







Changing the way things are done.

Magswitch is a mechanical device that turns a permanent magnetic field completely ON and OFF. The advantages provided by Magswitch Technology offer significant, new capabilities in steel fabrication and handling.

A New Way of Thinking

Groundbreaking advancements in technology provide early adopters with an opportunity to gain a competitive edge. Those who expand on previous thinking by harnessing this uncharted potential early on often gain the greatest advantage—something metal handlers across the globe have experienced after transitioning to Magswitch magnetic tools from traditional technologies.

While permanent magnets have been a part of welding and fabricating for a long time, they've historically been left to do small work, dismissed as a difficult method of handling large pieces of steel. Magswitch Technology changes that, challenging conventional clamping and fit up methods in all steel fabrication by forever improving the safety, productivity and efficiency of metalworking operations from small-scale welding to shipbuilding and industrial automation.

What Does Magswitch Mean for You?

If you work with steel, Magswitch translates into a simple bottom line: cost-savings, safety improvements and easier handling. Every process, from receiving steel to moving and fabricating it, can directly benefit from implementing a Magswitch tool. Our expanding product line includes powerful heavy lifters, robotics tools, welding tools and more.

All Magswitch products advantages:

- Complete ON/OFF control
- Precise placement: no fighting magnets
- Super strong hold: the magnets do the big work
- Exceptional hold on thin steel

Full Catalog – Table of Contents

Welding & Fabrication	3-16
Shipbuilding & Heavy Fabrication	17-22
Heavy Lifting	23-30
Woodworking	31-34
Automation	35-47
Magswitch Partners	48
Magswitch University	49
Magswitch On The Go	50
Marketing & Selling Tools	51-52
Selecting the Right Lifter	52



Every Magswitch product is proudly designed, developed, manufactured and tested by Magswitch to ISO 9001:2015 standards.



Magswitch products are a green technology **greentech** which endure the power of rare earth magnets without electricity.



Look for our new high heat tools. Magswitch tools currently handling up to 742° Fahrenheit (350° Celsius).



Every Magswitch product complies with the European health, safety and environmental

Safety is our #1 Priority!

At Magswitch, we are dedicated to safety. We consider safety in everything we do. If you work around steel, safety is the first consideration.

Fewer hands on the job, touching steel, means a safer workplace. Safety is our primary design consideration - easy actuation, lighter lifting, stability control and lift-to-shear capabilities all tie back to an emphasis on safety.

Magswitch automation tools are designed with fail-safe operation in mind. In case of a loss of air pressure, our magnets will remain in the most recent positon, either ON or OFF.

Magswitch heavy lifting magnets abide by ASME BTH-1 and B30.20 standards and include fail-safe locking mechanisms to ensure a load is not released without operator interaction.

About Magswitch Technology

Magswitch Technology is an Australian corporation, with its headquarters in Colorado, USA. Magswitch has designed and developed a new technology in switchable magnets, created a platform for the introduction of products across global markets that are significantly "Changing the way things are done".

Initially, technology drove the company's corporate strategies, with a business model focused on protection of its "simple but elegant" magnetic technology.

Today, with numerous patents and patents pending in all industrialized markets across the globe, Magswitch has evolved into an integrated business. In addition to research and development facilities on three continents, Magswitch now delivers product design and application engineering, manufacturing and product distribution globally.

Magswitch is committed to a business model that identifies key industry partners, allowing the corporation to leverage its technology and products through recognized global distributors.

The Magswitch culture is firmly established around innovative solutions for Customers and Industry Groups. A commitment to Constant Improvement Process (CIP) ensures we are working today on customer needs for tomorrow. As Industry innovation drives automation, Magswitch is developing a reputation as the partner who delivers first and functional solutions. In welding, lifting and automation, Magswitch is committed to treating industry problems with urgency and inclusive solutions that are cutting capital and recurrent costs, shortening delivery times and driving new standards in ISO efficiency deliverables.

The Magswitch management team is made up of visionary leaders and enthusiastic youth who constantly strive for innovation within a "can do" culture.

"The key to our success is our love of competition, as this is what drives our DNA."

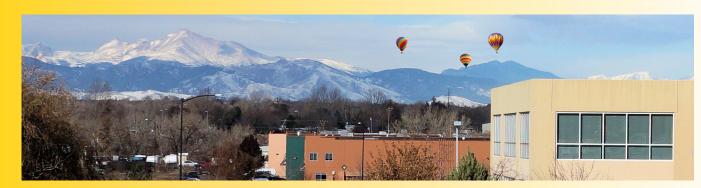




Table of Contents Welding & Fabrication

Faster

Magswitch products are engineered to drive productivity for professional welders and fabricators. Large sheet leveling, sheet de-stacking, weld grounding and many more applications are performed significantly faster with Magswitch products. Magswitch magnets more than pay for themselves with increased productivity alone.

Safer

At Magswitch, safety is our primary consideration. Using Magswitch eliminates the need for human contact with steel, significantly reducing the risk of injuries. Our magnets do not require power to stay ON, creating a safer work environment.

Easier to Use

Easier to Use – The true ON/OFF capabilities of Magswitch tools create a platform that is easier to use than other competitive products. No residual magnetism allows easy removal and cleaning of our magnets. With a powerful hold on thin material, Magswitch can be used in many more applications compared to traditional magnetic technology.





Welding & Fabrication



	Part # Magnet	8100099	8100106	8100238	8100494
	Strength =	1000 lbs (454 kg)	600 lbs (272 kg)	400 lbs (181 kg)	150 lbs (68 kg)
High Heat A		5.8 in (146.6 kg)	4.1 in (104.0 mm)	3.6 in (90.7 mm)	2.5 in (63.3 mm)
Upon Reque	Width =	2.8 in (72.0 mm)	2.0 in (51.5 mm)	1.6 in (41.3 mm)	1.2 in (30.8 mm)
Car	Length =	4.3 in (108.0 mm)	3.0 in (75.0 mm)	2.5 in (64.0 mm)	1.9 in (48.0 mm)
	Weight =	8.0 lbs (3.6 kg)	3.2 lbs (1.4 kg)	2.1 lbs (0.9 kg)	0.7 lbs (0.3 kg)



and fixturing tool ever.

A "must have" tool for every welding professional.

- Incredible strength
- Fast, precise positioning
- Mounts anywhere no limitations like clamps
- Magnetic grip on three sides
- Mounts to flat and pipe
- Pre-tapped holes on four sides for mounting
- Great for making your own fixtures
- Magnet turns completely off stays clean!
- Great for supporting guides and walls.
- Just a simple 180° turn of the knob ON or OFF



safety



Align two pieces of steel -





Helping hand – a temporary support to Great for making your own fixtures. Secure steel for fabricating





steel or cast iron table. No limitations together with hold on multiple sides.



Use as a guide anywhere on a Fabricate angles quickly; pull corners Strong hold provides make shift vise. Great for making your own fixtures





The Next Evolution in Magnetic Drilling!

Superior magnetic performance on a wide range of steel - flat or curved surfaces!

Magswitch patented technology now with a powerful patent-pending pivoting base!

- SAFER! Magnets require no electric power and will not release in the event of a power failure
- LIGHTER! Weighs less than 25 lbs.

MagDrill Disruptor 30

- STRONGER! Maintains strong grip on thin steel
- EASIER TO USE! Automatically conform to any pipe 3" or larger in diameter
- EFFICIENT! One tool for flat or round surfaces save time and money
- Powerful 8.2 amp motor
- Cuts holes up to 1-3/16" diameter, up to 2" deep











MagDrill Disruptor 30





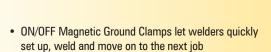
Welding & Fabrication

Magnetic Ground Clamps









- All new fin design lowers temperature by almost 27%
- Higher amperage available with new 800 model
- Stronger hold in the shear (vertical) position allows for use with heavy gauge ground cable
- No more tacking on tabs and searching for a ground location
- Fast setup, grounds instantly on plate or pipe



Stays clean. Turn off Magswitch and wipe away debris.



Strong grip on flat or round surfaces.



bit.ly/1RGCuU4





Pivot Angle 200







Part #	8100367
Magnet Strength =	200 lbs (90 kg)
Height =	9.4 in (240.0 mm)
Width =	3.9 in (97.9 mm)
Length =	9.4 in (240.0 mm)
Weight =	3.5 lbs (1.6 kg)

200

Odd angles in seconds.

Magswitch Pivot Angle offers a range of angles from 25-270 degrees. Each axis features a Magswitch with a 200 lbs (90kg) hold capability. A single pivot point is located on the elbow. The elbow joint locks and unlocks quickly with a lever. With a single pivot point, the elbow joint locks and unlocks quickly. On each axis, a Magswitch is exposed on a side to enable the tool to secure to a table or wall, while simultaneously holding the work piece. Pivot angle is perfect for repetitive work on all angles.



Degree angle indicator on elbow.

