




Magnets | Material Handling
Electronic Inspection | Service

Automation and Workholding

MPI helps increase throughput in production facilities with innovative workholding products that increase profitability.

Highland, Michigan | 1.248.887.5600 | www.mpimagnet.com

For more information & product data sheets visit us on the web at:
www.mpimagnet.com

683 Town Center Drive, Highland, Michigan 48356
1.248.887.5600 | www.mpimagnet.com

About MPI

Based in Metro-Detroit Michigan, MPI designs, manufactures, and services magnets, material handling, and electronic inspection systems. MPI products are designed to be complete metal and foreign contamination control solutions for food production and related industries. MPI's safe and reliable equipment and service programs help customers minimize downtime and protect brand integrity. MPI leads the industry in customer service and innovation, continuously expanding its offerings to meet the needs of a dynamic marketplace.

Company Timeline

2021
MPI celebrates 40 years of business operations

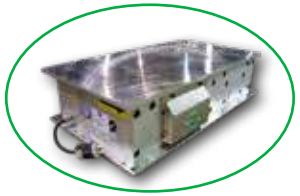
2020
MPI manufacturers and installs over 450 ft. of M-1000 Series Electric Scrap Shaker system for major tier one auto supplier

2019
Adds industrial workholding line to compliment the industrial product line

2017
MPI standardizes all equipment on American-made drive packages

2015
MPI begins offering service plans for continued product performance and maintenance

2010
MPI patents its first generation Electric Shaker and builds the world's longest single beltless magnetic conveyor - 101 feet



2006
MPI patents the sealless pneumatic shaker conveyor and sealless pneumatic beltless magnetic conveyor, and introduces its next generation Electric Shaker

1998
MPI introduces its pneumatic shaker

1995
MPI expands its manufacturing facility, doubling capacity again

1993
MPI relocates to Highland, Michigan to a state-of-the-art manufacturing facility, doubling capacity

1989
MPI patents the magnetic can-laner conveyor and builds its first Beltless Magnetic Conveyor

1981
MPI begins operations in Walled Lake, Michigan

Protecting and Moving the World Through Innovation

Keith Rhodes
MPI Founder & CEO

Kyle Rhodes
Vice President - Business Development

When you choose to buy from MPI you're not just buying a magnet. At its core, a magnet is designed to capture and retain unwanted tramp metal. When you choose an MPI magnet, you get so much more.

Over 40 years ago, MPI's founder realized that when he took time to explain magnetic technology, customers were delighted, and they obtained the results they were looking for. His vision was to start a company where both employees and customers were treated exceptionally well, and innovation was the new normal.

Thus, MPI was born, and today it is still under the same family ownership and unique set of values – treat people right, consistently develop high quality and innovative products, and lead the industry in customer education. We continuously invest in improving your business by developing new products designed to make a real difference to our customers. Through the years, MPI has invented innovative products, including the quick-cleaning and self-cleaning drawer magnets, as well as the electric low frequency shaker systems. We recently launched the world's first and only intelligent magnet, the Intell-I-Mag®!

MPI truly believes that it is our obligation to educate our current and future customers on magnetic technology. We say that *"an educated customer is an MPI customer."* We conduct presentations on the principles of magnetic separation for our customers, industry groups, and OEM manufacturers. The presentation qualifies as a course for Continuing Education Credits for Professional Engineers. In addition, our comprehensive, one-of-a-kind *"MPI Magnet Audit"* has given over a thousand companies valuable insights to help improve their metal control processes.

We recognize that industrial production facilities require quality tooling when manufacturing components. This is why MPI introduced the Automation and Workholding product line complementing our full line of metal control solutions. MPI offers lifting magnets, magnetic chucks, demagnetizers, sheet separators and magnetic filtration equipment - everything a shop needs to move and hold metal during manufacturing. We've also created a network of distributors throughout North America to support our customer's machining requirements.

Not only are MPI products the best in the industry, but we also make it easy for our customers to do business with us. With over 300 years of collective industry experience, our proven process ensures you get the right product, every time. Delivering exceptional customer service, MPI's experienced representatives and Regional Managers around the world come to your facility to meet with you and better understand your needs.

MPI Promise

To assure you that choosing MPI can be done with complete confidence, we stand behind our products with the industry's best policies and guarantees that make doing business with MPI easy and risk-free. The MPI Promise is like a benefits package that starts the moment you first speak with us and extends long after your equipment installation. When you do business with MPI we promise:

COMPLETE SATISFACTION

Our equipment will achieve the results for which they were designed and manufactured. If you encounter any issue, we will make it right. Family owned and operated since 1981, we stand behind our products and treat our customers like part of the family.

EDUCATION

You have the right to understand the technology you are buying, including the alternatives. We pledge a continuous focus on delivering customer education that empowers you with the information needed to select what is best for your application.

LIFETIME SUPPORT

For as long as you own an MPI system, MPI Metal Control Experts are on-call to provide technical support regarding installation, start-up, optimization and testing needs for your entire metal control system. We will even assist with your non-MPI brands.

THE CHIEF

Really, our head honcho cares about your experience with MPI. If you have any feedback you'd like to share here is your open invitation to contact our Vice President - Business Development, Kyle Rhodes, at rhodes@mpimagnet.com.

THE BEST QUALITY

Our products are built with the best available designs, material and workmanship to provide the best metal control results in your application. From concept to final product, we design our equipment to the highest standards with the lowest total cost of ownership.

24/7 SERVICE

2nd or 3rd shift need support? Our 24/7 service line connects you directly with an on-call MPI Expert. Call the main line at 1.248.887.5600 and press 9.

RELIABLE DELIVERY

Over the last 10 years, 99% of our shipments have been delivered on or before our promise date. If you need a product before our quoted lead time, let us know and we will do everything we can to make it happen.

FAIR PRICES

We are committed to providing premium products at the best value. If you receive a competitive quote with a lower price for an "apples to apples" product, we will match it - plain and simple.

Lifting Magnets

Lifting Magnets make moving material easier without deforming or damaging the load. MPI workholding tools are versatile, compact, and easy to operate. They replace ropes, chains, and clamps, providing more control with the strong force of a magnet.

MPI permanent lifters are the only product in the industry protected by a five-year warranty on the magnetic system. Our products are manufactured in Europe to the highest quality standards, meeting all ANSI/ASME B30.20 (safety standard) requirements.

An Air Gap test is conducted with an air gap that simulates real operating conditions to reveal true capacity. MPI offers annual lifter re-certification service to verify lifting performance, meet product specifications, and meet the requirements of your company's annual OSHA lifting safety compliance program.

Lifting Magnet Selection Guide

Lifting Magnet	Permanent	Battery BM	Battery BMP	Permanent Crane
Technology	Permanent	Battery	Battery	Permanent
Included with Each Magnet	-	12V battery, battery charger, and remote (Controller operates from up to 33' for safety)	12V battery, battery charger, and remote (Controller operates from up to 33' for safety)	-
Nominal Lifting Capacity Flat Material	up to 2,000kgs/4,409lbs	up to 5,000 kg/11,023 lbs	up to 3,600kg/7,936lbs	-
Nominal Lifting Capacity Round Material	up to 1,000kgs/2,204lbs	-	up to 2,200kg/4,850lbs	-
Horizontal Working Limit	-	-	-	551 lbs
Vertical Working Limit	-	-	-	176 lbs
Safety Factor	3:1	2:1	2:1	4:1
Magnetic System Warranty	5 year	1 year	1 year	1 year
Use	Flat, round, and cylindrical workpieces	Flat surface loads	Flat and round surface loads	Horizontal to vertical positions, vice versa
MPI Difference	Strong welded design features stainless steel lifting eye, welded to compact body, with only two recessed handle screws. Simple Easy Switch Handle switches magnet on and off easily, quickly, and safely with one hand.	Compact LED display with battery status indicator provides audio and visual warning of low battery level. The magnet will not activate once the battery voltage drops below the safety level lifting. Large steel lifting eye with safety bail sensor. Variable Force adjusts holding force when handling a particular quantity of sheet metals from a stack, with Tip-Off for gradual slackening portion of the load.	Compact LED display with battery status indicator provides audio and visual warning of low battery level. The magnet will not activate once the battery voltage drops below the safety level lifting. Large steel lifting eye with safety bail sensor. Variable Force adjusts holding force when handling a particular quantity of sheet-metals from a stack with Tip-Off for gradual slackening portion of the load.	Large, lockable lifting eye prevents undesirable tilting from horizontal to vertical positions, with a lockable release lever for comfortable and safe operation. First magnetic "claw" of its kind, in compliance with UNI EN 13155 standard for handling with a crane. Unique pole configuration reduces peel-off effect for thin sheets during handling.

Instructions for the Workload Limit Table for Plates and Rounds

1. Select your MPI Lifting Magnet model.

2. Select the surface finish and condition (clean and smooth, rusty or hot, irregular or rough) that corresponds to your plate or round bar. If your surface roughness exceeds the maximum, do not make the lift.

   Plates:
   a. Select the plate thickness from the table. If your plate thickness is not listed, select the next lower value from the table. Never lift plates thinner than the minimum listed in the table.

   b. Check that the plate you are attempting to lift is shorter than the maximum length (L) and narrower than the maximum width (W) listed in the table under the heading "Max. dimensions" for the thickness of the selected plate.

   Round bars:
   a. Be sure the diameter of the bar is between the minimum and maximum diameter as listed in the table. Never lift bars outside this range.

   b. Ensure that the bar is less than the maximum length (L) max listed in the table.

3. Determine the maximum safe lifting capacity of the magnet based on your material thickness.

   Plates:
   a. Select the maximum safe lifting value from the table for the minimum length (L) and minimum width (W) from one of the two choices. Do not make the lift if your plate is less than these minimum values.

   Round bars:
   a. The maximum safe lifting value is shown in the table.

4. If you are not lifting AISI 1020 steel, determine the reduction in safe lifting capacity by the percentage factor for your material from the Material Reduction Factor Table shown below. For example, if you are lifting cast iron, multiply the maximum safe lifting capacity determined in Step 3 above for steel by 45% to get the maximum safe lifting capacity for your lift of cast iron.

5. Finally, determine the weight of the plate or round bar you are attempting to lift to be sure it is less than the maximum safe lifting capacity determined in Step 4. The weight can be calculated using the density of 0.283 lbs per cubic inch for steel or by use of a commonly available on-line weight calculator.

