

APPLICATION SOLUTIONS FOR MAGNETICS AND LIFTING TECHNOLOGY



MADE IN
GERMANY

LIFTING

Holds! Our lifting magnets don't let up



“Keeping at it” is the motto for lifting magnets from Alfra's law – Whether for round or flat steel. Depending on the model, the reliable helpers lift up to one tonne of ferromagnetic material. Thanks to patented TML technology depending on the product even on thin-walled sheets fittings from one millimetre in thickness.

- Magnetic field with very low scattering losses develops impressive holding power even on thin materials.
- Safety factor 3:1
- Can be customised for a wide variety of projects individually thanks to additional threaded
- Prism for safe lifting of pipes and curved surfaces

POSITIONING AND FIXING

As you were! Holding magnets and welding angle for fixing and levelling



Could you also regularly use a helping hand with your projects? No matter whether steel plates for welding onto kept at the same height or whether steel beams or pipes are to be joined at a specific angle by welding seam – arc created during welding – there is certainly a magnet in our range that can master this task.

- Angle magnet TMA 600 for aligning heavy workpieces at different angles
- Infinitely adjustable from 0° to 90°
- Welding seams are possible close to the magnet because the arc created is only deflected in our range that can master this when a distance of less than 15 mm to the tool is reached.
- Connection threads in M5 and M6 on the surface and on both sides of the housing for the possibility of customising the Alfra holding solenoids from the TMC line in a variety of ways



**MADE IN
GERMANY**

ROUND SLING

Seek and ye shall find! Tested Alfa round slings are in no way inferior to our magnets



A lifting magnet is as reliable as the individual components in a holding. This is why we recommend for safe applications with our magnet products Alfa round slings made of 100% tear-resistant polyester. We are so convinced of these extremely resilient helpers that we use them daily in our own workshops.

- Available in usable lengths of 0.5 m and 1.0 m
- Carry loads up to one tonne with one device. Safety factor 7:1
- Thanks to high-quality workmanship, the round slings are abrasion-resistant and glide ideally in the lacing process
- Reliable with safety thanks to the GS seal awarded by TÜV

ALFRA MAGNETS IN ACTION



HALLENBAU – USA / BLOOMFIELD – RICARDO



SHIPBUILDING – TURKU / FINLAND – ALEKSI

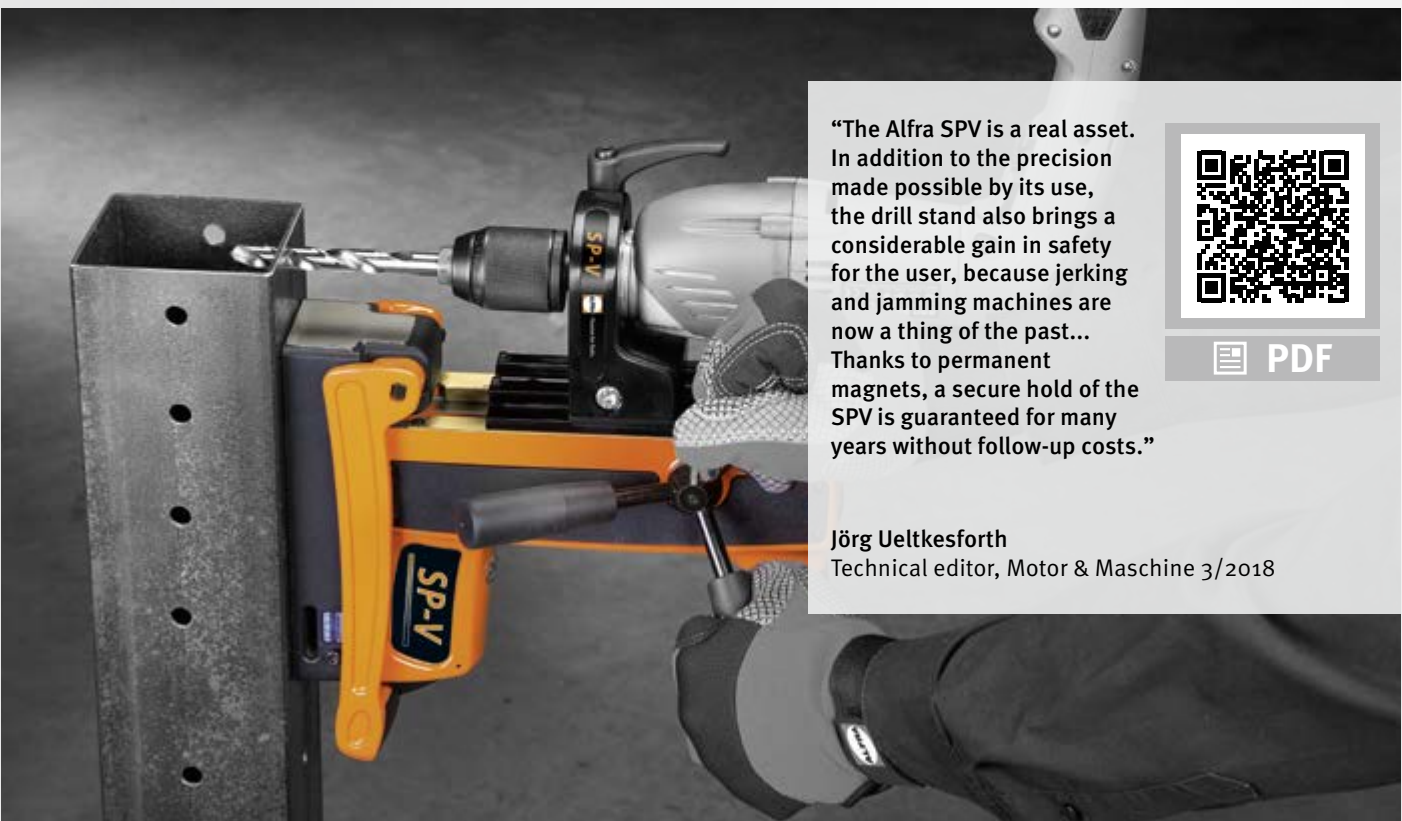
Thin Material Lifting explained simply
Watch our animated video here