11.1			
			_
11/11/	The second	7.	
	The same of the sa	3	

Each magnet holds on two

Mini Angles Multi Angle 400 300 Amp Ground Mini Multi

Part #	8100438	8100351	8100350	8100352
Magnet Strength =	400 lbs (181 kg)	150 lbs (67 kg)	90 lbs (40 kg)	90 lbs (40 kg)
Height =	3.8 in (95.5 mm)	3.4 in (87.0 mm)	2.5 in (65.0 mm)	2.1 in (53.6 mm)
Width =	2.6 in (65.0 mm)	1.6 in (42.0 mm)	1.2 in (32.0 mm)	1.2 in (32.0 mm)
Length =	5.1 in (129.0 mm)	3.6 in (90.5 mm)	2.8 in (72.0 mm)	2.3 in (59.0 mm)
Weight =	2.6 lbs (1.2 kg)	1.1 lbs (0.5 kg)	0.4 lbs (0.2 kg)	0.4 lbs (0.2 kg)

Mini Multi w/



youtu.be/3lbqXYNgkJ4

Mini Angle offers a 45/135° and 90°

- Reduce setup time
- Stays Clean Longer Life
- More angles in one product
- Stronger grip available in larger sizes
- ON/OFF When off, metal debris falls away







8100351

Mini Multi Angle with temporary ground for quick tacking

Each Multi Angle offers several common angles: 45/135°, 60/120°,75/105°, and 90°

MagVises

Water Tool of	in manuswitch in
---	--

Part #	8100450	8100897
Magnet Strength =	1000 lbs (454 kg)	1500 lbs (681 kg)
Height =	5.4 in (138.0 mm)	6.3 in (160.4 mm)
Width =	4.3 in (110.0 mm)	6.4 in (161.7 mm)
Length =	5.9 in (149.8 mm)	7.1 in (179.7 mm)
Weight =	9.7 lbs (4.4 kg)	21.0 lbs (9.5 kg)

1500

1000

- SAFER! Hold small to medium size parts in place for grinding
- LIGHTER! Weighs less than 10 lbs.
- STRONGER! Available in 1000 and 1500 lbs. strengths
- EASIER TO USE! Grinding debris just falls/wipes away when magnet is turned off
- EFFICIENT! Reduce setup and grinding time



Scan link or go to http:// youtu.be/guqrc3nDr20







FASTER, EASIER & SAFER...

No more picking up sharp or hot steel with your hands

- Complete ON/OFF Magswitch magnet control
- Safely pick up hot, sharp or dirty steel
- More powerful better resistance to pry off
- Ideal for removing small parts from a cutting table
- Increased efficiency for faster and safer picks
- Fast pick up and transport of small steel loads
- Add safety and convenience to every workstation
- Pick, place, slide and position steel without using your fingers
- One-handed operation for harder to reach parts
- Ideal for small steel handling, dragging sheet, picking, placing and pulling parts out of burn table or handling scrap



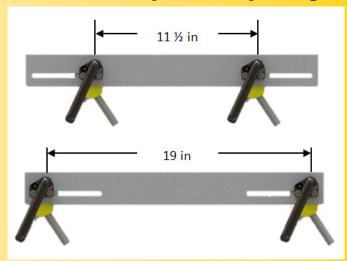
Shallow field magnet de-stacks thin steel



Pipe groove for transporting pipe Pivot handle allows use as a hand lifter or a sheet dragger.



Dual Lifter Adjustability Range



Hands off sharp edges & hot material



Part #	8800487*
Magnet Strength =	235 lbs (106 kg)
Height =	8.2 in (209.0 mm)
Width =	2.9 in (75.0 mm)
Length =	6.7 in (173.0 mm)
Weight =	2.4 lbs (1.1 kg)

*Includes belt holster







Push button ON/OFF control. Ideal for fast, repetitive lifting.

cut outs from cutting tables. The cordless hand lifter holds hot, sharp, dirty steel with the press of a button!

Perfect for removing parts and



The world's first Cordless Electric (CE) Hand Lifter! The Hand Lifter 60-CE is a must for every metal fab shop. Ideal for pulling parts out of a cutting table, picking up steel to place on a work table, in a fixture or handling



youtu.be/655UAQOTyDQ



Includes charger and two rechargeable batteries.

Replacement Parts:

4 Volt Rechargeable Batteries (2-Pack) - #8800053 Battery Cap Cover - #8800096

Battery Chargers:

US/CAN - #8800054 UK/SA - #8800054UK Europe - #8800054GE Australia - #8800054AU

Extenda-Lifts

Faster and safer handling of steel.





youtu.be/vklagoSHGv8

	Part #	8100025	8130177
	Magnet Strength =	600 lbs (272 kg)	1000 lbs (454 kg)
	Height =	28.2 in (724.0 mm)	28.8 in (731.5 mm)
	Width =	3.9 in (100.0 mm)	4.3 in (108.0 mm)
	Length =	4.6 in (117.0 mm)	4.8 in (122.0 mm)
	Weight =	5.3 lbs (2.4 kg)	9.8 lbs (4.4 kg)

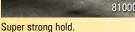




- Pick up steel from the floor or cutting table with ease
- Great for picking up hot, sharp or dirty steel
- Two sizes available
- Ideal for cities and utilities, valve box and small lid removal

It is always a concern when you have to reach down or bend over to pick up steel. That's why our Extenda-Lift does this for you. Easy on the back!







Picks up flat or round shapes.



12

	400	600	BoomerAngle
Part #	8100453	8100090	

Part #	8100453	8100090
Magnet Strength =	400 lbs (181 kg)	600 lbs (272 kg)
Height =	10.2 in (258.0 mm)	10.1 in (258.0 mm)
Width =	4.3 in (109.0 mm)	6.6 in (169.0 mm)
Length =	10.2 in (258.0 mm)	10.1 in (258.0 mm)
Weight =	6.6 lbs (3.0 kg)	9.7 lbs (4.4 kg)



Holds flat and round – perfect for working with pipe and fence set ups.





Magnets rotate for virtually unlimited angles.

- Offers virtually unlimited angles with a rotating MagSquare at the end of each axis
- Fixed 90° angle on the inside and outside, or adjust to any angle in between
- Incredible power and precision control
- Adjustable Easy to use

Scan link or go to http:// youtu.be/Z-OrHiDsYhM

	165	400	600	1000		90 Degree Angles
Part #	8100548	8100454	8100495	8100503		
Magnet Strength =	150 lbs (68 kg)	400 lbs (181 kg)	600 lbs (272 kg)	1000 lbs (454 kg)		
Height =	8.0 in (205.0 mm)	10.4 in (262.9 mm)	11.2 in (288.0 mm)	11.3 in (287.0 mm)		
Width =	1.9 in (47.0 mm)	5.2 in (133.2 mm)	4.1 in (104.0 mm)	5.7 in (145.0 mm)		
Length =	8.0 in (205.0 mm)	10.4 in (262.9 mm)	11.2 in (288.0 mm)	18.6 in (474.0 mm)	1	
Weight =	1.8 lbs (0.8 kg)	6.2 lbs (2.8 kg)	8.2 lbs (3.7 kg)	21.2 lbs (9.6 kg)		
						الله النه النه

MagSquares can be repositioned or reversed on each axis.





New 90 Degree Angle 1000 for heavy fabrication work. to prevent arc blow.

• Fixed 90° welding angle

- Incredible power and precision control,
- Adjustable Slide up or down on each axis
- Reversible inside or outside
- Size for any job big or small
- Use additional MagSquares for increased strength



Scan link or go to http:// goo.gl/Lis81i

	25	40
Part #	8100012	8100006
Magnet Strength =	75 lbs (34 kg)	200 lbs (91 kg)
Height =	3.5 in (89.0 mm)	4.0 in (103.0 mm)
Width =	1.6 in (40.0 mm)	2.7 in (67.9 mm)
Length =	1.9 in (47.2 mm)	2.7 in (69.0 mm)
Weight -	0.5 lbs (0.2 kg)	1.9 lbs (0.9 kg)







Attaches to flat or round surfaces. Hang tools, nuts or bolts near your work area.

- The perfect helping hand
- Safer work environment Hang tools, lights, wires, hoses, cables and more
- ON/OFF with turn of the handle
- Convenient and easily move from job to job



MagHooks

Scan link or go to http:// bit.ly/15IZopm



	150	235	400	600	MagMounts
Part #	8100579	8100451	8100523	8100580	
Magnet Strength =	150 lbs (68 kg)	235 lbs (106 kg)	400 lbs (182 kg)	600 lbs (272 kg)	
Height =	1.6 in (40.0 mm)	1.7 in (44.2 mm)	2.6 in (65.0 mm)	2.8 in (71.0 mm)	High Heat Availabl
Width =	2.2 in (58.8 mm)	2.7 in (68.0 mm)	3.3 in (82.5 mm)	4.1 in (104.4 mm)	Upon Request
Length =	3.1 in (78.2 mm)	3.8 in (97.7 mm)	4.6 in (116.0 mm)	4.7 in (120.0 mm)	
Weight =	0.7 lbs (0.3 kg)	1.2 lbs (0.5 kg)	2.4 lbs (1.1 kg)	3.6 lbs (1.6 kg)	









- Side-actuation handle leaves the top of the tool free for mounting a variety of accessories.
- Easy Mounting Multiple threaded holes on the top

14

MagJigs 150 60 235 60 Keychain 8100377 8110005 8110004 8100818 8100514 Part # Magnet 60 lbs (27 kg) **Strength** = 235 lbs (106 kg) 150 lbs (68 kg) 95 lbs (43 kg) 60 lbs (27 kg) 3.1 in (78.3 mm) 2.1 in (52.1 mm) 1.8 in (46.6 mm) 1.9 in (49.1 mm) 1.7 in (44.1 mm) Upon Request 1.1 in (26.8 mm) 2.4 in (60.0 mm) 1.7 in (44.0 mm) 1.3 in (34.0 mm) 1.1 in (26.8 mm) 3.5 in (88.0 mm) 2.6 in (67.0 mm) 2.3 in (57.0 mm) 1.6 in (39.5 mm) 1.5 in (39.3 mm) Weight = 1.0 lbs (0.5 kg) 0.5 lbs (0.2 kg) 0.3 lbs (0.1 kg) 0.2 lbs (0.1 kg)0.2 lbs (0.1 kg)



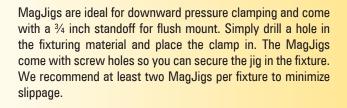
Welding & Fabrication













bit.ly/1v5ex0a

300



1000

MagYoke MagYoke

Part #	8100551
Magnet Strength =	5.8 lbs (2.6 kg)
Height =	5.3 in (134.6 mm)
Width =	6.4 in (162.6 mm)
Length =	1.9 in (48.3 mm)
Weight =	6.0 lbs (2.7 kg)



Non-Destructive Testing of Weld Joints

- Full Yoke system testing capabilities
- Using patented ON-OFF switchable magnets, test welds without an electrical power source
- OFF position allows tool to easily be removed from material
- Significantly reduces metal to metal sparking
- · Lightweight and easy to use



Marine	Products
IVIGILIO	1 I Gaagto







Mounts to flat or curved surfaces.