Material Reduction Factor Table

The Workload Limit Table for Conditions and Finishes is for AISI 1020 steel. Other materials are less magnetic. Any increase in alloy content will reduce the safe lifting capacity of the magnet. Use these percentage factors for materials other than AISI 1020 steel:

Material	Percentage Factor
Cast Steel	90%
3% Silicon Steel	80%
AISI 1095 Steel	70%
416 Stainless Steel	50%
Cast Iron (non-chilled)	45%
Pure Nickel	10%

Lifting Magnet Specifications

Permanent Lifting Magnet

Part Number	W (IN)	L (IN)	H (IN)	Ø OF EYE (IN)	WEIGHT (LBS)	Tested Lifting Capacity (LBS)	Workload Limit Flat Materials (LBS)	Workload Limit Round Materials (LBS)	Ø MIN/ MAX (IN)
LM-0150-REN	2.4	3.7	4.7	0.4	6.6	992	330	143	2/4
LM-0300-REN	3.9	6	7.1	0.6	22.1	1,984	661	330	2.4/7.8
LM-0600-REN	4.7	9.7	7.1	0.8	46.3	3,968	1,322	661	2.5/10.6
LM-1000-REN	5.8	12.1	9.3	0.8	88.2	7,054	2,204	1,102	4/11.8
LM-1500-REN	6.5	14.7	10.8	0.8	152.1	10,361	3,306	1,653	6/13.7
LM-2000-REN	6.5	18.8	10.8	0.8	198.4	13,668	4,409	2,204	6/13.7

LM-0150-REN

Type of Surface						
Load Thick-ness	Clean and Smooth Ground Surface Air Gap <0.004 IN		Rusty and Hot Rolled Surface Air Gap 0.004 - 0.012 IN		Irregular and Rough Surface Air Gap 0.012 - 0.02 IN	
	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
0.984	330	-	187	-	132	-
0.59	287	79 x 20	154	430 x 20	121	35 x 20
0.393	265	98 x 20	143	59 x 20	110	47 x 20
0.157	110	98 x 20	88	91 x 20	66	67 x 20
0.078	44	59 x 20	31	51 x 20	29	47 x 20
Round Diameter (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
2 to 4	143	98	110	79	77	59

LM-0300-REN

Load Thick-ness	Clean and Smooth Ground Surface Air Gap <0.004 IN		Rusty and Hot Rolled Surface Air Gap 0.004 - 0.012 IN		Irregular and Rough Surface Air Gap 0.012 - 0.02 IN	
	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
>= 1.18	661	-	419	-	254	-
0.59	540	78 x 39	353	55 x 39	232	39 x 39
0.393	441	98 x 39	287	59 x 39	209	47 x 39
0.236	220	86 x 39	198	70 x 39	154	59 x 39
0.157	121	70 x 39	110	70 x 39	88	51 x 39
Round Diameter (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
2.4 to 7.875	331	138	265	118	165	98

LM-0600-REN

Load Thick-ness	Clean and Smooth Ground Surface Air Gap <0.004 IN		Rusty and Hot Rolled Surface Air Gap 0.004 - 0.012 IN		Irregular and Rough Surface Air Gap 0.012 - 0.02 IN	
	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
>= 1.18	1322	-	948	-	595	-
0.787	1025	78 x 59	860	78 x 49	551	49 x 39
0.59	948	88 x 59	750	90 x 49	485	70 x 39
0.393	628	98 x 59	529	94 x 49	408	86 x 39
0.315	496	94 x 59	397	90 x 49	287	78 x 39
0.236	342	86 x 59	265	78 x 49	220	78 x 39
Round Diameter (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
2.5 to 10.625	661	157	529	138	352	118

LM-1000-REN

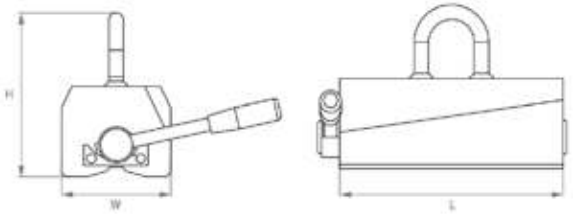
Type of Surface						
Load Thick-ness	Clean and Smooth Ground Surface Air Gap <0.004 IN		Rusty and Hot Rolled Surface Air Gap 0.004 - 0.012 IN		Irregular and Rough Surface Air Gap 0.012 - 0.02 IN	
	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
>= 2.36	2204	-	1863	-	1433	-
1.18	1896	96 x 59	1609	78 x 59	1246	75 x 49
0.984	1830	112 x 59	1554	94 x 59	1212	88 x 49
0.787	1642	126 x 59	1411	108 x 59	1124	102 x 49
0.59	1102	130 x 59	981	114 x 59	838	110 x 49
0.393	584	108 x 59	529	100 x 59	441	104 x 49
Round Diameter (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
3.9 to 11.8	1102	177	882	157	661	137

LM-1500-REN

Load Thick-ness	Clean and Smooth Ground Surface Air Gap <0.004 IN		Rusty and Hot Rolled Surface Air Gap 0.004 - 0.012 IN		Irregular and Rough Surface Air Gap 0.012 - 0.02 IN	
	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
>= 3.15	3306	-	3131	-	2249	-
1.96	3219	118 x 47	2646	98 x 47	2116	78 x 47
1.18	2161	137 x 47	1984	128 x 47	1720	98 x 51
0.787	1676	138 x 55	1653	118 x 63	1532	98 x 69
0.59	1191	118 x 59	1168	118 x 59	926	98 x 55
Round Diameter (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
5.9 to 13.8	1653	197	1543	177	1323	138

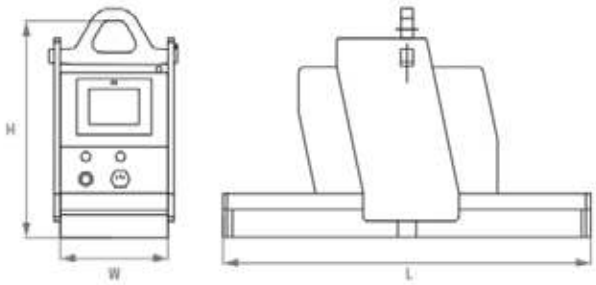
LM-2000-REN

Load Thick-ness	Clean and Smooth Ground Surface Air Gap <0.004 IN		Rusty and Hot Rolled Surface Air Gap 0.004 - 0.012 IN		Irregular and Rough Surface Air Gap 0.012 - 0.02 IN	
	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
>= 3.15	4409	-	3638	-	2866	-
1.96	4299	128 x 59	3527	98 x 59	2756	78x 59
1.18	2976	138 x 59	2535	128 x 59	2205	98, x 59
0.787	2425	138 x 79	2205	118 x 79	1984	98 x 79
0.59	1433	118 x 59	1323	118 x 59	1212	78 x 59
Round Diameter IN	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)	Max. Load (LBS)	Max. Length (IN)
5.9 to 13.8	2204	197	1984	177	1764	157



DO NOT LIFT PLATES THINNER THAN INDICATED IN THE CHART. WHEN LIFTING TUBES WITH A THIN WALL, THE LENGTH MAY BE THE LIMITING FACTOR.

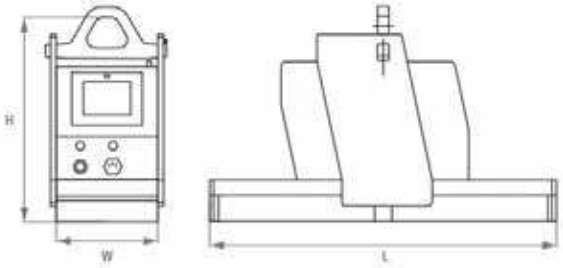
*WLL= maximum working load designed for certain lifting magnet capacity, with respect to minimal safety factor 3:1.



Battery Lifting Magnet BM

Part Number	Workload Limit Flat Materials (LBS)	Tested Lifting Capacity (LBS)	W x L of base (IN)	Height up to crane hook (IN)	Weight (LBS)	Built in Battery	Type of Battery
BM2976	2,976	5,952	9.5 x 10.7	18.1	132	12V/35Ah	FG12-35D
BM5511	5,511	11,022	9.5 x 15.7	18.1	159	12V/75Ah	FG12-75D
BM7936	7,936	15,872	9.4 x 41.3	18.1	397	12V/75Ah	FG12-75D
BM11023	11,023	22,046	10.3 x 47.2	18.1	448	12V/75Ah	FG12-75D

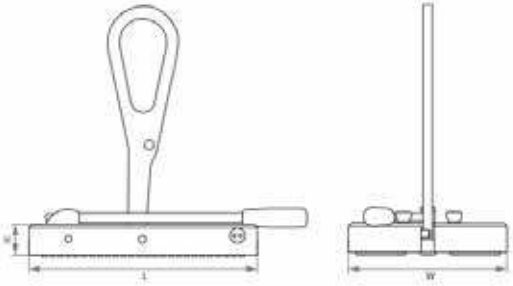
	Material Thickness (IN)	Clean and Smooth Ground Surface Air Gap <0.00394 IN		Rusty and Hot Rolled Surface Air Gap 0.00394 - 0.0118 IN		Irregular and Rough Surface Air Gap 0.0118 - 0.0196 IN		Very Rough Surface Air Gap >0.0196 IN
		Max. Dimensions LxW (IN)	Weight Limits (LBS)	Max. Dimensions LxW (IN)	Weight Limits (LBS)	Max. Dimensions LxW (IN)	Weight Limits (LBS)	
BM-2976	≥1.49	84 x 84	2976	74 x 74	2557	66 x 66	1984	Consult your supplier
	.984	84 x 84	2094	72 x 72	1962	72 x 72	1697	
	.748	84 x 84	1455	72 x 72	1278	72 x 72	1102	
	.511	84 x 84	815	72 x 72	749	59 x 59	573	
	.393	72 x 60	396	59 x 59	352	59 x 59	330	
	.236	48 x 48	198	48 x 48	189	48 x 48	176	
BM-5511	≥1.96	94 x 94	5511	94 x 82	4629	82 x 82	3858	
	1.49	94 x 94	4078	94 x 82	3571	82 x 82	2976	
	.984	94 x 94	2645	94 x 82	2491	82 x 82	2094	
	.748	94 x 82	1763	82 x 82	1543	82 x 70	1345	
	.511	70 x 70	815	70 x 70	793	70 x 70	727	
	.393	70 x 59	551	70 x 59	440	70 x 59	396	
	.236	59 x 47	242	59 x 47	220	59 x 47	198	
BM-7936	≥.984	236 x 118	7936	236 x 106	7209	177 x 118	6018	
	.748	260 x 94	5357	236 x 94	4916	177 x 94	4321	
	.511	201 x 94	2755	188 x 94	2601	177 x 94	2403	
	.393	153 x 94	1587	141 x 94	1455	129 x 94	1344	
	.236	141 x 71	749	129 x 70	661	129 x 59	595	
	.118	94 x 71	242	82 x 70	220	70 x 70	198	
BM-11023	≥1.96	141 x 130	11023	130 x 130	9259	118 x 106	7716	
	1.49	130 x 130	8157	129 x 118	7142	118 x 106	5952	
	.984	130 x 130	5291	129 x 118	4982	118 x 106	4188	
	.748	118 x 106	3527	118 x 106	3086	106 x 106	2689	
	.511	106 x 94	1631	106 x 94	1587	94 x 94	1455	
	.393	82 x 82	1102	82 x 82	881	82 x 82	793	
	.236	70 x 70	485	70 x 70	440	70 x 70	396	



Battery Lifting Magnet BMP

Part Number	Lifting Capacity for Flat Materials (LBS)	Lifting Capacity for Round Materials (LBS)	Minimum/ Maximum Diameter (IN)	Tested Lifting Capacity (LBS)	W X L of Base (IN)	Height up to Crane Hook (IN)	WEIGHT (LBS)	Built in Battery
BMP3968	3,968	2,425	1.57/17.32	7,936	9.5x18.5	24	368	12V/75Ah
BMP7936	7,936	4,850	1.77/19.69	15,873	10.3x30	24	926	12V/75Ah

	Material Thickness (IN)	Clean and Smooth Ground Surface Air Gap <0.00394 IN		Corroded and Hot Rolled Surface Air Gap 0.00394 - 0.0118 IN		Irregular and Rough Surface Air Gap 0.0118 - 0.0196 IN		Very Rough Surface Air Gap >0.0196 IN
		Max. Dimensions LxW (IN)	Weight Limits (LBS)	Max. Dimensions LxW (IN)	Weight Limits (LBS)	Max. Dimensions LxW (IN)	Weight Limits (LBS)	
BMP-3968	≥1.97	78 x 78	3968	65 x 59	2270	59 x 59	2050	Consult your supplier
	1.49	74 x 74	2491	70 x 59	2050	70 x 59	1873	
	.984	82 x 82	2248	82 x 70	1851	82 x 70	1675	
	.748	94 x 82	1763	82 x 70	1455	82 x 70	1300	
	.511	94 x 82	1256	82 x 82	1036	82 x 70	925	
	.393	82 x 82	859	82 x 70	683	82 x 59	595	
	.236	78 x 78	551	78 x 59	440	70 x 59	330	
BMP-7936	≥2.75	-	7936	-	7495	-	7054	
	1.57	106 x 106	5015	94 x 94	5379	94 x 82	5114	
	1.18	118 x 118	3814	106 x 106	3461	106 x 94	3130	
	.787	118 x 118	2755	106 x 106	2513	106 x 94	2314	
	.590	118 x 118	2028	106 x 106	1851	106 x 94	1719	
	.393	106 x 106	1344	106 x 94	1278	94 x 94	1146	
	.236	118 x 106	815	106 x 94	771	106 x 94	705	
				Diameter (IN)		Weight Limit (LBS)		Max Length (IN)
				BMP-3968	BMP-7936	BMP-3968	BMP-7936	
BMP-3968/7936			Load Type	01.57-017.3	01.77-019.6	2491	4982	236



