

Safety Through Power



A wide choice of Quality



MaxX 125



MaxX 250



MaxX 500



MaxX 1000

MaxX 1500



The innovative technology concept and the superior performance make MaxX the absolute reference in the field of magnetic lifting of ferrous loads.

MaxX 250

S TECHOMMONET

Powerful, compact, safe, reliable and competitive are the key factors of the MaxX line's success all over the world.

MaxX lifters are the ideal solution for handling a large variety of work pieces, from flats to rounds, from finished to rough, with easy and ergonomic operation in total safety. The operating costs are near zero, efficiency and productivity are dramatically increased and return on investment is extremely quick.

The handy and practical use of the MaxX lifters come in connection with their compact size and mini me weight that optimize space and crane capacity.

A wide range of models are available with capacities from 125 Kg. (275 lbs) up to 2000 Kg. (4450 lbs) and with different versions for loads with regular and reduced thicknesses.

MaxX 2000





The best expression of power

Through a qualitative selection of top grade energy magnets and further optimization of the tolerances between the stator and the rotor, it is possible to achieve a "Plus" for the model MaxX 250 a MaxX 500.

With the same size and weight, these models will give 20% more performance thus being labelled MaxX 300 and MaxX 600 "Energy version".



Greater flexibility with thin gage loads

MaxX TG was conceived to meet the demand for handling thinner steel loads in a safe and efficient way.

The special design of the polar surface together with the proper balancing of the magnetic masses located in the stator and in the rotor, allows it to get the magnetic flux concentrated in a shorter distance.

The rotation of the handle remains easy while keeping the high characteristics of uniform magnetic strength all over the contact area.



MaxX TG makes it possible to de-stack plates starting from a .2" thickness using 2 lifters with MFB beam.

Lifters



The ultimate generation

The most practical, safe and economical way to handle ferrous loads.

Hundreds of thousands of units installed all over the world is the confirmation of the great value given in many industrial sectors, including:

- tool and die makers
- machinery builders
- cutting and metal forming workshops
- steel distribution centers
- shipyards
- foundries and steel plants
- steel construction and fabrication
- warehousing and transportation

and in general for the needs of all modern industries, to enhance productivity for a sharp competitive edge.

A single operator can handle the load which is always anchored and lifted from the top without deformation or damage with optimal use of the available work space, streamlining working process and improving safety conditions for men and equipment.









MaxX 125, The smallest, the most practical

The compact size allows the MaxX 125 to be used in very narrow spaces with limited capacity hoist systems. A higher level of flexibility is given by the rotating hook being standard equipment.







Safety and simplicity up front

The activation and deactivation phases

With the simple rotation of the lever the lifter is being activated and deactivated. During the MAG phase the lever is being firmly blocked by a mechanical safety device preventing any possible accidental deactivation.

The simplicity of a single movement for a constant and predictable result

DEMAG





The locking device is simple and clearly visible to the operator.

MAG



Activation phase with a smooth fluid movement of the lever.



MaxX warns you of possible dangers

The high-energy developed by the permanent magnets and the high concentration of magnetic flux generated exclusively in the polar area, without flux dispersions, enable the operator to notice when the clamping conditions are not optimal.

In fact in this case the movement of the lever becomes irregular and quite difficult. The operator will be ok to seek for a more suitable positioning of the lifter perceiving immediately a more fluid motion without effort of the lever during the activation phase and thus achieving safer operative conditions.

Exclusive technology for an intercative safety





ATS

With a simple touch all the information on a digital display

The model MaxX 1000 and MaxX 2000 can be supplied with the new integrated and patented Auto Test System, ATS.

The ATS device is able to check the force generated by the MaxX lifter on the specific load and then compare it with the weight of the same determined by a load cell built into the lifting hook.

Whenever the force generated by the lifter does not exceed at least 2 time the weight of the load the ATS system gives a light and a sound signal to warn the operator to stop the undertaken handling operation.

The digital display will show the relevant values in order so the operator can get all information to proceed with a safe handling operation.



MaxX 1000 ATS

- verifying:
- the force generated by the lifter on the specific load
- the weight of the load to be lifted.

