

# LIFTING MAGNETS



Wide range of lifting magnets:

- PERMANENT MAGNET
- ELECTROPERMANENT
- OF BATTERY



# LIFTING MAGNETIC SYSTEMS

### **Presentation**

In order to expand the offer of magnetic lifting systems, SELTER is pleased to present a new range, completely different from elevators for industrial use. With this we manage to reach sectors of high demand that Until now we were not able to attend.

Finally we are pleased to be able to offer high capacity systems, with electropermanent magnetic technology, as well as elevators battery magnets and also for large surface pieces and little thickness.

All these systems complement our traditional range and make SELTER your magnetic equipment specialist for elevation. Our technical team is at your disposal to advise you and resolve your doubts about magnetic lifting.

Thank you for trusting SELTER, S.A.



# LIFTING MAGNETS

# LMN series

**MAGTER** LMN series lifting magnets are the essential ally for moving blocks and iron plates. Thanks to the ease of handling, they provide significant time savings in the handling of loads. The lever allows easy and quick actuation. In addition, the safety lock prevents accidental rotation while the load is under restraint. It is the ultimate solution for moving ferromagnetic materials efficiently, safely and reliably.

### **Applications:**

- . For flat and round pieces, thanks to the V-shaped poles.
- . In mechanical engineering, metal manufacturing, metal industries, shipbuilding, transportation companies or materials management. Advantages:
- . Absolutely safe lifting: with a safety factor of 3 (the lifting force is 3 times higher than the recommended lifting force).
- . It does not cause damage to the surface of the treball piece.
- . Activation ON/OFF using the manual lever.

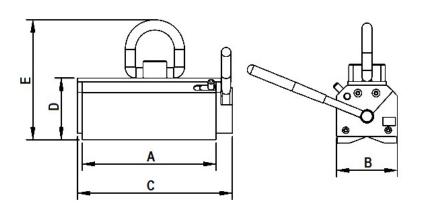
### Features:

- . Operation with both hands using manual lever and safety lock
- . Max. operating temperature 80°C
- . Manufactured with neodymium magnets, extremely strong and with lifelong magnets.
- . Compact and robust construction with a small weight.





Code	Model		Di	mensi	ions		Max. weight	Max. dim.	Max. weight	Ø minmax.	Thickness	Weight
		A mm	B mm	C mm	D mm	E mm	flat piece Kg	flat piece mm	round piece Kg	round piece mm	minoptimal mm	Kg
16.11.701	LMN-100	105	70	133	71	153	100	1250 x 600	45	40-100	4-10	4
16.11.703	LMN-300	181	90	214	87	170	300	2000 x 1000	125	40-160	6-15	10
16.11.705	LMN-500	255	90	288	87	170	500	2000 x 1500	215	60-200	8-15	15
16.11.710	LMN-1000	310	120	335	126	247	1000	3000 x 1500	450	80-350	10-25	36
16.11.720	LMN-2000	435	176	487	182	331	2000	3500 x 2000	900	120-400	15-30	110
16.11.730	LMN-3000	530	230	550	186	381	3000	3500 x 2000	1350	150-400	20-50	170
16.11.750	LMN-5000	570	370	614	321	552	5000	5000 x 3000	2250	200-450	25-60	475





# **BATTERY LIFTING MAGNETS**

# **EBEP Series**

**MAGTER** magnetic battery lifters result from the combination of two techniques: on the one hand, that of electropermanent elevators, that do not consume current during working time (they act as a permanent magnet) and the battery that provides the energy at the time of magnetize and demagnetize. The battery of these elevators is recharged simply connecting it to the network.

### **Applications:**

- . For flat and round pieces, thanks to the V poles.
- . In profile warehouses to lift ferrous loads, in centers of machining, oxycutting, plasma and in multiple situations, to help reduce work times.

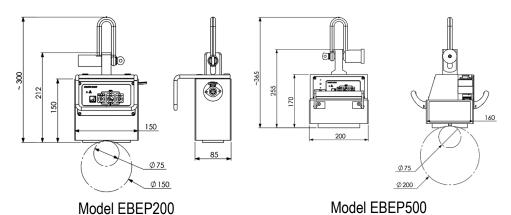
### Advantages:

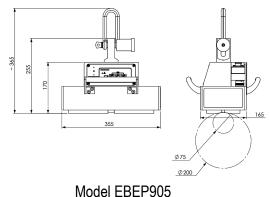
- . The battery does not consume power during lifting, only 1 second when magnetizing and 1 second when demagnetizing.
- . You can select between manual or automatic mode.
- . Very low energy consumption.
- . Visual and acoustic warning device for battery charge status.

### **Characteristics:**

- . Approximately 1,000 on/off cycles are possible with a battery charge.
- . Lithium battery, rechargeable in 2 hours
- . The EBEP200 model is activated manually by pressing a button
- . The EBEP500 and EBEP950 models can be activated manually, by pressing a button or automatically by seamless switching contact, located on the ring for the crane hook.