Permanent Crane Magnet

Part Number	Width (IN)	Length (IN)	Height (IN)	Horizontal Limit (LBS)	Vertical Limit (LBS)	Weight (LBS)	Tested Break Away Force (LBS)
PCM-GP250	7.8	11.3	1.6	551	176	21.5	2,425

Horizontal

		Δ ≤ = 0.003 IN			Δ = 0.003 - 0.011 IN			Δ = 0.019 IN		
	S (IN)	L Max. (IN)	W Max. (IN)	Max. Lift (LBS)	L Max. (IN)	W Max. (IN)	Max. Lift (LBS)	L Max. (IN)	W Max. (IN)	Max. Lift (LBS)
PCM -GP250	>0.787	62	39	551	39	27	253	19	19	99
	0.472	78	39	429	59	31	242	39	19	99
	0.393	66	39	308	47	31	165	47	19	99
	0.314	43	39	209	47	31	132	47	19	83
	0.196	59	39	132	39	31	72	47	19	50
	0.118	66	39	88	51	31	55	59	19	41

Vertical

		Δ ≤ = 0.003 IN			Δ = 0.003 - 0.011 IN			Δ = 0.019 IN		
	S (IN)	L Max. (IN)	W Max. (IN)	Max. Lift (LBS)	L Max. (IN)	W Max. (IN)	Max. Lift (LBS)	L Max. (IN)	W Max. (IN)	Max. Lift (LBS)
PCM -GP250	> 0.787	39	19	176	19	15	66	15	11	26
	0.472	47	19	132	23	19	61	15	11	24
	0.393	47	19	101	19	19	44	15	11	22
	0.314	39	19	66	19	19	33	15	11	17
	0.196	39	19	39	19	15	17	19	11	13
	0.118	39	19	28	19	19	13	19	15	11

*WLL= maximum working load designed for certain lifting magnet capacity, with respect to minimal safety factor 4:1.

DO NOT LIFT PLATES THINNER THAN INDICATED IN THE CHART. WHEN LIFTING TUBES WITH A THIN WALL, THE LENGTH MAY BE THE LIMITING FACTOR.

Permanent Magnetic Parts Lifter

MPI's Permanent Magnetic Parts Lifter is designed for ferrous parts and the direct replacement of vacuum cups located on ferrous parts transfer systems. A powerful rare earth magnet is activated by air pressure. An air solenoid controls both on and off operation by connecting flexible airlines to the quick disconnect fittings. Short bursts of air ranging from 40-60 PSI, is all that is required to operate the unit.

MPI's exclusive "Fail Safe" feature is built into each magnet. Once the powerful permanent magnet is engaged, only air pressure in the reverse "off" direction will disengage the unit, even if the airline is disconnected or loses pressure. This process ensures a positive connection between the parts and the working surface of the Permanent Magnetic Parts Lifter.

Standard Features:

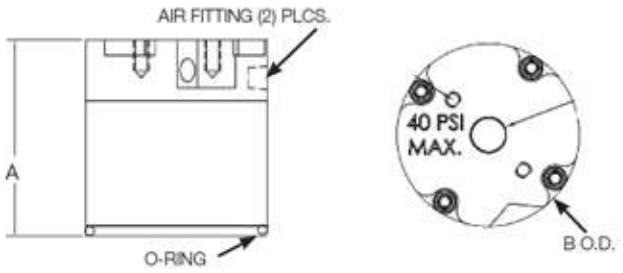
- CNC Machined from T-6061 Billet Aluminum
- MPI's exclusive replaceable and easy to change O-ring non-marring face
- Low air consumption and quiet operation
- Air supply controls positive part pick up and release with no internal spring unlike other brands
- Longer lasting solution compared to vacuum cups
- Standard 3/8-NPT thread for retro-fitting to existing end effectors
- Unit is provided with:
  (1) 1/8" NPT Pipe Plug
  (1) 3/8" NPT Pipe Plug
  (1) 3/8" NPT X 1.500" Black Pipe Nipple

Optional Features:

- Steel Airline Fittings
- Non-Standard Unit Sizing
- Suction Cup Adapter Plate, for simple retro-fit applications on existing lines
- Custom magnetic circuits to meet customer specific applications available on request

PMPL Model #	Height	Diameter
PMPL-175-250-REN-S	2.50"	1.75"
PMPL-300-350-REN-S	3.50"	3.00"
Holding Values		
Material Gauge	PMPL-175-250-REN-S	PMPL-300-350-REN-S
26 Gauge	5.0 lbs	20.5 lbs
18 Gauge	5.25 lbs	30.5 lbs
12 Gauge	6.0 lbs	34.0 lbs
7 Gauge	6.5 lbs	36 lbs.

All values are maximum breakaway. To maintain safety standards, lift magnets should be used at 1/3 of their breakaway capacity.



The Proper Ways to Use a Lift Magnet

Common Lift Magnet Performance Loss and Failures Factors

- Blunt force impacts, such as dropping, or banging on the magnet, can cause fractures in the magnet
- High heat: If the magnet is exposed to temperatures above its' capabilities, it will lose magnetism
- Exposure to electrical fields, like generators or welding ground circuits, will result in loss of magnetism
- External factors that influence a lift magnet's performance are nicks, scratches, gouges, rust, etc. to the contact surface of the lifter
- Breakaway testing will prove the magnet is performing at the intended Working Load Limit (WLL)

Why Should I Use a Lift Magnet Testing and Certification Service?

Lift Magnets cannot be visually inspected alone. Lifting Magnet failure is often the result of internal damage to the magnetic material. A simple visual inspection, which can be performed on other lifting devices, will not uncover this type of damage. MPI's Lift Magnet Testing and Certification Service performs a thorough visual inspection and functional testing of magnetic lifting products. The service uses testing techniques and equipment that meets or exceeds the ASME B30.20 Standards for Below-the-Hook Magnetic Lifting Devices. These performance tests are often referred to as Breakaway tests.

Proper breakaway testing of a lift magnet determines the maximum lift capacity of the magnet under ideal conditions. This allows the lift the operator/owner to determine if the magnet meets the rated Working Load Limit (WLL) or lift capacity as designed by the manufacturer. After testing, MPI provides documentation of the testing and if the magnet meets the manufacturer's labeled rating, a certificate of conformance.

Important Items to Consider When Operating a Lifting Magnet

Always

- Instruct new operators to read the relevant manual before use
- Use the entire work surface of the lifter
- Fully engage the lifter in the ON position before lifting the load
- Wear suitable protective gear when using the equipment
- Maintain the lifter work surface in good condition
- Check the suitability of equipment used in conjunction with the lifter
- Adhere to the safe working load information specified

Never

- Lift or transport people
- Lift loads while people are in the maneuvering space
- Allow untrained personnel to operate the lifter
- Leave a load unattended
- Attempt to switch the lifter before setting the load down
- Position yourself beneath the lifted load
- Bring the load to a sharp stop
- Lift a load outside of the specified safe workload of the lifter
- Lift a load with dimensions outside those specified for the lifter
- Lift an unbalanced load
- Operate the lifter in temperatures higher than 80ºC (176ºF) or lower than -10ºC (14ºF)
- Operate the lifter in humidity higher than 80%
- Operate the lifter in explosive (EX) or static sensitive environments
- Submerse the lifter in water

Magnetic Chucks

Magnetic chucks are modern devices replacing vices, mechanical clamps, and fixtures. Using electromagnetic, electropermanent, and permanent magnetic chucks for clamping and unclamping of the machined components saves time, allows the workpiece to be accessible from five (5) sides, and does not damage the product.

A key advantage of magnetic chucks for workholding is consistent clamping. Unlike mechanical clamps and vises, there are no variations on how tightly the workpiece is held. Full support of the workpiece is another advantage of magnetic checks. For example, if toe clamps are used on the outer surfaces of a workpiece, supporting the center of the piece is a challenge. These unsupported areas can chatter, resulting in increased cycle time.

Rectangular Permanent Magnetic Chucks

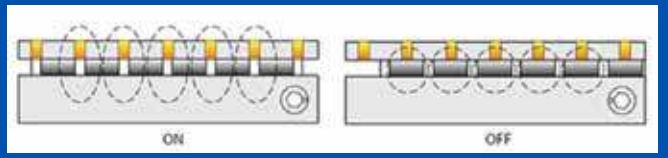
Permanent Magnet	Rare Earth Surface Grinder Chuck	Dymax Permanent Magnetic Chuck	Rare Earth Compact Milling Chuck
Technology	Permanent	Permanent	Permanent
Included with Each Magnet	Set of Clamps, Allen Key, Rear and Side Stop Blocks, and instructions for use	Rear and side stop blocks, Allen Key, and instructions for use	Stop Bars, Allen Key, and instructions for use
Holding Force	100N/cm² / 145lbs/in²	120N/cm² / 174lbs/in²	160N/cm² / 232lbs/in²
Minimum Workpiece Size	4mm x 4mm x 1mm / .157" x .157" x .039"	10mm x 10mm x 5 mm / .393" x .393" x .196"	25mm x 25mm x 6mm / .984" x .984" x .236"
Regrinding Limit	7mm / .275"	6 mm / .236"	10mm / .393"
Pole Pitch	T1.9mm - 1.4+0.5mm / T0.074" - 0.055"+0.019" (steel/brass)	T15mm - 5mm+1mm+5mm+1mm+2mm+1mm / T .590" - .196"+.039"+.196"+.039"+.078"+.039" (steel/stainless steel)	T15mm - 11mm+4mm / T .590" - .433"+.157" (steel/epoxy)
Pole Type	Transverse	Transverse	Transverse
Magnetic System Warranty	1 year	1 year	1 year
Use	Precise Surface Grinding of small and thin, as well as large parts. Also suitable for electrical discharge machining (EDM).	Heavy Duty Surface Grinding, Light Milling, also suitable for electrical discharge machining (EDM)	Milling, Drilling, Planing and Heavy Duty Grinding
MPI Difference	Solid design, waterproof High stability and chuck accuracy during surface grinding Clamp even the thinnest parts Long life span due to the fixed top plate, which can be re-ground many times. Easy operation with low maintenance. Durable switching mechanism Manufactured in Europe to the highest quality standards	Double neodymium magnet system Versatile permanent magnetic chuck for use in grinding and light milling High durability and long-life span of the top plate made of steel/stainless steel Robust and durable steel base for precise machining Waterproof design is immersible in dielectric liquid during EDM machining Manufactured in Europe to the highest quality standards	Compact dimensions and a high holding force High use-value and long-life span thanks to an unparalleled regrinding limit Holding surface with uniform distribution of the magnetic force right up to the edges Waterproof design Manufactured in Europe to the highest quality standards

Permanent Magnetic Chucks

Permanent magnetic chucks are comprised of highly energized magnetic and ferromagnetic materials, which attract the magnetic steel when used in a certain configuration. Magnets do not lose their magnetic force under normal conditions. Activation and deactivation (switching ON/OFF) is carried out mechanically, by removing the interior system with permanent magnets. A manual lever is used for this action.

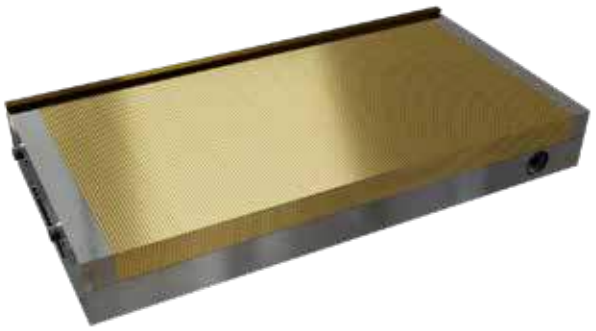
Advantages of Permanent Magnetic Chucks

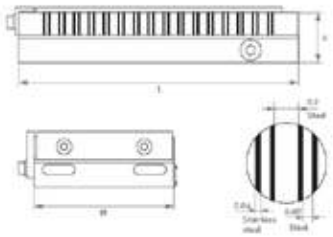
- No dependence on electric power, safe, with no combined expenses.
- Easy installation and quick removal of the chuck onto another machine.
- No heat generation and thermal deformation of the top plate, which allows very precise machining.
- Usually has a dense pole pitch, very suitable for small and extra-small components.
- Solid construction, virtually maintenance-free, with a long-life span.
- Relatively low purchase costs.