High autonomy

ATS is powered by standard rechargeable AA batteries.

Automatic Stand-by: after a few seconds of inactivity, the system shuts down automatically.

The autonomy will be ensured for several thousand activation cycles.



With the ATS system activated the capacity of the lifter and the weight of the load to be handled are compared at any handling operation.

Power under control

The force generated by the lifter is in direct relation with the characteristics of the load to be handled. Limited or irregular contact surface, rust, paint, generate air gap with consequent partial dispersion of the magnetic flux. ATS checks the force either related to the morphology of the load and the typology of the material.

Both models can be used in the traditional way with the standard safety factor 3 or as an alternative after actuating the ATS system making a responsible handling of loads having higher weight taking advantage of the safety factor 2 fixed for the ATS alarm.





A revolutionary patent

The MaxX series is born from an innovative design concept, the result of long and extensive experience of Tecnomagnete in the development and manufacturing of permanent electro magnetic systems for work holding and heavy duty lifting. The key elements of the MaxX lifter, i.e. the stator and the rotor, are manufactured with a solid block construction without any welding or assembling screws. This will grant high constant performances and a high level of durability and reliability over the time.

Concentrated power

The 'neutral crown' circuit, basic patent of all Tecnomagnete products, allows the channeling of the magnetic flow through the polar area only, i.e. where the power is needed ensuring a steady and optimal performance with a total lack of magnetic dispersion that prevents undesired attraction from adjacent loads.

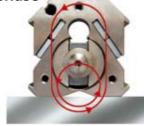
Reliability:

The cycles occur with the simple rotation of the lever, without effort.

The only moving part, the rotor, has its fulcrum on ball bearings and doesn't develop any physical contact during rotation.



Mag phase 🍃



In the activation (MAG) and deactivation (DEMAG) phases the rotor is rotated through the appropriate lever 125 ° allowing the reversal of magnets polarity placed inside and changing the Demag phase

direction of the magnetic flux. The load is held only by the constant force of permanent magnets and the steel mono-block lifter structure. **Total Safety!**



Safe power: High-energy permanent magnets ensure great concentrated and constant power for an indefinite period. The 1:3 safety factor of the recommended load to the testing force ensures optimal working conditions even with substantial operating air gaps.

Compact and Robust: The incredible ratio

between power and weight is given by the original double magnets circuit and by the very tight internal tolerances related to the mono block construction.



Safety Through Power

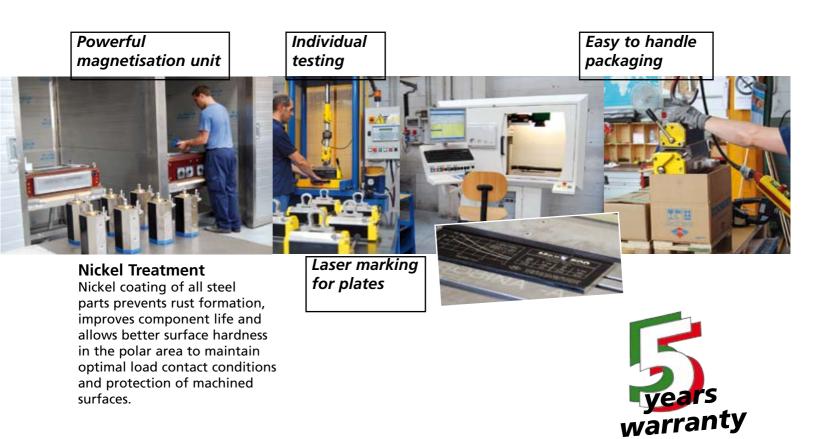
SUD ISO 9001

An advanced manufacturing process

The mono-block construction has allowed us to simplify the manufacturing process with less manpower input and with streamlined production flows.

Dedicated high power magnetisation units have been developed to polarize the permanent magnets in a uniform way when the lifter is fully assembled for a perfect balancing of the magnetic flux. Sophisticated electronic instruments are in use for a constant inspection of the high quality of the permanent magnets.

