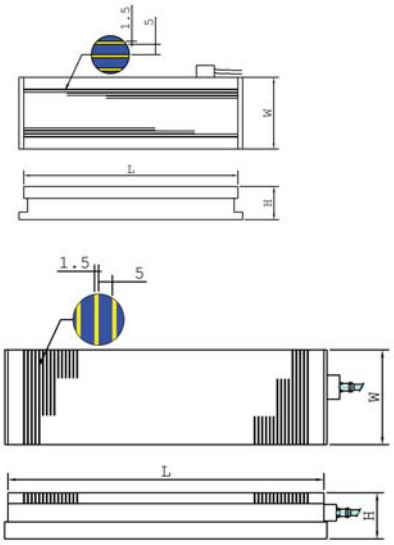
Applications

Cross pole series

- Suitable for a wide range of work pieces.
- For grinding application of small to big sized components.

Long pole Series

- Since it produces stale attractive force in the lengthwise direction, it is possible to move the work piece along the belt while maintaining the attractive force.
- The plate design makes it easy to design and locate fixtures correctly for effective holding of intricately shaped work pieces.



- The operating voltage is 110 VDC upto 12103.18, beyond that 220 VDC.
- Can be designed for other operating voltages.
- Long pole chucks are also made, the ordering series for the same is 12104.

All dimensions are in mm.

Art No.	Top Plate		Pole Pitch	H	Controller
	W	L			
12103.01	150	300	6.5 (5+1.5)	75	92101.01
12103.02		450			
12103.03	200	500			
12103.04		600			
12103.05	250	600			
12103.06		750			
12103.07		1000			
12103.08		1500			
12103.09	300	600			
12103.10		750			
12103.11		900			
12103.12		1000			
12103.13		1200			92101.02
12103.14		1500			
12103.15	400	600			
12103.16		900			
12103.17		1000			
12103.18		1200			
12103.19	500	750		78	
12103.20		1000			
12103.21		1500			
12103.22		2000			92101.03
12103.23	600	750			
12103.24		1000			

- Due to continuous upgradation in design there could be changes in specifications.
- Other sizes on request.

EMICRO

ART 12105

Microfine Pole Rectangular Magnetic Chuck

Features

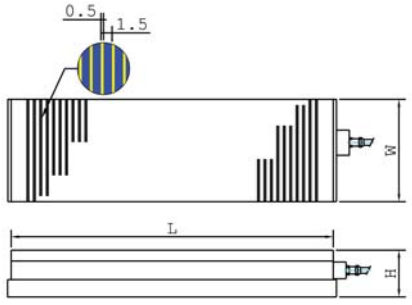
- All metal brass and steel laminated top plate.
- High resistance to coolant and corrosion.
- High mechanical rigidity and proven robustness.
- Guaranteed water proof.
- Top plate is machinable upto 4 mm.

Applications

- Ideal for thin components and for precision grinding.
- The low magnetic flux does not interfere with the grinding operation thereby giving higher accuracy.

All dimensions are in mm.

Art No.	Top Plate		Pole Pitch	H	Controller
	W	L			
12105.01	150	300	2 (1.5+0.5)	75	92101.01
12105.02		450			
12105.03	200	500			
12105.04		600			
12105.05	250	600			
12105.06		750			
12105.07		1000			
12105.08		1500			
12105.09	300	600			
12105.10		750			
12105.11		900			
12105.12		1000			
12105.13		1200			92101.02
12105.14		1500			
12105.15	400	600			
12105.16		900			
12105.17		1000			
12105.18		1200			
12105.19	500	750		78	
12105.20		1000			
12105.21		1500			
12105.22		2000			92101.03
12105.23	600	750			
12105.24		1000			



- The operating voltage is 110 VDC upto 12105.18, beyond that 220 VDC.
- Can be designed for other operating voltages.

• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

EGRIP

ART 12106

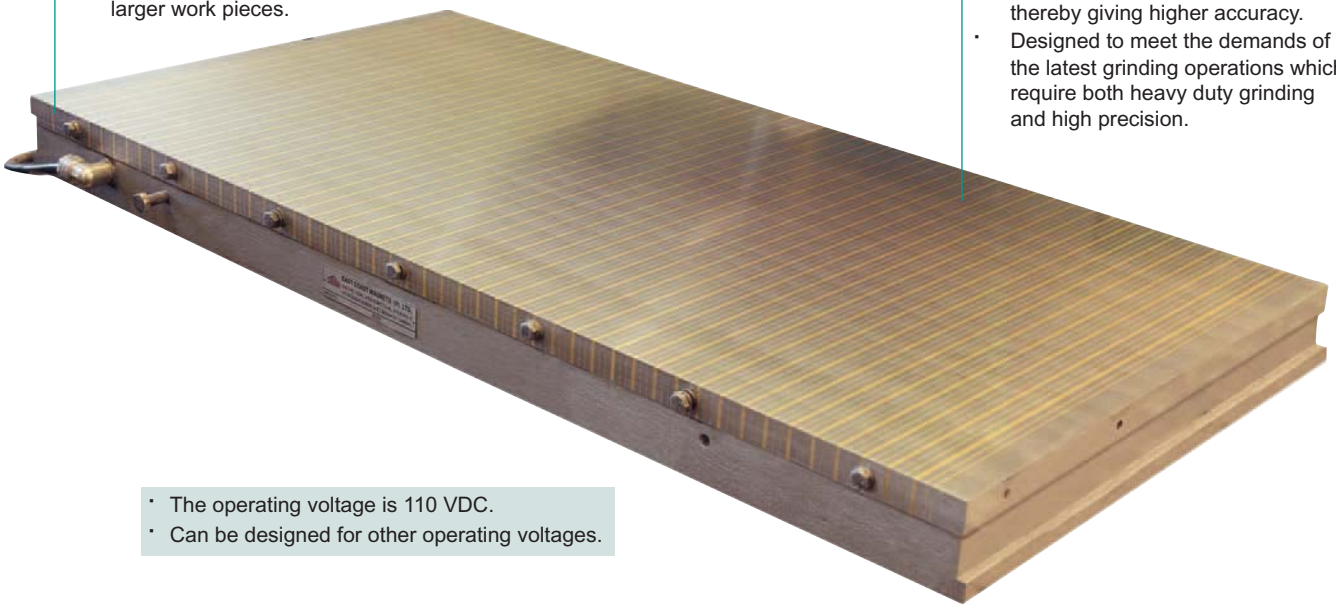
Universal Cross Pole Rectangular Magnetic Chuck

Features

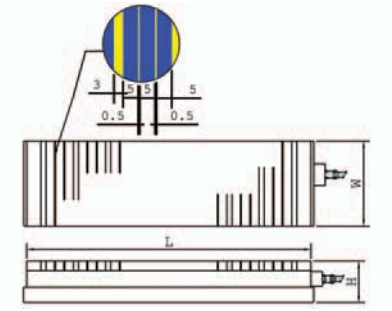
- Single piece body construction for high precision.
- 100% leak proof construction.
- Lowest height electro magnetic chucks.
- Chuck weighs less by 10%-20%, there by increasing the durability of grinder itself.
- Less than 5ºC chuck temperature change after 1 hour of working.
- Minimum power consumption.
- Possibility of combining several chucks for a large installation.
- Due to low height, there is more space between the grinding wheel and the chuck which enables the processing of larger work pieces.

