

asfalq  
TOOLS

● LIFTING MAGNETS

● SB 200 | SB 500 | SB 950

● MAGNETIC TOOLS

asfalq  
MAGNETS

asfalq  
MACHINES

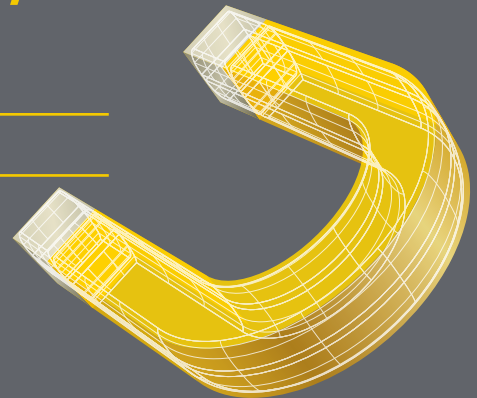
● CLAMPING MAGNETS

# Lifting magnets

## Lifting and clamping with safety

Standard lifters

Custom-made lifters



**The Ace for Metal**

MAGNETS MACHINES TOOLS

**Assfalg GmbH**

Buchstraße 149  
73525 Schwäbisch Gmünd  
Germany

Tel +49 (0) 71 71 92 505-0  
Fax +49 (0) 71 71 92 505-50

info@assfalg-metal.com  
www.assfalg-metal.com

The right of changes and deviating pictures is reserved. Liability is excluded.

Design and production:  
Hela Werbung GmbH | [www.hela.com](http://www.hela.com)



## Lifting Magnets



**Elift**  
Lifting Magnet

02



**HL | SH 12 |  
HL 60-CE |  
HL 60-CE-L**  
Manual Magnet  
Transporter

04



**SH 35-K | SH 60-K**  
Crane Magnet Transporter

05



**SB 200 | SB 500 |  
SB 950**  
Battery Lifting Magnet

06



**EPM BAT**  
Battery Lifting Magnet

08



**EPM M**  
Electropermanent Lifting  
Magnet

10



**EPM H**  
Electropermanent Lifting  
Magnet

11



**Load Lifting Beams  
with patented full  
steel EPMagnet  
Modules**

12



**MAP-MRP Series**  
Magnetic Gripper  
for automation

16



**AR Series**  
Magnetic Gripper  
for automation

18



**AY Series**  
Magnetic Gripper  
for automation

19



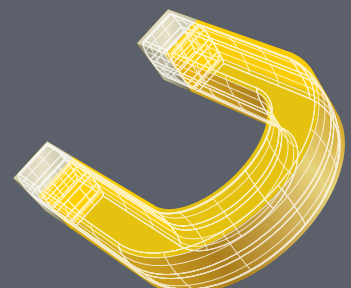
**LAY Series**  
Magnetic Gripper  
for automation

20



**Assfalg Lifting  
Magnets in Action**

21



# Elift

## Lifting Magnet

The unmistakable advantages of the lifting magnets Elift from Assfalg are economy and fast handling.

The hand-operated permanent lifting magnet is the perfect and fully developed solution for moving all ferromagnetic materials in an efficient, safe and reliable way.

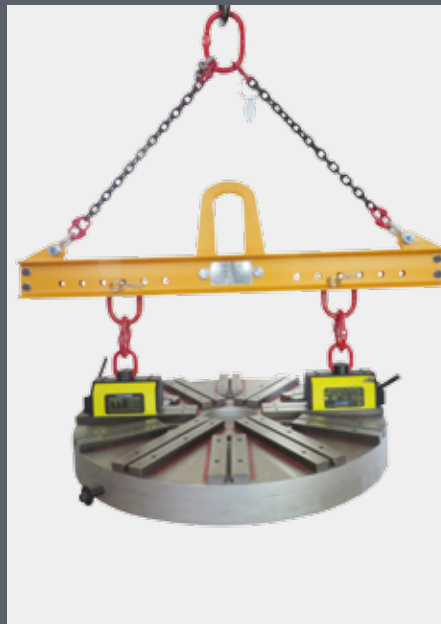
- Vertical transport  
 $F_v = 1/3 F_h$



- The safety lock prevents accidental loosening under load

### Application

- ▶ For flat and round material, because of v-prism pole shoe
- ▶ Select lifter size according to load and for easy operation of the switching level
- ▶ For raw material, semi-finished and finished products
- ▶ In mechanical engineering, tool manufacturing, plant engineering, steel construction, ship-building, transport company or materials store