All MaxX lifters are tested one by one in order to ascertain that all products distinctive characteristics are met and to certify all operative parameters under the most strict international norms. Project innovation, material selection, state of the art manufacturing process, powerful and reliable product with no maintenance need, convenience in price, have decreed the great international success making MaxX the most sold lifter all over the world.

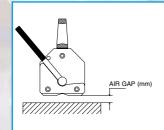




A model for every demand

Safety factor 3

You cannot play with safety. Each lifter is tested to certify the force to be 3 times compared to the Suggested Load Weight (SLW). That means a MaxX 250, with SLW 250 Kg.(550 lbs) generates a force of at least 750 daN.

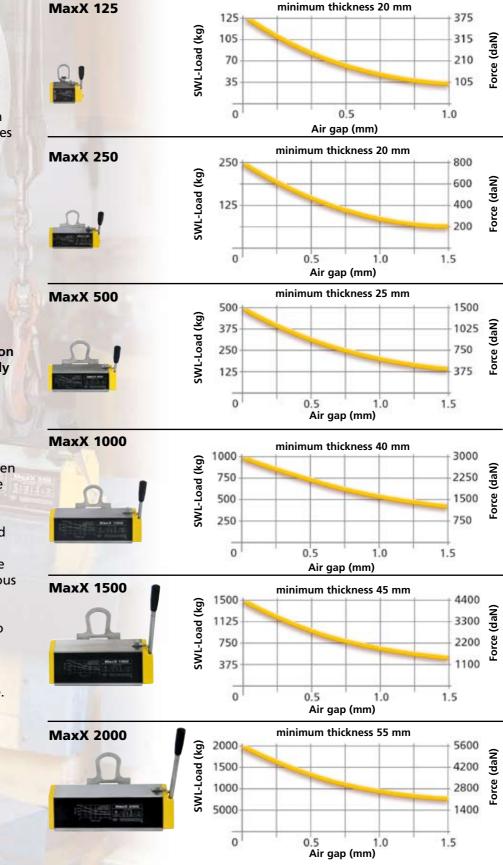


Pull/Air gap curves on common Fe 370B steel poles completely covered

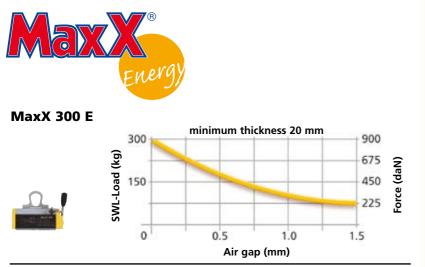
The behaviour with irregular loads -called "high air gaps" clarifies the difference between MaxX and other lifters on the market.

Air gap means the loss of contact between the load and the magnet, usually caused by irregular surfaces or by the presence of dirt / paint / ferrous residue on the load.

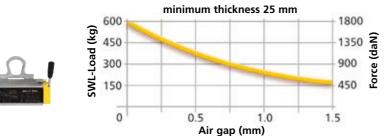
MaxX allows the possibility to operate in total safety with different typologies of load, in connection with its highly performing pull/air gap curve.







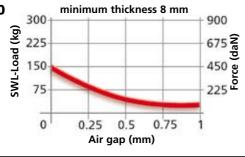




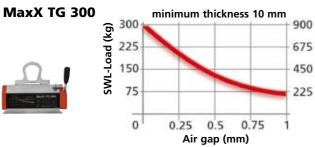


MaxX TG 150





Force (daN)



For plates



Model	SLW-Load	Thick	Length
	max	min.	max
	lbs	inch	inch
MaxX 125	275	.78	39.3
MaxX 250	550	.78	59
MaxX 500	1100	.98	78.7
MaxX 1000	2200	1.52	118
MaxX 1500	3300	1.77	118
MaxX 2000	4400	2.16	118
MaxX 300 E	660	.78	59
MaxX 600 E	1320	.98	78.7
MaxX TG 150	330	.31	59.0
MaxX TG 300	660	.39	78.7

For rounds



Model	SLW-Load max Ibs	Thick min. inch	Length max inch	Ø max inch
MaxX 125	110	.39	39.3	11.8
MaxX 250	220	.39	59	11.8
MaxX 500	440	.59	78.7	15.7
MaxX 1000	880	.98	118	17.7
MaxX 1500	1320	1.18	118	19.6
MaxX 2000	1760	1.37	118	23.6
MaxX 300 E	330	.39	59	11.8
MaxX 600 E	550	.59	78.7	15.7
MaxX TG 150	132	.31	59	9.45
<u>MaxX TG 300</u>	264	.39	78.7	11.42



Best performances with the suitable load

All magnetic performances are directly related to the physical and morphological conditions of the load to be clamped. In addition to the air gaps, other key issues are related to the thickness of the load, to the type of the material and to the temperature of the load.