VIDEO



LIFTING – RECIFE / BRAZIL – PEDRO



“The Alfra SPV is a real asset. In addition to the precision made possible by its use, the drill stand also brings a considerable gain in safety for the user, because jerking and jamming machines are now a thing of the past... Thanks to permanent magnets, a secure hold of the SPV is guaranteed for many years without follow-up costs.”



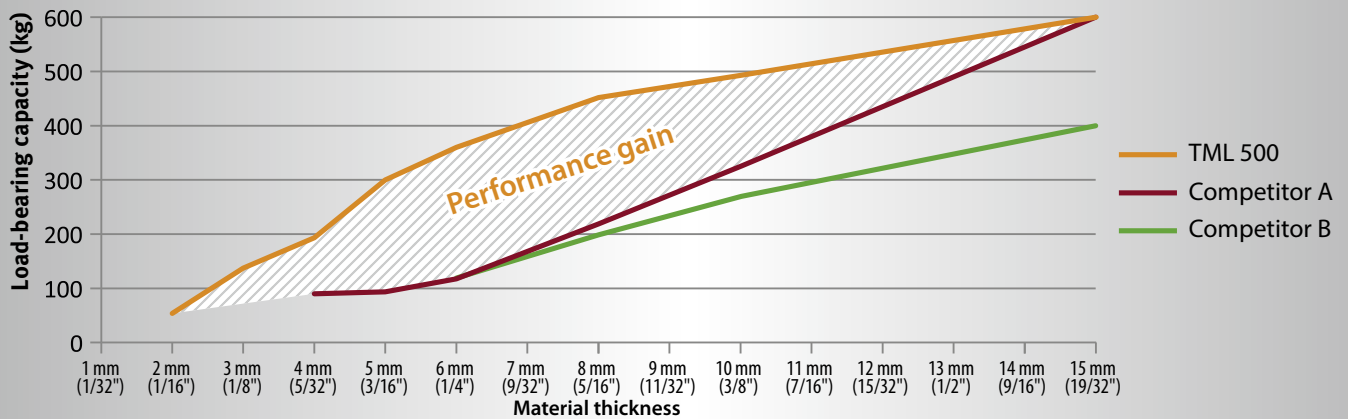
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Jörg Ueltkesforth
Technical editor, Motor & Maschine 3/2018

TML – THE BENEFITS AT A GLANCE

In which way do ALFRA TML Magnets stand out from conventional magnets?

Graph A – The TML provides more performance!



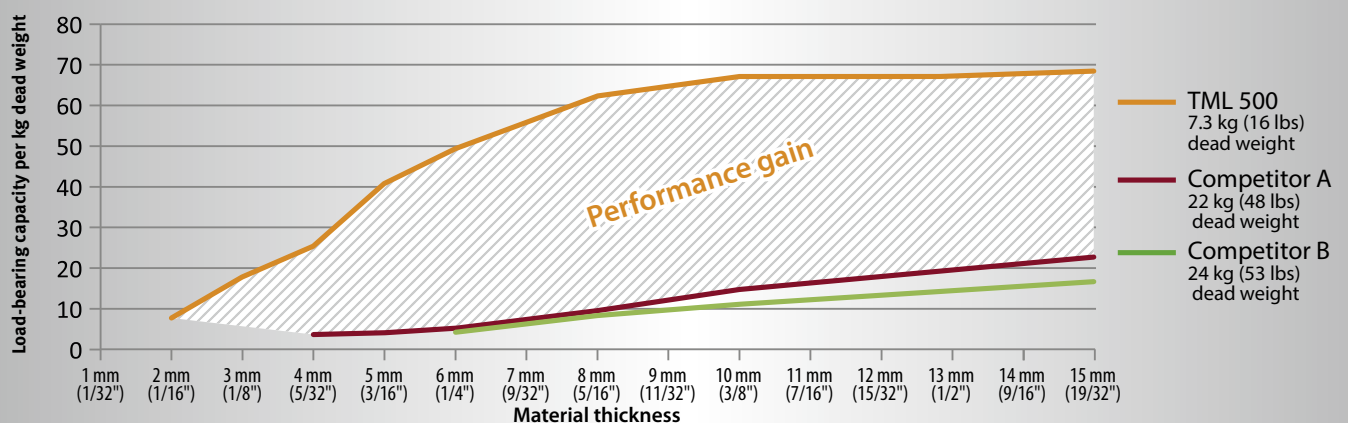
A comparison of the performance data of the TML 500 and two conventional magnets reveals how powerful the TML 500 is, especially when used on thin materials.

The hatched area shows the 'performance gain' of the TML and illustrates how big the performance difference is between TML and conventional magnets.

The measurements were taken on thin-walled steel S235 by means of a pull-off station certified by the TÜV (German Technical Inspection Association).