Applications

- Ideal for standard components and for precision grinding.
- The low magnetic flux does not interfere with the grinding operation thereby giving higher accuracy.
- Designed to meet the demands of the latest grinding operations which require both heavy duty grinding and high precision.



- The operating voltage is 110 VDC.
- Can be designed for other operating voltages.



All dimensions are in mm.

Art No.	Top Plate		Pole Pitch	H	Controller
	W	L			
12106.01	300	600	19 (5+0.5+5+0.5+5+3)	75	92101.01
12106.02		750			
12106.03		900			
12106.04		1000			
12106.05		1200			
12106.06		1500			
12106.07	400	600			
12106.17		800			
12106.08		900			
12106.09		1000		78	
12106.10		1200			
12106.11	500	750			92101.02
12106.12		1000			
12106.13		1500			
12106.14		2000			
12106.15	600	750			
12106.16		1000			

• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

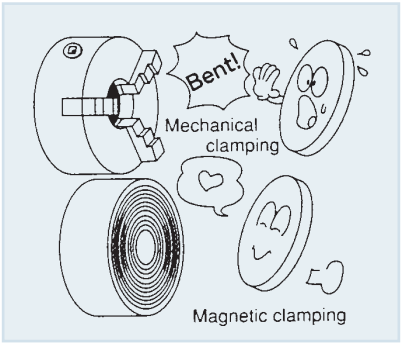
ECONCENTRIC

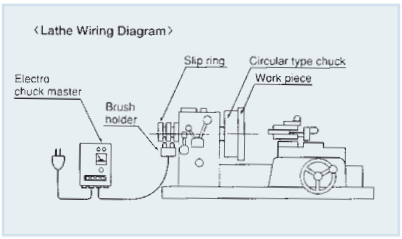
ART 12201

Concentric Pole Round Magnetic Chuck

Features

- All metal aluminium and steel set top plate.
- Top plate, integral part of the chuck, is made from solid plate with solid steel layer between pole & coils.
- Has high mechanical rigidity and proven robustness.
- Watertight execution allows abundant application of coolants.
- Excellent holding power with low energy consumption.
- Can be mounted on machine table by fitting the adaptor plate to the threaded holes in the back side.





Applications

- Suitable for all types of Rotary surface grinding machines
- Also for lathe operations of disc shaped components.
- Is particularly efficient for holding relatively thick, medium and large sized work pieces, especially discs.
- Supplied as OE in most of the Rotary surface grinding machines.

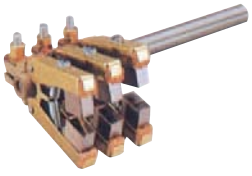
- Carbon Brush Holder with Brass collector slip rings for fitting on the machine spindle for power supply.
- The operating voltage is 110 VDC upto 12201.11, beyond that 220 VDC.
- Can be designed for other operating voltages.
- Brass separated chuck can be made at extra cost.

All dimensions are in mm.

Art No.	D	Pole Pitch	H	Controller
12201.01	150	11 (8+3)	85	92101.01
12201.02	200			
12201.03	300		95	
12201.04	450			
12201.05	500			
12201.06	600			
12201.07	700			
12201.08	800			
12201.09	1000	16 (11+5)	115	92101.02
12201.10	1200			
12201.11	1500			
12201.12	2000	20 (15+5)	120	92101.03
12201.13	2500			92101.04

• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

Brass collector slip ring



Spring loaded carbon brush holder

ERADIAL

ART 12202

Radial Pole Round Magnetic Chuck

Features

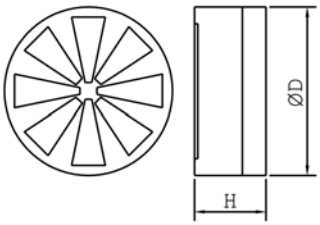
- Power from all poles transferred to rings/plates held in centre.
- Brass collector slip rings with carbon brush holder is used to give continuous power supply.
- Can be mounted on machine table by fitting the adaptor plate to the threaded holes in the back side.
- Top plate is machinable upto 8 mm.

Applications

- Suitable for all types of Rotary surface grinding machines
- Also for lathe operations for disc components.
- Radially movable location blocks will help to position and secure work pieces (bearing rings, thrust bearings, etc.); this is also necessary for clearance of the cutting tool or wheel.

All dimensions are in mm.

Art No.	D	No. Of Poles	H	Controller
12202.01	150	6	95	92101.01
12202.02	300	8		
12202.03	500	12		
12202.04	600			
12202.05	800	16		
12202.06	1000	18	115	92101.02
12202.07	1500	20		
12202.08	2000	24	120	92101.03
12202.09	2500	30		92101.04



• Carbon Brush Holder with Brass collector slip rings for fitting on the machine spindle for power supply.
• The operating voltage is 110 VDC upto 12202.11, beyond that 220 VDC. • Can be designed for other operating voltages.

EFINE

ART 12203

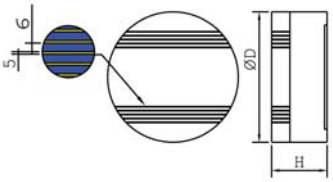
Fine Pole Round Magnetic Chuck

Features

- All metal brass and steel laminated top plate.
- High resistance to coolant/corrosion.
- High mechanical rigidity and proven robustness.
- Guaranteed water proof.
- Can be mounted on machine by fitting the adaptor plate to the tapped holes provided in the back side.
- Top plate is machinable.

Applications

- Suitable for all types of Rotary surface grinding machines.
- Also for lathe operations of disc shaped components.
- Ideal for small & thin components.



