



Manual for HX Magnetic Transporter

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HX Magnetic Transporter

General safety regulations

The following safety instructions must be observed in order to ensure safe and accident-free working with magnetic transporters.

As a general rule, only those employees may operate magnetic transporters who

- are trained in handling magnetic transporters
- are familiar with the relevant accident prevention regulations
- have read and understood our operating instructions and safety regulations

The operator is responsible for observing the safety regulations and for the technical condition of the magnetic transporter.

We recommend appointing a responsible employee (expert) who is entrusted with this task, monitor the condition and safe handling of the magnetic transporter.

Recommended use

Lifting sheets from stacks, pulling sheets horizontally from shelves and manually transporting flat parts made of magnetizable steel is made considerably easier when magnetic transporters enable gripping and secure holding during transport. We recommend the HX for clearing cutting tables, pulling parts e.g. from the saw, positioning parts in welding fixtures, guiding workpieces on the crane, lifting parts out of boxes.

The magnetic transporter serves as an “extra hand” and thus contributes to safety. Handling is extremely simple: The magnetic transporter is placed on the workpiece and switched on (press the handle down and turn to ON), and it can be lifted, carried or pulled from the stack immediately. The magnetic transporter is released by pressing down and turning the lever to OFF.

Model	Art. Nr.	Dim. (mm)		WLL* (kg)	from material thickness (mm)	Stackable from sheet thickness (mm)	Weight (kg)
		H	Ø				
HX-30 Magnetic Transporter	1108 030	175	62	30	1	2,5	1,5
HX-60 Magnetic Transporter	1108 060	175	78	60	2	4	2
HX-120 Magnetic Transporter	1108 120	188	98	120	3	5	3,5
*Safety factor 2.5 for manual operation							

Operating manual

Before using the magnetic transporter

- The magnetic transporter must be subjected to a safety check before each use: The contact surface must be clean, smooth and free of damage. Adhering dirt must be removed (recommendation: remove dirt with a small, hard brush, blow off with compressed air...).
- To achieve the full holding force, the load to be transported must be smooth and free of dirt, swarf, scale, paint, etc. on the contact surface of the magnetic conveyor. Loose dirt and swarf must be removed. This is preferably done by wiping with a hand brush or compressed air. Anything that creates an air gap between the steel poles and the load impedes the penetration of the magnetic force into the workpiece to be transported and thus considerably reduces the lifting capacity.
- The magnetic surface (= contact surface) of the magnetic transporter must be in full contact with the load, i.e. the contact surface of the load must always be at least the same size as the contact surface of the magnetic transporter. If this is not the case, the full lifting force cannot be achieved!
- In order to achieve the full lifting force, the contact surface must be “flat” and must not have any break-outs or holes. If the contact surface is reduced, only a reduced lifting force is achieved.
- When lifting horizontally, the magnetic transporter must be positioned approximately at the load's center of gravity.

If you are unsure, please contact your manufacturer or supplier before use!!!

HX Magnetic Transporter

Limitation of the nominal lifting force

The nominal lifting force is achieved if the conditions described above are met and if the load is made of a low-carbon steel, e.g. St37 or C22. Alloying additives reduce the lifting force, so that For example, only a lifting force of approx. 60% of the lifting force of St37 is achieved with a steel X12Cr13.

If the sheet thickness is less than 2 mm, the nominal lifting force of the magnetic conveyor can be reduced by up to 50% and more.

This does not limit the application range of the magnetic transporter.

(Example: a metal sheet 2000x1000x0.5mm weighs approx. 8kg)

However, if the sheet is bent too much - especially with large sheets - it will peel off the magnetic transporter when lifted horizontally.

Attention: The maximum workpiece temperature must not exceed 80°C.

Maintenance and servicing of magnetic transporters

The maintenance and servicing of magnetic transporters must be carried out by experts appointed by the operator. It is limited to checking the "magnetic holding surface" and cleaning it if necessary.

Care must be taken to ensure that the steel poles remain rust-free. In addition, the steel poles must be checked for damage (burrs, scratches, raised areas, etc.) to ensure that they lie flat on the workpiece.

Minor damage can be smoothed out by sanding on a sheet of sandpaper with a fine grain or, better still, on a flat, large-area whetstone. The sheet of sandpaper is best placed on a flat and non-magnetizable surface.