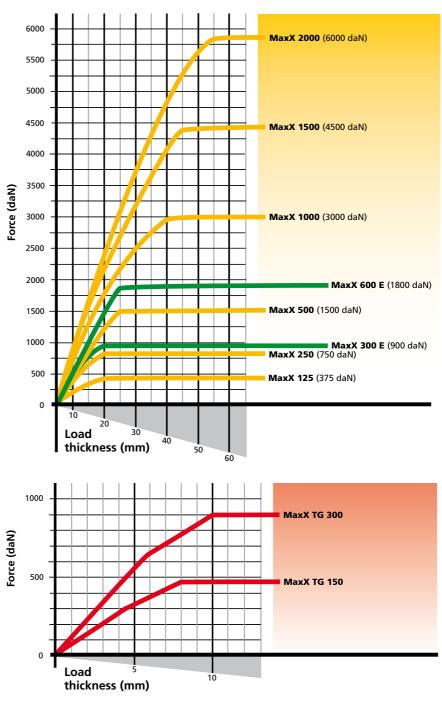
Thickness of the load As a general rule the greater the force released by the magnet, the greater the thickness needed to concentrate 100% of the magnetic flux.



Type of the material Higher is the concentration of carbon, lower is the magnetic force induced on the load.

Temperature

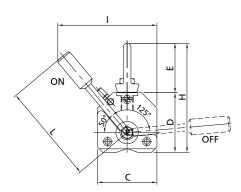
All declared performances are granted up to 80 C° (176 F) on the load contact surface.

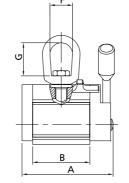


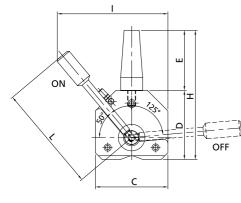
Force to material 120% 100% 80% 60% 40% 20% 0%. Medium alloyed Alloyed Common Cast steel steel steel iron

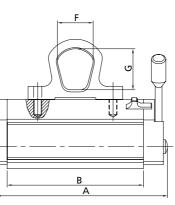
Force to thickness

Size, weights and dimensions

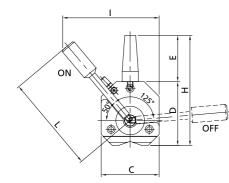


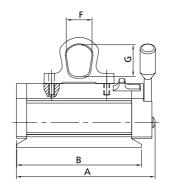






Model	Weig	ht		D	imen	sions	(inch	es)			
	lbs.	А	В	с	D	Е	F	G	н	Ι	L
MaxX 125	8	4.75	3	3	3	2.5	1.18	1.75	5.7	5	5.3
MaxX 250	13	7.5	5.5	3	3	2.5	1.37	1.7	5.5	5	5.3
MaxX 500	33	9.8	7.8	4	4	3.5	2	2.36	7.5	6.5	6.7
MaxX 1000	79	13.5	11	5.25	5	3.5	2	2.36	8.5	8.9	9.5
MaxX 1500	145	15	12.5	6.5	6.75	4.8	2.5	3.4	11.5	13	14.8
MaxX 2000	176	18	15.25	6.5	6.75	4.8	2.5	3.4	11.5	13	14.8
MaxX 300 E	13	7.5	5.5	3	3	2.5	1.37	1.7	5.5	5	5.3
MaxX 600 E	33	9.8	7.8	4	4	3.5	2	2.36	7.5	6.5	6.7
MaxX TG 150	13	7.5	6.7	3	3	2.5	1.37	1.7	6	5	5.3
MaxX TG 300	35	9.8	9	4	4	3.5	2	2.36	7.5	6.5	6.7







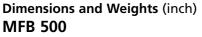


Dedicated tools

To get the best performance

Tecnomagnete suggests a line of devices for MaxX lifters to increase the flexibility of use in many applications for horizontal and vertical handling.