All dimensions are in mm.

Art No.	D	Pole Pitch	H	Controller
12203.01	200	11 (6+5)	90	92101.02
12203.02	300			
12203.03	450			
12203.04	500			
12203.05	600			
12203.06	700			

• Carbon Brush Holder with Brass collector slip rings for fitting on the machine spindle for Power supply • The operating voltage is 110 VDC • Can be designed for other operating voltages.
• Electro permanent magnetic chucks of this type are available, the ordering code for them is 13302 and controller 93101 series.

- Due to continuous upgradation in design there could be changes in specifications.
- Other sizes on request.

CONTROLLER

ART NO. 92101

Features

- Rigid basic model
- Simply Converts AC to DC Volts.
- 4/6 Steps magnetisation power control.
- Manual Switch ON by Rotary Switch.
- Spring return manual DEMAG operation.

Applications

- Can be used with any Electro Magnetic Chuck.
- Can operate any Electro Magnet upto 600 Watts

Art. No.	Output Volts (VDC)	Amps (A)
92101.01	110	2
92101.02		4
92101.03		6

ART NO. 92102

Features

- Solid State Controller.
- Power variation done using SCR's.
- Precision Power Control.
- Special DEMAG operation ensuring proper demagnetization of Hardened Steel.
- Comes along with remote pendant unit, which can be mounted anywhere around the machine.

Applications

- Can be used with any Electro Magnetic Chuck.
- Assured easy removed of Job.

Art. No.	Output Volts (VDC)	Amps (A)
92102.01	110	10

ART NO. 93101

Features

- Solid State Controller.
- Magnetic Power divided into eight pre-selected steps.
- MAG/ DEMAG on Panel Mounting.
- Comes along with remote pendant unit, which can be mounted anywhere around the machine.

Applications

- Can be used with Electro Permanet Magnetic Chuck.
- PCB Card Module for mounting in side pannal can also be supplied.

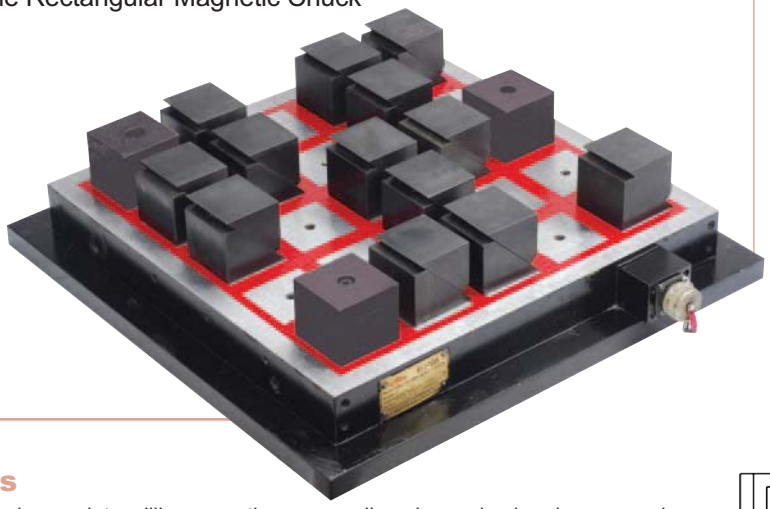
Art. No.	Operating Volts (AC; 50Hz)	No. Channel	Amps (A)
93101.01	220 / 440	1	50
93101.02		2	
93101.03		4	

- Due to continuous upgradation in design there could be changes in specifications.
- Other sizes on request.

EPSQUARE75

ART 13109

75mm Square Pole Rectangular Magnetic Chuck

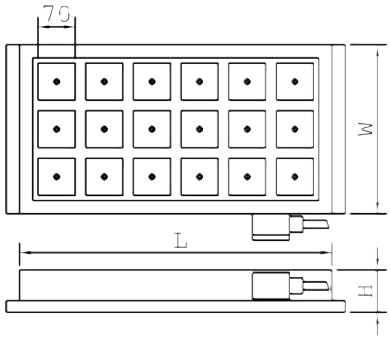


Features

- High and uniform magnetic power.
- Perfect safety in case of power failure. No electricity needed to keep the Magnetic chuck ON.
- Unobstructed movement of cutters during machining.
- Drastically reduces set up time.
- Helps in achieving best machining accuracy.
- Uniform clamping over entire area, no chattering of tools, improves finish and tool life.

Applications

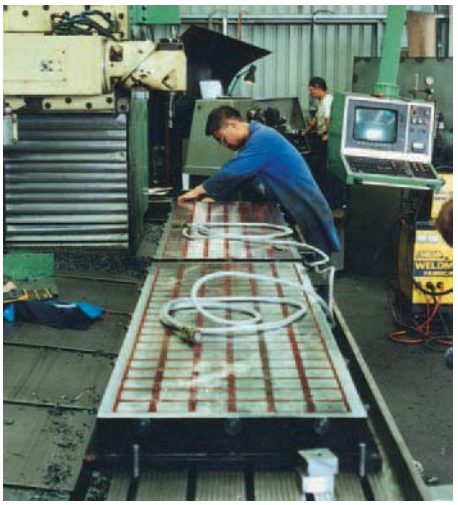
- Most suitable for heavy duty milling operations on medium, large sized and even rough components.
- A minimum of 4 alternate poles contact is necessary for optimum clamping.
- Minimum thickness of job - 20 mm.
- Easily integrated with Pallet changing and FMS Systems.
- AUTOMATIC SHIMMING: Sliding pole extensions allow clamping and uniformly support work pieces even with bent surfaces, achieving high accuracies of planarity.

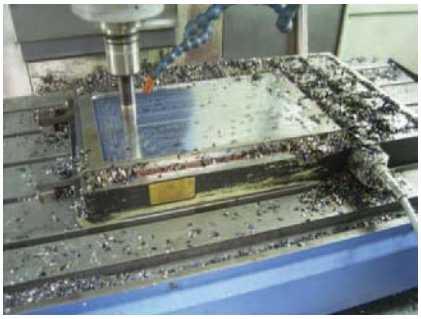


All dimensions are in mm.