- 👉 The “strongest” magnet can lift 5 t of flat material



### Professional advantages

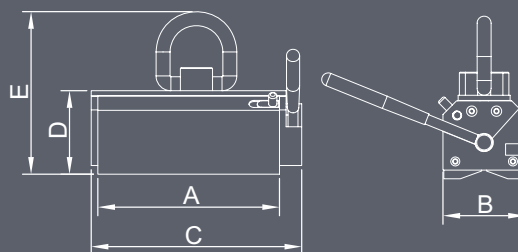
- ▶ Absolutely safe lifting - with 3-times safety factor (the pull-off strength is 3 times more as the recommended lifting force)
- ▶ No restrictions on scaled, rough or oily surfaces
- ▶ No damaging of the work piece surface
- ▶ Smooth switching ON/OFF via hand lever
- ▶ Optimization of crane capacity and space because of independent permanent magnet lifter
- ▶ Smooth lever more when switching OFF provided correct lifter size was selected

### Features

- 👉 Two-hand operation via hand lever and safety lock
- 👉 Max. operation temperature 80°C
- 👉 Use of durable and extremely strong neodymium magnet materials
- 👉 Compact, sturdy construction, low dead weight

### Options

- 👉 Additional crane eye for lifting and vertical transport (load only 1/3), available for Elift 300/Elift 500 (Art.No.47392)
- 👉 Special version for hot temperature use
- 👉 Special version for immersing into profiles or for larger diameters
- 👉 Service and repair according the safety rules



Technical data	Dimensions [mm]					load	Min. thickness	Load	∅	Max.	Weight [kg]	No.
	A	B	C	D	E	Fh [kg]	[mm]	SWL 3:1	from - to	length x width [mm]		
Elift 100	105	70	133	71	153	100	15	45	40 - 100	1250 × 600	4	50871
Elift 300	161	90	194	87	169	300	25	125	40 - 160	2000 × 1000	9	34858
Elift 500	221	98	256	101	183	500	30	215	60 - 200	2000 × 1500	16	34859
Elift 1000	310	120	335	126	247	1 000	50	450	80 - 350	3000 × 1500	36	34860
Elift 2000	435	176	487	182	331	2 000	50	900	120 - 400	3500 × 2000	110	34862
Elift 3000	530	230	550	186	381	3 000	60	1 350	150 - 400	3500 × 2000	170	43161
Elift 5000	570	370	614	312	552	5 000	80	2 250	200 - 450	5000 × 3000	475	42037

# HL | SH 12 | HL 60-CE | HL 60-CE-L

## Permanent Magnet Handlifter

The permanent magnet handlifters SH (from German production) and HL are suitable for transporting especially thin sheets as well as oily or sharp edged ones.

The permanent magnet handlifter HL 60-CE is especially designed for hot or sharp edged flamecut parts. It gets magnetized or demagnetized over push buttons on the handle. The HL 60-CE accu lasts for 1000 switching cycles before recharging. The charger and an exchange accu are included.

The **HL 60-CE-L** is with long handle.



SH 12

HL 60-CE



HL 60-CE-L

### Application

- ▶ Handling of thin sheets or small flamecut parts
- ▶ Max. operation temperature 80°C
- ▶ For HL / SH the workpiece surface should be clean and dustfree (oil does not effect the magnetic force)
- ▶ Usable in mechanical engineering, tool manufacturing, plant engineering, steel construction, shipbuilding, still mill, transport company or materials store

### Features HL | SH 12

- Ⓞ Horizontal or vertical sheet transport
- Ⓞ Destacking of even 2 mm sheet thickness
- Ⓞ Very flat magnetic field, especially designed for thin sheets
- Ⓞ Mechanical release by pushing the handle

### Features HL 60-CE | HL 60-CE-L

- Ⓞ Fast handling of sharp-edged or hot metal parts
- Ⓞ Magnetizing or demagnetizing by push buttons
- Ⓞ Nearby no residual magnetism, therefore insensitive to dust or chips
- Ⓞ The electrical switching protects the workpiece surface
- Ⓞ Long lasting exchange accu, up to 1000 ON/OFF cycles

### Delivery contents HL 60-CE | HL 60-CE-L

- Ⓞ HL 60-CE | HL 60-CE-L
- Ⓞ Charger 230V with 2 x accu 12V

### Technical data

	Hold surface [mm]	Lifting force SWL 3:1	Drag force SWL 3:1	Sheet thickness [mm]	Weight [kg]	No.
		Fh [kg]	Fv [kg]			
HL 10	150 x 100	60	20	> 2,0	2,0	104
HL 20	190 x 140	120	40	> 2,0	3,5	25031
SH 12	133 x 106	120	60	> 2,0	1,3	101
HL 60-CE	56 x 42	30	-	> 5,0	1,1	60347
HL 60-CE-L	56 x 42	30	-	> 5,0	2,5	69924

# SH 35-K | SH 60-K

## Crane Magnet Transporter

Since decades crane transporters of the SH series have been considered to be a economic solution for horizontal or vertical transport by crane. Contrary to other permanent magnet lifters the SH types have a flatter magnetic field especially designed for picking up sheets with 3 mm thickness and more. They are a real alternative to mechanical transport clamps, even for support during sheet bending process.