The result: Whereas competitors A and B are not able to generate a sufficient magnetic field on thin materials, the TML achieves a load-bearing capacity of 50 kg (110 lbs) on just 2 mm (1/16") and 195 kg (430 lbs) on 4 mm (5/32") material thickness – this is unique to ALFRA.

Graph B – Less weight but more performance!



When taking the ratio of the magnets' load capacity in graph A and their dead weight into account, the hatched 'performance gain' shows the efficiency of TML magnets in contrast to their competitors.

Conventional lifting magnets exhibit lower performance due to their extremely high dead weight and their relatively low adhesive force. The TML, however, weighs just a fraction of the weight of competitors A and B while achieving a considerably higher load-bearing capacity.

TML Lifting Magnets—the ideal tools to lift thin materials with thicknesses as low as 2 mm (1/16")!

FURTHER BENEFITS OF THE ALFRA MAGNETIC SYSTEM



Hardened steel bottom plate with TiN-coating eliminating the need to regrind the magnet's bottom plate: reduced maintenance



Slight premagnetisation for the easy positioning of the magnet



One-handed activation possible



Magnets can be customized thanks to additional connection threads inside the housing



New design allowing for the use of the magnet even between the flanges of a steel beam



The magnetic field concentrates directly on the material and reduces scattering losses to a minimum



180° pivotable and 360° rotatable load swivel



Magnets allow welding at a distance of just 15 mm (9/16") from the magnet's external side

ALFRA MAGNET TECHNOLOGY



LIFTING



CORE DRILLING

ALFRA sets new standards in magnet technology!

Our Permanent Magnets are activated according to a patented principle, completely independent of the mains supply—providing safety and permanent stability!

ALFRA is the worldwide license holder for the new, patented magnetic system that allows you to drill, lift, position, transport...from a material thickness of just 1 mm (1/32")!



POSITIONING

TML

US Patent No.
8350663B1



MADE IN GERMANY



SPECIAL / PROBLEM SOLUTIONS

MAGNETIC AND LIFTING TECHNOLOGY - OVERVIEW

LOAD-LIFTING - FLAT STEEL

 KG LBS					
	50 KG (110 LBS)	100 KG (220 LBS)	250 KG (550 LBS)	500 KG (1,100 LBS)	1,000 KG (2,200 LBS)
					
	TMH 50	TML 100	TML 250	TML 500	TML 1000
Page	166	167	168 - 169	170 - 171	172 - 173
Prod.-No.	41100.H	41100.L	41250	41500	41700
Max. load-bearing capacity	50 kg (110 lbs)	100 kg (220 lbs)	250 kg (550 lbs)	500 kg (1,100 lb)	1,000 kg (2,200 lbs)
Breakaway force	> 300 kg (660 lbs) on 6 mm (1/4") steel S235 (without adapter plate)	> 300 kg (660 lbs) on 6 mm (1/4") steel S235	> 750 kg (1,653 lbs) on 10 mm (3/8") steel S235	> 1,500 kg (3,300 lbs) on 15 mm (9/16") steel S235	3,400 kg (7,500 lbs) on 12 mm (1/2") steel S235
Min. material thickness	1 mm (1/32")	1 mm (1/32")	2 mm (1/16")	2 mm (1/16")	2 mm (1/16")
Dead weight	1.6 kg (3.5 lbs)	1.7 kg (3.7 lbs)	3.5 kg (7.7 lbs)	7.3 kg (16 lbs)	18.0 kg (238 lbs)
Dimensions L x W (closed lever)	190 x 124 mm (7 1/2" x 4 7/8")	146 x 124 mm (5 3/4" x 4 7/8")	240 x 91 mm (9 7/16" x 3 9/16")	295 x 118 mm (11 5/8" x 4 5/8")	470 x 154 mm (18 1/2" x 6 1/16")

LOAD-LIFTING - ROUND STEEL

 KG LBS			400 KG (880 LBS)
	50 KG (110 LBS)	90 KG (200 LBS)	
			
	TMH 50 R	TML 90 R	TML 400 R
Page	174	175	176 - 177
Prod.-No.	41100.H.R	41100.L.R	41400.R
Pipe diameter	25 - 200 mm (1" - 7-7/8")	25 - 200 mm (1" - 7-7/8")	50 - 400 mm (2" - 15-3/4")
Max. load-bearing capacity	50 kg* (110 lbs)*	90 kg* (200 lbs)*	400 kg* (880 lbs)*
Breakaway force	> 270 kg (595 lbs) on 6 mm (1/4") steel S235	> 270 kg (595 lbs) on 6 mm (1/4") steel S235	> 1,200 kg (2,650 lbs) on 15 mm (9/16") S235
Min. material thickness	1 mm (1/32")	1 mm (1/32")	2 mm (1/16")
Dead weight	1.6 kg (3.5 lbs)	1.8 kg (4 lbs)	8.2 kg (18 lbs)
Dimensions L x W (closed lever)	190 x 124 mm (7 1/2" x 4 7/8")	146 x 124 mm (5 3/4" x 4 7/8")	295 x 118 mm (11 5/8" x 4 5/8")

*Max. load-bearing capacity on round pipes: 20 - 50 % of flat material subject to pipe diameter and material thickness