Art No.	W	L	No. Of Poles	H	Controller
13109.01	250	400	8	68	93101.01
13109.02		600	12		
13109.03		800	16		
13109.04		1000	20		
13109.05	300	400	12		
13109.06		600	18		
13109.07		800	24		
13109.08		1000	30		
13109.09	400	400	16		
13109.10		600	24		
13109.11		800	32		
13109.12		1000	40		
13109.13	500	400	20		
13109.14		600	30		
13109.15		800	40		
13109.16		1000	50		93101.02
13109.17	600	600	36		93101.01
13109.18		800	48		93101.02
13109.19		1000	60		

• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

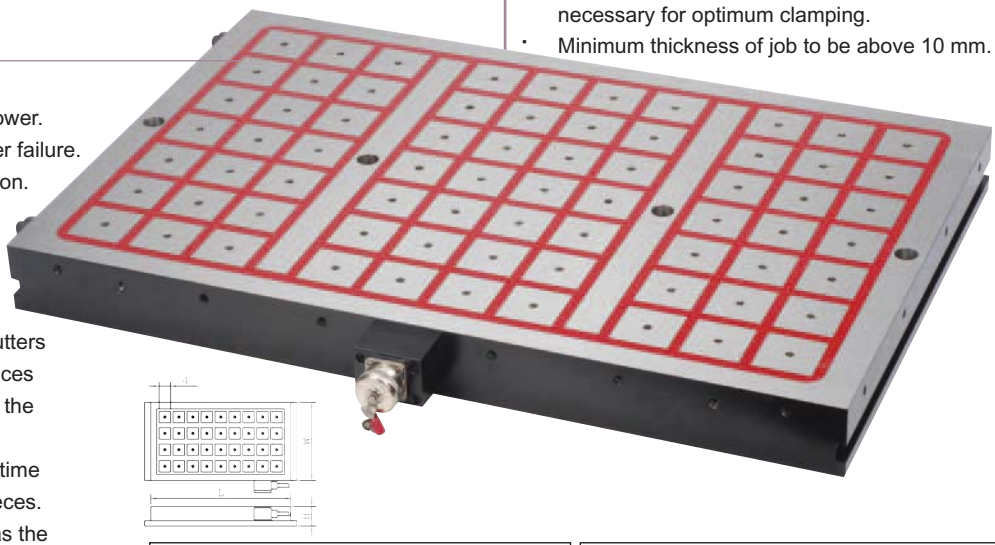




EPSQUARE50

ART 13108

50mm Square Pole Rectangular Magnetic Chuck

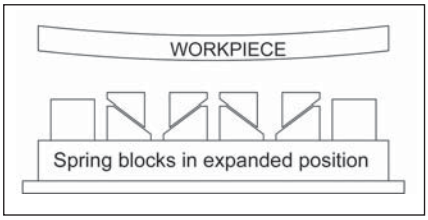


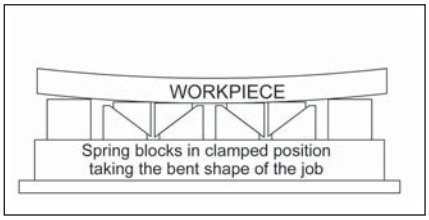
Applications

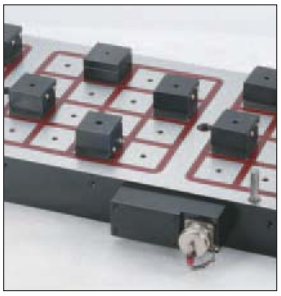
- Most suitable for heavy duty milling operations on small and medium sized components.
- A minimum of 8 alternate poles contact is necessary for optimum clamping.
- Minimum thickness of job to be above 10 mm.

Features

- High and uniform magnetic power.
- Perfect safety in case of power failure.
- Modular and sturdy construction.
- Variable magnetic power.
- Easily integrated with pallet changing and FMS systems.
- Uniform clamping of the job.
- Unobstructed movement of cutters during machining as all five faces of the job can be machined in the same setting.
- Drastically reduces the setup time and machining of the work pieces.
- Better machining accuracy - as the chattering of tools reduces, the finish and tool life is improved.



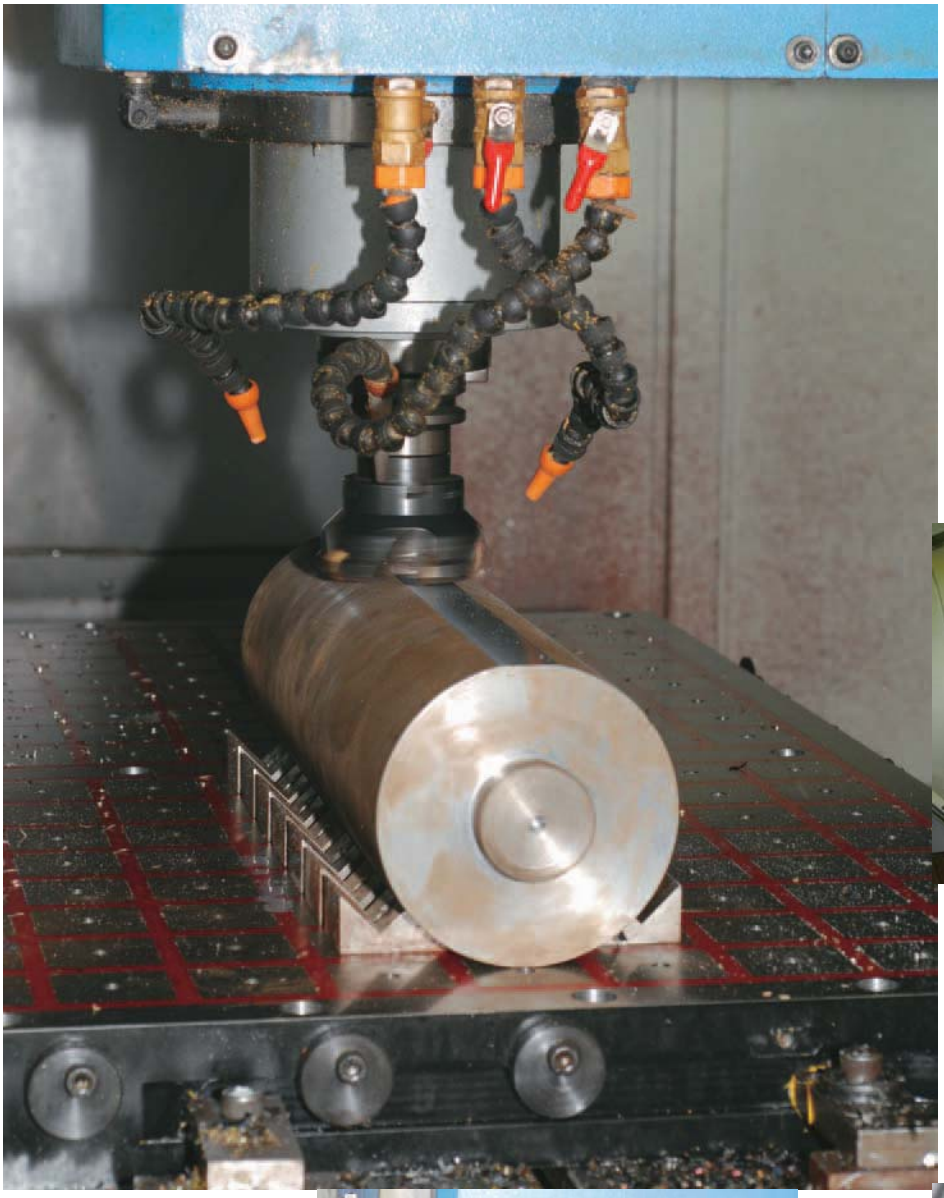




All dimensions are in mm.