SH 35-K



- Vertical transport  
 $F_v = 1/3 F_h$

### Application

- ▶ Suitable for sheets with thickness from 3 mm
- ▶ Use on clean sheets (oil does not negatively effect magnetism)
- ▶ Sheet or plate can be tilted
- ▶ Usable in mechanical engineering, tool manufacturing, plant engineering, steel construction, shipbuilding, steel mill, transport company or materials store

### Features

- ⚙ Mechanical release by handle
- ⚙ Max. operation temperature 80°C

### Options

- ⚙ Rope loop for a soft mounting on the crane hook
- ⚙ Service and repair according to safety regulations

### Technical data

	Hold surface [mm]	Lifting force SWL 3:1	Drag force SWL 3:1	Sheet thickness [mm]	Weight [kg]	No.
		Fh [kg]	Fv [mm]			
SH 35-K	190 x 110	250	84	ab 3,0	4	105
SH 60-K	310 x 190	500	167	ab 6,0	12	106

# SB200 | SB500 | SB950

## Battery Lifting Magnet

The electropermanent battery lifting magnets are suitable for the flat material load range of 200kg | 500kg | 950kg and the round material load range of 50kg | 200kg | 400kg. Using a current pulse of less than one second the electro-permanent battery lifters SB 200 | SB 500 | SB 950 from Assfalg are switched manually by pushbuttons or automatically. Although no current flows during the transport of the load, the workpiece remains safely clamped like a permanent magnet. Up to 1000 ON/OFF switching cycles by SB 200 | SB 500 and 500 ON/OFF switching cycles by SB 950 are possible before recharging the integrated accu by the supplied mains charger.



SB 950

### Application

- ▶ For flat and round material
- ▶ Destacking from 4mm sheet thickness by power reduction
- ▶ Independent from mains supply
- ▶ In mechanical engineering, tool manufacturing, plant engineering, steel construction, shipbuilding, steel mill, flame cutting, transport company or materials stores







SB 200

SB 500



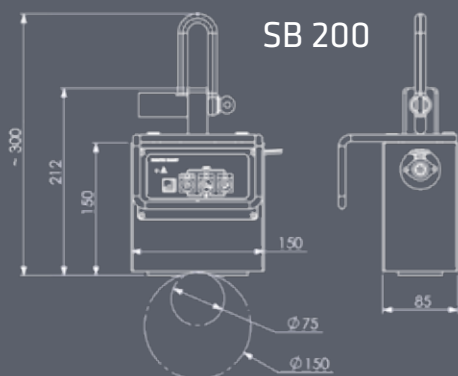
### Professional advantages

- ▶ No battery flow during lifting (only a current pulse for a few seconds is required for magnetizing or demagnetizing)
- ▶ The magnets are either manually switched via push buttons or automatically via AUTO function
- ▶ Power reduction for destacking or low weight loads
- ▶ A built in security mechanism prevents switching when the load is suspended
- ▶ Option: Positioning drawbar SB 950, swivel-mounted in Z-Axis +/- 60°

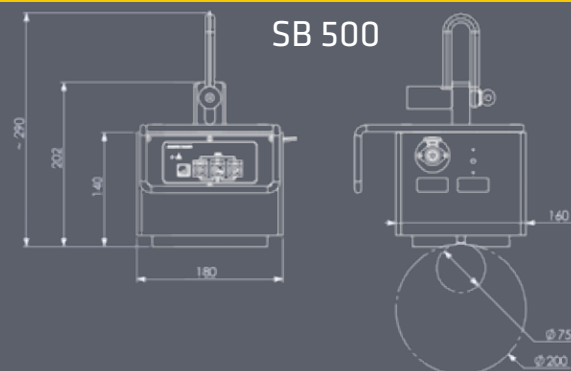


### Features

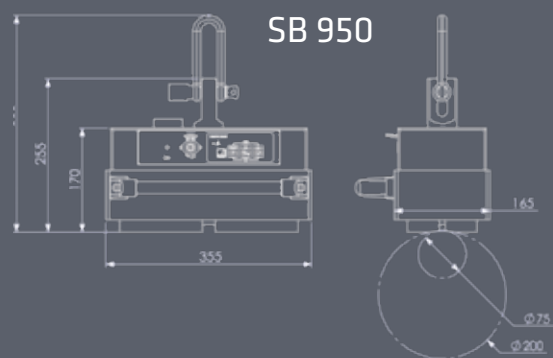
- ✔ Auto mode is instead of wireless control
- ✔ Up to 1000 ON/OFF switching cycles before recharging
- ✔ Accu (lithium-ion battery) is charged in approx. 2h mains charger 110V / 230V / 50-60Hz