Part #	8100111	8100077	8100051
Magnet Strength =	240 lbs (109 kg)	600 lbs (272 kg)	1000 lbs (455 kg)
Height =	4.3 in (108.1 mm)	5.0 in (128.1 mm)	6.1 in (155.5 mm)
Width =	4.9 in (124.4 mm)	4.9 in (124.4 mm)	6.2 in (158.3 mm)
Length =	6.5 in (164.0 mm)	6.3 in (161.0 mm)	7.6 in (194.0 mm)
Weight =	2.9 lbs (1.3 kg)	5.8 lbs (2.6 kg)	10.2 lbs (4.6 kg)

600



Nothing like bouncing around or fighting currents when doing tough work underwater. Tether securely and easily with Magswitch Marine Tethers.



Tethers personnel or gear.

Neight =	2.9 lbs (1.3 kg)	5.8 lbs (2.6 kg)	10.2 lbs (4.6 kg)

Ideal for underwater welding and tethering

- Tether tools and equipment more securely
- Noise-suppressing coating
- Use in military and commercial applications
- Work on steel hull ships or structures
- Corrosive-resistant coating
- Marine-grade components

NOT FOR USE AS A FALL PROTECTION DEVICE

MagWheels 95 150 600 1000 Part # 8100401 8100074 8100075 8100250 Magnet 38 lbs (17 kg) 65 lbs (29 kg) 292 lbs (133 kg) 528 lbs (239 kg) Strength = 2.2 in (55.7 mm) 2.8 in (71.2 mm) 4.8 in (121.7 mm) 6.5 in (164.4 mm) Width = 1.6 in (41.0 mm) 2.0 in (52.0 mm) 3.6 in (92.0 mm) 5.0 in (127.0 mm) 2.2 in (56.2 mm) 2.7 in (69.2 mm) 4.0 in (101.1 mm) 7.1 in (180.4 mm) 0.7 lbs (0.3 kg) 2.2 lbs (1.0 kg) 6.6 lbs (3.0 kg) 20.0 lbs (9.0 kg)

The Magswitch MagWheel offers powerful connection for drive units on any ferrous surface, enabling flat, vertical or inverse travel. This unique tool has magnetic rotating elements with the potential to automate. The magnetic flux path through the wheels means climbing, carrying and

Applications include:

- Positioning and guiding
- Sheet feeding
- Pipe handling
- Fitting and fabrication
- OEM automation and fixturing applications

driving anywhere above or below a magnetic surface.

MagWheel provides all the features of a standard Magswitch on the move.



MagWheel illustrated on a Bug-0® automated welder.

Sheet Aligning & Sheet Handler Tools



No more pounding, breaking, grinding or clamping to level steel. Just turn the magnet on and pull the lever to align.











Doubles as a beam press.

- Remove high/low when aligning plate
- 100 times faster than using dogs and wedges
- MagPress doubles as a stiffenerbeam press



youtu.be/Jp3AJ3B-h5g

MagDolly MagDolly HD Part # 8100433 8100927 Magnet Strength = Magnet sold separately Magnets sold separately Overall Height = 52.8 in (1340.8 mm) 44.1 in (1120.0 mm) Extended Height = N/A 63.4 in (1611.1 mm) Width = 28.5 in (723.4 mm) 27.6 in (701.6 mm) 75.3 in (1913.0 mm) Length = 98.1 in (2490.5 mm) Weight = 43.6 lbs (19.8 kg) 60.0 lbs (27.3 kg)



Save time by using ON/OFF magnets and wheels to move sheet.



MagDolly lifts flat or round shaped steel.

MagDolly Series



Easy ON/OFF magnet actuation. Complete control - stays clean.

- Dolly's work with any Magswitch lifting magnet
- · Allows one user to move steel
- Safer and faster
- HD model allows for two users and rolls on uneven surfaces



Scan link or go to http:// youtu.be/Jp3AJ3B-h5g

Magswitch Infrastructure Tools

Magnetic Manhole Dolly and Valve Box Lifter.

In world of back-breaking hard work filled with workers compensation claims for back and finger injuries, Magswitch provides an affordable alternative that makes handling manhole covers easier and safer for your employees. A simple lightweight system, utilizing a dolly and strong Magswitch magnet, enables fast setup and quick removal of manhole and utility covers. When considering the cost of claims, cities can easily reduce these costs with the Magswitch system and provide a safer work environment for their employees.

With employees removing several valve boxes daily, the Magswitch Valve Box Lifter provides unprecedented convenience and safety in removing the cover. No need to get down on your knees and pinch your fingers. Simply position the magnet over the valve lid, turn on with extended handle and remove.

The Magswitch Magnetic Manhole Lifter can radically reduce the chance of injury by lifting covers, the #1 workers compensation claim. Plus, insurance companies might offer discount rates to your customers, or help them with the purchase price, because it creates a safer work environment for employees!



MLAY1000x3

Reduce back injuries.

Eliminate pinching your fingers.

Magnetic Manhole Lifter Dolly



Part #	8100927	8100403	8100418
Magnet Strength =	Magnet sold separately	3000 lbs (1360 kg)	4000 lbs (1814 kg)
Overall Height =	44.1 in (1120.0 mm)	10.4 in (264.5 mm)	9.9 in (250.8 mm)
Extended Height =	63.4 in (1611.1 mm)	N/A	N/A
Width =	27.6 in (701.6 mm)	7.7 in (195.4 mm)	7.7 in (195.4 mm)
Length =	98.1 in (2490.5 mm)	10.7 in (271.3 mm)	13.8 in (350.3 mm)
Weight =	60.0 lbs (27.3 kg)	36.5 lbs (16.6 kg)	45.2 lbs (20.5 kg)

WARNING: Magnets experience significant strength reduction on cast iron and uneven surfaces.

The Manhole Lifter Dolly can be used with either the MLAY1000x3 or MLAY1000x4 depending on the size of the manhole cover. For cast iron manhole covers, the MLAY1000x3 is ideal for those that weigh up to 400 lbs. For anything heavier than 400 lbs., the MLAY1000x4 is recommended.



MagDolly HD



MLAY1000x4

Scan link or go to http:// voutu.be/X7S2nETEm7I

Magnetic Valve Box Lifter



reduction on cast iron and uneven surfaces.

8100025	8130177
600.0 lbs (272 kg)	1000 lbs (453 kg)
28.4 in (722.0 mm)	28.8 in (731.5 mm)
3.9 in (100.0 mm)	4.3 in (108.0 mm)
4.6 in (117.0 mm)	4.8 in (122.8 mm)
5.3 lbs (2.4 kg)	9.8 lbs (4.4 kg)
	600.0 lbs (272 kg) 28.4 in (722.0 mm) 3.9 in (100.0 mm) 4.6 in (117.0 mm)

600

The Extenda-Lift 600 is a lighter tool, designed for smaller covers. The Extenda-Lift 1000 is a heavy-duty version for lifting heavier items or covers with uneven surfaces.



Scan link or go to http://

WARNING: Occupational Safety & Health Administration (OSHA) does not recommend lifting objects over 50 lbs by hand. Magnets experience significant strength



Introduction

Table of Contents Shipbuilding & Heavy Fabrication

90 Degree Angle Stiffeners	.1
MagPress	.1
Stiff Jack Tools	.2
Beam Press Accessory	.2
Heavy Sheet Leveler Accessory	.2
Stiffener Alignment Tool	.2
Replacement Parts & Accessories	2

Safer

Magswitch is committed to the notion that your team member should not be touching and handling steel. Let Magswitch tools do that.

Faster

Magswitch designs tools that improve productivity, resulting in lower Cost to Complete (CTC) and shortens Days to Deliver (DTD).

Stronger

We'll save you time and materials. Magnetic tools so strong, so controllable, you can save time, effort and material.

Major shipyard customers say: "Using Magswitch tools helps us save over 20 hours every week of unproductive fitting and grinding just on one substructure!"



90 Degree Angle Stiffeners







	Part #	8100961	81001000
	Magnet		
	Strength =	1200.0 lbs (545.5 kg)	2400.0 lbs (454.0 kg)
	Height=	8.2 in (208.0 mm)	12.3 in (312.8 mm)
	Width =	3.1 in (80.0 mm)	3.1 in (80.0 mm)
	Length =	7.2 in (183.0 mm)	10.3 in (262.0 mm)
	Weight =	9.9 lbs (4.5 kg)	17.6 lbs (8.0 kg)

2400

1200

Incredible Power & Precision Control!

- Magswitch 90 Degree Angle Stiffeners are some of the most compact, powerful and versatile welding tools in the market
- The angle stiffeners are easy to use and work with larger and heavier steel
- Due to the unique design, the entire side plate is magnetized, therefore they can be used with stiffeners of various sizes
- If you want more strength, just add one more magnet (only available on the 600x2 tool)
- Reinforced end caps for superior durability



MagPress MagPress Part # 8100935 Magnet Strength = 1100.0 lbs (500.0 kg) 16.3 in (414.1 mm) Height= 7.0 in (177 mm) Width =19.6in (497.8mm) Length = Weight = 13.1lbs (6.0 kg)

Align Large Steel Sheets Quickly with Precision!

- A simple way to align plate or press beam
- The MagPress features 1100 lbs of hold force instantly
- Removes high/lows with ease, simply place magnet on low, pry on high and weld with the other hand
- This allows for an individual to align two sheets and weld the separate sheets much quicker than other
- By turning the handle to other side, this tool becomes a beam press tool which can press 4-6" beam in a second
- This product gives you two functions in one simple tool

Adjustable Stiff Jack Tools

Magswitch Technology delivers tools that reduce Cost to Complete & Days to Deliver.