Art No.	W	L	No. Of Poles	H	Controller
13108.01	250	400	18	68	93101.01
13108.02		600	24		
13108.03		800	30		
13108.04		900	36		
13108.05		1000	42		
13108.06	300	400	24		
13108.07		600	32		
13108.08		800	40		
13108.09		900	48		
13108.10		1000	56		
13108.11	400	400	36		
13108.12		600	48		
13108.13		800	60		
13108.14		900	72		
13108.15		1000	84		
13108.16	500	400	42		
13108.17		600	56		
13108.18		800	70		
13108.19		900	84		
13108.20		1000	98		93101.02
13108.21	600	600	72		93101.01
13108.22		800	90		93101.02
13108.23		900	108		
13108.24		1000	126		

- Due to continuous upgradation in design there could be changes in specifications.
- Other sizes on request.



MAGNASLOT

ART 13130

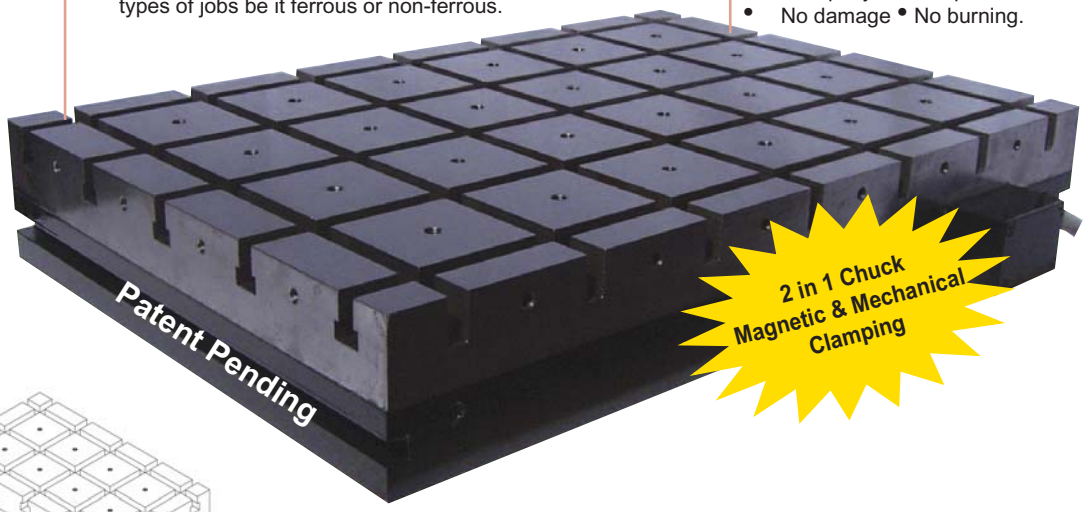
Innovative Magnetic Bed.

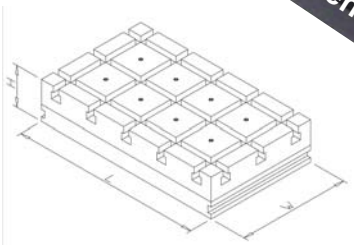
Application

- Can be used for heavy duty milling operations.
- Tee Slots in the working face of the chuck enables clamping Magnetically and/ or Mechanically all types of jobs be it ferrous or non-ferrous.

Feature

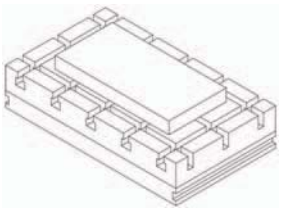
- The working face of the Magnetic Chuck is machined from a single block of mild steel, wherein the poles are demarcated by making slots in the Top surface obviating the need to use filler material.
- 100% safety to Original Machine Bed.
- Universal Clamping directly on Magnetic Chuck.
- 100% Leaf Proof.
- Maximum Accuracy.
- Very Rigid and Robust construction.
- No Epoxy • No Expansion • No Deformation.
- No damage • No burning.



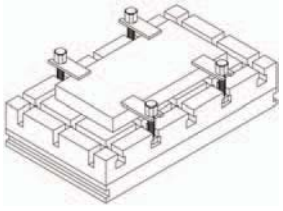


	Available EPM Chucks	MAGNASLOT
Clamping of Ferrous Jobs	Can be Clamped.	Can be Clamped.
Clamping of Non-Ferros Jobs	Can only be clamped using special fixtures or vices.	Can be clamped on T Slots.
Working Face Accuracy	Due to excessivve heat generation in some operations, Epoxy bulges.	Solid Steel Top helps distribution of heat all over the chuck and retails accuracy.

- A Complete Magnetic Bed for your Machine.
- The operating voltage is 220/440 V.
- Can be designed for other operating voltages.
- All steel top working face without T-slot also available.



Job clamped Magnetically



Job clamped Mechanically

All dimensions are in mm.