SPECIAL SOLUTIONS

	POSITIONING/ INDIVIDUALIZATION			ANGLE FIXING
	FOR FLAT STEEL		FOR ROUND STEEL	0° - 90°
				
	TMC 70	TMC 300	TMC 300 R	TMA 600
Page	178	179	180	181
Prod.-No.	41070	41100	41100.R	41100.A
Pipe diameter	-	-	25 - 200 mm (1" x 7-7/8")	-
Holding force	70 kg (155 lbs)	300 kg (660 lbs)	300 kg (660 lbs)	2 x 300 kg (2 x 660 lbs)
Breakaway force	> 72 kg (158 lbs) on 6 mm (1/4") steel S235	> 300 kg (660 lbs) on 6 mm (1/4") steel S235	> 300 kg (660 lbs) on 6 mm (1/4") steel S235	> 300 kg (660 lbs) each TMC 300 on 6 mm (1/4") steel S235
Min. material thickness	1 mm (1/32")	1 mm (1/32")	1 mm (1/32")	1 mm (1/32")
Dead weight	0.29 kg (63 lbs)	1 kg (2.2 lbs)	1.1 kg (2.4 lbs)	2.7 kg (6 lbs)
Dimensions L x W (closed lever)	65 x 50 mm (2 3/4" x 2")	146 x 124 mm (5 3/4" x 4 7/8")	146 x 124 mm (5 3/4" x 4 7/8")	249 x 180 mm (9 13/16" x 7 1/16") (with levers, magnets are parallel)

ROUND SLING



ROUND SLING

Page

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MANUAL LIFTING MAGNET TMH 50

- 1 Only 1.6 kg (3.5 lbs) dead weight
- 2 Large, stable handle



- Up to 50 kg (110 lbs) load-bearing capacity on a steel sheet S235 with a thickness of just 3 mm (1/8")
- Protects hands and fingers from hot and sharp-edged steel
- Indispensable for anyone who, e.g. has to transport welding-parts from A to B without a lifting device. (Max. temperature 60° C; 140°F)
- Wear-resistant magnetic contact area made of hardened steel with TiN-coating preventing damages and guaranteeing a long lifetime

Technical data TMH 50:

- Dead weight: 1.6 kg (3.5 lbs)
- Breakaway force: > 300 kg (660 lbs) on 6 mm (1/4") steel S235 (without adapter plate)
- Max. load-bearing capacity on flat material: 50 kg (110 lbs) (on 3 mm; 1/8" steel S235)
- Max. load-bearing capacity during vertical lifts: 35 kg (77 lbs) (on 3 mm; 1/8" steel S235)
- Length: 126 mm (4-15/16"); width: 80 mm (3-1/8"); height: 100 mm (3-15/16") (incl. lever: length 190 mm; 7-1/2", width 124 mm; 4-7/8")



VIDEO

Prod.-No.

ALFRA TMH 50

41100.H

LIFTING MAGNET TML 100

- 1 Only 1.7 kg (3.7 lbs) dead weight
- 2 Max. load-bearing capacity: 100 kg (220 lbs) (with 3:1 safety factor)
- 3 360° rotatable and 180° pivotable load swivel
- 4 Easy one-handed operation



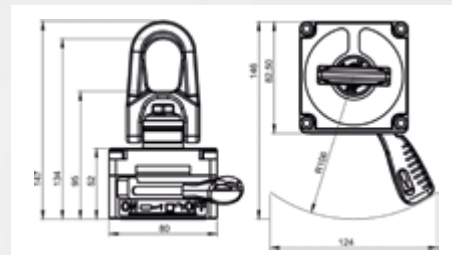
MADE IN GERMANY 
US Patent No. 8350663B1



- Max. load-bearing capacity of 50 kg (110 lbs) with 3 mm (1/8") (material thickness and 100 kg load-bearing capacity from just 6 mm (plus triple safety factor)
- Outstanding performance on thin-walled materials (operable from just 1 mm; 1/32")
- 360° rotatable and 180° pivotable load swivel – even under full load
- Wear-resistant magnetic contact area made of hardened steel with TiN-coating preventing damages and guaranteeing a long lifetime

Technical data TML 100:

- Dead weight: 1.7 kg (3.7 lbs)
- Breakaway force: > 300 kg (660 lbs) on 6 mm (1/4") steel S235
- Max. load-bearing capacity during vertical lifts (90° inclination of the load): 30 kg (66 lbs) (from 6 mm ; 1/4" steel S235 with 3:1 safety factor)
- Length: 82.5 mm (3-1/4"); width: 80 mm (3-1/8");
(incl. lever: length 190 mm; 7-1/2", width 124 mm; 4-7/8")
height (load swivel in horizontal position): 85 mm (3-3/8"),
height (load swivel in vertical position): 147 mm (5-13/16")



 VIDEO

ALFRA TML 100

Prod.-No.

41100.L



MAGNETIC
SYSTEMS
PATENTED
US Patent No.
8350663B1

Empfehlung
PROFESSIONAL 3/22
Tools

Alfra Lasthebemagnet TML 250
Art.-Nr.: 41250

Oberklasse 1,2

PROFESSIONAL 3/22
Tools
Preis/Leistung: gut – sehr gut

Top class! Our TML 250 receives a recommendation from the test magazine „Professional Tools“: Easy to use, easy to transport, good to very good price-performance ratio.