Shipbuilding & Heavy Fab

	3 Ton	6 Ton
Part #	8800477	8800478
Overall Height =	35.0 in (889.4 mm)	34.9 in (886.4 mm)
Width =	21.5 in (545.9 mm)	21.5 in (546.4 mm)
Length =	33.7 in (856.1 mm)	38.4 in (976.0 mm)
Weight =	132.7 lbs (60.3 kg)	182.4 lbs (82.9 kg)
Max. Beam Height =	20.9 in (530.4 mm)	22.5 in (572.4 mm)
Min. Beam Height =	2.0 in (50.8 mm)	2.0 in (50.8 mm)

Includes: Two MLAY 1000x3

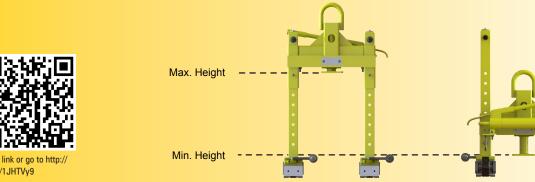
Features and Benefits

	3 1011	0 1011
Part #	8800477	8800478
Overall Height =	35.0 in (889.4 mm)	34.9 in (886.4 mm)
Width =	21.5 in (545.9 mm)	21.5 in (546.4 mm)
Length =	33.7 in (856.1 mm)	38.4 in (976.0 mm)
Weight =	132.7 lbs (60.3 kg)	182.4 lbs (82.9 kg)
Max. Beam Height =	20.9 in (530.4 mm)	22.5 in (572.4 mm)

- Must-have for barge and boat-builders
- Shallow-field magnets offer exceptional grip on thin steel
- Cuts fabrication time in half
- Powerful patented technology
- Handle on the top to move unit under
- Handles and wheels allow for easy movement along stiffener
- Straight handles allow for easy rotation and movement – similar to a wheelbarrow
- Wide variety of stiffener heights due to longer ram stroke

Stiffener Beam Height

Includes: Two MLAY 1000x6





Beam Press Accessory

Part #	8100553	
Height =	13.8 in (349.4 mm)	
Width =	7.1 in (179.8 mm)	
Length =	10.0 in (255.0 mm)	
Weight =	11.6 lbs (5.3 kg)	

Beam Press



- Attaches to MLAY 1000x4 or x6 lifting magnet
- Provides pry point for fitting stiffener beams
- · Easy-carry handle allows for transportation by one or two



Requires: MLAY1000x4 or MLAY1000x6

	Heavy Sheet Leveler	Heavy Sheet Leveler Accessory
. 4	0100540	

Part #	8100540	
Height =	9.7 in (247.3 mm)	
Width =	8.7 in (219.8 mm)	
Length =	20.4 in (518.0 mm)	
Weight =	12.5 lbs (5.7 kg)	







New tools that solve old issues.

Stiffener Alignment

Also see these tools in this catalog:

90 Degree Angle Tools - See page 11

Multi Angle MagVise - See page 8

MagPress - See page 19

MagDrill - See page 6

South Parliament	

- Remove high/low during plate fit-up
- Levels up to 2" thick plate
- Easy-carry handle

Requires: MLAY1000x3, MLAY1000x4 or MLAY1000x6

Stiffener Alignment Tool Accessory





Requires: MLAY1000x2

- Mounts onto MLAY 1000x2 lifting
- Provides stop for setting up stiffener beams
- Keeps beams at 90 degrees during fit-up

Hand Lifter 60-CE (Cordless Electric) - See page 10 **Heavy Lifting Magnets - See page 23** MagSquares - See page 5

Replacement Parts & Accessories





Magswitch offers a variety of accessories and replacement parts for our tools. Poles shoes are replaceable and extend the life of magnets. Other accessories include handles, plungers, batteries, charges, bolts and more! A large variety of annular cutters are available as well. If you need an annular cutter or pilot pin not listed below, please call us with the details.

Part #	Description
8800539	HSS Annular Cutter Kit, 8 Piece: 2 x HCS.9/16, 2 x HCS.11/16, 2 x HCS.13/16
8800540	HSS Annular Cutter Kit, 9 Piece: 1 x HCS.9/16,1 x HCL.9/16,1 x HCS.11/16,1 x HCL.11/16,1 x HCS.13/16,1 x HCL.13/16
8800541	HSS Annular Cutter Kit, 12 Piece: 1x HCS. 7/16, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1-1/16, 1-3/16
8800542	Pilot Pin 1/4"x4 15/16"
8800543	Pilot Pin 1/4"x6 1/8"
8800544	Adapter, 3/4" Weldon-1/2"-20 Thread
8800545	Keyless Drill Chuck, 1/2"-20 Thread

Note: HCS=1" Depth HCL=2" Depth

1801117

1801123

15/16"x1" Depth

1"x1" Depth

Part #	HSS Annular Cutters	Part #	TCT Annular Cutters
1801065	7/16"x2" Depth	1801084	7/16"x2" Depth
1801064	1/2"x2" Depth	1801081	1/2"x2" Depth
1801095	9/16"x2" Depth	1801085	9/16"x2" Depth
1801068	5/8"x2" Depth	1801083	5/8"x2" Depth
1801075	11/16"x2" Depth	1801082	11/16"x2" Depth
1801073	3/4"x2" Depth	1801124	3/4"x2" Depth
1801072		1801092	•
	13/16"x2" Depth		13/16"x2" Depth
1801067	1-1/8"x2" Depth	1801094	7/8"x2" Depth
1801120	7/8"x2" Depth	1801093	15/16"x2" Depth
1801074	1-1/16"x2" Depth	1801052	1"x2" Depth
1801118	15/16"x2" Depth	1801103	7/16"x1-3/8" Depth
1801121	1"x2" Depth	1801099	1/2"x1-3/8" Depth
1801110	7/16"x1" Depth	1801104	9/16"x1-3/8" Depth
1801108	1/2"x1" (Depth	1801102	5/8"x1-3/8" Depth
1801109	9/16"x1" Depth	1801100	11/16"x1-3/8" Depth
1801066	5/8"x1" Depth	1801101	3/4"x1-3/8" Depth
1801091	11/16"x1" Depth	1801112	13/16"x1-3/8" Depth
1801122	3/4"x1" Depth	1801114	7/8"x1-3/8" Depth
1801073	13/16"x1" Depth	1801113	15/16"x1-3/8" Depth
1801126	7/8"x1" Depth	1801056	1"x1-3/8" Depth
1801076	1-1/16"x1" Depth		



Scan link or go to http://magswitch.com.au/product-category/ accessories



bit.ly/1xSad1H

Scan to download our replacement parts list.

Scan for additional

accessories and

cutters.



Introduction

Table of Contents Heavy Lifters

Technology & Feature Advantages	.25
Selecting the Right Lifter	.26
MLAY600 Lifting Magnets	.27
E50 - 900/660 CE With Remote	.27
MLAY1000 Lifting Magnets	.28
HLF Series.	.29-3

Lighter

Magswitch lifters offer substantial advantages in strength, size, control and features over old technology. This translates into safer lifting for your team. When considering the substantial convenience of choosing a magnetic lifter over hooks and slings, it's easy to see how much they can improve efficiency in steel handling.

Safer

Safety is paramount when using magnetic lifters.

At Magswitch, our priority is just that—introducing tools that improve the overall safety and efficiency of all types of work environments and metal handling applications.

Stronger

Permanent magnets are now employed to lift heavy steel where only hooks or straps were previously trusted. The advancements employed by Magswitch Technology take magnetic lifting capabilities to a whole new level of safety and strength.



26

Technology and Feature Advantages



Unlike older technologies, Magswitch lifters exert full hold force on thinner steel.

» The majority of steel lifted is less than 1inch thick.

Better hold on uneven, dirty steel or round shapes.

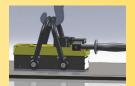
» Magswitch lifters feature a more concentrated flux, resulting in a safer hold when lifting these types of materials.

Magswitch Lifters are easier to turn on.

Heavy Lifting

» Especially beneficial in larger lifters, where older technology makes working with thin steel (1 inch or less) very difficult.

Easier to activate on thin material than old technology lifters.





Lock on/Lock off handle

Single hook: lift from

horizontal to vertical.

» Use one swivel hook when

lifting from flat to vertical

Dual hook: Stability control

» Use both hooks for safer lifts; the force of the lift stabilizes

dangerous swings in the load

the magnet and reduces

(Patent-pending: App #61/665,611 USA).

» Meets or exceeds all domestic and international lifting standards

Replaceable pole shoes

» Periodically replace the pole shoes to maintain safety and extend the life of the lifter

Magswitch Delivers safety:

Choosing the right lifter is very important for safer lifting.

Always Play It Safe. Saving a few dollars on a magnetic lifter is not worth the risk. Lift ratings vary dramatically due to a number of variables. ALWAYS select lifters based on what you are lifting.

Look at the Max. Safe Working Load capabilities of each magnet on the chart below and note the magnets that qualify for the job. The Max. Safe Working Load changes with material thickness as well as other important factors. Please consult your Magswitch dealer for recommedations specific to your application.