Art No.	W	L	H	Controller
13130.01	250	400	70	93101.01
13130.02		600		
13130.03		800		
13130.04		1000		
13130.05	300	400		
13130.06		600		
13130.07		800		
13130.08		1000		
13130.09	400	400		
13130.10		600		
13130.11		800		
13130.12		1000		
13130.13	500	400		
13130.14		600		
13130.15		800		
13130.16		1000		93101.02
13130.17	600	600		93101.01
13130.18		800		93101.02
13130.19		1000		

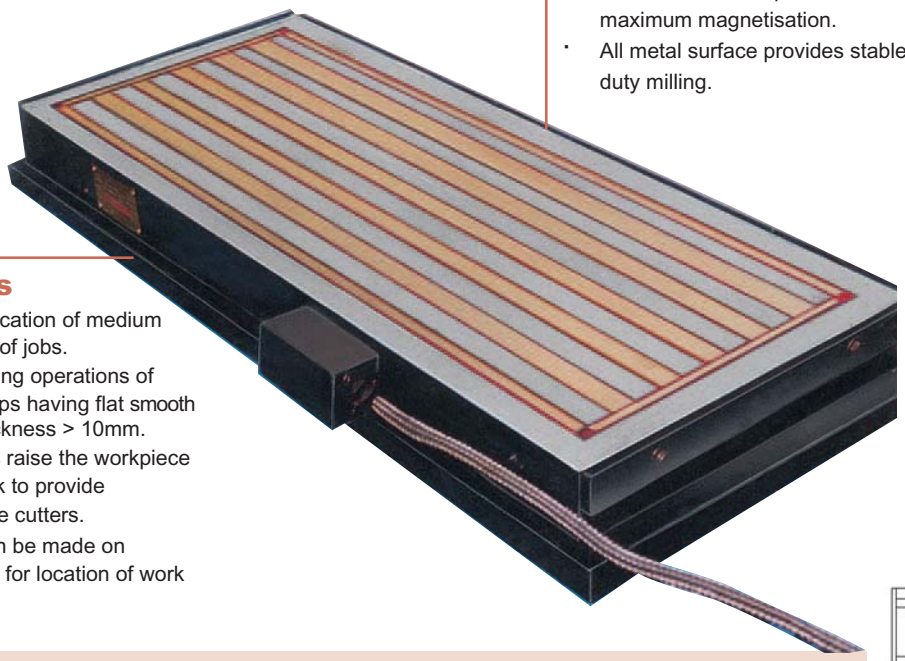
E P M I L L

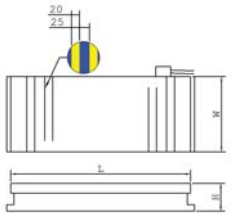
ART 13104

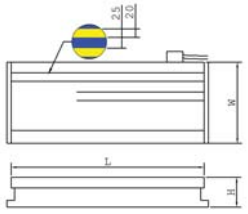
Heavy Duty Standard Pole Rectangular Magnetic Chuck

Features

- Energy Saving : electricity is required only for switching On/Off.
- High clamping force by super powerful NdFeb magnets.
- Uniformity of clamping over the entire contact surface.
- Drastically reduces the setup time of work pieces.
- Power from entire pole is induced to components for maximum magnetisation.
- All metal surface provides stable working area for heavy duty milling.







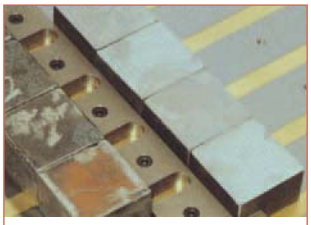
Applications

- For milling application of medium and large sizes of jobs.
- Suitable for milling operations of plates/ flats/ strips having flat smooth surface and thickness > 10mm.
- Pole extensions raise the workpiece above the chuck to provide clearance for the cutters.
- Dowel holes can be made on working surface for location of work piece.

- These chucks are also available in transverse pole design and the ordering code for the same is 13103.
- These chucks can also be designed for job thickness above 5mm.

All dimensions are in mm.

Art No.	W	L	H	Pole Pitch	Controller
13104.01	260	450	70	65 (15+50)	93101.01
13104.02		500			
13104.03		525			
13104.04		630			
13104.05		700			
13104.06		800			
13104.07		1000			
13104.08	310	450			
13104.09		500			
13104.10		525			
13104.11		630			
13104.12		700	75		
13104.13		810			
13104.14		1000			
13104.15	400	630			
13104.16		1000			
13104.17		1200			93101.02
13104.18		1500			
13104.19	410	810			93101.01
13104.20	500	2000			93101.03



Number of small components can be machined using simple pole extension fixtures.

Side milling can be performed using raised blocks for free cutter movement.

• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

EPGRIND

ART 13105

Fine Cross Pole Rectangular Magnetic Chuck

Applications

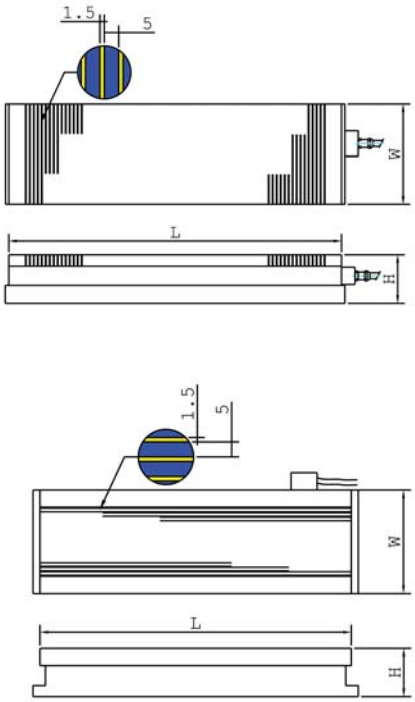
- For grinding application of all sizes of jobs.
- These chucks are suitable for all surface grinding machines.

Features

- No electricity required to keep the chuck ON.
- All metal top plate of brass and steel lamination provides full active area.
- Variable power makes it possible to adjust the magnetic force.
- Holds all type and sizes of work pieces.
- No heat built up, no deformation provides high precision accuracy.

Chucks with long pole configuration are also available.

- These chucks are also available in long pole design and the ordering code for the same is 13106.
- Large area can be arranged by multiple mounting of chucks side by side which can be operated by a single controller.
- Special purpose chucks can also be designed to suit particular applications.
- Pole pitch of 2mm (1.5+0.5) can be made at extra cost.



All dimensions are in mm.

Art No.	W	L	Pole Pitch	H	Controller
13105.01	150	300	6.5 (5+1.5)	80	93101.01
13105.02		450			
13105.03	200	500			
13105.04		600			
13105.05	250	600			
13105.06		750			
13105.07		1000			
13105.08		1500			
13105.09	300	600		85	
13105.10		750			
13105.11		900			
13105.12		1000			
13105.13		1200			
13105.14		1500			
13105.15	400	600			
13105.16		900			
13105.17	500	750			
13105.18		1000			
13105.19		2000			93101.02
13105.20	600	750			93101.01

• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

EPCUBE

ART 13107

EPCUBE Square pole Rectangular Magnetic chuck

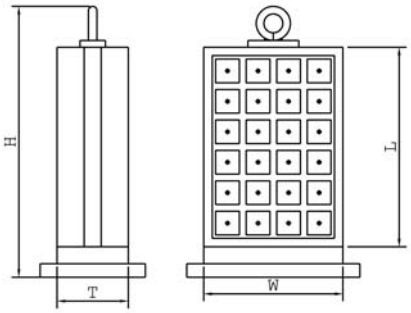
Applications

- Specially made for Horizontal Machining Centers.
- Achievement of total flexibility to clamp work pieces of different shapes and sizes, even larger than those of the clamping area.
- Easily integrated with pallet clamping and FMS system.