Limitations of Permanent Magnetic Chucks

- Limitation of chuck size, usually up to 12” x 24” in size.
- Less to no control of the holding force.
- The mechanical system is less suitable for automated processes.





Rare Earth Surface Grinder Chuck

Part Number	Description	Width (IN)	Length (IN)	Height (IN)	Weight (LBS)
SGC-70140-REN	3” x 6” Rare Earth Surface Grinder Chuck	3	6	2	13
SGC-100175-REN	4” x 7” Rare Earth Surface Grinder Chuck	4	7	2	15.4
SGC-100200-REN	4” x 8” Rare Earth Surface Grinder Chuck	4	8	2	17.6
SGC-100250-REN	4” x 10” Rare Earth Surface Grinder Chuck	4	10	2	22.1
SGC-130255-REN	5” x 10” Rare Earth Surface Grinder Chuck	5	10	2	28.7
SGC-150150-REN	6” x 6” Rare Earth Surface Grinder Chuck	6	6	2	21
SGC-150250-REN	6” x 10” Rare Earth Surface Grinder Chuck	6	10	2	33.1
SGC-150300-REN	6” x 12” Rare Earth Surface Grinder Chuck	6	12	2	39.7
SGC-150350-REN	6” x 14” Rare Earth Surface Grinder Chuck	6	14	2	48.5
SGC-150400-REN	6” x 16” Rare Earth Surface Grinder Chuck	6	16	2	55.1
SGC-150450-REN	6” x 18” Rare Earth Surface Grinder Chuck	6	18	2	61.7
SGC-200400-REN	8” x 16” Rare Earth Surface Grinder Chuck	8	16	2	77.2
SGC-200450-REN	8” x 18” Rare Earth Surface Grinder Chuck	8	18	2	81.6
SGC-200500-REN	8” x 20” Rare Earth Surface Grinder Chuck	8	20	2	90.4
SGC-200600-REN	8” x 24” Rare Earth Surface Grinder Chuck	8	24	2	108
SGC-250500-REN	10” x 20” Rare Earth Surface Grinder Chuck	10	20	2.2	126
SGC-300500-REN	12” x 20” Rare Earth Surface Grinder Chuck	12	20	2.2	148
SGC-300600-REN	12” x 24” Rare Earth Surface Grinder Chuck	12	24	2.2	179

Dymax Permanent Magnetic Chuck

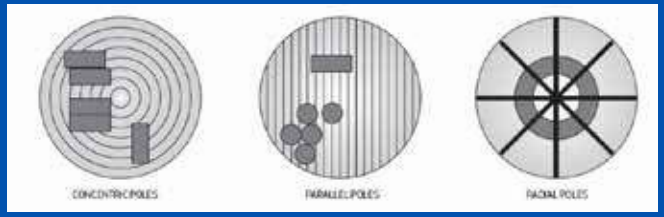
Part Number	Description	Width (IN)	Length (IN)	Height (IN)	Weight (LBS)
D-150300-REN	Dymax 6" x 12" Milling Chuck	6	12	2	44
D-150450-REN	Dymax 6" x 18" Milling Chuck	6	18	2	66
D-200450-REN	Dymax 8" x 18" Milling Chuck	8	18	2	88
D-250380-REN	Dymax 10" x 15" Milling Chuck	10	15	2.2	88
D-300450-REN	Dymax 12" x 18" Milling Chuck	12	18	2.2	172
D-300600-REN	Dymax 12" x 24" Milling Chuck	12	24	2.2	172

Rare Earth Compact Milling Chuck

Part Number	Description	Width (IN)	Length (IN)	Height (IN)	Weight (LBS)
CMC-150250-REN	6” x 10” Rare Earth Compact Milling Chuck	6	10	2	37.5
CMC-150450-REN	6” x 18” Rare Earth Compact Milling Chuck	6	18	2	55
CMC-200400-REN	8” x 16” Rare Earth Compact Milling Chuck	8	16	2.2	73
CMC-200500-REN	8” x 20” Rare Earth Compact Milling Chuck	8	20	2.2	90
CMC-200600-REN	8” x 24” Rare Earth Compact Milling Chuck	8	24	2.2	112
CMC-250400-REN	10” x 16” Rare Earth Compact Milling Chuck	10	16	2.4	101
CMC-300500-REN	12” x 20” Rare Earth Compact Milling Chuck	12	20	2.4	145.5
CMC-300600-REN	12” x 24” Rare Earth Compact Milling Chuck	12	24	2.4	181
CMC-320320-REN	13” x 13” Rare Earth Compact Milling Chuck	13	13	2	81.5

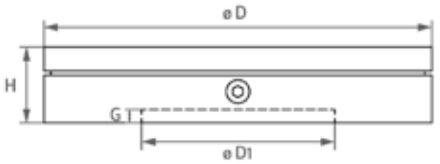
Rectangular or Round Chuck? Selecting the Best Chuck for the Application

Your component should cross as many poles as possible to achieve the greatest holding power. To select a chuck shape, consider the application (grinding, milling, drilling, EDM, etc.,) and the range of sizes and thicknesses of the parts that will be held. The maximum holding force is only reached if the part can conduct all available magnetic flux from the magnet pole. If the workpiece thickness is smaller than 50 % of the pole width, the holding force will be weaker.



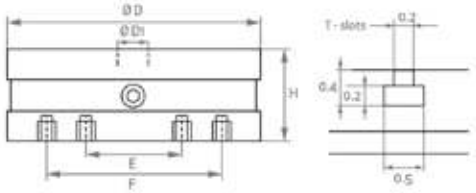
Round Permanent Magnetic Chucks

Permanent Magnet	Rare Earth Round Chuck	Double Rare Earth Round Chuck
Technology	Permanent	Permanent
Included with Each Magnet	Allen Key and instructions for use	Allen Key and instructions for use
Holding Force	160N/cm² / 232lbs/in²	140N/cm² / 203lbs/in²
Minimum Workpiece Size	40mm x 8mm / 1.57" x .314"	35mm / 1.377"
Regrinding Limit	10mm / .393"	5 mm / .196"
Pole Pitch	T15mm - 11mm+4mm / T .590" - .433"+.157" (steel/epoxy)	-
Pole Type	Parallel	Radial
Magnetic System Warranty	1 year	1 year
Use	Clamping of workpieces during turning and circular grinding	Turning and grinding of round and ring-shaped workpieces. Facing work, internal and external diameter machining is possible separately or in one operation.
MPI Difference	Solid steel body Top plate with parallel pole configuration Continuous adjustment of the holding force Waterproof design Double magnetic system Manufactured in Europe to the highest quality standards	Compact top plate made of one piece of steel with radial poles Suitable for turning and circular grinding Very powerful double magnetic system with neodymium magnets Steel base Manufactured in Europe to the highest quality standards



Rare Earth Round Chuck

Part Number	Description	Diameter (IN)	Height (IN)	G (IN)	D1 (IN)	Weight (LBS)
MAX-155-REN*	6” Rare Earth Round Chuck	6	2.2	0.2	2	19.8
MAX-200-REN*	8” Rare Earth Round Chuck	8	2.2	0.2	2.4	33.1
MAX-250-REN*	10” Rare Earth Round Chuck	10	2.2	0.2	3.2	48.5
MAX-300-REN*	12” Rare Earth Round Chuck	12	2.2	0.24	5.9	70.6
MAX-350REN	14” Rare Earth Round Chuck	14	2.2	0.24	6.7	94.8
MAX-400-REN	16” Rare Earth Round Chuck	16	2.2	0.24	7.9	123.5



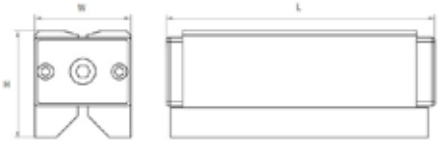
Double Rare Earth Round Chuck

Part Number	Description	Diameter (IN)	Height (IN)	Diameter 1 (IN)	E (IN)	F (IN)	Weight (LBS)
RC-130-REN*	Double Rare Earth Round Chuck	5	2.2	0.59	–	3.9	11
RC-150-REN*	Double Rare Earth Round Chuck	6	2.2	0.59	3.15	4.7	16
RC-200-REN*	Double Rare Earth Round Chuck	8	2.2	0.787	4.33	7.1	29
RC-250-REN*	Double Rare Earth Round Chuck	10	2.8	1.18	5.51	8.7	55
RC-300-REN*	Double Rare Earth Round Chuck	12	2.9	1.49	7.09	10.2	82
RC-350-REN	Double Rare Earth Round Chuck	14	2.9	1.57	8.66	11.81	108.03
RC-400-REN	Double Rare Earth Round Chuck	16	2.9	1.57	10.24	13.39	149.91
RC-500-REN	Double Rare Earth Round Chuck	20	3	1.96	11.81	15.75	240.30
RC-600-REN	Double Rare Earth Round Chuck	24	3	3.54	13.78	17.72	379.20
RC-700-REN	Double Rare Earth Round Chuck	28	3	3.54	13.78	17.72	515.88
RC-800-REN	Double Rare Earth Round Chuck	32	4.3	3.93	15.75	27.56	925.94

Magnetic Permanent Blocks

Magnetic Permanent Blocks (MPB) are an excellent tool for attaching components during surface machining or welding. The magnetic blocks offer flexible attachment without disturbing contours for easy drilling, deburring, fine grinding, and mounting work. The magnetic permanent block chucks are completely nickel-coated for high resistance to corrosion. The blocks are sold as a pair (two) and contain a switching key.

Application: Clamping
Technology: Permanent
Block Dimension: From 2.52 x 5.6 x 3 in
Holding Force: up to 10kN/cm2
Clamping Surfaces: Three sides



Part Number	Width (IN)	Length (IN)	Height (IN)	Clamping Area 1 (IN)	Clamping Area 2 (IN)	Holding Force (kN)	Weight (LBS)
MPB-500	2.5	5.6	2.8	4.72 x 2.24	5.35 x 2.52	5	17.2
MPB-700	2.5	7	2.8	6.14 x 2.24	6.77 x 2.52	7	21.6
MPB-1000	3.4	7.2	3.5	6.38 x 2.99	7.01 x 3.43	10	38.8

Electromagnetic Chucks

Electromagnetic Chuck	Longitudinal Fine Pole Surface Grinding Chuck	Transverse Fine Pole Surface Grinding Chuck
Technology	Electromagnet	Electromagnet
Included with Each Magnet	Supplied with two (2) hold down clamps	Side and rear stop blocks, set of clamps, and instructions for use
Holding Force	90N/cm² / 130lbs/in²	110N/cm² / 159lbs/in²
Minimum Workpiece Size	25mm x 25mm x 3mm / 1" x 1" x .12"	25mm x 25mm x 3mm / 1" x 1" x .12"
Regrinding Limit	6mm / .236"	6 mm / .236"
Pole Pitch	T4mm - 3mm+1mm / T .160" - .12"+.04" (steel/brass)	T4mm - 3mm+1mm / T .160" - .12"+.04" (steel/brass)
Pole Type	Parallel	Transverse
Magnetic System Warranty	1 year	1 year
Use	For clamping of one or more ferromagnetic workpieces on surface grinding machines during dry or wet (coolant) grinding. This chuck can also be used at checking and assembling workplaces.	For clamping small and large workpieces during precise surface grinding
MPI Difference	Design with firmly embedded coils Waterproof design Variable adjustment of the force to create the optimum conditions for clamping Suitable for sinker EDM applications Magnetic field does not affect EDM operation Powerful holding over entire chuck surface Fine pole divisions Low height Manufactured in Europe to the highest quality standards	Design with firmly embedded coils Waterproof design Electromagnet is easily operated by pressing the button on the control unit Variable adjustment of the force to create the optimum conditions for clamping High nominal holding force Multi core magnetic system generates an efficient and uniform magnetic field over the entire surface of the chuck Manufactured in Europe to the highest quality standards
	Note: Control Unit sold separately	

Electromagnetic Chucks

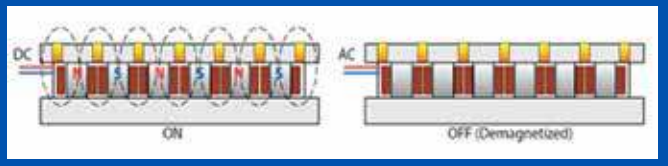
The magnetic field in an electromagnetic chuck is generated by coils through which a rectified current flows. There are ferromagnetic cores inside the coils. These cores are magnetized by the electric current. Electromagnets are activated by the control unit, which makes it possible to vary the force of the magnet and the demagnetization of the workpiece.