SB 200



SB 500



SB 950

### Technical data

	Dimensions [L×W×H] [mm]	Load	Min. thickness [mm]	Load	∅ from - to [mm]	Hold surface [mm]	Weight [kg]	No.
		SWL 3:1 Fh [kg]		SWL 3:1 Fh [kg]				
SB200	150 x 85 x 150	200	4	50	75 - 150	115 x 50	10	65697
SB500	180 x 160 x 140	500	4	200	75 - 200	145 x 125	25	62666
SB950	355 x 165 x 170	950	4	400	75 - 200	320 x 130	41	60643

# EPM B

## Battery Lifting Magnet

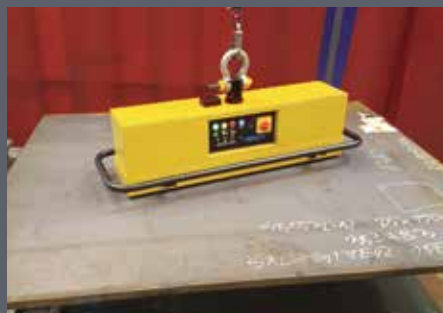
The electropermanent battery lifting magnets can be used without connection to the power supply. They combine safety of permanent magnets with the operation comfort of electromagnets. Sheets from 6 mm thickness can also be separately lifted from stack. Even magnetizing and demagnetizing of the lifting magnet can take place automatically.



- 🕒 The automode mechanism: The magnet switches automatically, as soon as it is put on the workpiece and the crane hook is released!

### Application

- ▶ For flat and round material because v-prism pole shoe
- ▶ Operation is independent from mains supply
- ▶ Usable even for beam operation with 2 magnets
- ▶ For raw material, semi-finished and finished products
- ▶ In mechanical engineering, tool manufacturing, plant engineering, steel construction, shipbuilding, steel mill, cutting-, laser operation, transport company or materials store





EPM B 5000



EPM B 10000

### Professional advantages

- ▶ Automatic magnetizing and demagnetizing of the workpiece by AUTO mode
- ▶ 3 times safety factor and additional safety feature to drop accidentally the load in the air
- ▶ Scaled or rough surface can be mastered
- ▶ No current flow during lifting - the magnet is magnetized or demagnetized by pulse current only
- ▶ Usable in multi-shift operations, because approx. 300 switches are possible

### Features

- ☑ Selection between manual or automatic mode
- ☑ Max. operation temperature 80°C
- ☑ Optical and acoustic alarm device with battery charge level indicator
- ☑ Inching for destacking is possible either by power reduction button or by optional wireless remote control
- ☑ 300 operation cycles before recharging 8h by mains supply of 110V / 230V

### Options

- ☑ Special pole shoes for round material
- ☑ Radio remote control for destacking sheets from 6 mm thickness or for dropping during lifting or for use with spreader beam
- ☑ Service and repair according safety regulations

Technical data	Dimensions [L×W×H] [mm]	Load	Min. thickness [mm]	Min. thickness for separating [mm]	Load	Max. ø [mm]	Hold surface [L×B] [mm]	Weight [kg]	No.
		SWL 3:1 Fh [kg]			SWL 3:1 Fh [kg]				
EPM B 3000	560 x 340 x 500	3 000	40	6	1 500	300	460 x 230	190	28527
EPM B 5000	740 x 410 x 320	5 000	50	6	2 500	300	680 x 380	520	33855
EPM B 10000	1 060 x 500 x 600	10 000	70	6	-	-	1 060 x 500	715	64358
EPM B 3000L	940 x 220 x 280	3 000	40	6	-	-	880 x 180	190	60429
EPM B 5000L	1 250 x 290 x 340	5 000	40	6	-	-	1 150 x 220	250	64294