Code	Model	lel Dimensions Max			Max. Load	Max. dim.	Max. Load	Ø min-max. Thickness		Weight
		L	В	Н	flat piece	flat piece	round piece	round piece	minimum-optimal	
		mm	mm	mm	Kg	mm	Kg	mm	mm	Kg
16.11.722	EBEP200	150	85	150	200	115 x 50	50	75 - 150	4 - 20	10
16.11.725	EBEP500	200	160	170	500	145 x 125	200	75 - 200	4 - 20	26
16.11.729	EBEP950	355	165	950	950	320 x 130	400	75 - 200	4 - 20	41

# LIFTING MAGNET



# EBPE950B model

This lifting magnets adds the advantages of the EBPE series (battery-operated electropermanent) with the integrated crane scale. Like the EBPE-950 model, it has a lifting capacity of 950 Kg for flat pieces and 400 Kg for round pieces; but it has a built-in sensor that measures the weight of the piece, compares it with the capacity of the lift and shows on the screen whether the piece in question can be lifted. It takes into consideration the surface finish, thickness and type of material of the piece.

Automatic mode allows contactless switching. Each time the lifting magnet is placed and the crane eye is released, a switching process is generated and the lifting magnet is turned on or off. Together with the optionally available positioning bar, pieces can be picked up, guided and positioned with millimeter precision.



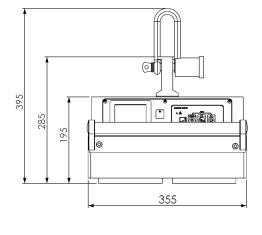
### **Characteristics:**

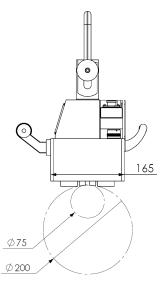
- . Visual and acoustic warning device for battery charge status.
- . Operating time approximately 1,000/500 cycles ON/OFF switching
- . The rechargeable battery (lithium ion) can be charged in about 2 hours from AC outlet

### Advantages:

- . Visual Load Display
- . No battery current flows during lifting, only a one second long current pulse is required to magnetize or demagnetize.
- . It can be switched manually using pushbuttons or automatically through a contact system.
- . 3 levels of clamping force for lifting materials from a thickness of 4 mm
- . Externally mounted replaceable and rechargeable battery case.
- . Optional: SB950 positioning bar, adjustable in the Z axis +/- 60°

Code Model		Dimensions	Max. Load	Max. dim.	Max. Load	Ø min-max.	Thickness	Weight
		L B H	flat piece	flat piece	round piece	round piece	minimum-optimal	
		mm mm mm	Kg	mm	Kg	mm	mm	Kg
16.11.729-100	EBEP950B	355 165 950	950	320 x 130	400	75 - 200	4 - 20	46







# **BATERY LIFTING MAGNETS**

# **EBEPS** series

MAGTER battery lifting magnets result from the combination of two techniques. On the one hand, the electropermanent lifters, which do not consume current during working time (they act as a permanent magnet) and the battery that provides energy at the time of magnetizing and demagnetizing. The battery of these lifts is recharged simply by connecting it to network.

### **Applications:**

- . For flat and round pieces, thanks to the V poles.
- . In profile warehouses to lift ferrous loads, in machining, oxycutting, plasma centers and in multiple situations, to help reduce working times.

### Advantages:

- . Magnetization and demagnetization of the workpiece is carried out automatically (automatic positioning)
- . Recommended lifting force with triple protection (safety device prevents the load from accidentally falling)
- . 4 levels of clamping force for lifting materials with a thickness of 6 mm. Optionally, it is possible to separate the stacked sheets using a remote control. It is also suitable for lifting material with rough or oily surfaces.
- . During working time the battery does not consume current, only during magnetization and demagnetization (electropermanent system).
- . It can be used in multi-shift operations, as approximately 300 switching operations are possible on a single battery charge.





Code	Model	Dimensions		Max. Load Max. dim.		Max. Load	Ø min-max.	Thickness	Weight	
		L	В	Н	flat piece	flat piece	round piece	round piece	minimum-opti	mal
		mm	mm	mm	Kg	mm	Kg	mm	mm	Kg
16.11.743	EBEPS3000	660	280	530	3000	590 x 200	1500	400	6 - 40	190
16.11.744	EBEPS5000	740	410	700	5000	622 x 290	2500	500	6 - 50	520
16.11.745	EBEPS10000	1060	500	600	10000	1060 x 500			6 - 70	715



# **ELECTROPERMANENT LIFTING MAGNETS**

# **EP** series

MAGTER EP series lifting magnets are based on electropermanent magnetism technology. These devices only use energy at the time of magnetization and demagnetization. During working time they do not consume energy.

### **Characteristics:**

- . 400 V, 50 Hz mains connection
- . Maximum operating temperature: 80 °C
- . Push-button or automatic switching option
- . Remote control option Model EP4000

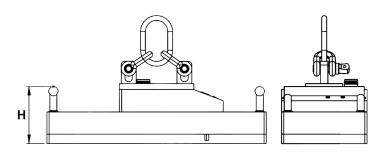
### **Applications:**

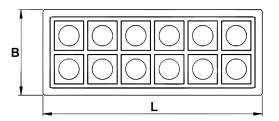
- . Maximum security, thanks to triple security technology
- . Ideal for carrying pieces in series
- 4 levels of adhesion to hold even thin sheets



Model EP4000

Code	Model	Dimensions			Max. load	Contact	Thickness of the piece	Weight
		L	В	Н	flat piece	area	minimum-optimal	
		mm	mm	mm	Kg	mm	mm	Kg
16.11.752	EP200	150	85	150	200	115 x 50	4 - 20	9
16.11.753	EP500	180	160	140	500	160 x 130	4 - 20	25
16.11.754	EP1000	355	165	170	1000	310 x 120	4 - 20	50
16.11.755	EP2500	590	230	155	2500	590 x 230	6 - 15	92
16.11.756	EP4000	860	230	165	4000	860 x 230	6 - 15	140
16.11.756	EP5000	1000	280	165	5000	1000 x 280	6 - 15	200







# **ELECTROPERMANENT LIFTING MAGNETS**

# **EPE** series

MAGTER EPE series magnetic lifters are based on electropermanent magnetism technology. These devices only use energy when magnetizing and demagnetizing. During working time they do not consume energy. The EPE series is ideal for lifting large raw loads such as blocks or plates with large air gaps.

### **Characteristics:**

- . Safety coefficient: 3
- . Maximum security, thanks to triple security technology
- . 400 V, 50 Hz mains connection
- . Maximum operating temperature: 80 °C
- . Integrated control with light and acoustic indicators
- . 4 square poles
- . Remote control



Model EPE 15000

Code	Model	Dimensions L B		Max. load flat piece	Minimum-Optimal Thickness of the piece	Weight	
		mm	mm	Kg	mm	Kg	
16.11.761	EPE10000	880	531	10000	6 - 30	950	
16.11.762	EPE15000	860	563	15000	6 - 40	1300	
16.11.763	EPE20000	980	577	20000	6 - 40	1750	
16.11.764	EPE25000	1100	637	25000	6 - 80	2150	
16.11.765	EPE30000	1147	625	30000	6 - 80	2700	





# **ELECTROPERMANENT LIFTING MAGNETS**

# **EP-modular series**

MAGTER EP-modular series lifting magnets are a combination of EP electropermanent magnetic lifter modules + crossbars. EP magnetic lifters are based on electropermanent magnetism technology. These devices only use energy when magnetizing and demagnetizing. During working time they do not consume energy.

### Advantages:

- . Safe separation of sheets in stacks from 5 mm thick.
- . Initial lift occurs at 70% and final lift occurs at 100% (indicated by a visual and acoustic warning device).
- . An additional safety device prevents the load from accidentally falling.
- . Low energy consumption magnetic control through preselection of sheet thickness, which determines the force level mooring.
- . Automatic operation selection with remote control.
- . Low maintenance

### Features and options:

- . The magnetization and demagnetization of each of the EP modules is carried out automatically.
- . Possibility of activating the EP modules separately.
- . In case of irregular sheets, each of the EP modules can be equipped with leveling springs.
- . Integration of load measurement cells and magnetic flow sensors.







### INFORMATION REQUIRED TO OFFER A LIFTING MAGNET

**MAXIMUM** 

C	US1		ME	R:
	uoi	u	VII	Π.

Company name:

Contact person:

Address:

C.P. and population:

Phone: e-mail:

### MAGNETIC LIFT EQUIPMENT SPECIFICATIONS

Type of material: BLOCK SHEET
Material quality: IRON STEEL
Surface condition: FORGED LAMINATE
Material thickness: MINIMUM MAXIMUM
Material width: MINIMUM MAXIMUM

Material Length: MINIMUM

Maximum load weight: Kg

Overhead crane capacity: Kg

Bridge crane height: m

Work environment: INTERIOR EXTERIOR SALINE Temp. ambient: MINIMUM MAXIMUM Temp. material: MINIMUM MAXIMUM Power: BATTERY ELECTRICAL

Winder: YES NO

Hook type: Number of hooks

Distance between hooks: MINIMUM MAXIMUM

Observations:

Attach a drawing or diagram of your installation, if possible.



# Selter

SELTER, S.A.
Montnegre, 52
17006 Girona
Spain

Tel. 972 233 030 selter@selter.es

www.selter.es