 **WEB**

LIFTING MAGNET TML 250

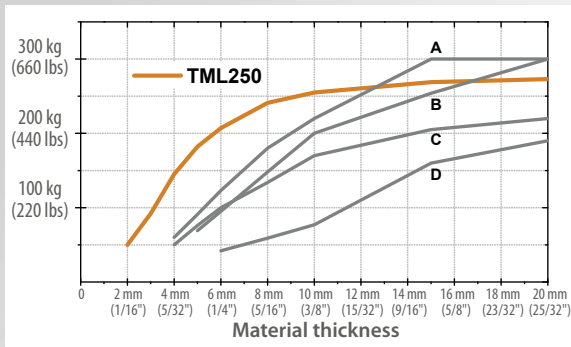
- 1 Only 3.5 kg (7.7 lbs) dead weight
- 2 Max. load-bearing capacity: 250 kg (550 lbs) (with 3:1 safety factor)
- 3 360° rotatable and 180° pivotable load swivel
- 4 One-handed operation ('inside' steel beam possible)



- Up to 250 kg (550 lbs) load-bearing capacity from a material thickness of 10 mm (3/8") and 90 kg (195 lbs) from just 3 mm (1/8") material thickness on steel S235 plus 3:1 safety factor (i.e. the force that leads to the breakaway of the metal sheet must represent triple the maximum holding force)
- Outstanding performance on thin-walled materials
- Up to 70 % less dead weight with at least the same performance in contrast to conventional magnets
- Easy activation with minimal effort due to the ergonomic activation lever
- Innovative operational concept allowing for an enlarged operating range
- 360° rotatable and 180° pivotable load swivel
- Wear-resistant magnetic contact area made of hardened steel with TiN-coating preventing damages and guaranteeing a long lifetime

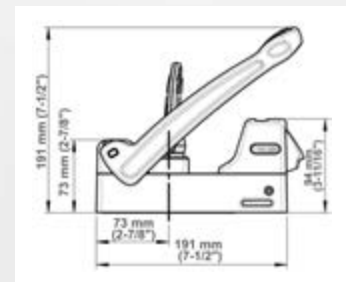
Technical data TML 250:

- Dead weight: 3.5 kg (7.7 lbs)
- Breakaway force: > 750 kg (1,653 lbs) on 10 mm (3/8") steel S235
- Max. load-bearing capacity: 250 kg (550 lbs) (with 3:1 safety factor)
- Length: 240 mm (9-7/16") (closed lever), width: 91 mm (3-9/16"), height: 191 mm (7-1/2") (opened lever)
- Magnetic contact area: length: 135 mm (5-5/16"), width: 65 mm (2-9/16")



Competitors:

- A: 300 kg (660 lbs) Permanent magnet; 9 kg (19.8 lbs) Dead weight
- B: 300 kg (660 lbs) Permanent magnet; 11 kg (24.2 lbs) Dead weight
- C: 250 kg (550 lbs) Permanent magnet; 10 kg (22 lbs) Dead weight
- D: 250 kg (550 lbs) Permanent magnet; 10 kg (22 lbs) Dead weight



Prod.-No.

ALFRA TML 250

41250



MAGNETIC
SYSTEMS

PATENTED

US Patent No.
8350663B1

LIFTING MAGNET TML 500

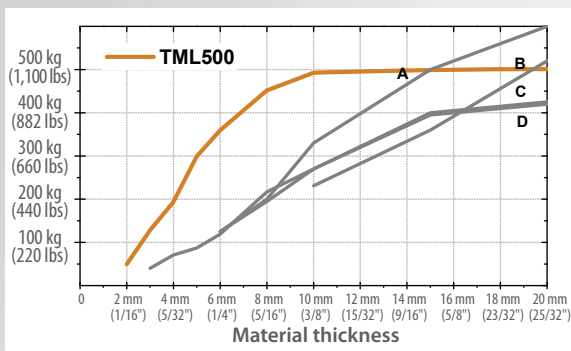
- 1 Only 7.3 kg (16 lbs) dead weight
- 2 Max. load-bearing capacity: 500 kg (1,100 lb) (with 3:1 safety factor)
- 3 360° rotatable and 180° pivotable load swivel
- 4 One-handed operation ('inside' steel beam possible)



- Up to 490 kg (1100 lbs) load-bearing capacity from a material thickness of 10 mm (3/8") and 300 kg (660 lbs) from just 5 mm (3/16") material thickness on steel S235 plus 3:1 safety factor (i.e. the force which leads to the breakaway of the metal sheet must represent triple the maximum holding force)
- Outstanding performance on thin-walled materials (useable from as low as 2 mm; 1/16")
- Up to 70 % less dead weight with at least the same performance in contrast to conventional magnets
- Easy activation with minimal effort due to the ergonomic activation lever
- Innovative operational concept allowing for an enlarged operating range
- 360° rotatable and 180° pivotable load swivel
- Wear-resistant magnetic contact area made of hardened steel with TiN-coating preventing damages and guaranteeing a long lifetime

Technical data TML 500:

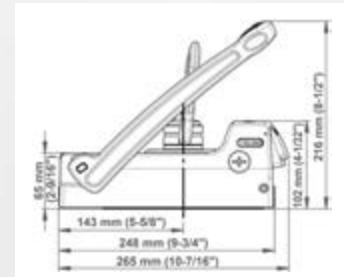
- Dead weight: 7.3 kg (16 lbs)
- Breakaway force: > 1,500 kg (3,300 lbs) on 15 mm (9/16") steel S235
- Max. load-bearing capacity: 500 kg (1,100 lb) (with 3:1 safety factor)
- Max. load-bearing capacity during vertical lifts (90° inclination of the load): 150 kg (330 lbs) (from 15 mm; 9/16" on steel S235 with 3:1 safety factor)
- Length: 295 mm (11-5/8") (closed lever), width: 118 mm (4-5/8"), height: 216 mm (8-1/2") (opened lever)
- Magnetic contact area: length: 185 mm (7-1/4"), width: 88 mm (3-7/16")



Competitors:



- A:** 600 kg (1,320 lbs) Permanent magnet; 22 kg (48.5 lbs) Dead weight
- B:** 600 kg (1,320 lbs) Permanent magnet; 24 kg (52.9 lbs) Dead weight
- C:** 500 kg (1,100 lbs) Permanent magnet; 20 kg (44 lbs) Dead weight
- D:** 500 kg (1,100 lbs) Permanent magnet; 8 kg (17.6 lbs) Dead weight



Prod.-No.