# EPM M

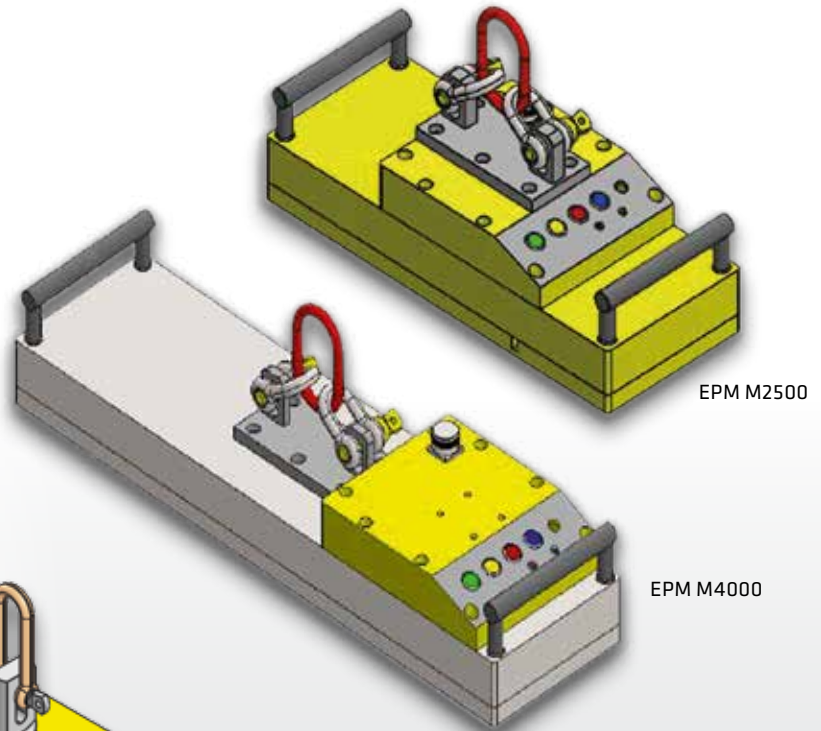
## Electropermanent Lifting Magnet

This EPM M magnets are used for frequent handling of workpieces when mains supply is available.

The switching time is rather short.

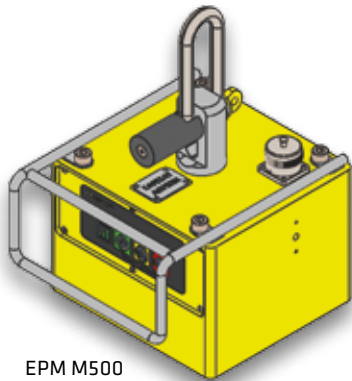
They combine the safety of permanent magnets with the convenience of electromagnets.

Only short pulse current is needed for switching, hence energy consumption is very low.

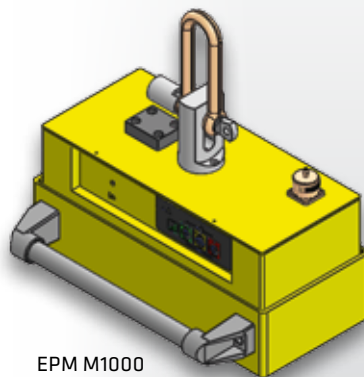


EPM M2500

EPM M4000



EPM M500



EPM M1000

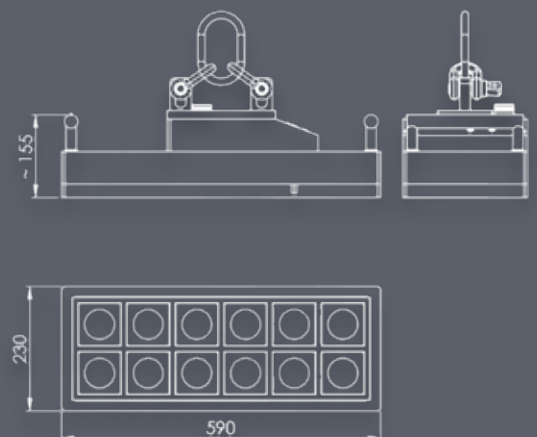
### Professional advantages

- ▶ Very short switching cycles
- ▶ No drop of workpiece when power supply fails
- ▶ Mainly maintenance free
- ▶ Reduction of power for destacking from 6mm sheet thickness

### Features

- Ⓢ Integrated controller for 400V / 50-60Hz / 16A mains supply
- Ⓢ Max. operation temperature 80°C
- Ⓢ Selection of manual mode or automatic mode
- Ⓢ Option:
  - radio remote control for destacking
  - customized applications

### EPM M2500



### Technical data

Technical data	Dimensions [L×W×H] [mm]	Load	Min. thickness [mm]	Hold surface [mm]	Weight [kg]	No.
		SWL 3:1 Fh [kg]				
EPM M500	180 x 160 x 140	500	4	160 x 130	25	69840
EPM M1000	355 x 165 x 170	1 000	4	310 x 120	50	69858
EPM M2500	590 x 230 x 155	2 500	15	590 x 230	92	69758
EPM M4000	860 x 230 x 165	4 000	15	860 x 230	140	59785
EPM M5000	1 000 x 280 x 165	5 000	15	1 000 x 280	200	69841

# EPM H

## Electropermanent Lifting Magnet

EPM H is for lifting and transporting heavy ferrite blocks or slaps, even with rough surface.

The casing is sturdy and equipped with alarm lamp and sound.

The square pole technology guarantees a bigger force concentration in the workpiece and bridges airgaps.