Features

- Unobstructed movement of the cutter during machining, as all five faces of the job can be machined at the same setting.
- Single or multiple work pieces get clamped ergonomically and easily by the operator outside the machining area.

* Power connection from detachable bayonet connector, position can be changed.



All dimensions are in mm.

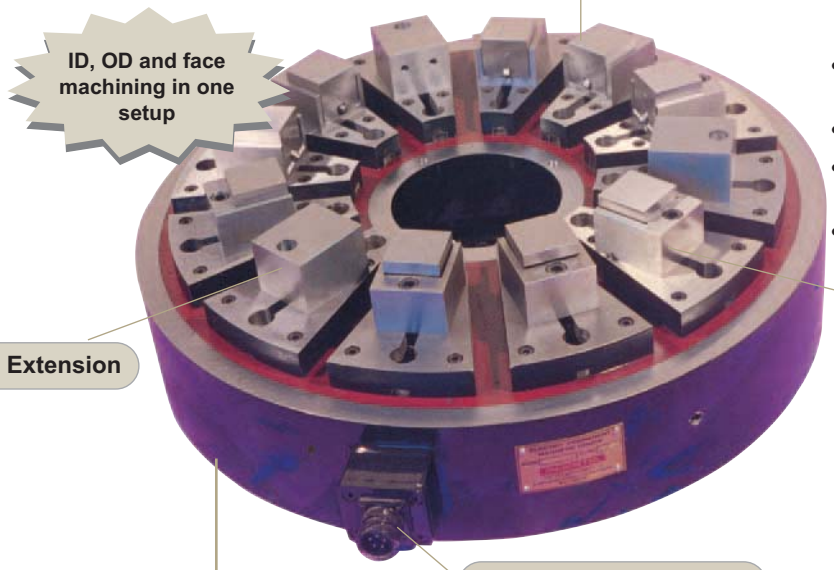
Art No.	W	L	T	H	No. Of Poles	Controller
13107.01	475	425	180	600	16	93101.01
13107.02		595	200	780	24	
13107.03	625	665	200	860	42	

- Due to continuous upgradation in design there could be changes in specifications.
- Other sizes on request.

EPRADIAL

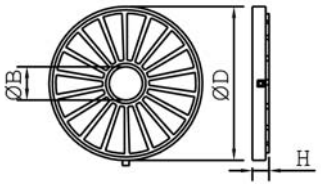
ART 13201

Radial Pole Round Magnetic Chuck



Features

- Perfect safety in case of power failure. No electricity needed to keep the Magnetic chuck ON.
- Power from all poles transferred to rings/plates held in centre.
- High resistance to coolant.
- High mechanical rigidity and proven robustness.
- High resistance to both axial and radial forces enabling application of heavy cuts

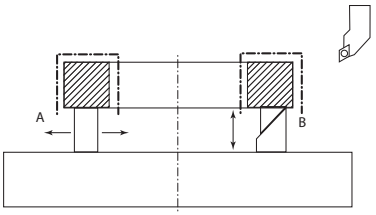


Applications

- Clamps ferromagnetic rings on vertical and horizontal turning lathes.
- Radially movable location blocks will help to position and secure work pieces (bearing rings, thrust bearings, etc.); this is also necessary for clearance of the cutting tool or wheel.
- Mobile Pole extensions ensures perfect clamping of irregular work pieces and machining it flat & parallel.

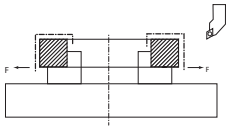
- For power connection bayonet connector is recommended when the chuck is intended to be used in different machines.
- Carbon Brush Holder with brass collector slip rings is fitted on the machine spindle for power supply. It is recommended when the chuck is for a specific machine.

RADIAL POLE CLAMPING

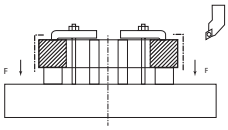


Fixed Moving pole extension projects the job up from the holding face thus giving way for tool to pass through the ID/ OD.

CHUCK JAW CLAMPING



Radial Clamping - can machine OD + Face a time.



Axail Clamping - can machine OD or ID at a time.

All dimensions are in mm.

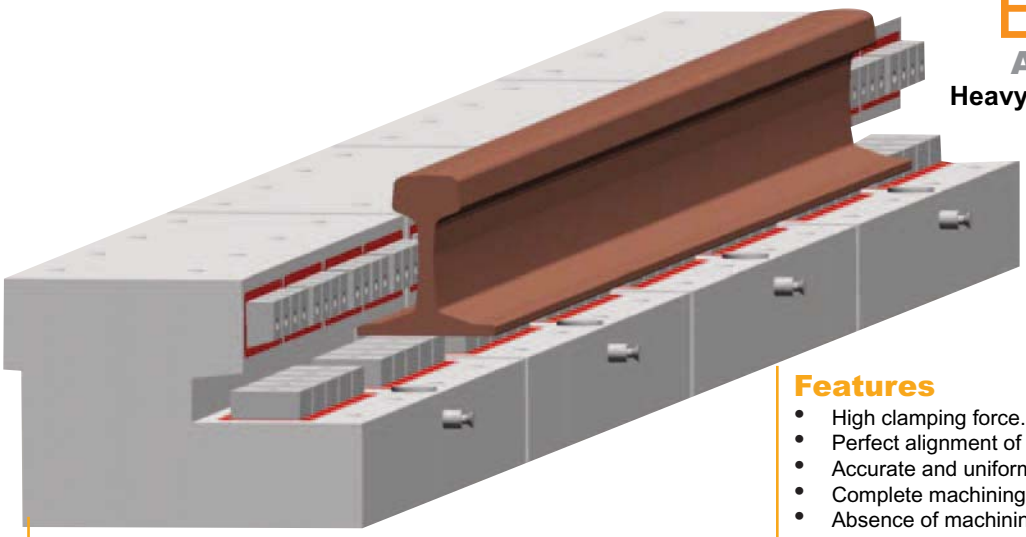
Art No.	D	H	B	Controller
13201.01	300	90	90	93101.01
13201.02	450		150	
13201.03	500		175	
13201.04	600		200	
13201.05	800		250	
13201.06	1000	100	250	93101.02
13201.07	1250		300	
13201.08	1500	110	500	93101.04
13201.09	1750		500	
13201.10	2000	115	500	
13201.11	2500		600	

• Due to continuous upgradation in design there could be changes in specifications.
• Other sizes on request.