ALFRA TML 500

41500



▶ VIDEO

LIFTING MAGNET TML 1000

- 1 Only 18.0 kg (40 lbs) dead weight
- 2 Max. load-bearing capacity: 1.000 kg (2,200 lbs) (with 3:1 safety factor)
- 3 360° rotatable and 180° pivotable load swivel
- 4 One-handed operation ('inside' steel beam possible)



- Up to 1,000 kg (2,200 lbs) load-bearing capacity from a material thickness of 10 mm (3/8") on steel S235 plus 3:1 safety factor (i.e. the force which leads to the breakaway of the metal sheet must represent triple the maximum holding force)
- Outstanding performance on thin-walled materials (useable from as low as 2 mm; 1/16")
- Up to 70 % less dead weight with at least the same performance in contrast to conventional magnets
- Easy activation with minimal effort due to the ergonomic activation lever
- Innovative operational concept allowing for an enlarged operating range
- 360° rotatable and 180° pivotable load swivel
- Wear-resistant magnetic contact area made of hardened steel with TiN-coating preventing damages and guaranteeing a long lifetime

Technical data TML 1000:

- Dead weight: 18.0 kg (40 lbs)
- Breakaway force: > 3,400 kg (7,500 lbs) on 12 mm (1/2") steel S235
- Max. load-bearing capacity: 1,000 kg (2,200 lbs) (with 3:1 safety factor)
- Max. load-bearing capacity during vertical lifts (90° inclination of the load): 300 kg (660 lbs) (from 12 mm; 15/32" on steel S235 with 3:1 safety factor)
- Length: 470 mm (18-1/2") (closed lever), width: 154 mm (6-1/16"), height: 335 mm (13-3/16") (opened lever)
- Magnetic contact area: Length: 387 mm (15-1/4"), width: 92 mm (3-5/8")



Prod.-No.

ALFRA TML 1000

41700

MANUAL LIFTING MAGNET TMH 50 R

1 Only 1.6 kg (3.5 lbs) dead weight

2 Large, stable handle

R With prism for pipes and curved surfaces
Lifts pipes from 25 mm (1") to 200 mm (7-7/8") in diameter



- Lifts pipes from 25 mm (1") to 200 mm (7-7/8") in diameter
- Protects hands and fingers from hot and sharp-edged steel
- A must have for everyone who needs to move welding parts from one place to another (max. temperature: 60°C; 140°F)
- Wear-resistant magnetic contact area made of hardened steel with TiN-coating preventing damages and guaranteeing a long lifetime

Technical data TMH 50 R:

- Dead weight: 1.6 kg (3.5 lbs)
- Breakaway force: > 270 kg (660 lbs) on 6 mm; 1/4" steel S235
- Max. load-bearing capacity on round pipes: 20 - 50 % of flat material (see TMH 50), subject to pipe diameter and material thickness
- Length: 126 mm (4-15/16"); width: 80 mm (3-1/8"); height: 100 mm (3-15/16") (incl. lever: length 190 mm; 7-1/2", width 124 mm; 4-7/8")



Prod.-No.

41100.H.R

ALFRA TMH 50 R

LIFTING MAGNET TML 90 R

R With prism for pipes and curved surfaces
Lifts pipes 25 mm (1") to 200 mm (7-7/8") in diameter

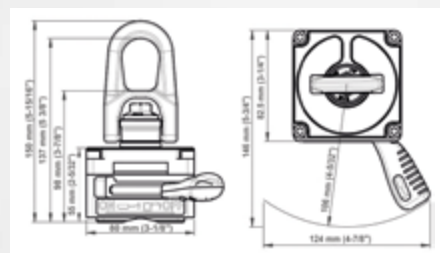
- 1 Only 1.8 kg (4 lbs) dead weight
- 2 Max. load-bearing capacity: 90 kg (200 lbs) (with 3:1 safety factor)
- 3 360° rotatable and 180° pivotable load swivel
- 4 Easy one-handed operation



- Lifts pipes from 25 mm (1") to 200 mm (7-7/8") in diameter
- Outstanding performance on thin-walled materials (operable from just 1 mm; 1/32")
- 360° rotatable and 180° pivotable load swivel – even under full load
- Wear-resistant magnetic contact area made of hardened steel with TiN-coating preventing damages and guaranteeing a long lifetime

Technical data TML 90 R:

- Dead weight: 1.8 kg (4 lbs)
- Breakaway force: > 270 kg (595 lbs) on 6 mm (1/4") steel S 235
- Max. load-bearing capacity with round pipes: 20 - 50 % of the load-bearing capacity on flat material (see TML 100), depending on pipe diameter and material thickness
- Length: 82.5 mm (3-1/4"); width: 80 mm (3-1/8");
(incl. lever: length 190 mm; 7-1/2", width 124 mm; 4-7/8")
height (load swivel in horizontal position): 88 mm (3-7/16")
height (load swivel in vertical position): 150 mm (5-15/16")



VIDEO

Prod.-No.