### Professional advantages

- ▶ Unsensitive to rusty or rough workpiece surface
- ▶ Low energy consumption because of pulse current for switching
- ▶ No drop of workpiece, when power supply fails

### Features

- Ⓜ Integrated controller for power supply 400V / 50-60Hz / 32A
- Ⓜ With tower lamp for indicating ON or OFF
- Ⓜ With buzzer for picking up mode
- Ⓜ Max. load dimension 6 m x 2 m
- Ⓜ Option:
  - radio remote control
  - customized application

### Technical data

	Dimensions [L×W×H] [mm]	Load	Min. thickness [mm]	Weight [kg]	No.
		SWL 3:1 Fh [kg]			
EPM H10	880 x 531	10 000	30	950	on request
EPM H15	860 x 563	15 000	40	1300	on request
EPM H20	980 x 577	20 000	40	1750	on request
EPM H25	1 100 x 637	25 000	80	2150	on request
EPM H30	1 147 x 625	30 000	80	2700	on request

# Load Lifting Beams with patented full steel EPMagnet Modules

The EPMagnet modules are switched by mains power supply. They combine the safety of permanent magnets with the convenience of electromagnets. Sheets from 5 mm thickness can be destacked.

Magnetizing and demagnetizing of the EPM lifting system can happen manually or by radio remote control. For uneven sheet formats the EPMagnet modules are equipped with spring suspensions.

The EPMagnet modules are integrated in a magnet unit, which is fixed to the beam.



## Application

- ▶ Especially for sheet lifting
- ▶ Destacking by remote control
- ▶ For loading or deloading flamecut systems on trucks
- ▶ More flexibility with telescopic beams
- ▶ For feeding and clearing of flame-cutting-/laser systems, also in multi-shift operation
- ▶ Optional: EPMagnet modules for horizontal and vertical transport





Assfalg designs up on request

## Features

- ✔ EPM lifting system is ready for use up to the crane hook
- ✔ Power supply is 400V / 50-60Hz / 16A or 32A
- ✔ Lamp and buzzer indicates the magnetization and demagnetization process
- ✔ Picking up is done with 70% power and automatically increased to 100% after 10 seconds
- ✔ Accidental demagnetization during lifting is prevented by ADPREM safety mechanism
- ✔ Different magnetic zones can be selected according to sheet size
- ✔ Low energy load consumption because of pulse current for switching
- ✔ No drop of load when power supply fails

## Options

- ✔ Customized beam and EPMagnet modules
- ✔ Triggering of each EPMagnet module
- ✔ Special safety features for automation
- ✔ Integration of load cells and magnet flow sensors



## Overhang table for safe load transport

Thickness of the steel plate (mm)	4	5	7	8	10	12	15	18	20
Max. overhang of the steel plate (mm)	1100	1350	1500	1550	1550	1950	2150	2550	2700

# Load Lifting Beams with patented full steel EPMagnet Modules TBK4 | TBK6

The electro-permanent telescopic lifting beams TBK4 and TBK6 are designed for lifting and transporting sheets of different sizes from 3m to 16m.

The patented solid steel modules allow destacking from 5mm thickness by radio remote control.

Magnetic zones and power level can be preselected according to sheet size. The EPMagnet modules are equipped with spring suspensions to balance unevenness of sheets.



## Application

- ▶ For large sheets
- ▶ Destacking by inching function on remote control
- ▶ Horizontal rotation of EPMagnet units if small long sheets are lifted
- ▶ No drop of sheet when power supply fails
- ▶ Low energy consumption, because of pulse current for switching
- ▶ Customized options







### Technical Data TBK4

	Load SWL 3:1	Min. thickness	Length min. - max.	Width min. - max.	Weight	No.
	Fh [kg]	[mm]	[mm]	[mm]	[kg]	
TBK4 / 75	7 500	5	3 000 - 12 000	500 - 2 500	3 000	on request
TBK4 / 100	10 000	5	3 000 - 12 000	500 - 3 000	3 000	on request
TBK4 / 120	12 000	5	3 000 - 12 000	500 - 3 000	3 000	on request
TBK4 / 140	14 000	5	3 000 - 12 000	500 - 3 000	3 000	on request
TBK4 / 180	18 000	5	3 000 - 12 000	500 - 3 000	3 000	on request

### Technical Data TBK6

	Load SWL 3:1	Min. thickness	Length min. - max.	Width min. - max.	Weight	No.
	Fh [kg]	[mm]	[mm]	[mm]	[kg]	
TBK6 / 100	10 000	5	2 800 - 16 000	500 - 2 500	4 500	on request
TBK6 / 140	14 000	5	2 800 - 16 000	500 - 3 500	4 500	on request
TBK6 / 180	18 000	5	2 800 - 16 000	500 - 3 500	4 500	on request
TBK6 / 200	20 000	5	2 800 - 16 000	500 - 3 500	4 500	on request
TBK6 / 240	24 000	5	2 800 - 16 000	500 - 3 500	4 500	on request

# MAP - MRP Series

## Magnetic Gripper for Automation

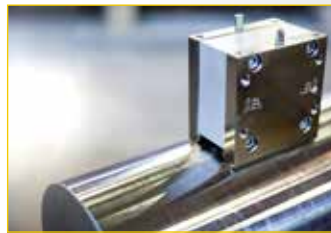
These permanent magnets cover individual needs and can be fitted for nearly all surfaces.