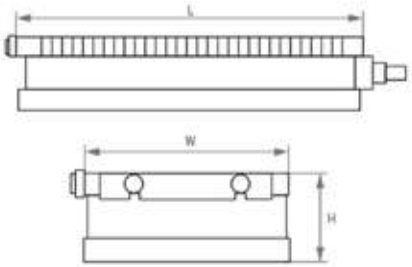
Advantages of Electromagnetic Chucks

- Depending on the coil size, the electromagnets can generate a very strong magnetic field, which means firm clamping of the load.
- Due to the high magnetic field, it is also possible to reliably clamp uneven loads with larger gaps between the load and the chuck.
- The chuck can be supplemented with advanced control systems for fluent control of the force of the magnet and control of the demagnetization cycle. This results in simple removal of the workpiece from the chuck.
- It is possible to make any chuck size depending on the workpiece size.
- Operation of the magnets can be manual, automatic, or a combination.

Limitations of Electromagnetic Chucks

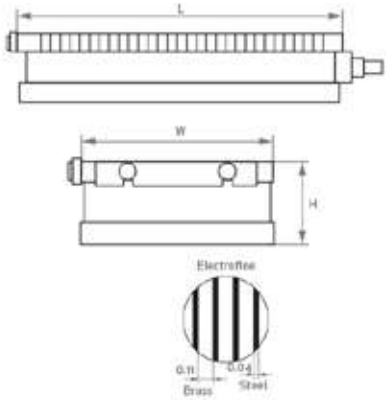
- The magnet needs a continuous power supply. Interruption leads to loss of holding force.
- Regarding application, an emergency power supply may be required.
- The current in the coils generates heat, which limits the accuracy.





Electromagnet Longitudinal Fine Pole Surface Grinding Chuck

Part Number	Description	Recommended Control	Width (IN)	Length (IN)	Height (IN)	Weight (LBS)	AMPS	OHMS	Volt Input	Watts
EMLP-150300-SGC	6” x 12” Electromagnet Longitudinal Fine Pole	EMCU-150W	6	12	2.8	46	0.49	233	110	57
EMLP-150450-SGC	6" x 18" Electromagnet Longitudinal Fine Pole	EMCU-150W	6	18	2.8	70	0.77	149	110	89
EMLP-200450-SGC	8" x 18” Electromagnet Longitudinal Fine Pole	EMCU-150W	8	18	2.8	100	0.98	117	110	113
EMLP-200600-SGC	8" x 24" Electromagnet Longitudinal Fine Pole	EMCU-150W	8	24	2.8	130	1.06	110	110	122
EMLP-250500-SGC	10" x 20" Electromagnet Longitudinal Fine Pole	EMCU-150W	10	20	2.8	180	1.49	77	110	172
EMLP-250600-SGC	10" x 24" Electromagnet Longitudinal Fine Pole	EMCU-150W	10	24	3	215	1.3	88	110	150
EMLP-300600-SGC	12" x 24" Electromagnet Longitudinal Fine Pole	EMCU-150W	12	24	3	185	1.24	92	110	143



Electromagnet Transverse Fine Pole Surface Grinding Chuck

Part Number	Description	Recommended Control	Width (IN)	Length (IN)	Height (IN)	Weight (LBS)
EMTP-150250-SGC	6" x 10" Electromagnet Transverse Fine Pole	EMCU-150W	6	10	2.8	44.1
EMTP-150300-SGC	6" x 12" Electromagnet Transverse Fine Pole	EMCU-150W	6	12	2.8	55.125
EMTP-150350-SGC	6" x 14 Electromagnet Transverse Fine Pole	EMCU-150W	6	14	2.8	59.535
EMTP-150400-SGC	6" x 16" Electromagnet Transverse Fine Pole	EMCU-150W	6	16	2.8	61.74
EMTP-150450-SGC	6" x 18" Electromagnet Transverse Fine Pole	EMCU-150W	6	18	2.8	74.97
EMTP-200400-SGC	8" x 16" Electromagnet Transverse Fine Pole	EMCU-150W	8	16	2.8	90.405
EMTP-200450-SGC	8" x 18" Electromagnet Transverse Fine Pole	EMCU-150W	8	18	2.8	103.64
EMTP-200500-SGC	8" x 20" Electromagnet Transverse Fine Pole	EMCU-150W	8	20	2.8	121.28
EMTP-200600-SGC	8" x 24" Electromagnet Transverse Fine Pole	EMCU-150W	8	24	2.8	143.33
EMTP-250500-SGC	10" x 20" Electromagnet Transverse Fine Pole	EMCU-630W	10	20	3	154.35
EMTP-250600-SGC	10" x 24" Electromagnet Transverse Fine Pole	EMCU-630W	10	24	3	183.02
EMTP-300600-SGC	12" x 24" Electromagnet Transverse Fine Pole	EMCU-630W	12	24	3	207.27
EMTP-300700-SGC	12" x 28" Electromagnet Transverse Fine Pole	EMCU-630W	12	28	3	242.55
EMTP-300800-SGC	12" x 32" Electromagnet Transverse Fine Pole	EMCU-630W	12	32	3	315.32

Electropermanent Chuck

Electropermanent Chuck	Mastermilling Chuck
Technology	Electropermanent
Included with Each Magnet	Supplied with two (2) side stoppers and 6m/20' armored cable
Holding Force	170N/cm² / 246 lbs/in²
Minimum Workpiece Size	50mm x 110mm x 20mm / 2"x4.3"x0.787"
Recommended Workpiece Thickness	minimum 12mm/ 0.47"
Regrinding Limit	6mm / .236"
Pole Size	50mmx50mm / 2"x2"
Pole Type	Square
Magnetic System Warranty	1 year
Use	Milling material - can be machined from five (5) sides, drilled through, and uneven material can be machined as well using pole extensions
MPI Difference	Slot round the entire perimeter for easy attachment to machine table Stop blocks can be moved freely to any side Option to connect set of magnets to a single control unit Shown with optional square pole extensions Quick push-pull connector Manufactured in Europe to the highest quality standards
	Note: Control Unit sold separately

Electropermanent Chucks

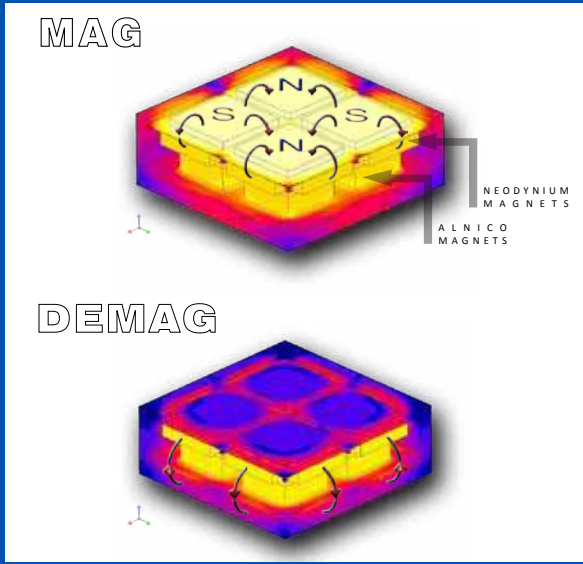
Electropermanent handling systems use a combination of permanent and electromagnetic technology. They are built on the ability of certain ferromagnetic materials to become a permanent magnet based on the short action of a strong direct current. They remain in this state without an external power supply. During the demagnetization process, pulses of alternating current will demagnetize the ferromagnetic materials again. An electric current is only needed for clamping/unclamping the load.

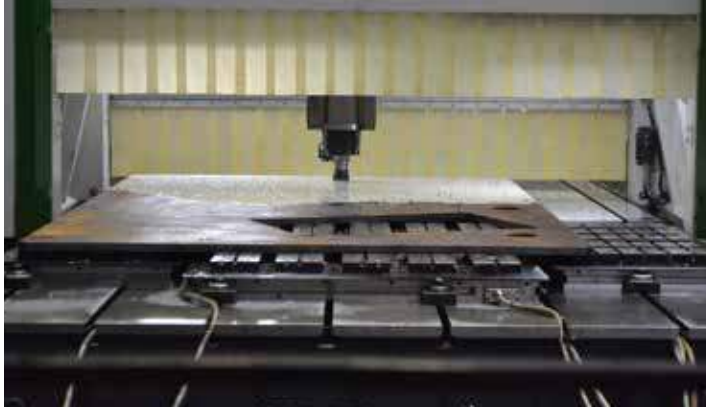
Advantages of Electropermanent Chucks

- High holding force, which makes it possible to apply heavy milling operations.
- High level of safety in terms of independence of electric power. The workpiece will not be released even after disconnecting the power supply.
- Minimum electrical consumption, used for switching ON/OFF only.
- Operation using the control unit allows its application in automated system operations.
- The temperature in the chuck does not change in the OFF/ON positions, which means there are no negative effects caused by different temperatures.
- It is possible to design and manufacture any system regardless of size, delivering customized solutions.

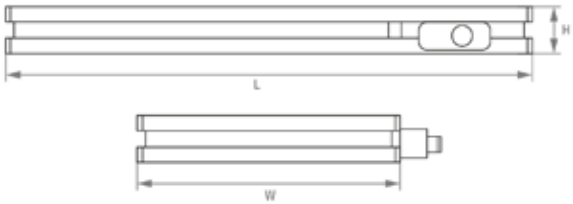
Limitations of Electropermanent Chucks

- Higher price than that of permanent chucks.
- Compared to electromagnets, there is a higher sensitivity to the air-gap between the chuck and the component to be clamped.
- When a malfunction occurs in the control unit, the load can remain clamped.