Reduction Factors for Materials (Other than AISI 1020 Steel)		
Material Reduction Factor		
Cast Steel	0.90	
3% Silicon Steel	0.80	
AISI 1095 Steel	0.70	
416 Stainless Steel	0.50	
High Carbon Steel	0.50	
Cast Iron Non-Chilled	0.45	
Pure Nickel	0.10	

Selecting the Right Magswitch Lifter

FLIP TO PAGE 52 TO FILL OUT A CHECKLIST FOR SELECTING THE RIGHT MAGSWITCH LIFTER. 2500 eal World" of Steel Lifting 2000 Safe Working Load 1500 in LBS. 3:1 G. 1000 * 1 Ton Rated Lifter 500 1/2" (13 mm) Steel 1" (25 mm) Steel 2" (50 mm) Steel Part # Wt. (lbs) 736.0 748.0 750.0 761.7 446.0 778.3 904.0 911.0 911.0 783.0 1663.7 2148.7 1100.0 0.0 900.0 1400.0 2000.0 1725.3 2569.8 2732.6 4016.7

	Part #	Product Description	Max Safe Working Load 3:1	Thin Steel Safe Working Load on 1/4" 3:1	Full Saturation
eld	8100089	Magswitch MLAY600 Lifting Magnet	200 lbs	170 lbs	600 lbs
^ Fi	8100360	Magswitch MLAY600x2 Lifting Magnet	367 lbs	248 lbs	1,100 lbs
Shallow Field	8100364	Magswitch MLAY600x4 Lifting Magnet	762 lbs	517 lbs	2,285 lbs
Sh	8100387	Magswitch E50-900/660 CE Lifting Magnet	600 lbs	380 lbs	1,800 lbs
	8100088	Magswitch MLAY1000 Lifting Magnet	333 lbs	205 lbs	1,000 lbs
ъ	8100484	Magswitch MLAY1000x2 Lifting Magnet	667 lbs	425 lbs	2,000 lbs
Field	8100403	Magswitch MLAY1000x3 Lifting Magnet	911 lbs	446 lbs	2,733 lbs
Deep	8100418	Magswitch MLAY1000x4 Lifting Magnet	1,300 lbs	494 lbs	3,900 lbs
	8100482	Magswitch MLAY1000x6 Lifting Magnet	2,149 lbs	783 lbs	6,446 lbs
	8100549	Magswitch MLAY1000x12 Lifting Magnet	4,016 lbs	1,331 lbs*	12,000 lbs

Chart values represent data collected using SAE 1020 steel only. Please consult your distributor for information regarding de-rating factors for other materials. No information contained herein may take precedence over ASME B30.20 standard. Many factors contribute to actual breakaway force in each application. Always test the Magswitch in each application before deployment.

*Estimated holding force

COMPARE HEAVY LIFTERS MAGSWITCH TECHNOLOGY OLD TECHNOLOGY **MAGSWITCH TECHNOLOGY** Stronger Hold on Thinner Steel Stronger Hold on Thinner Steel Weight: 85-130 Lbs 517 LBS 783 LBS SWL SWL STEEL 1,298 LBS SWL 762 LBS SWL 900 LBS 1/2" (13MM) SWL STEEL 1"(25MM) 762 LBS 1,872 LBS 1,400 LBS STEEL SWL 762 LBS 2,148 LBS 2,000 LBS 2" (50MM) STEEL

All ratings per ASME 3:1 Safe Working Load (SWL)

1/2 TON

1 TON



2 TON



Scan link or go to http:// bit.ly/1v5iVfF



Heavy Lifting Magnets





1000 1000x2 1000x3 Part # 8100088* 8100484* Max. SWL 3:1 333.0 lbs 667.0 lbs lift capacity (151.0 kg) (302.0 kg) Deep Deep Minimum de-0.8 in (19.1 mm) stack thickness 0.8 in (19.1 mm) 10.6 in (269.5 mm) 10.4 in (264.5 mm) Height = 10.0 in (253.1 mm) Width = 2.8 in (72.1 mm) 7.7 in (195.6 mm) 7.7 in (195.4 mm) Length = 5.8 in (147.1 mm) 9.9 in (250.5 mm) 10.7 in (271.3 mm) Weight = 11.5 lbs (5.2 kg) 23.8 lbs (10.8 kg) 36.5 lbs (16.6 kg)

*Features single hook for lifting

	1000x4	1000x6	1000x12
Part #	8100418	8100482	8100549
Max. SWL 3:1 lift capacity	1300.0 lbs (591.0 kg)	2149.0 lbs (977.0 kg)	4016.0 lbs (1825.0 kg)
Minimum de- stack thickness	Deep 0.8 in (19.1 mm)	Deep 1.0 in (25.4 mm)	Deep 1.3 in (31.8 mm)
Height =	9.9 in (250.8 mm)	9.5 in (242.5 mm)	11.9 in (301.8 mm)
Width =	7.7 in (195.4 mm)	7.7 in (195.4 mm)	12.1 in (306.8 mm)
Length =	13.8 in (350.3 mm)	20.1 in (510.3 mm)	19.5 in (496.0 mm)
Weight =	45.2 lbs (20.5 kg)	60.3 lbs (27.4 kg)	120.0 lbs (55.0 kg)

For heavy lifting, the MLAY1000 series lifters attain full hold on approximately 1.0in (25.4mm) thick steel.

These lifters feature our full swivel hook for lifting from the top or the side. Each lifter is manually activated

The MLAY1000 series features a replaceable pole shoe, ideal for customizing to fit your application. With

full field saturation (hold force) at 1.0in (25.4mm), this lifter is ideal for porous material and thick steel. The

These lifters are lightweight and easy to turn on compared to old technology lifters, which are difficult to activate on thin steel. For example, the MLAY1000 series can easily be activated on 0.5in (12.7mm) thick

steel. This means that Magswitch enables you to use powerful lifters on thinner steel. These lifters feature

our patented dual hook for load stability, and single hook for lift between horizontal to vertical. With full field

saturation, hold force at 1.0in (25.4mm), these lifters are ideal for porous material and thick steel.

Heavy Lifting Magnets

Most powerful shallow-field tool

(517 lbs on only 1/4 inch).

Part# 8100089

1/4 TON
Part# 8100364

medium lifting.

Heavy Lifting

Lightweight, small

profile and strong lift.

The Magswitch MLAY600 series magnets are perfect for small materials and light to medium lifting. These lifters are lightweight, have a small profile and feature our full swivel hook for lifting from the top or the side. Each features a locking handle to ensure release of load is only intentional. Manual ON/ OFF operation.

600

8100089

Shallow

0.5 in (12.7 mm)

4.4 lbs (2.0 kg)

Part #

Max. SWL 3:1

stack thickness

lift capacity

Height =

Width =

Length =

Weight =

600x2

8100360

7.2 in (184.0 mm) 6.7 in (170.4 mm)

2.0 in (51.5 mm) 6.5 in (165.4 mm)

4.2 in (106.0 mm) 8.7 in (220.9 mm)

0.5 in (12.7 mm)

9.5 lbs (4.3 kg)

600x4

8100364

Shallow

17.9 lbs (8.1 kg)

200.0 lbs (90.0 kg) 367.0 lbs (166.0 kg) 762.0 lbs (346.0 kg) 600.0 lbs (272.0 kg)

With full field saturation, hold force at 0.5 in (12.7mm), these lifters are ideal for thinner steel, but hold thick steel just as well

The MLAY600x4 is lightweight yet very strong. This lifter features our patent-pending dual hook for load stability, and single hook for lifting horizontal to vertical. With full field saturation, hold force at 0.5 in (12.7mm), this lifter is ideal for thinner steel, but will hold thick steel just as well.

Custom designed pole shoes are available for MLAY600x2 and MLAY600x4



900/600 CE

8100387

Shallow

19.4 lbs (8.8 kg)

0.5 in (12.7 mm) 0.5 in (12.7 mm)

6.6 in (166.5 mm) 12.7 in (322.0 mm)

6.5 in (165.4 mm) 4.1 in (103.0 mm)

9.3 in (235.9 mm) 9.3 in (236.0 mm)

w/ Remote Control

- · World's first cordless electric heavy lifter!
- Includes two 12-volt rechargeable Lithium-ion batteries and a charger, so you always have a spare charged battery on hand
- · Battery offers up to 750 actuations per charge.
- · Lifts flat, steel and pipe.
- Manual ON/OFF override feature, if battery loses charge.
- Compact fits in narrow beams.







Safety: Patent-pending dual hook for added load stability



and features a safety lock in both on and off position.

MLAY1000x2,3,4,6 all have replaceable pole shoes.





Use the single hook to lift horizontal to vertical.

27

Magswitch Heavy Lift Frame Series

Another revolutionary innovation from Magswitch!

If you lift pipe, I-beams or heavy sheet steel, this is a tool you need in your shop! Magswitch Technology is "Changing the way things are done" once again by introducing the innovative new Heavy Lift Frame Series. This game-changing tool utilizes patented shallow-field technology to lift a single sheet from a stack of material. Enhanced workplace safety is achieved through fail-safe operation. Increased strength, efficiency and durability make tough jobs easy. By providing unique magnetic solutions for new standards of productivity, one man can easily do the work of two.

Features and Benefits

Proudly designed, tested and manufactured in the USA

- Patented and powerful shallow-field technology
- Single sheet de-stack capability
- Revolutionary in steel lifting / handling
- Scalable technology customized to meet your needs
- Add additional magnets based on needs
- Cordless electric (CE) actuation with remote control allows for easy ON/OFF capability - available on most heavy lift frames
- Onboard battery creates a more compact tool
- Enhanced workplace safety is achieved through fail-safe operation
- Dual Purpose under hook or forklift

Bottom Line Benefits

- Increased productivity / safety / significant cost savings

Magswitch."

"I never trusted single sheet lifters until I was introduced to







*Chain slings sold separately

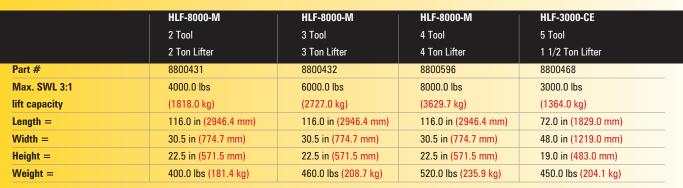


bit.ly/1CtvRNw





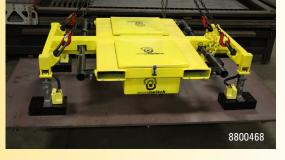




Cordless Electric Operation (CE) Manual (M)







Heavy Lifting



*Chain slings sold separately



Prevent Accidents Before They Happen!



Invaluable Tools For Any Woodworker

Utilizing patented magnetic technology, Magswitch has created a series of powerful award-winning tools designed to make your woodworking projects faster, easier and safer. The Magswitch Workholding System replaces fences, jigs and other devices, and our system works on a variety of machines. These tools increase safety by keeping fingers away from the table while improving the quality of cuts. With fast and precise setup anywhere on the table, the tools are ideal for anyone working with wood.

See Demo on Workholding System.