They get switched within very short cycle time by pneumatic impulse.



MRP-170

MAP-40



### Application

- ▶ For round and flat workpieces
- ▶ For workpieces with irregular surfaces
- ▶ For thin and thick sheets
- ▶ Suitable for automation, lifting operations, robotic technology, welding and clamping technology

### Features

- Ⓢ Longlived construction
- Ⓢ Maintenance-free
- Ⓢ Highest safety
- Ⓢ Compressed air demand 5 - 8 bar
- Ⓢ IP Code 67
- Ⓢ Special pole shoes for special surface

### Technical data

	Dimensions	Load	Min. thickness	Min. $\varnothing$	Load	Required diameter	Max. residual gripping capacity
	[ $\varnothing$ x H] or [L x W x H]	SWL 3:1			SWL 3:1		(magnet OFF)
	[mm]	Fh [kg]	[mm]	[mm]	Fh [kg]	[mm]	[kg]
MAP-6	$\varnothing$ 35 x 35	6	>4	-	-	-	0,03
MAP-40	$\varnothing$ 65 x 50	40	>8	-	-	-	0,2
MAP-120R	$\varnothing$ 120 x 80	120	>25	$\varnothing$ > 0	70	$\varnothing$ > 200	6
MAP-180	$\varnothing$ 120 x 82	180	>25	-	-	-	6
MRP-28NK	80 x 55 x 126	84	>12	>12	36	-	0,3
MRP-46	80 x 55 x 82,5	46	>12	$\varnothing$ > 20	30	$\varnothing$ > 120	4
MRP-130F	120 x 103 x 120	130	>25	-	-	-	40
MRP-170	103 x 120 x 140	170	>25	$\varnothing$ > 25	120	$\varnothing$ > 120	30



MAP-6

### Professional advantages

- ▶ Switchable permanent magnets with 3-times safety
- ▶ Custom-made pole shoes can be fitted to special forms
- ▶ Low residual magnetism
- ▶ Very short switching time by air pressure pulse
- ▶ Low energy consumption



MAP-120R



MRP-28NK



MRP-46

### Gripping capacity versus material thickness and airgap

	Load SWL 3:1 Fh [kg]	Min. thickness [mm]	Load with thickness of:			Load with airgap of:			Weight [kg]	No.
			2 mm	4 mm	8 mm	0,1 mm	0,2 mm	0,4 mm		
MAP-6	6	>4	12	18	18	8,1	4,5	2,2	0,19	63448
MAP-40	40	>8	22	57	120	79	58	34	0,95	63450
MAP-120R	120	>25	19	60	175	310	270	200	5,80	64324
MAP-180	180	>25	26	80	224	360	270	167	5,80	64333
MRP-28NK	84	>12	28	56	82	126	75	38	2,60	66289
MRP-46	46	>12	36	91	122	100	72	36	1,80	65011
MRP-130F	390	>25	40	119	300	340	300	260	9,50	65707
MRP-170	170	>25	47	147	400	460	410	300	10,7	64823

# AR Series

## Magnetic Gripper for Automation

The AR permanent magnets are well controlled by air pressure. The rectangular housing is designed for an easy exchange of pole shoes. Special pole shoes are needed for irregular, uneven workpiece forms. The magnets are very flexible because one of 3 possible magnet areas can be used. This magnet is best choice when no flat area exists.



AR 50 Classic



AR 40 Naams

### Application

- ▶ For round and flat workpieces
- ▶ For workpieces with irregular surfaces
- ▶ Suitable for automation, lifting operations, robotic technology, welding and clamping technology

### Features

- Ⓜ Each AR device is equipped with a set of flat or tube / round pole shoes
- Ⓜ The exchangeable pole shoes can be adapted individually to the workpiece
- Ⓜ Very low residual magnetism
- Ⓜ Universal in application
- Ⓜ Very light and very heavy workpieces can be grabbed

### Technical data

	Hold surface [Ø or W x H]	Load SWL 4:1	Min. thickness	Weight	No.
	[mm]	Fh [kg]	[mm]	[kg]	
AR 20	34	7	3	0,4	66675
AR 30	44	15	3,5	0,7	67555
AR 40	55 x 42	43	9,5	1,9	68803
AR 50	64 x 52	62	9,5	2,8	68771
AR 70	92 x 72	110	12,7	6,8	66567
AR 110	150 x 114	356	38,1	28,4	62329

# AY Series

## Magnetic Gripper for Automation

A highly technical tool series that allows maximum saturation (performance) on thin material. Array units ("AY") offer increased power in a compact, single actuator package. These units are suited to sheet handling on the fly or in shear. This is a revolutionary automation tool that for the first time, truly challenges vacuum suction systems while delivering fast payback on the initial investment. Units can be specified for deep field (JSC) or shallow field (ASC) operation.