Pole extensions sold separately

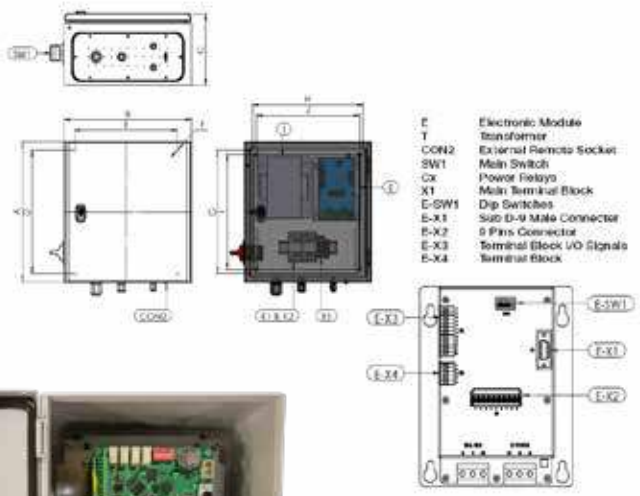


Electropermanent Mastermilling Milling Chuck

Part Number	Description	Width (IN)	Length (IN)	Height (IN)	Weight (LBS)
MM-50-300490-EP	12" x 20" 24 pole ElectroPermanent Mastermill Milling Chuck	12	20	2	108
MM-50-300600-EP	12" x 24" 32 pole ElectroPermanent Mastermill Milling Chuck	12	24	2	135
MM-50-300800-EP	12" x 32" 40 pole ElectroPermanent Mastermill Milling Chuck	12	32	2	181
MM-50-300900-EP	12" x 36" 48 pole ElectroPermanent Mastermill Milling Chuck	12	36	2	203
MM-50-420430-EP	16" x 18" 36 pole ElectroPermanent Mastermill Milling Chuck	16	18	2	134.5
MM-50-420490-EP	16" x 20" 36 pole ElectroPermanent Mastermill Milling Chuck	16	20	2	154
MM-50-420600-EP*	16" x 24" 48 pole ElectroPermanent Mastermill Milling Chuck	16	24	2	190
MM-50-420800-EP*	16" x 32" 60 pole ElectroPermanent Mastermill Milling Chuck	16	32	2	251
MM-50-420900-EP	16" x 36" 72 pole ElectroPermanent Mastermill Milling Chuck	16	36	2	282
MM-50-420990-EP	16" x 40" 72 pole ElectroPermanent Mastermill Milling Chuck	16	40	2	313
MM-50-480490-EP	18" x 20" 42 pole ElectroPermanent Mastermill Milling Chuck	18	20	2	176
MM-50-480600-EP	18" x 24" 56 pole ElectroPermanent Mastermill Milling Chuck	18	24	2	214
MM-50-480800-EP	18" x 32" 70 pole ElectroPermanent Mastermill Milling Chuck	18	32	2	287
MM-50-480900-EP	18" x 36" 84 pole ElectroPermanent Mastermill Milling Chuck	18	36	2	322
MM-50-480990-EP	18" x 40" 84 pole ElectroPermanent Mastermill Milling Chuck	18	40	2	355
MM-50-580600-EP	22" x 24" 64 pole ElectroPermanent Mastermill Milling Chuck	22	24	2	260
MM-50-580800-EP	22" x 32" 80 pole ElectroPermanent Mastermill Milling Chuck	22	32	2	346
MM-50-580900-EP	22" x 36" 96 pole ElectroPermanent Mastermill Milling Chuck	22	36	2	390
MM-50-580990-EP	22" x 40" 96 pole ElectroPermanent Mastermill Milling Chuck	22	40	2	428

Electromagnet Control Unit

Electromagnet Chuck Control Units are designed to magnetize and demagnetize electromagnetic devices such as electromagnetic chucks and lifters. Magnetization consists of supplying a continuous DC output voltage to the device. Demagnetization cycles consist of a specific combination of positive and negative voltage pulse(s). The workpiece material may retain some residual magnetism due to its chemical and magnetic properties. The control units are designed to operate any 110VDC magnetic device within the specified wattage.



MPI's Electromagnet Control Unit features an SR interlock safety contact. By using a potential free relay contact driven by the machine's PLC, the controls can be enabled or disabled. The safety contact closes when the magnetic device is properly magnetized and should be used to enable the operation of the connected machine. A 24V signal on E-X3-10 of the control board provides a warning signal to disable the control unit. The safety control unit feature should be engaged during machining or transport.

Key Features:

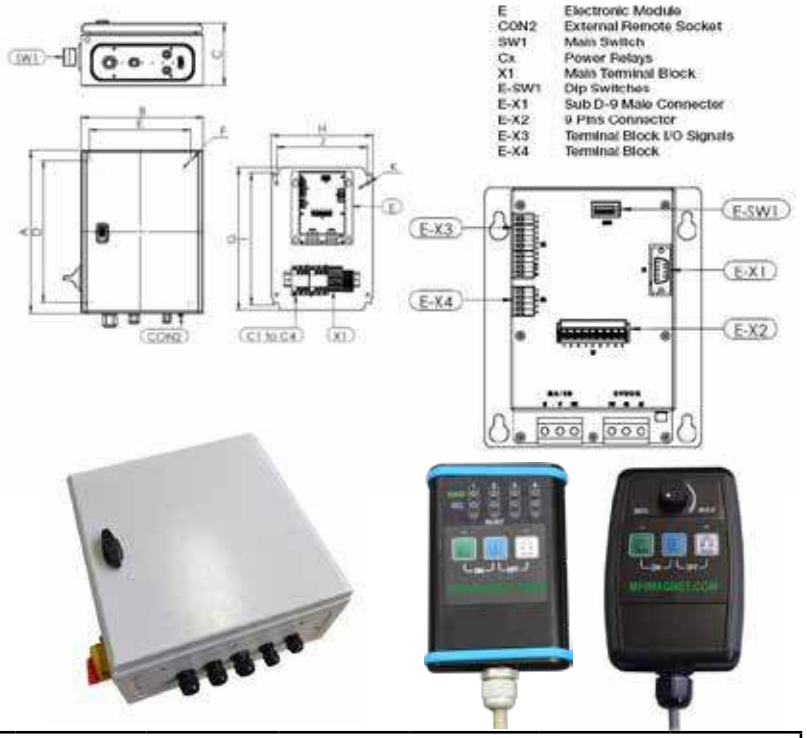
- Clamping force control for higher accuracy and colder operation
- Demagnetization of the chuck and workpiece for easy unclamping
- Powerful control system with a microprocessor
- 150W and 630W Models Stock, all others special order
- Choose a design – metal box (IP54 stock) or panel (IP00 special order)
- One (1) year warranty

Part Number	Description	Mains AC input voltage (Vac)	Output DC voltage (Hz)	Mains frequency (Hz)	Operating temp. (F)	Max. relative humidity	Max. working altitude (FT)	Cabinet protection class	Required circuit breaker	Required cable (**)	Remote control	Embedded control
EMCU-150W***	Electromagnet Control Unit 150-watt capacity	110	110	50/60	32-122	90%	3,280	IP66	4A C curve	3 G 1.5	No	Yes
EMCU-150W-230	Electromagnet Control Unit 150-watt capacity, 230 volt	200-230	110	50/60	32-122	90%	3,280	IP66	4A C curve	3 G 1.5	No	Yes
EMCU-630W***	Electromagnet Control Unit 630-watt capacity, 230 volt with U19 remote control	200-230	110	50/60	32-122	90%	3,280	IP66	10A C curve	3 G 2.5	Yes	No
EMCU-1250W-230	Electromagnet Control Unit 1250-watt capacity, 230 volt with U19 remote control	200-230	110	50/60	32-122	90%	3,280	IP66	16A C curve	3 G 2.5	Yes	No
EMCU-2500W-230	Electromagnet Control Unit 2500-watt capacity, 230 volt with U19 remote control	200-230	110	50/60	32-122	90%	3,280	IP66	32A C curve	3 G 2.5	Yes	No
EMCU-630W-380-460	Electromagnet Control Unit 630-watt capacity, 380-460 volt with U19 remote control	380-460	110	50/60	32-122	90%	3,280	IP66	6A C curve	3 G 2.5	Yes	No
EMCU-1250W-380-460	Electromagnet Control Unit 1250-watt capacity, 380-460 volt with U19 remote control	380-460	110	50/60	32-122	90%	3,280	IP66	10A C curve	3 G 2.5	Yes	No
EMCU-2500W-380-460	Electromagnet Control Unit 2500-watt capacity, 380-460 volt with U19 remote control	380-460	110	50/60	32-122	90%	3,280	IP66	16A C curve	3 G 2.5	Yes	No

Cable between electrical grid and control unit is not supplied. Make sure to follow required cable specifications. * Stock units ALL other units call for delivery*

ElectroPermanent Control Unit

The ElectroPermanent power supply and control units are designed to magnetize and demagnetize all types of ElectroPermanent magnetic devices, depending on factory settings. MPI offers several control units, depending upon size and the number of chucks. In case of other magnetic device brands and models, consult MPI. EPCU control units are named by the number of output channels (i.e., number of electrical circuits to be energized in the magnetic clamping system): EPCU10: 1 channel, EPCU20: 2 channels, and EPCU40: 4 channels.



Key Features:

- EPCU control units come in two different versions:
  - SW for single wave rectified output voltage
  - DW for double-wave (full wave) rectified output voltage
- Operational safety – the machine cannot be started up at a low holding force
- Safe magnetization level setting
- Effective demagnetization of the chuck and the workpiece for easy removal
- Control of the chuck via remote controller available
- Control one or more magnets at the same time (depending on selected unit type)
- One (1) year warranty
- Models 10SW and 10DW use U19 Control style. All other models use RM control style.
- U19: No channel selection possible but it can be used with EP-CU20 and 40
- Mag and demag cycles will start for all channels
- RM : Channel selection possible

Model SW for Single-Wave Rectified Output Voltage

Part Number	Description	Number of Chucks & Size (IN)	Main operating voltage (Vac)	Main operating frequency (Hz)	Operating temperature (F)	Max. relative humidity	Max. working altitude (FT)	Cabinet protection class	Required circuit breaker	Required power cable (*)	Number of output channels
EPCU-10SW	ElectroPermanent Chuck Control Remote Control (RC-EPC) included	1 chuck sizes to 16” x 32”	200-460	50/60	32-122	90%	3,280	IP66	32A-D	3 G 4	1
EPCU-20SW	ElectroPermanent Chuck Control Remote Control (RC-EPC) included	2 chuck sizes to 16” x 32”	200-460	50/60	32-122	90%	3,280	IP66	40A-D	3 G 6	4
EPCU-40SW	ElectroPermanent Chuck Control Remote Control (RC-EPC) included	4 chuck sizes to 16” x 32”	200-460	50/60	32-122	90%	3,280	IP66	40A-D	3 G 6	2

**Cable between electrical grid and control unit is not supplied. Make sure to follow required cable specifications.*

Model SW for Double-Wave (Full Wave) Rectified Output Voltage

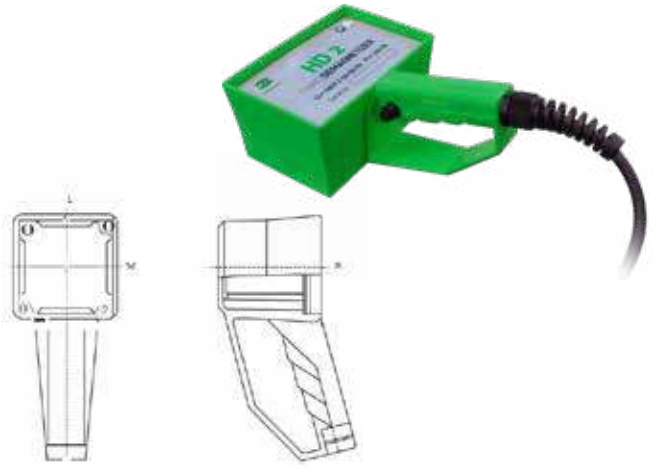
Part Number	Description	Number of Chucks & Size (IN)	Main operating voltage (Vac)	Main operating frequency (Hz)	Operating temperature (F)	Max. relative humidity	Max. working altitude (FT)	Cabinet protection class	Required circuit breaker	Required power cable (*)	Number of output channels
EPCU-10DW	ElectroPermanent Chuck Control Remote Control (RC-EPC) included	1 chuck sizes to 16” x 32”	200-460	50/60	32-122	90%	3,280	IP66	40A-D	3 G 6	1
EPCU-20DW	ElectroPermanent Chuck Control Remote Control (RC-EPC) included	2 chuck sizes to 16” x 32”	200-460	50/60	32-122	90%	3,280	IP66	40A-D	3 G 6	2
EPCU-40DW	ElectroPermanent Chuck Control Remote Control (RC-EPC) included	4 chuck sizes to 16” x 32”	200-460	50/60	32-122	90%	3,280	IP66	50A-D	3 G 10	4

**Cable between electrical grid and control unit is not supplied. Make sure to follow required cable specifications.*

Demagnetizers

Some materials retain residual magnetism if exposed to magnetic fields. The amount depends on the workpiece size and the type of material. To remove this undesirable residual magnetism, the object must be exposed to an alternating magnetic field, which eliminates the magnetism to the lowest possible value.

Magnetized workpieces cross the electrical plane, exposing the workpiece to an opposite magnetic field and creating an irregular magnetic field. By slow movement across the top plate and away, the unwanted residual magnetism is effectively removed from the object.