Scan link or go to http

Safer

Avoid saw-related accidents before they happen. Reduce kickback and keep your fingers out of harms way.

Faster Setup

A simple half-turn locks the tool into place with unprecedented holding power. Never again will you be limited to mitre slots or tracks.

Precise

Easy and precise positioning. Better control of your work piece allows for a higher quality cut.

Table of Contents Woodworking

Starter Kit
Vertical Featherboard Attachment
Resaw Guide
Dual Roller Attachement
Thin Stock Hold Down Attachment
Universal Track Attachment
Individual Featherboards
MagJigs 34
MagSquares
Accessories & Add one



33

All your tabletop workholding needs in one complete system.

A workholding system built around Magswitch ON/OFF magnetic clamps provides strong, precise placement anywhere on any steel table. Our award-winning technology is a breakthrough for accomodating your workholding needs on all your power tool tables including table saws, joiners, planers, band saws and shapers.

Starter Kit and Accessories



Starter Kit Part# 8110134 It all starts here.

Add attachments for more versatility. Kit contains:
Two 150 lb grip MagJigs, a Universal Base and a Reversible Featherboard
Attachment.

- » Fast easy set up
- » Precise tensioning
- » Place anywhere on table



Vertical Featherboard Attachment

- » Safety award winner. Mitigate kickback.
- » Absolute must-buy with Starter Kit.
- » Dual plane workholding.
- » Stack horizontally for tall panels.

Part# 8110178



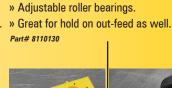
Thin Stock Hold Down Attachment

- » Three tools in one.
- » Thin stock hold near blade.
- » Clean cuts with strong hold near blade.» Cut thin strips with roller guide.
- Part# 8110362*

Resaw Guide Attachment

- » Adjustable roller bearing for glide.
- » Angled in-feed/out-feed for blade drift.
- » Micro adjust to exact 90°.
- » Use on band saw or out-feed on table saw.

 Part# 8110125



Dual Roller

Attachment

» Ideal for tall panel feed

» Glide rollers - yet strong firm hold.





18in & 36in Universal Track Attachment

- » Instant wall anywhere you need it.
- » Accepts standard hardware.
- » Accepts all standard T-bolts, ¼ in. hex, 5/16 in hex and Kreg® clamps. 18 in Universal Track Wall (Part# 8110132)*

36 in Universal Track Wall (Part# 8110370)*

Add Extra l

Add Extra Bases or MagJigs

» Use the MagJigs in your own fixtures.

Mounting Base (Part# 8110112)*

Riser Kit (4) - for Vertical Attachment (Part# 8110155)*

* Must have Starter Kit or Mounting Base and two MagJigs to mount the attachment to.

Individual Featherboards

8110015	Universal Featherboard (two 95 lb grip magnets)
8110328	Pro Table Featherboard (two 150 lb grip magnets)
8110329	Pro Fence Featherboard (two 150 lb grip magnets)
8110131	Reversible Featherboard

Individual Featherboards

Description

Delivering the benefits of Magswitch technology, the Universal, Pro Table and Pro Fence Featherboards are available to meet your specific needs. The Pro Table Featherboard accommodates the Vertical Featherboard Attachment (Part #8110178).



Universal

Pro Table

Pro Fence

Part # Description MagJigs

8100818 MagJig 60 8110004 MagJig 95 8110005 MagJig 150 8100377 MagJig 235









MagSquares

ON/OFF Magnetic Clamp

Magswitch MagJigs are the unprecedented and ultimate workholding clamp. Incredible hold force is activated with a simple 180° turn! Unmatched speed, strength and precision have revolutionized table-top workholding. Simply drill holes into your 34 in boards and use as many MagJigs as you like, depending on the hold force you require. Use anywhere on a steel table and move from fixture to fixture.

Part #	Description

Part #

8100494	MagSquare 165
8100238	MagSquare 400
8100106	MagSquare 600
9100000	MagCauero 1000



ON/OFF Magnetic Squares

Magswitch MagSqaures are the most versatile workholding tools ever. A half turn is the only action required to turn them on and off, making them superior to manual clamping. Use as a guide anywhere on a steel or cast iron table. No limitations like clamps

Description Accessories & Add-ons



Drill holes in ¾" thick material to create custom jigs (see MagJigs above for custom application). Forstner bits available for MagJig 95 & 150. Magnetic cabinet latches are great for boats, RV's and trailers. Available in both manual and auto-on.







Woodworking







The unmatched control and scalability of ON/OFF permanent magnets, combined with our patented new switching technique allows manufacturers, integrators and engineers to find clever new solutions each day. This more efficient technology generates millions in cost savings.

Magswitch MIS tools bring the power and versatility of the Magswitch Technology to the automation world, offering significant new capabilities and tremendous improvements to end of arm tooling, pick-and-place, lifting and many other applications. The powerful and lightweight tools in the integrated solutions line make it possible to implement magnets where they weren't previously applied. One application greatly benefitting from the use of magnetic technology is end of arm gripping and handling. Magswitch can replace costly vacuum cups and traditional pin clamps, which over time present expensive energy efficiency and breakage problems.

Companies such as Volkswagen, Audi, Comau, Gestamp, Chrysler, Ford, Bobcat and Caterpillar are now using Magswitch pneumatic tools in their plants. Six additional automotive companies are in the process of establishing Magswitch for integration. If you handle or fabricate steel using automation, you will find solutions and savings with Magswitch that you never knew were possible.

Speed

Bringing the power & versatility of Magswitch Technology to the automation world.

Efficiency

Significant new capabilities and improvements in material handling applications.

Energy Savings

Replace costly vacuum cups, heavy grippers and problematic pin clamps.

Table of Contents Automation

AR-Series	37
<mark>AY-Series</mark>	38
. <mark>AY-Series</mark>	39
Magnetic Sheet Fanner Series	<mark> 4</mark> 0
.aser Fixture Tool	40
New Innovations	<mark> 4</mark> 1
<mark>Pin Clamp Tool </mark>	<mark> 4</mark> 2
Ball & Apple Core Mounts	<mark> 4</mark> 2
Pole Shoe Customization	43
Magnetic Field Depth	<mark> 4</mark> 4
Custom Applications/Machining	45
<mark>Custom Design/Machine Co</mark> mpone	<mark>ents 4</mark> 6
Application Engineering Process	47

Automation

AR-Series	Part #	NAAMS	Part #		Suggested MAX	Optimal Material	Unit
An-Selles	NAAMS	High Heat	Classic	Description	Safe Working Load 4:1	Thickness	Weight
	8140678*	8140718*	8140481*	AR20	15.8 lbs (7.2 kg)	11.0 ga (3.0 mm)	0.9 lbs (0.4 kg)
	8140679*	8140719*	8140480*	AR30	33.5 lbs (15.2 kg)	10.0 ga (3.5 mm)	1.5 lbs (0.7 kg)
	8140715*	8140720*	N/A	AR40	95.3 lbs (43.3 kg)	0.4 in (9.5 mm)	3.7 lbs (1.9 kg)
	8140680*	8140721*	8140319	AR50	137.0 lbs (62.1 kg)	0.4 in (9.5 mm)	6.1 lbs (2.8 kg)
NAAMS	8140681*	8140722*	8140320	AR70	244.0 lbs (110.7 kg)	0.5 in (12.7 mm)	14.9 lbs (6.8 kg)
	N/A	N/A	8140740	AR110	783.3 lbs (356.0 kg)	1.5 in (38.1 mm)	62.5 lbs (28.4 kg)

*Accepts 8.0 mm face shielded inductive proximity

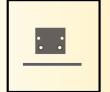


- Fast MTTR with NAAMS mounting
- Customizable contact surface
- Maximum power to weight ratio
- Saves energy 90% less Air
- Fail-safe operation



Scan link or go to http:// youtu.be/bNJKcwRseFk









FLAT ROUND

IRREGULAR

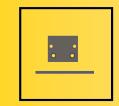


Application:	Simultaneous pick and place of stamped components with vision		
Replacement for:	Power clamps, parallel grippers, suction cups		
Transfer Medium:	6-Axis Robot		
Challenges:	 » Small parts loading into fixture limit clamping possibilities » Part shifting during handling 		
Magswitch Advantage:	Maintain Position Accuracy » Custom pole shoes match geometry to maintain orientation Reduced Gripper Size » Small form factor allows units to fit into tighter spaces		

		Suggested MAX	Optimal Material	Unit
Part #	Description	Safe Working Load 4:1	Thickness	Weight
8140543	M10AY ASC*	13.3 lbs (6.0 kg)	20.0 ga (1.0 mm)	1.0 lbs (0.5 kg)
8140447	M15AY ASC*	40.0 lbs (18.2 kg)	12.0 ga (2.7 mm)	1.8 lbs (0.8 kg)
8140591	M20AY ASC**	95.0 lbs (43.2kg)	0.2 in (4.8 mm)	3.2 lbs (1.5 kg)
8140263	M30AY ASC**	131.0 lbs (59.4 kg)	10.0 ga (3.4 mm)	6.4 lbs (2.9 kg)

^{*}Accepts 8.0 mm face shielded inductive proximity
**Accepts SMC D-S7P1 & D-S7P2, or D-S791 & D-S792

FOR USE ON:



FLAT



Scan link or go to http:// http://bit.ly/1QbQZil

- Shallow field technology
- Better performance in shear
- Replaces suction cups
- Best tool for de-stacking
- Saves energyFail-safe operation



AY-Series

Application:	Fast handling of sheet metal blanks
Replacement for:	Suction cups
Transfer Medium:	Palletizing robot, gantry, pick & place units
Challenges:	 » Unstable degree of oil (slipping parts during transfer) » Very low cycle times (down to 2 seconds) » High Energy Consumption (permanent vacuum required to ensure fail-safe operation)
Magswitch Advantage:	Eliminate downtime from slipping parts » Performance is independent of degree of oil Improved Cycle Times » Maximum actuation time of 0.3s Energy Efficient » Air consumption reduced by 90%