ALFRA TML 90 R

41100.L.R



“In metalworking companies or on construction sites, time pressure and high safety standards play an important role. With the TML 400 R magnet from Alfra, our customers not only lift and adjust up to 400 kg with a safety factor of 3:1, but thanks to the 360° swivelling and rotating load whirl, the permanent magnet with one-hand operation function transports round steel from A to B in an uncomplicated way: for example, pipes in pipeline construction, curved sheets in container construction, or round workpieces when loading metalworking machines...”

Ferry Plattes
Technical Representative -
Sales Support
Lifteurop



▶ VIDEO



LIFTING MAGNET TML 400 R

R With prism for pipes and curved surfaces
Lifts pipes from 50 mm (2") to 400 mm (15-3/4") in diameter

- 1 Only 8.2 kg (18 lbs) dead weight
- 2 Max. load-bearing capacity: 400 kg (880 lbs) (with 3:1 safety factor)
- 3 360° rotatable and 180° pivotable load swivel
- 4 Easy one-handed operation



- Lifts pipes from 50 mm (2") to 400 mm (15-3/4") in diameter
- Outstanding performance on thin-walled materials (operable from just 2 mm; 1/16")
- 360° rotatable and 180° pivotable load swivel—even under full load
- Wear-resistant magnetic contact area made of hardened steel with TiN-coating preventing damages and guaranteeing a long lifetime

Technical data TML 400 R:

- Dead weight: 8.2 kg (18 lbs)
- Breakaway force: > 1,200 kg (2,650 lbs) on 15 mm (9/16") S235
- Max. load-bearing capacity with round pipes: 20 - 50 % of the load-bearing capacity on flat material (see TML 500), depending on pipe diameter and material thickness
- Length: 295 mm (11-5/8") (closed lever); width: 118 mm (4-5/8"); height: 216 mm (8-1/2") (open lever)



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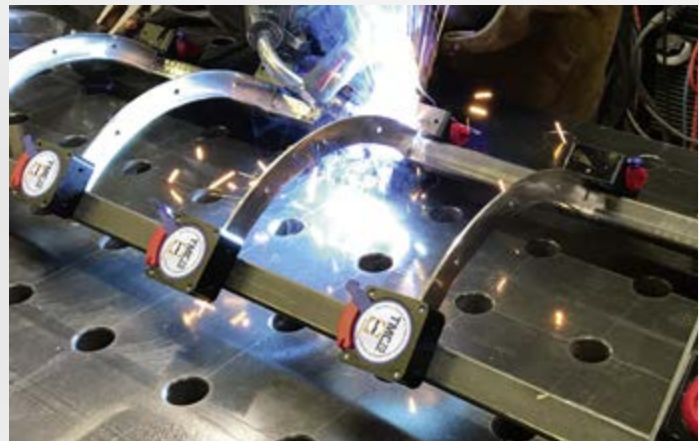
ALFRA TML 400 R

41400.R

MAGNETIC CLAMP TMC 70

OUR "LITTLE ONE" WITH A WIDE RANGE OF APPLICATIONS IS THE PERFECT MAGNETIC BASE FOR YOUR PROJECTS

- 1 Only 0.29 kg (10.2 oz) dead weight**
- 2 Up to 70 kg (154 lbs) load-bearing capacity (vertically)**
- 3 Easy one-handed operation**



Instead of complicated clamping: The TMC 70 for easy fixing of metal parts for welding work

The design of the TMC 70 has one main purpose: to make the magnet a valuable helper for a variety of tasks in your business. For example for special challenges in welding. Among others, the TMC 70 is showing full effort when it comes to fixing ferromagnetic metal sheets and panels – to ensure flawless welding seams. Furthermore the compact magnet is an assistant if you have to weld at an angle or if you have to fix particularly filigree metal parts, which alternatively would have to be fastened with clamps.

Attachment holes on top and three sides are providing, that the TMC 70 is nearly unlimited customizable. The flat design is an advantage, too.

Due to a height of only 25 mm, the magnet is perfectly suitable for the easy integration and attachment of accessories. Like all Alfra-magnets the TMC 70 is characterized by the patented magnetic technology, which is generating the magnetic field in an ideal way. The result: exceptional holding power even on thinwalled materials.

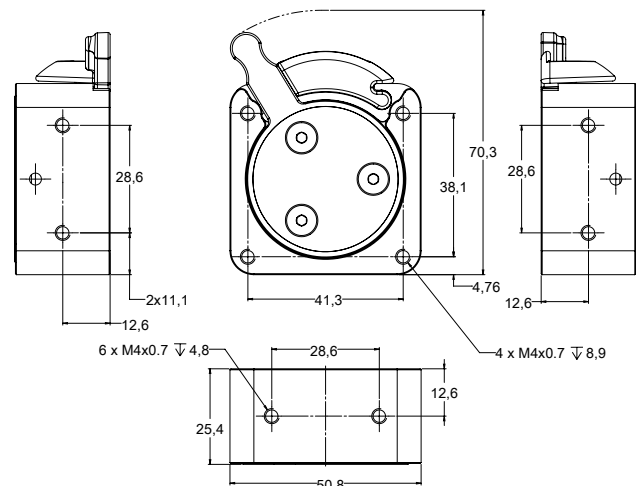
From a material thickness of 3 mm on steel the magnet has a holding force of 60 kg. The smart construction of the activation lever ensures that you are able to use the TMC 70 from three sides, even in narrow angles. The security mechanism is keeping the magnet reliably in switched-on position. Additionally the smallest of our positioning magnets is especially lightweight and durable because of the aluminum case.