Important

Damaged magnetic transporters must not be repaired by the operator. They must either be sent to the manufacturer for repair or disposed of by the operator.

Caution

The full adhesive force is only achieved on workpieces with a smooth, flat and clean surface, which are made of materials that are easy to magnetize and are sufficiently thick. Only about 1/3 of the adhesive force is achieved on scaled surfaces!

Optional levers

With HX, the standard T-handle can be replaced with an optional handle. To do this, the grub screws must be loosened and the handle replaced. It is important to ensure that the fixing hole is centered on the grub screw before it is tightened again.

Model	Art. Nr.	Dim. (mm) H
T-handle for HX	1108 G01	100
Cylinder handle für HX	1108 G02	120
Extended handle 400mm	1108 G03	400
Extended handle 600mm	1108 G04	600



Standard T-handle



Cylinder handle for quick handling at body height



Extended handle for ergonomic picking from boxes or the floor

SICHERHEITS-HINWEISE

HANDLING INSTRUCTIONS / CONSIGNES D'UTILISATION



Es besteht Verletzungsgefahr bei unsachgemäßer Behandlung von Magneten. Daher sollten Sie im Umgang mit Magneten folgendes unbedingt beachten:



Magnets can represent risks of injury in case of improper handling. We therefore recommend to respect the following instructions when handling with magnets:



Les aimants peuvent représenter un risque de blessure en cas d'utilisation inadéquate. C'est pourquoi nous vous conseillons de respecter les instructions suivantes concernant l'utilisation des aimants:



Die starken, anziehenden Kräfte der Magnete sind eine mögliche Gefahrenquelle - die Haut kann gequetscht (eingeklemmt) werden. Wir empfehlen deshalb mit geeigneten Schutzmaßnahmen zu arbeiten und zu vermeiden, dass Finger bzw. Haut zwischen die Magnete geraten! Bitte beachten Sie, dass sich Magnete selbst aus großen Abständen anziehen können - es besteht auch hier Verletzungsgefahr!

The strong adhesive forces of magnets are representing a possible source of danger - skin could be squeezed. We suggest therefore to work with usefull protection measures and to avoid, that fingers or skin are placed among the magnets!

Please pay attention, that magnets can be adhesive even over gib distances - here as well are existing dangers of injury!

Les grandes forces d'attraction magnétique représentent une source de risques potentiel - la peau pourrait être coincée. Nous recommandons donc de travailler avec des mesures de protection appropriées et d'éviter que les doigts ou la peau ne soient placés entre les aimants! Attention, les aimants peuvent aussi s'attirer sur des grandes distances - dans ce cas aussi il existe des risques de blessure!



Magnete können beim Zusammenprallen in scharfkantige Teile splintern. Jeglicher Zusammenprall sollte daher vermieden werden!

Magnets can splitter into sharp pieces when crashing. Therefore any chrash should be avoided!

Les aimants frittés éclatent en débris coupants en cas de choc. C'est la raison pour laquelle les chocs doivent être évités!



Magnete dürfen nicht in explosionsgefährdeter Umgebung eingebaut werden, weil sie Funken auslösen und Explosionsgefahr besteht!

Magnets are not allowed to be installed in explosive areas, as they can set off sparks which could cause explosions!

Les aimants ne doivent pas être montés dans un environnement explosif, car ils peuvent provoquer des étincelles qui pourraient déclencher une explosion!



Starke Magnetfelder können elektrische bzw. elektronische Geräte beeinflussen oder beschädigen. Dies gilt auch für Herzschrittmacher. Personen mit Herzschrittmacher müssen einen Sicherheitsabstand von mindestens 1 Meter einhalten!

Strong magnetic fields can influence or destroy electronic equipment. Persons with pacemakers must keep a safety distance of at least 1 meter!

Les champs magnétiques peuvent influencer ou endommager les appareils électriques ou électroniques. Cela s'applique aussi pour les stimulateurs cardiaques. Les personnes portant un stimulateur cardiaque doivent respecter une distance de sécurité d'au moins 1 mètre !



Nachteilige Auswirkungen von Magnetfeldern auf den menschlichen Körper sind uns nicht bekannt.

Negative effects of magnetic fields to the human body are unknown to us.

Des effets défavorables de champs magnétiques sur le corps humain nous ne sont pas connus.