	High Heat		Suggested MAX	Optimal Material	Unit	LAY-Series
Part #	Part #	Description	Safe Working Load 4:1	Thickness	Weight	LAI-Selles
8140575	8140711	PLAY20x4	72.1 lbs (32.8 kg)	0.4 in (9.5 mm)	2.6 lbs (1.2 kg)	<u> </u>
8140405	8140873	PLAY50x2	275.0 lbs (125.0 kg)	0.5 in (12.7 mm)	10.6 lbs (4.8 kg)	
8140393	8140838	PLAY50x3	413.0 lbs (187.0 kg)	0.5 in (12.7 mm)	18.3 lbs (8.3 kg)	THE PARTY OF THE P
8140404	8140874	PLAY50x4	572.0 lbs (260.0 kg)	0.5 in (12.7 mm)	30.0 lbs (13.6 kg)	
8140391	8140875	PLAY70x2	530.0 lbs (240.9 kg)	0.8 in (19.1 mm)	26.6 lbs (12.1 kg)	
8140544	8140836	PLAY70x3	719.0 lbs (326.8 kg)	0.8 in (19.1 mm)	36.0 lbs (16.3 kg)	@ magnifich
8140417	8140876	PLAY70x4	975.0 lbs (443.0 kg)	0.8 in (19.1 mm)	48.0 lbs (23.2 kg)	
Note: Stand	ard sensor can a	ccents SMC D-S7P1	& D-S7P2, or D-S791 & D-S79	72		• •

FOR USE ON:



FLAT



ROUND



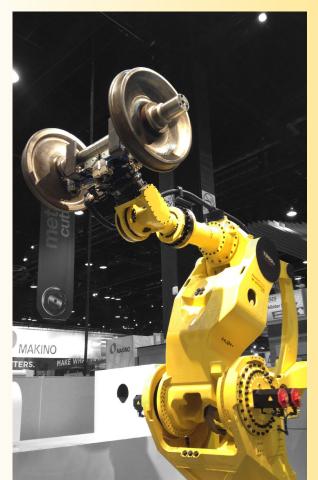
IRREGULAR



youtu.be/WDoLeaYqRfk

Customizable Contact Surface

- Deep field technology
- Ideal for handling long components
- Saves energy
- Fail-safe operation





Application:	Railway wheelset lathe load/unload	
Replacement for:	Mechanical grippers	
Transfer Medium:	6-Axis Robot	
Challenges:	» Extreme weight (1157kg)» Shear loading» Part security» Gripper weight	
Magswitch Advantage:	Improved Safety » No external moving parts Reduced Gripper Weight » Lighter, more compact tools Extreme Performance » High power to weight ratio	

Magnetic Sheet Fanner Series

Finally, a safer magnetic sheet fanner to save fingers!

Magswitch Magnetic Sheet Fanner - True ON/OFF technology preventing costly accidents!

- Tackles any height stack with ease
- Free floating design holds fanner to stack with auto-indexing functionality
- Portable

8100871	8140686
7.5 in (190.0 mm)	8.5 in (216.0 mm)
6.3 in (159.5 mm)	6.5 in (164.0 mm)
9.0 in (228.0 mm)	12.8 in (323.5 mm)
14.8 lbs (6.7 kg)	40.0 lbs (18.2 kg)
	7.5 in (190.0 mm) 6.3 in (159.5 mm) 9.0 in (228.0 mm)

Free-Floating





Pneumatic

Laser Fixture Tool AR30

8140788 Part # **Optimal Matl.** Thickness 10.0 ga (3.5 mm) Length = 4.1 in (105.0 mm) Width = 2.5 in (64.0 mm) 5.7 in (145.0 mm) Height = 4.8 lbs (2.2 kg) Weight =







FLAT



ROUND



IRREGULAR



The Magswitch AR-Series has been tested in production on laser cutting applications with the following results:

Increased process efficiency by reducing nonvalue added times.

- » Magswitch tools clamp inside perimeter of the part allowing for optimized laser path.
- » Faster manual loading and automatic clamping.

• Improved repeatability of process and part accuracy.

» No moving parts (clamp arms) during process guarantees static part location improving quality of final product.

Automation

Automation

New Innovations... Coming Soon!

NEW!

Smart Technology

- Integrated into Tool
- Eliminates Need for Additional Sensors
- Available on ALL New Tools





J-Series

- Integrated top NAAMS Mounting
- Stronger
- Improved Pole Shoe Design

Degauss Technology

- Works with ALL Magswitch Tools
- Removes Magnetic Footprint Left by Tool
- Integrated with Smart Technology
- Ideal for Powertrain and Hardened Steel Components



Part #	Description
8800409	AR20 Pin Clamp Pole Shoe Kit
8800410	AR30 Pin Clamp Pole Shoe Kit
8800411	AR40 Pin Clamp Pole Shoe Kit
8800412	AR50 Pin Clamp Pole Shoe Kit

Standard pin clamp pole shoe kits fit all relevant magnet size part numbers *Custom central pin sold separately

Combine Magswitch clamping technology with location accurate pin positioning. AR-Series units can be fitted with standard pin clamp pole shoe kits that allow for the addition of a custom locating pin. Custom pole shoe designs may also be utilized if necessary. Please send designs and questions to *applications@magswitch.com.au* for design assistance and review.





Pin Clamp Accessory Kit*

Ball & Apple Core Mounts Ball mounts for M/ME/AR/AY units	Part #	Description
	8800334	M15AY Ball
	8800345	M15AY Apple
	8800335	M20/M30AY Ball
	8800346	M20/M30AY Apple
	8800245	M15 Ball
O mas	8800246	M15 Apple
	8800243	M20 Ball
	8800244	M20 Apple
	8800242	M30 Ball
	8800226	M30 Apple
	8800235	M4040 Ball
Each Standard ball mount has a 28.5mm steel ball which	8800236	M4040 Apple
can mount to many existing EOAT mounting arms, easily	8800250	PLAY20x4 Ball
replacing existing tools on a fixture such as suction cups.	8800251	PLAY20x4 Apple

For custom shoes, please inquire with your distributor or direct to Magswitch. Even more custom accessories available upon request, including bin picking shielding (MagArmor) and unique pins.

- Match geometry of target component
- Improve performance on irregular shapes
- Increased versatility; Change shoes to handle a variety of components
- Multiple component shapes can be designed into a single pole shoe

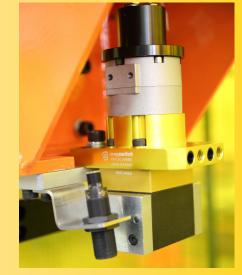
Pole shoe design may affect magnet performance













Magswitch Field Depth

Magswitch Technology's product line offers two distinct magnetic field configurations, Deep or Shallow. Field depth is an important consideration when selecting a magnet for your application. It is controlled by magnet size and multiple magnet configurations, both proprietary features of Magswitch Technology. The thickness of ferrous material needed to absorb all magnetic flux from the magnet determines field depth. For example, insufficient thickness causes oversaturation, reducing the strength of the magnet when lifting a target. The oversaturation also provides a strong magnetic field in the air below the target material, sometimes resulting in the gripper trying to lift or attach any adjoining component to the target material. Always be sure to thoroughly test all applications and when possible consult your distributor or Magswitch representative directly.

Deep Field

Deep field units will work best on thicker materials and materials that have an air gap, such as uneven or rough surface, dirt, rust, debris, paint or any other surface imperfection which prevents the magnet from making full contact with ferrous steel. Deep field magnets can achieve full saturation on imperfect targets where shallow field cannot.

Shallow Field

Shallow field units will work best on thinner materials, such as sheet metal and stamped parts that have a flat picking surface large enough for the entire unit. Smaller magnets and interacting magnetic arrays create a shallow field that achieves full saturation on thin workpieces and allows accurate destacking of thin material.

Due to the scalability of the technology, shallow field configurations may be specified on any thickness material to optimize your cost/performance ratio.

See this principle

demonstrated here!



Scan link or go to http:/ youtu.be/gLEEu0jFL3w

Field Depth by Size:

The number in similar unit descriptions will indicate field depth. Larger number=Deeper field. E.g. M110>M70>M50

Field Depth by Magnet Configuration:

Deep Field = (N-S) (S-N) (N-S) Jointed Star Common poles should face each other. This is the case with our LAY and AY JSC series. Read the operation and design guidelines for more information on proper pole alignment and connectivity.



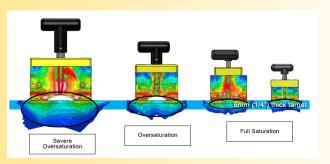
Shallow Field = (N-S) (N-S) (N-S) Alternating Star Dissimilar poles should face each other. This is the case with our AY ASC series which is specifically designed to hold better on thinner sheets. Field Depth is represented in the charts for each series by the Optimal Material Thickness Column.



Automation

Field Depth (1/4in (6mm) thick target)

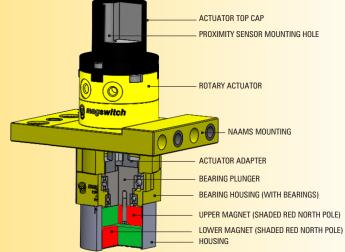
Factors include total height and diameter of the housing (magnets). Housing shape is a lesser factor as well.



Airgap Performance (1/4in (6mm) thick target)



MAGSWITCH CUTAWAY – OFF POSITION



Custom Applications/Machining

In addition to groundbreaking products, Magswitch offers the expertise and resources to assist customers with their design and application challenges. Contact one of our knowledgeable sales representatives for advice on fixture, pole shoe, guarding and multiple magnet designs to achieve the best performance possible for your application. If you need more than a design, we've got you covered in the fabrication department as well—at a fraction of the cost of a machine shop, Magswitch can help you customize a range of components to expand the usability of your tool.