Technical data TMC 70:

- Dead weight: 0.29 kg (10.2 oz)
- Breakaway force: 72 kg (158 lbs) on 6 mm (1/4") steel S235
- Length: 69 mm (2-3/4"); width: 50 mm (2"); height: 25 mm (1")



▶ VIDEO



Prod.-No.

ALFRA TMC 70

41070

MAGNETIC CLAMP TMC 300

OUR “LITTLE ONE” WITH A WIDE RANGE OF APPLICATIONS IS THE PERFECT MAGNETIC BASE FOR YOUR PROJECTS

- 1 Only 1 kg (2.2 lbs) dead weight
- 2 Up to 300 kg (660 lbs) load-bearing capacity (vertically)
- 3 Easy one-handed operation



- Excellent holding force up to 300 kg (660 lbs) – even on a steel plate with 6 mm (1/4") thickness only
- User-friendly one-handed operation thanks to ergonomic activation lever
- Connection threads (M5 and M6) on the top and the sides of the TMC 300 allow for the easy attachment of handling accessories such as cutting guides, angle side plates, handles, and much more
- Ideal tool to ease your work, e.g. during levelling of plates, platform construction, fixation, or any kind of clamping technique!
- The specially aligned magnetic field (patented) makes up to approx. 15 mm to the outside of the magnet (9/16") possible
- Wear-resistant magnetic contact area made of hardened steel with TiN-coating preventing damages and guaranteeing a long lifetime
- Exceptional shear force for better hold, especially during vertical applications

Technical data TMC 300:

- Dead weight: 1 kg (2.2 lbs)
- Breakaway force: > 300 kg (660 lbs) on 6 mm (1/4") steel S235
- Length: 82.5 mm (3-1/4"); width: 80 mm (3-1/8"); height: 32.5 mm (1-1/4") (incl. lever: length 190 mm; 7-1/2", width 124 mm; 4-7/8")



Prod.-No.

ALFRA TMC 300

41100

MAGNETIC CLAMP TMC 300 R

R With prism for pipes and curved surfaces
Lifts pipes from 25 mm (1") to 200 mm (7-7/8") in diameter

- 1** Only 1.1 kg (2.4 lbs) dead weight
- 2** Max. Breakaway force: 300 kg (660 lbs)
- 3** Easy one-handed operation



MADE IN GERMANY
US Patent No. 8350663B1

- Excellent holding force on pipes from 25 mm (1") to 200 mm (7-7/8") in diameter
- Outstanding performance on thin-walled materials (operable from just 1 mm; 1/32")
- The specially aligned magnetic field (patented) makes up to approx. 15 mm to the outside of the magnet (9/16") possible
- Wear-resistant magnetic contact area made of hardened steel with TiN-coating preventing damages and guaranteeing a long lifetime

Technical data TMC 300 R:

- Dead weight: 1.1 kg (2.4 lbs)
- Breakaway force: > 300 kg (660 lbs) on 6 mm (1/4") steel S235
- Max. load-bearing capacity with round pipes: 20 - 50 % of the load-bearing capacity on flat material (see TMC 300), depending on pipe diameter and material thickness
- Length: 82.5 mm (3-1/4"); width: 80 mm (3-1/8"); height: 32.5 mm (1-1/4") (incl. lever: length 190 mm; 7-1/2", width 124 mm; 4-7/8")

Prod.-No.

ALFRA TMC 300 R

41100.R

ADJUSTABLE WELDING ANGLE TMA 600

- 1 Only 2.7 kg (6 lbs) dead weight
- 2 Infinitely adjustable from 0° to 90°
- 3 Including two TMC 300 Magnetic Clamps providing a max. holding force of up to 2 x 300 kg (660 lbs) (perpendicular to the magnetic contact area)



MADE IN GERMANY 
US Patent No. 8350663B1



- Highly adjustable angle side plates with a range from 0° to 90° for holding and welding workpieces
- Quick clamping levers for easy fixation/adjusting
- A must have for everyone who needs to weld heavy workpieces together at different angles
- Lightweight, easy and trouble-free handling
- Wear-resistant magnetic contact area made of hardened steel with TiN-coating preventing damages and guaranteeing a long lifetime

Technical data TMA 600:

- Breakaway force: > 300 kg (660 lbs) per TMC 300 on 6 mm (1/4") steel S235
- Shear force: up to 100 kg (220 lbs)
- Dead weight: 2.7 kg (6 lbs)
- Length: 184 mm (7 1/4"); width: 124 mm; 4-7/8"); height: 128 mm (5 1/16") (magnets are parallel)
(with levers, magnets are parallel: length: 249 mm (9 13/16"); width: 180 mm (7 1/16")



▶ VIDEO

ALFRA TMA 600

Prod.-No.

41100.A

ALFRA – ROUND SLING

Textile sling for lifting and moving loads

Round slings comply with Euro standard 1492-2 and are made of tear-resistant polyester (PES)-a high-tensile multifilament yarn

Suitable for loads up to 1,000 kg (2,200 lbs)



- 100 % polyester
- Complies with EN 1492-2
- Safety factor 7:1
- GS symbol
- Processed with great care
- Reliable and resistant to abrasion
- Excellent gliding properties in the noose

ROUND SLING			
Prod.-No.	load capacity	Length	Effective length
189414110	1,000 kg (2,200 lbs)	1.0 m (39-3/8")	0.5 m (19-11/16")
189414154	1,000 kg (2,200 lbs)	2.0 m (78-3/4")	1.0 m (39-3/8")