Their solid block construction make them very sturdy and reliable over the time with no maintenance.



A (inch)	66.14	
B (inch)	11.8	
C (inch)	5.1	
D (inch)	.59	
Weight (lbs)	81	



MFB MaxX Fixed Beam

The MFB beam allows the perfect coupling of MaxX lifters, allowing the handling of big size loads with horizontal operation.

MFB is available in MFB500 for load up to 500 Kg. (1110 lbs) and MFB2000 for load up to 2000 Kg. (4450 lbs) versions, adaptable to all types of MaxX.

The distance of the 2 lifting hooks, included in the standard specification, can be easily changed using the 5 pre-arranged positioning slots.

MFB 2000

74.8
16.3
6.3
.70
165

Technical Characteristics / load capacity MFB 500

		Plates		Rou	nds
in combination with:	SLW-Load (Ibs)	Max Length (inch)	Max Width (inch)	SLW-Load (lbs)	Max Length (inch)
2 MaxX 250	880	118	59	440	118
2 MaxX 300 E	1100	118	59	440	118
2 MaxX TG 150	440	118	59	220	118
2 MaxX TG 300	1100	118	59	550	118

MFB 2000

	Plates		Rounds		
in combination with:	SLW-Load (lbs)	Max Length (inch)	Max Width (inch)	SLW-Load (lbs)	Max Length (inch)
2 MaxX 500	1760	118	59	880	118
2 MaxX 1000	3300	118	59	1650	118
2 MaxX 1500	4400	118	59	2200	118
2 MaxX 2000	4400	118	59	2200	118
2 MaxX 600 E	1980	118	59	1100	118









MVS MaxX Vertical System

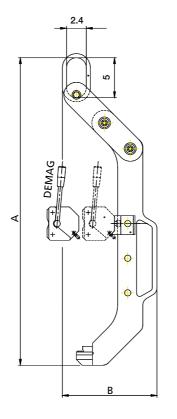
MVS system is designed for the vertical handling of steel blocks.

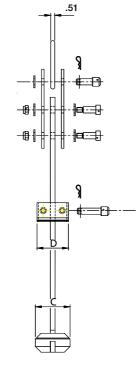
The typical application is loading /unloading a workpiece on a horizontal spindle milling machine.

Using simple stalls its possible to fix the workpiece to the magnetic chuck from one side to other one, so as to work both faces.

MVS is easily adaptable to workpieces of different sizes, changing the position of locking pins.

MVS is available for MaxX 250/500/1000.





Dimensions and Weights

Model	MVS 250	MVS 500	MVS 1000
A (inch)	31.6	38.4	42.3
B (inch)	10.43	11.8	13.07
C (inch)	4.3	5.5	5.5
D (inch)	3.9	6.3	6.3
Weight (lbs)	220	39.6	41.8

Technical Characteristics

Model	MVS 250	MVS 500	MVS 1000
Load Max (lbs)	396	770	1540
Max length plate (inch)	31.5	39.4	39.4
Max height plate (inch)	21.65	27.5	31.5



DEMAG

Here is a strong statement: Tecnomagnete has revolutionized the world of work holding! Do you want a stronger one? The QuadSystem!

This permanent electro magnetic system generates a concentrated and predetermined force that is highly effective to clamp steel parts on machine tools, moulds for injection molding and dies for metal stamping machines, and the handling of ferrous loads.

We've believed in the force of our QuadSystem patent and many companies have believed in this powerful innovative technology. The large variety of applications of over 100,000 systems sold world wide gave all our customers a sharp competitive edge with safety and flexibility.

Nowadays, with the global network of our subsidiaries and commercial partners we are at your disposal to show you state of the art technical solutions for all applications and increase your success. *Tecnomagnete: all the magnetism of the leader.*

www.tecnomagnete.com



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