M15AY



### Application

- ▶ For thin workpieces:  
AY-ASC with a flat magnetic field
- ▶ For thick workpieces:  
AY-ISC with a deep magnetic field
- ▶ Suitable for automation, lifting operations, robotics technology, welding and clamping technology

### Features

- ⚙ Very thin sheets up to 0,5 mm can be separated from the stack
- ⚙ Absolutely safe lifting – namely with 4-times safety (the pull-off strength is 4 times of the recommended lifting force)
- ⚙ Very light and very heavy workpieces can be grabbed
- ⚙ Compact and stable
- ⚙ Very low residual magnetism

### Technical data

	Dimensions [Ø x H] [mm]	Load	Optimal material thickness [mm]	Weight [kg]	No.
		SWL 4:1 Fh [kg]			
M10AY	66 x 105	6	1,0	0,5	on request
M15AY	79 x 112	18	2,7	0,8	on request
M20AY	98 x 127	43	4,8	1,5	on request
M30AY	135 x 153	59	3,4	2,9	on request

# LAY Serie

## Magnetic Gripper for Automation

The "LAY" signifies Linear Array: designed for applications where stability and power are important. Ideal for long cylinders, tubing and rough surface finishes, the multiple magnetic fields in LAY units ensure strong holding forces also on thin material. Each unit comes with replaceable pole shoes for improved on-site serviceability.



LAY70x30



### Application

- ▶ Perfect for round and / or flat workpieces
- ▶ Best magnetic forces for thin and thick sheet thicknesses, but also for rough surfaces
- ▶ For workpieces with irregular surfaces
- ▶ Suitable for automations, lifting operations, robotics technology, welding and clamping technology

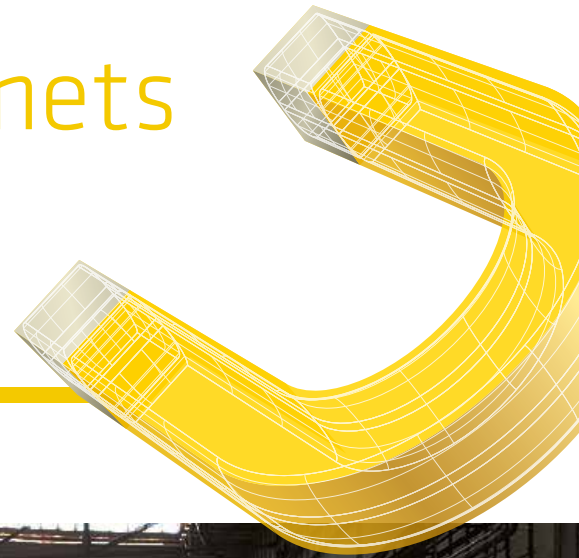
### Features

- ⚙ Exchangeable pole shoes can be used universally
- ⚙ Very strong adhesive forces on rough surfaces (air gap)
- ⚙ Very low residual magnetism
- ⚙ Quick switching by pressured air 6 - 8 bar

### Technical data

	Hold surface [L x W] [mm]	Load SWL 4:1 Fh [kg]	Min. thickness [mm]	Load SWL 4:1 Fh [kg]	Weight [kg]	No.
LAY20x4	97 x 32	32	9,5	15	1,2	66532
LAY50x2	119 x 72	125	12,7	50	4,8	66907
LAY50x3	166 x 72	187	12,7	70	8,3	66908
LAY50x4	223 x 72	260	12,7	100	13,6	68293
LAY70x2	177 x 96	240	19,1	90	12,1	67794
LAY70x3	255 x 98	326	19,1	120	16,3	on request
LAY70x4	336 x 98	443	19,1	200	23,2	66898

# Assfalg Lifting Magnets in Application



WANT TO KNOW MORE?

**We advise you gladly.  
Via telephone or during a personal appointment.**

➔ T +49 (0) 71 71 92 505-0    ➔ [info@assfalg-metal.com](mailto:info@assfalg-metal.com)



[www.assfalg-metal.com](http://www.assfalg-metal.com)

**Assfalg GmbH**

Buchstraße 149  
73525 Schwäbisch Gmünd  
Germany

Tel +49 (0) 71 71 92 505-0

Fax +49 (0) 71 71 92 505-50

**assfalg**