Demagnetizer	Handheld	Tabletop
Technology	Electropermanent	Electropermanent
Included	110 VAC 10ft power supply cable with plug	110V/60Hz 352 VA 10 ft power supply cable with plug
Duty Cycle	20%, maximum operating time 10 minutes	-
Operation	Pushbutton	Double pole switch with signal light
Magnetization power	high	-
Depth of demagnetization field	up to 1.57 in	Field penetration up to 1.57”
Warranty	1 year	1 year
Use	For large or complex components, such as molds, bearings, and various machine and mechanical parts, etc. It is an efficient tool where quick and mobile demagnetization is needed.	For quick and simple demagnetization of flat and small cylindrical components. Easily integrated into a production line, for instance under a conveyor belt.
MPI Difference	Lightweight plastic structure with large handle Push button, simple operation Compact dimensions for mobility Two styles depending upon thickness and dimension of workpiece to be demagnetized Manufactured in Europe to the highest quality standards	Lightweight aluminum body Stainless steel top plate Double pole switch with signal light Three styles available Enlarge work area by adding more demagnetizers side by side Manufactured in Europe to the highest quality standards

Tabletop Demagnetizer

Part Number	Description	Width (IN)	Length (IN)	Height (IN)	Weight (LBS)	Voltage
TTD-3	9.8” x 7” x 3.4” 110V/60Hz Tabletop Demagnetizer	9.8	7	3.4	19.4	110V
TTD-4	11” x 10.5” x 3.4” 110V/60Hz Tabletop Demagnetizer	11	10.5	3.4	31	110V
TTD-5	15.8” x 12” x 3.4” 110V/60Hz Tabletop Demagnetizer	15.8	12	3.4	42	110V

Handheld Demagnetizer

Part Number	Description	Length (IN)	Width (IN)	Height (IN)	Depth of Magnetic Field (IN)	Voltage	Weight (LBS)
HHDM-HD1	Handheld Demagnetizer	7.9	4.1	3.3	max. 0.79	110	4.2
HHDM-HD2	Handheld Demagnetizer	8.5	6.3	3.3	max. 1.57	110	4.85

Sheet Separators

Made in USA

MPI sheet separators are designed to improve productivity and employee safety in sheet handling operations. These magnets can also provide significant benefits in reducing costs by eliminating “doubles” when handling oily, sticky, or prefinished sheet stock in an automated stamping, forming, or blanking operation. Sheet separators utilize the basic laws of magnetic “like poles” repelling characteristics in their use and operation. By inducing “like” magnetic fields into a stack of steel sheets or plates, repelling forces are created from sheet to sheet, forcing them to separate from each other.

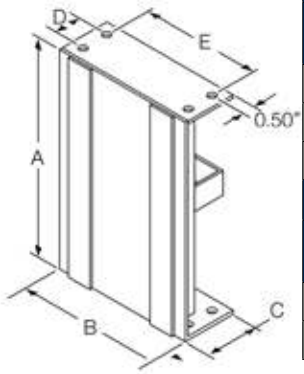
Model	Operation	Material	Cost	Installation
SS	Always on	Ceramic	•	Bolt to floor or pallet
STSS	Manual on/off	Rare Earth	••	Pallet pin
PAFM	Automated	Rare Earth	•••	Flexible (floor, pallet pin or robotic)

Reference specific datasheets for guides on proper model selection. Refer to www.mpimagnet.com for other available sizes.

Manual Sheet Separator (SS)

Permanent, always "on" design is the most economical solution and should be sized for the maximum height of the stack.

Sheet Sizes (in)	Sheet Metal Thickness			
	22 Gage	16 Gage	11 Gage	1/4" Plate
6x12	Use SS-600	Use SS-600	Use SS-800	Use SS-800
12x12	Use SS-600	Use SS-800	Use SS-800	Use SS-800
12x24	Use SS-600	Use SS-1000	Use SS-1000	Use SS-1200
24x24	Use SS-800	Use SS-1000	Use SS-1000	Use SS-1200
24x36	Use SS-800	Use SS-1200	Use SS-1200	Use SS-1200
36x36	Use SS-800	Use SS-1200	Use SS-1200	Use (2) SS-1200



600 Series Sheet Separator			800 Series Sheet Separator		
Part Number	Height (A) IN	Width (B) IN	Part Number	Height (A) IN	Width (B) IN
SS-605	5	6	SS-809	9	8
SS-609	9	6	SS-812	12	8
SS-612	12	6			
1000 Series Sheet Separator			**1200 Series Sheet Separator**		
Part Number	Height (A) IN	Width (B) IN	Part Number	Height (A) IN	Width (B) IN
SS-1009	9	10	SS-1209	9	12
SS-1012	12	10	SS-1212	12	12

Made in USA

Shown with optional bracket

Pneumatic Automated Fanner Magnet (PAFM)

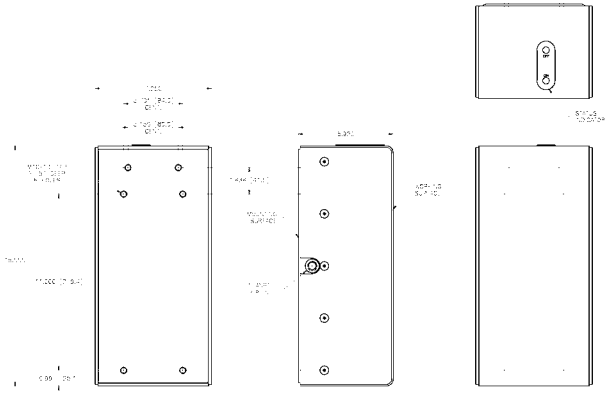
Automated fanner magnets are designed for high-volume, PLC-operated production lines. Unlike traditional sheet separators, an exclusive rack and pinion system rotates the magnet away from the unit face, totally eliminating any residual magnetic field and allowing for safer and more consistent movement of metal sheets.

Pneumatic automated fanner magnets utilize one of the basic laws of magnetics: like poles repel and opposites attract. By inducing “like” magnetic fields into a stack of steel sheets or plates, repelling forces are created from sheet to sheet, forcing them to separate. When a new stack is positioned, the magnet is turned on and sheeting fanning occurs, requiring no operator interface with the magnets.

The fanners are made from a powerful rare earth permanent magnet material with steel and stainless steel housing.

Key Features:

- Designed specifically for fully automated production lines
- Eliminates any residual magnetic field when off
- Increases productivity and efficiency
- Enables easier handling of oily, sticky, and/or polished sheets
- Powerful rare earth magnet for fanning large sheets
- Compact and lightweight design for simple mounting to end-of-arm tooling
- Pallet pin mounting bracket available
- Loss of air returns magnet to “safe” handling position, alleviating potential injury



Part Number	Magnet Area (IN)	Overall Width (IN)	Overall Height (A) (IN)
PAFM-725-100	10	7.25	10
PAFM-725-120	12	7.25	12
PAFM-725-140	14	7.25	14
PAFM-725-160	16	7.25	16
PAFM-725-180	18	7.25	18
PAFM-725-200	20	7.25	20
PAFM-725-220	22	7.25	22
PAFM-725-240	24	7.25	24

Pallet Pin Stack Tracker (STSS)

The Pallet Pin Stack Tracker (STSS) series is the safest manually operated sheet separator available. These units properly separate sheets while eliminating pinch points during operation. Simply slide the housing over the pin and attach the Stack Tracker to the side of the stack of blanks, near the top. As blanks are removed, the Stack Tracker will work its way to the bottom of the stack, fanning individual blanks as it moves.

The Stack Tracker significantly increases uptime by eliminating the possibility of double sheets when handling oily, sticky, or pre-finished blanks in automated stamping, forming, and shearing operations. A safety version with On/Off switch to eliminate unintended operation is also available.

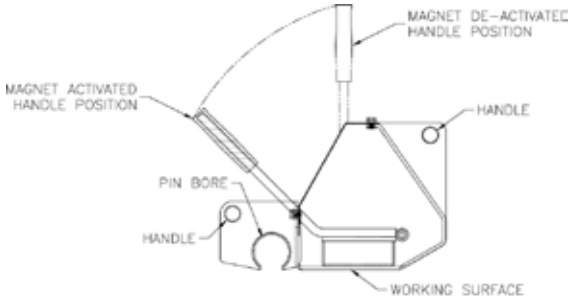
Key Features:

- Powerful rare earth magnet material
- 100% stainless steel housing
- Dual handle safety feature
- Lightweight, rugged design
- Automatic adjustment as stack decreases
- Safety cover around moving parts to eliminate pinched fingers

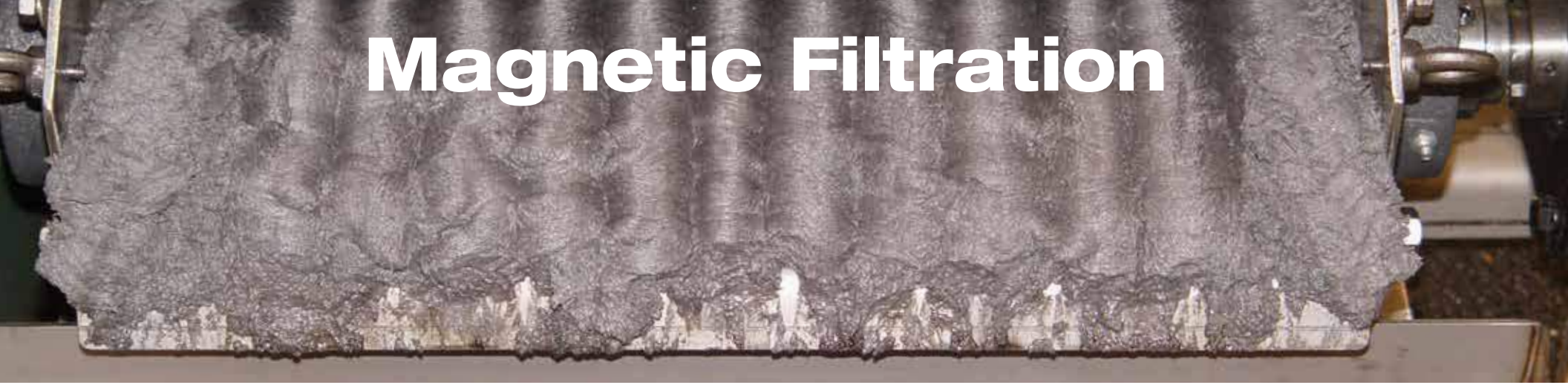
Optional Features:

- Special mounting available
- Replaceable wear strips
- Safety on/off switch

Stack Tracker - STSS Series				
Part Number	Height (IN)	Width (IN)	Pallet Pin Diameter (IN)	Offset (IN)
STSS-SAFETY-1.50-2.0-REN	5	5	1.5	2
STSS-SAFETY-1.50-FL-REN	5	5	1.5	Flush
STSS-SAFETY-1.75-2.0-REN	5	5	1.75	2
STSS-SAFETY-1.75-FL-REN	5	5	1.75	Flush
STSS-SAFETY-1.95-2.0-REN	5	5	1.95	2
STSS-SAFETY-1.95-FL-REN	5	5	1.95	Flush



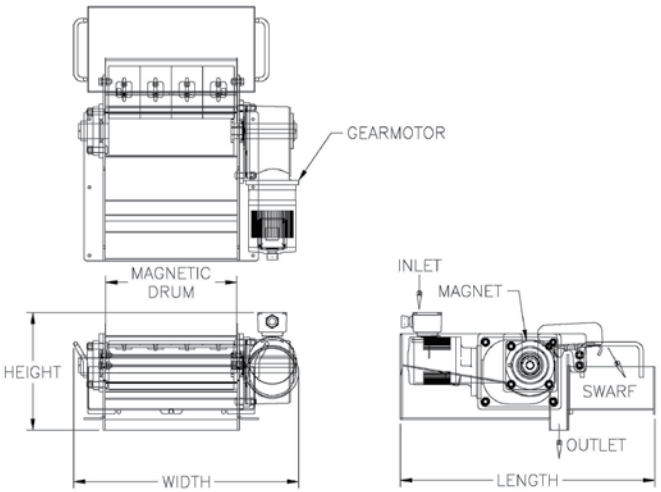
Made in USA



Magnetic Filtration

Coolant Cleaner

MPI's Coolant Cleaner is a continuous cleaning magnetic separator that removes ferrous material from the coolant flow and deposits it into a disposal bin. This CC-series cleaner is ideal for production runs of ferrous material on cutting and grinding machine tools and works with water based coolants or straight cutting oils. Both cost effective and durable, this separator extends the life cycle of machine tools and coolant. It provides increased productivity with less downtime for machine coolant replacement.