EPRAIL

ART NO. 13110

Heavy Duty EPM systems for Rail Machining

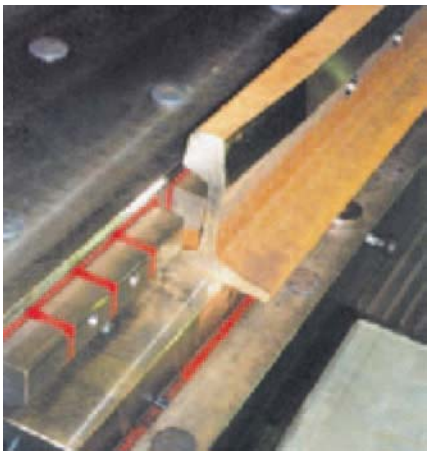


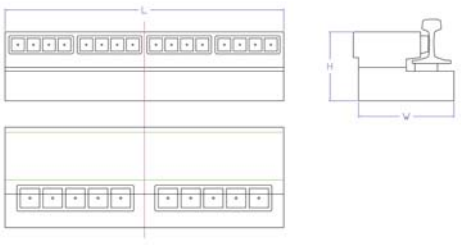
Applications

- A EPRAIL system is composed using a series of modular elements with approx. 1000 mm length each, in order to build up magnetic tables for different types of machines and lengths of rail to be machined.
- Each EPRAIL module has independent magnetic sectors right angle placed to clamp respectively the foot and the web of the rail.

Features

- High clamping force.
- Perfect alignment of the rail.
- Accurate and uniform clamping.
- Complete machining in only 2 set-ups.
- Absence of machining vibrations.
- Low tools consumption.
- High stock removal.
- Superior accuracies and finishing.
- Ergonomic and practical use.
- Easy chips removal.
- Energy saving.
- Different Profiles of rails can be clamped on same magnet using pole extensions.

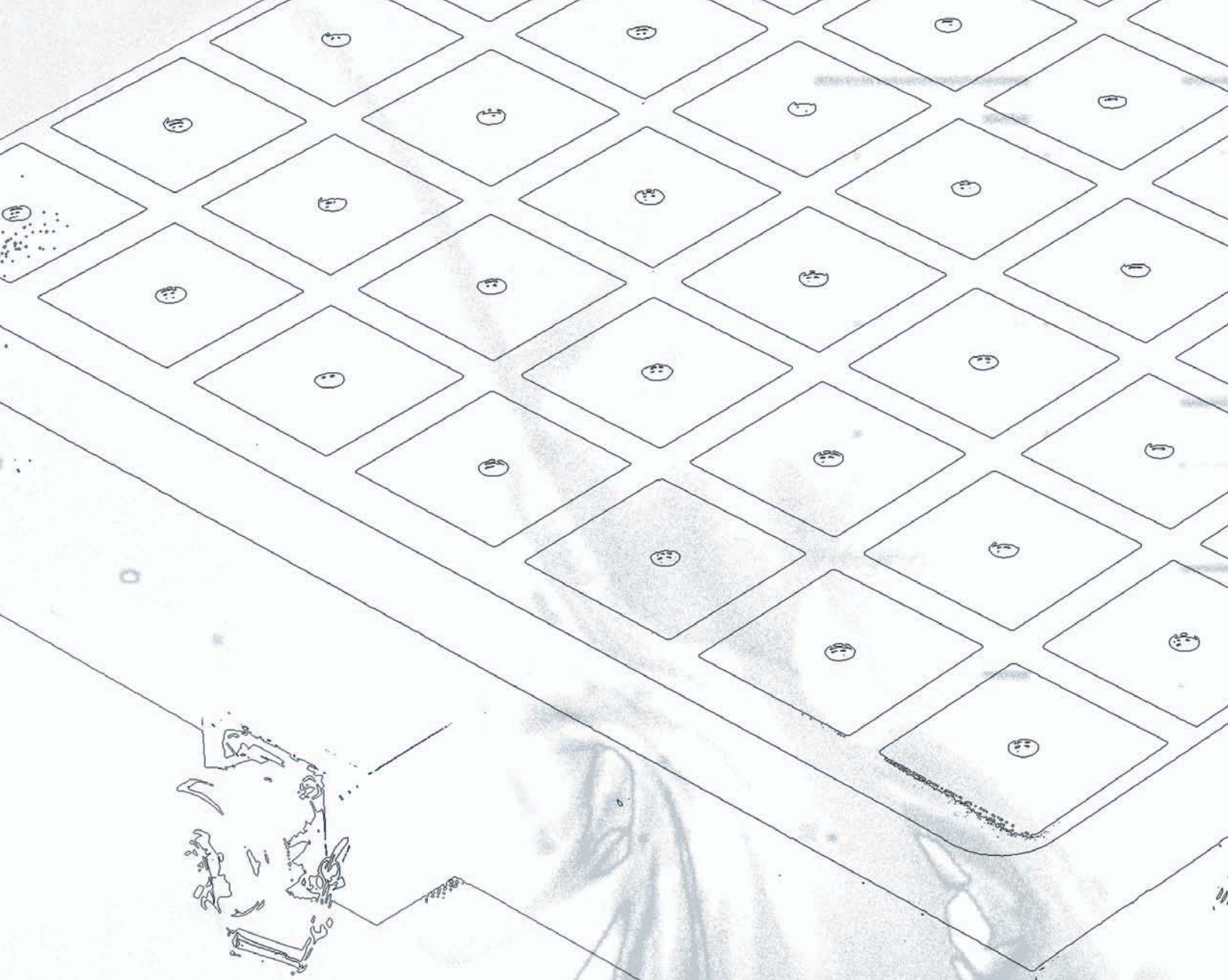




All dimensions are in mm.

Art No.	W	L	H	Controller
13110.01	390	1080	268	93101.05

- Due to continuous upgradation in design there could be changes in specifications.
- Other sizes on request.



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