Magswitch's application support utilizes the most advanced tools to provide the best application support in the industry. Using finite element analysis, our team can accurately determine the holding force of an End of Arm Tooling (EOAT) utilizing Magswitch tools with custom pole shoes on a client's part model. As part of the application process, Magswitch application engineers will identify correct tool size, quantity and placement on parts.

youtu.be/H80LH1vWpwl

Automation

No job is too large for Magswitch. In 2014, Magswitch assisted a prominent integrator fully equip a large boiler manufacturer's newest facility with Magswitch tools as a platform technology. Magswitch assisted in developing fixtures with compliance to handle boiler components throughout the 16 automated stations providing a complete platform solution for the manufacturing processes.





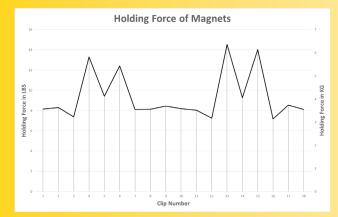
Magswitch super heavy lifters are available in linear and circular arrays. Available in pneumatic actuation and capable of lifting heavy loads.



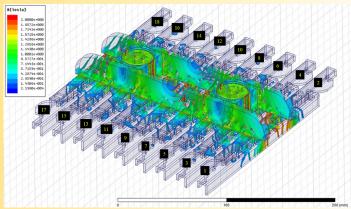
In addition to application design assistance, Magswitch offers ANSYS magnetic analysis to confirm holding force and validate pole shoe designs. Magswitch prides itself on having one of the most knowledgeable distribution networks and a team of engineers to handle any application presented. It is highly recommended that you contact your local distributor for application assistance on every project. Many factors determine the performance of a magnet and all should be accounted for before selecting your tool.

To help our team quickly and efficiently determine a solution, please take the time to fill out an inquiry form that can be found on the web at: http://magswitch.com.au/information-request/

Once you have completed the form, please send it to your local distributor contact located on the back of this catalog, or send it to: applications@magswitch.com.au.







Magnetic B Field of 2 AR30 units with a common pole shoe on 18 clips (numbered clips correlate with the holding force data on the left).

Custom Design - Machine Components

Magswitch offers custom machined components to help you with your application.

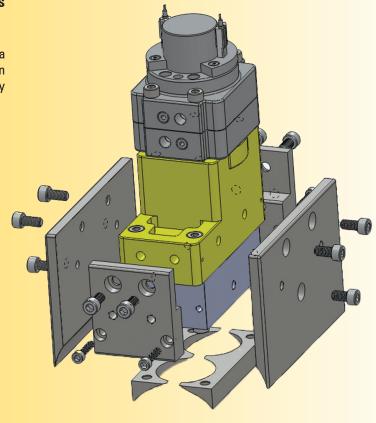
Don't hesitate to run your pole ideas past our engineers. If a custom pole shoe is required, Magswitch can provide design assistance to facilitate drawing generation. Custom accessory and fixture machining is also offered at competitive rates.

Send your designs to Magswitch for a free quotation.

Magswitch Technology 1355 Horizon Avenue Lafayette, Colorado 80026

Phone: 303-468-0662 Fax: 303-951-9918

Email: applications@magswitch.com.au



Application Engineering Process

Phase 1 – Collection of application details and initial evaluation

The 6 critical elements to selecting a tool are:

- 1. Material Grade e.g. AISI 1020
- 2. Thickness
- 3. Weight
- 4. Shape
- 5. Surface Condition coatings, treatments, roughness
- 6. Motion Profile

The Magswitch application engineering team will analyze the provided information to supply a basic recommended tool and quantity estimate.



8 (tests) 1. (5005-000) 1. (5005-0

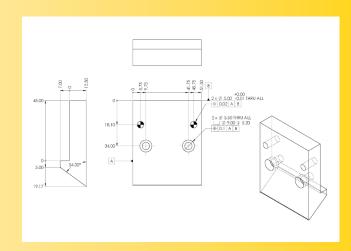
Phase 2 – Detailed Proposal

The detailed proposal includes the following:

- 1. Overview of application details
- 2. Tool selection
- 3. Tool placement on target component
- 4. Pole shoe design suggestion if necessary
- 5. Accessory design suggestion
- 6. ANSYS magnetic FEA analysis if required
- 7. Breakdown of safety factor analysis

Phase 3 – Final Design

After selecting Magswitch as the specified tool for the application, Magswitch engineers will complete detailed designs for pole shoes and accessories in order to produce and deliver components to meet project timelines.



Magswitch Partners

Magswitch Technology partners with many great brands around the world to distribute our brand as well as integrate our patented technology into their brands and products. When it comes to choosing the best technology, global brands go with Magswitch. In some cases Magswitch designs and delivers complete products. In other case, OEM's choose to design and integrate Magswitch technology into new products in partnership with Magswitch application engineering.

More great companies are changing the way their customers do things, from high tech, high voltage breaker systems and medical crash carts for increased safety, to high tech carbon fiber manufacturing in aerospace and deep sea ROV tools. It can be surprising how many place Magswitch Technology is found. We proudly support our partners, just as we do our own yellow tools.



Flange Wizard Inc.



Gullco www.gullco.com



Arc Products
www.arcproducts.com



Kawasaki Robotics robotics.kawasaki.com



Weld Tooling Corporation www.bugo.com



Lincoln Electric



Carter Products
www.carterproducts.com



CBS ArcSafe www.cbsarcsafe.com



ORS Nasco



ESAB www.esab.com



Tweco/Victor Technologies
www.victortechnologies.com
www.victortechnologies.com/tweco



Essendant (formally ADOX)
www.adoxoki.com

Magswitch U

On-Site Training • Virtual Training • Application Library





Scan link or go to www. magswitchmedia.com





In 2015 Magswitch opened our state-of-the-art training center, located inside our Global Headquarters building near Denver, CO. The training center is outfitted with A/V equipment and is setup for interactive training. We bring in guests such as distributor partners, OEM partners, Magswitch employees, and customers to learn about our amazing new technology. Magswitch is committed to educating our partners and customers on the proper use of magnets in order to make their operations safer and more efficient.

Please call our office at 303-468-0662 to arrange a tour, or to find out when the next training session is scheduled.

Magswitch On The Go

Magswitch On The Go is a great way to bring the showroom to the customer. This mobile trailer has been custom designed to demonstrate a wide range of Magswitch's product portfolio in a unique way. Customers get hands on training on how to use the products and in many cases, they find new and impressive ways to use the tools. The trailer has been all over the Gulf Coast and has been key to driving new products and innovations for implementations of Magswitch products. Additional demovehicles are being added to the Magswitch fleet in 2016.



Marketing & Selling Tools

Once an individual sees the products in action, the value of Magswitch technology becomes readily apparent. Unlike any other industrial magnetic product, Magswitch delivers a unique, powerful, controlled magnetic field that drives value in unlimited industrial applications. Productivity, efficiency and safety are the hallmarks of the Magswitch Value Proposition (MVP).

Magswitch Demo Kits

The Magswitch Demo Kit is a great selling tool to use with customers. The versatility, safety and productivity is on display and in the hands of users when demonstrating these kits. Customers can see the technology in action and really understand the MVP!



Compact / Durable / Professional

- MLAY 600x4 Lifting Magnet
- Multi Angle 1000 MagVise
- Pivot Angle 200
- Mini Multi Angle w/ 300 Amp Ground
- MagSquare 400
- 600 Amp Ground Clamp
- Steel Demo Pipe
- Steel Shot in Container

Part #	Description
8800125	Large Manual Tools & Lifting Demo Kit
8800589	Small Manual Tools Demo Kit
8800440	Automation Demo Kit

Marketing Materials

The Magswitch Marketing Department is available for support with trade shows, showrooms and events, photography, videography, literature, Magswitch demo table, steel shot, MagDrill demo plate signage and give-a-ways.

For questions regarding marketing products and services contact marketing@magswitch.com.au or call 303-468-0662.

Selecting the Right Magswitch Lifter

Choosing the right lifter is very important for safer lifting. Lift ratings vary dramatically due to a number of variables. ALWAYS select

What is the thickness of the material?	What is the geometry of the material?		
1/4 inch or less 1/4 inch - 1/2 inch	Shape Dimensions		
½ inch - ¾ inch	If round or irregular in shape – The MLAY1000 Series is our deep field uni which is designed for coated steel, rough surfaces and round stock.		
If ½ inch or less — you need a shallow-field tool. The MLAY600 Series is designed specifically for ½ inch material from 200 lbs to 800 lbs in one stability improved unit.	Is remote ON/OFF control required? YES NO		
What is the weight of the material?lbs	For moving steel in hard-to-reach or unsafe locations, consider the Cordles Electric (CE) Heavy Lifter.		
NEVER lift material that is heavier than the Max. Safe Working Load (SWL) of the tool.	What is the surface condition?		
What is the type of steel (grade)?	Rust Paint Plating		
Lift ratings based on AISI 1020 steel. Consider de-rating factors when working with other grades of steel (refer to page 26 for de-rating table).	Mill Scale Coating Other Air gaps created by rust, paint, coatings, mill scale, etc. will effect load rating.		
	What is the method of lift?		
Magswitch Delivers Safety:	Forklift Under Hook		

Always Play It Safe. Saving a few dollars on a magnetic lifter is not worth the risk. Please consult your Magswitch dealer for recommendations specific to your application. Fill out inquiry form here: http://magswitch.com.au/information-request/





Every Magswitch product is proudly designed, developed, manufactured and tested by Magswitch to ISO 9001:2015 standards.

Magswitch Technology Headquarters 1355 Horizon Avenue Lafayette, Colorado 80026 Ph: 303-468-0662

Fax: 303-951-9918



For more information contact your local distributor or info@magswitch.com.au

Proudly distributed by:



Why are Magswitch colors yellow?

In 2005, Magswitch decided to support a junior cycling team. With safety in mind, team jerseys were made yellow to make sure the riders can be easily seen on the roads. In 2007, when Magswitch created its image and colors for our tools, yellow was again the obvious choice given our commitment to safety with our tools all over the world. As a result, we launched our new safety logo in the spirit of our commitment to making your workplace safe.