With simple, automatic cleaning, the powerful Ceramic 8 magnet drum sits partially submerged in the coolant flow so that all liquid comes into contact with the high intensity magnetic field. Ferrous contaminant attaches itself to the rotating drum, where it is then continuously cleaned by a profiled scraper. The contaminant is pushed along the scraper until it falls into a bin. As the contaminant is pushed along the scraper, it compresses and excess liquid drains back into the tank, leaving the solids almost dry.

Key Features:

- Unique magnetic drum that is fully energized along its width and diameter
- Automatic and continuously self-cleaning
- 120 VAC standard
- Optional Rare Earth Magnetic Roll
- CC-series separator can be integrated with other purifiers to provide a very efficient filtering system

Made in USA

Coolant Cleaner Specifications

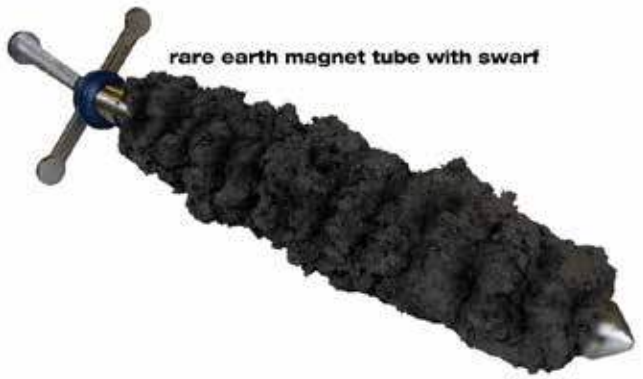
Model	Approx. Capacity/GPM				Magnetic Drum Size				Approx.	
	Water Soluble		Oil 100 SSU		Diameter		Width			
	Contamination		Contamination		IN	CM	IN	CM	LBS	KG
	Light	Heavy	Light	Heavy						
CC-06	20	15	15	10	4.625	11.75	6	15.25	65	29.5
CC-12	40	35	25	20	4.625	11.75	12	30.5	135	61.25
CC-18	65	50	40	30	4.625	11.75	18	45.75	175	79.25
CC-24	85	70	50	40	4.625	11.75	24	61	225	102

Contamination Scale: Light to Medium = approx. 1/8 lb per gallon
Medium to Heavy = approx. 1/8 lb to just under 1/2 lb per gallon

Filter Bag Magnet

Made in USA

Filter Bag Magnets (FBM) collect ferrous metal that would otherwise be collected in the bag filter. Installing a high-performance MPI rare earth filter bag magnet inside the bag filter significantly reduces the frequency required to clean and replace bag filters. This saves money and time. Implementing a magnetic bag filtration system allows the liquid to flow around the magnetic field and capture any ferrous particles in a magnetic trap. The magnetic tube filter is then removed, cleaned, and readied for reinsertion into the bag filter to be used again. The powerful magnet reduces the tramp metal that plugs and cuts filter bags.



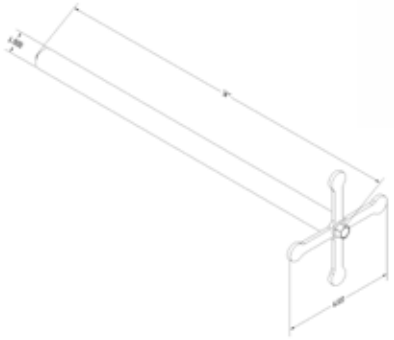
Key Features:

- High performance rare earth magnetic circuit generates over 10,000 gauss on product contact area for maximum tramp metal retention, significantly outperforming ceramic and alnico designs
- Liquid tight, fully welded design ensures no water ingress, which can damage the magnet
- Full length magnetic tube maximizes tramp metal retention
- Quality tested and certified to performance standard ordered prior to shipment (Certificate included with shipment)
- Heavy wall thickness tube for high durability
- Nonmetallic stripper for easy cleaning of magnetic tube
- Clover handle grip and centering device
- Multiple designs to fit every budget and performance requirement
- Industry leading lead time for delivery as short as 24 hours for custom sizes and configurations

Filter Bag Magnet Tube Performance				
Model	**1” Ceramic**	**1” REN**	**1” Hi-G**	**1” Thin Wall****
1/4” Ball Pull Values*	0.3 lbs	5.0 lbs	5.8 lbs	6.5 lbs
1/2” Ball Pull Values*	1.2 lbs	13.0 lbs	16.0 lbs	16.5 lbs
Gauss Value*	2,500	10,000	10,800	12,000
Tube Durability	● ● ●	● ● ●	● ● ●	●
Price	●	● ●	● ● ●	● ● ●

* Pull values are average on contact and gauss values are peak on contact.

** Always consult a magnet professional before selecting thin wall tubes. Thin wall tubes are not recommended for products with abrasive characteristics or in manual clean designs such as grates.



Filter Bag Magnet Selection Guide					
MODEL NUMBER	**FILTER SIZE**	**OVERALL LENGTH “A”**		**APPROX. WEIGHT**	
		IN	**MM**	**LBS**	**KG**
FBM-112-REN	12”	11.825	305	2.24	1.02
FBM-118-REN	18”	17.825	458	3.37	1.53
FBM-124-REN	24”	23.825	610	4.49	2.04

Made in USA

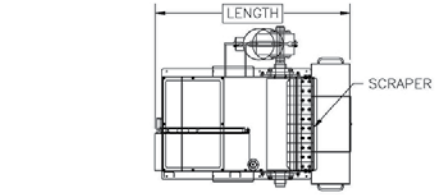
Eco-Flow

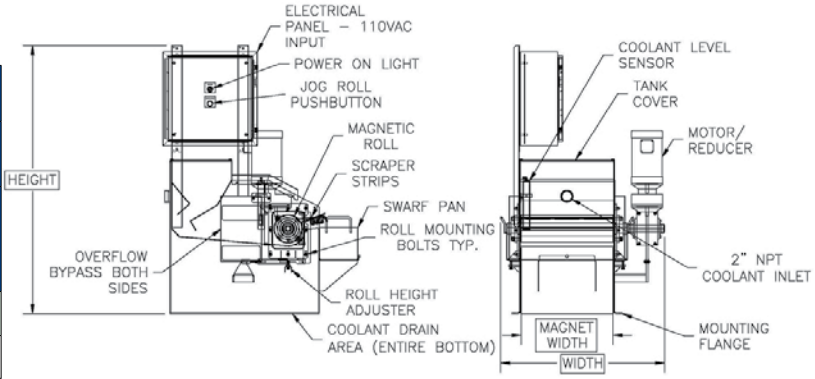
Eco-Flow provides true plug and play filtration. The fluid intake system keeps coolants calm, allowing contaminants to contact the roll at a low velocity for improved magnetic filtration. MPI's integrated, indexing magnetic roll never needs replacement. Eco-Flow's adjustable blades allow for maximum magnet cleaning and coolant recapture, eliminating the need for plastic squeegees. Eco-Flow also features an automatic coolant level sensor that monitors the level of incoming fluid to maximize filtration and avoid coolant overflow. There is also a bypass that eliminates potential spills in case of electrical or mechanical failure. Surrounding areas stay clean and potential accidents are prevented with Eco-Flow.

The Eco-Flow is a continuous cleaning magnetic separator that removes grinding swarf and other contaminants from coolants and deposits them directly into a disposal bin, eliminating the costs associated with collecting, transporting, and dumping waste materials. As swarf is removed, fluids are fed automatically back into the reservoir tank. An extremely dry swarf "cake" is produced. A drier cake means fewer messy, oily pools around machinery, and improved coolant recovery, reducing consumable costs. Magnetic technology is green, and substantially reduces both the need to buy costly consumables and the associated downtime required to change paper filters.

Key Features:

- System ships complete with magnetic roll, scraper system, fluid tank, inlet port (sized to specifications), and controls
- Plugs into a standard 110V outlet
- High intensity rare earth magnetic material traps contaminants
- Stainless steel construction
- Automatic and continuous self-cleaning
- Custom sizes and configurations available





Eco-Flow

Eco-Flow Specifications*

Model Number	GPM		Magnet Roll Width		Unit Length		Unit Height		Unit Width		Unit Weight	
	Water Based	Oil Based**	IN	CM	IN	CM	IN	CM	IN	CM	LBS	KG
Eco-Flow 7	29	15	7	17.8	41.2	104.6	56.7	144	21.3	54.1	500	227
Eco-Flow 11	46	23	11	27.9	41.2	104.6	56.7	144	25.3	64.3	550	250
Eco-Flow 19	80	40	19	48.3	41.2	104.6	56.7	144	33.3	84.6	600	272
Eco-Flow 38	160	80	38	96.5	41.2	104.6	56.7	144	52.3	132.8	650	295

*For highest performance separation, derate 20 - 25%. Rates shown are based on physical capacity.
Lower rates may be required, depending upon flow characteristics, volume of contaminants and efficiency desired.
**Up to 100 SSU.

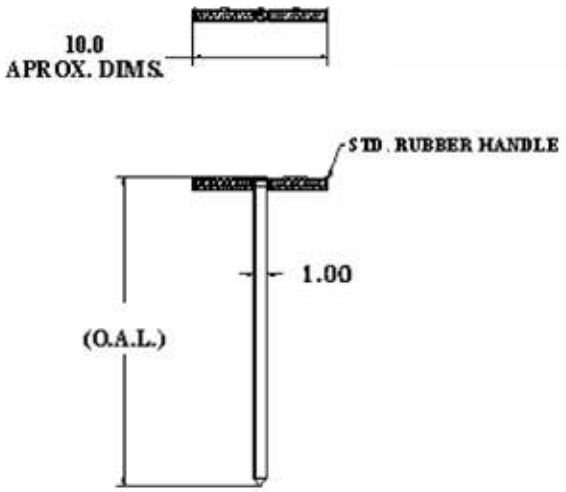
Magnetic Tube Probe

MPI Magnetic Tube Probes are used to test bulk-product containers for ferrous contamination prior to processing and to remove ferrous materials from product in hard-to-reach areas. Simply insert the probe into the product in several locations. Remove it slowly to check for ferrous particles on probe. They are easy to clean by wiping the probe with a clean rag.

Key Features:

- 304 Stainless Steel construction
- 1” diameter stainless steel tubing with 6” of magnet area at end of probe
- T-bar handle with rubber grips
- Permanent Ceramic 8 or Rare Earth magnet material

Made in USA



Magnetic Tube Probe Selection Guide		
Part Number	**Magnet Material**	**Overall Length (IN)**
MTP 124	Ceramic	24
MTP 124-REN	Rare Earth	24
MTP 136	Ceramic	36
MTP 136-REN	Rare Earth	36
MTP 148	Ceramic	48
MTP 148-REN	Rare Earth	48
MTP 160	Ceramic	60
MTP 160-REN	Rare Earth	60

MPI employees celebrate 40 years of business operations in 2021

Working With MPI

MPI Automation and Workholding products are sold exclusively through our select Industrial Distribution Network and supported by a nation-wide group of Independent Manufacturer's Representatives trained to help you select the right magnetic system for your application.

At MPI, we are always ready to work with you to select the right magnet for the job. We can help with additional specifications, drawings, and all available technical information. Supported by an extensive inventory, MPI will assist with your standard application or help design a custom magnetic system.

Magnets | Material Handling
Electronic Inspection | Service

MPI Headquarters
683 Town Center Drive
Highland, Michigan 48356

Customer Service
1.248.887.5600
info@mpimagnet.com

Website
www.mpimagnet.com
Live assistance available!

Working for You

MPI service programs are designed with the customer in mind. Each package is customized to address all major points of concern when maintaining metal control equipment.

MPI has an option for every customer need, requirement, and budget to make protecting your investment affordable and attainable.

CALL MPI
248.887.5600

Local MPI Representative: