



# LIFT MAGNET

## Guide Manual

**NOTE: Please read the Operating Instructions carefully before using this Product. If any doubt remains, please contact our company for further details.**



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# SAFETY INSTRUCTIONS

## GENERAL SAFETY RULES

Danger always exists when loads are transported by lifting devices, especially when the equipment is not being used properly or is poorly maintained. Because accidents and severe bodily injury or death can result, special safety precautions apply to the operation, inspection and maintenance of all lift magnets.

Following these simple rules can help to avoid lifting accidents

### Safety Rules

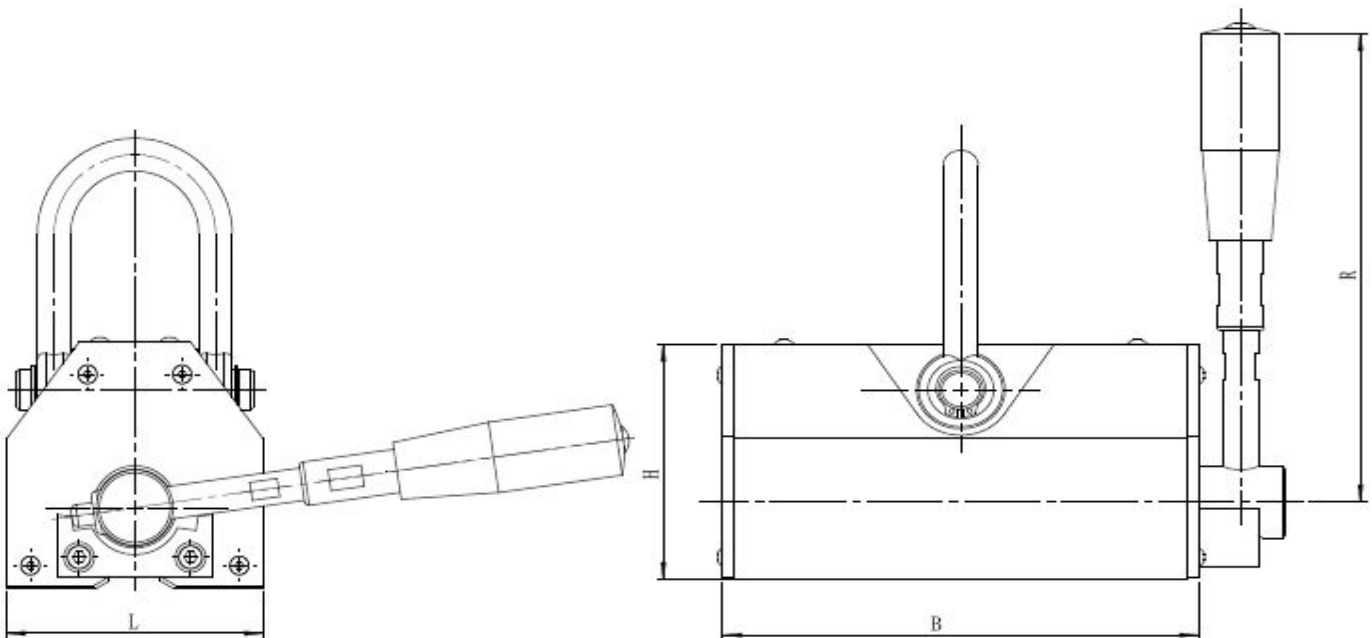
- DO NOT** lift people or loads with people on them.
- DO NOT** leave suspended loads unattended.
- DO NOT** operate a lift magnet that is missing parts, damaged or malfunctioning.
- DO NOT** remove or obscure product labeling.
- DO NOT** lift loads higher than necessary or over people.
- DO NOT** center the lift magnet by pounding on the sides of the lift with a hammer or other blunt instrument.
- DO NOT** hoist the load before locking the handle in the "ON" position (if applicable) or making sure the release handle is not interfering with the load.
- DO NOT** hoist a load weighing more than the lift's stated capacity.
- DO NOT** hoist a load if it is flexing and/or unbalanced. Magnet peel-off may occur and the load may fall.
- DO NOT** disengage the lift magnet before firmly setting down the load on the floor or support and making sure the load is steadied.
  
- ALWAYS** use the entire lift pole surface.
- ALWAYS** keep contact pole areas perfectly flat at and parallel on the surface of the load.
- ALWAYS** keep contact pole areas and surface of the load clean and free of debris.
- ALWAYS** protect pole surfaces from rust after use by treating with some oil.
- ALWAYS** check the magnetic poles to make sure they are flat at and not damaged from use.
- ALWAYS** store magnet in a dry environment.

### CONSTRUCTION AND SPECIFICATION

**Construction:** These compact, Power rare earth lifting magnets are permanent magnets that have on/off functionality. On and off the magnetic path is controlled by turning the handle. There is a clevis on the top of Permanent Magnetic lifter for hoisting, and a V slot on the bottom for holding cylindrical component firmly.

### Specifications

Model	Rated lifting strength (kgf)	Cylindrical lifting strength (kgf)	Max pull-off strength (kgf)	L	B	H	R	Operation temperature (°C)	Dead weight (kg)
PML100	100	50	350	64	92	64	126	<80	3
PML300	300	150	1050	92	162	91	155	<80	10
PML600	600	300	2100	122	232	117	196	<80	24
PML1000	1000	500	3500	176	258	163	285	<80	50
PML2000	2000	1000	7000	234	378	212	426	<80	125
PML3000	3000	1200	10500	255	525	256	735	<80	218
PML6000	6000	-	21000	432	695	280	830	<80	430

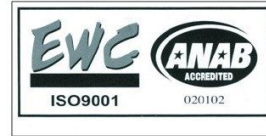


### OPERATION

1. Check lifter for missing parts, loose bolts or damage **firstly**. Tighten where necessary or contact the manufacturer or supplier.
2. Clean area where lifter will touch and make sure the poles are in full contact with the load. Be careful to make sure that the load to be lifted is within the prescribed range of the lift magnet's holding capabilities. Check the name plate on the lifter or the performance sheet to make sure your load is within this range.
3. To engage, pull handle grip upward and rotate the lever to the magnetized "+" or "ON" position, then release the grip. Make sure the lever system is in its lever-stop position.
4. Move the load observing applicable standards for safely handling any suspended load.

**NO ONE SHOULD BE IN THE OPERATING AREA.**

**NEVER STAND UNDER A LOAD BEING LIFTED OR LIFT OVER ANY PEOPLE.**



**ALWAYS USE EXTRA CAUTION.**

**ONLY USE ON MATERIAL THAT DOES NOT FLEX OR BEND.**

5. Set the load on the floor or support before releasing it, being careful that the load is perfectly settled on the floor or support and that the support is adequate for the load.
6. When turning OFF the lifter, be sure to hold the lever as firmly as possible to safely release the load. Once you have a firm grasp on the lever pull up on the handle grip and rotate the lever to the “-” or “OFF “position. The lifter is now in the neutral condition, and it can be taken away from the load.

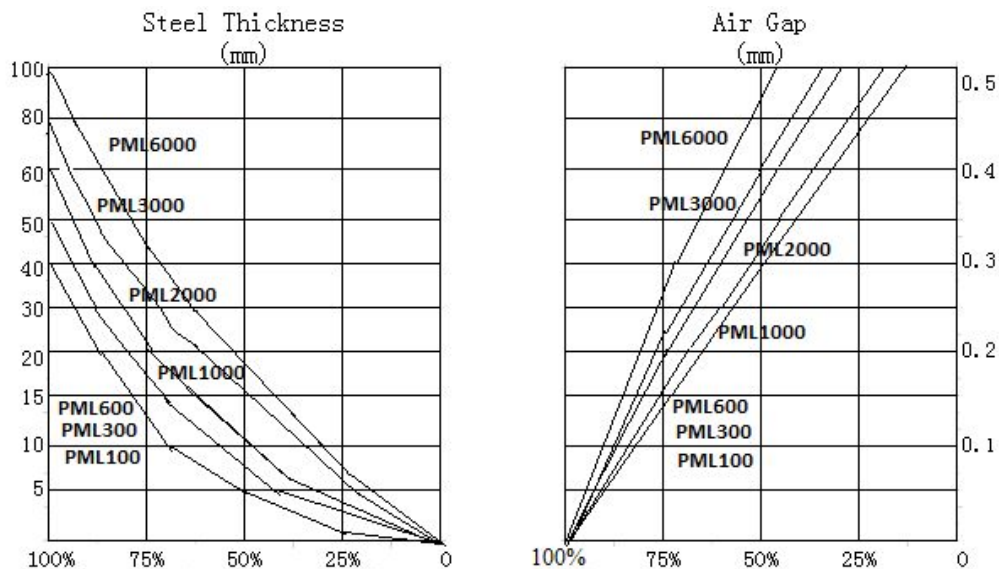
**ATTENTION**

1. Avoid operating in the high temperature, or high humidity, or acid, or alkaline environment, otherwise, lifter may be corroded.
2. Operators must be well trained first, since wrong act may cause accidents.
3. During operation, transportation and storage, bumping should be avoided, or may affect the lifting strength of the lifter and shorten the life time of it.
4. During operation, transportation and storage, lifter should be kept away from radioactive materials, or may affect the lifting strength.
5. The lifter only can lift one load each time.

**Main factors which influence the lifting capacity of Permanent Magnetic Lifter.**

**1. Influenced by thickness and surface quality of the component.**

Before operation, it is necessary to find out the percentage of the steel thickness-lifting capacity according to the load and capacity curve. If its surface roughness Ra is less than 6.3 um, the lifter surface gap will not exist, the lifting capacity will be 100%. If the surface roughness Ra is above 6.3 um or even worse, the lifter surface gap should be estimated. Find out the percentage that lifting capacity of the lifter may reach from the air gap-lifting capacity curve shown in the performance chart. Combine these two factors and calculating the lifting capacity that the lifter may reach. The curves are on the two sides of lifter.





## **2. Influenced by the composition of steel component.**

After measurement, if low-carbon steel component is regarded as a reference and the coefficient of lifting capacity is fixed: the coefficient for medium-carbon steel is 0.95; the coefficient for high-carbon steel is 0.90; the coefficient for low-alloy steel is 0.75, and the coefficient for cast iron is 0.50.

## **MAGNET MAINTENANCE AND CARE**

1. While carrying and using permanent magnetic lifter beware of the bumping and roughness of surface. So as not to influence its property and life-span.
2. After using, the lifter's pole face had better be protected by anti-rust oil, and please remove the anti-rust oil first before using.
3. Always store the magnet in a non-conductive, dry environment.
4. Check the lifter for missing parts, loose bolts or damage before using. Tighten where necessary or contact the manufacturer or supplier.
5. Please read the operating instruction carefully and know its property before using this lifter to avoid accident.
6. Maintenance must be strictly accordingly to the instruction by the professional authorized technical person.
7. Must test the lifting strength every year and check the safety of all the components in order to ensure its good performance.
8. During maintaining, if any parts need replacement, only spare parts from the manufacturer must be used.

## **WARRANTY**

All New Products are warranted to be free from defects in material and workmanship for the periods specified below for the original purchaser only.

Any Modifications To The Magnet, Handle or Lift Lug Voids The Warranty.

All Products will be covered by the exclusive limited warranty for 365 days from the date of shipment unless otherwise specifically stated in writing.

The expense of freight to and from the repair site will be the responsibility of the purchaser.