



magswitch[®]

Changing the way things are done.

Automation



Welding & Fabrication



PRODUCT CATALOG | APRIL 2014

Heavy Lifting



Woodworking



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.

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

 Ask the Magswitch Team about our new **Preferred Dealer Program.**



Every Magswitch product is proudly designed, developed, manufactured and tested by Magswitch to ISO 9001:2008 standards.



In this catalog, you will see this safety logo in many places. 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 prime design consideration, easy actuation, lighter lifting, stability control and lift-to-shear capabilities all tie back to an emphasis on safety.



*Magswitch is a green technology
Enduring power of rare earth magnets
without electricity.*








High Heat
Look for our new high heat tools



New products
Look for our new tools

Catalog Table of Contents

	Automation	P3-10
	Welding & Fabrication	P11-22
	• Ground Clamps	
	• Angle Tools	
	• MagSquares	
	• Hand Lifters	
	• Shipbuilding & Specialty Handling Tools	
	Heavy Lifting	P23-28
	• MLAY600 Series	
	• Electric MLAY600	
	• MLAY1000 Series	
	Magswitch Partners	P29
	Woodworking	P30-31

Magswitch Industrial Solutions

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 while generating millions in cost savings using Magswitch Automation Tools.

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 Industrial 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 like 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.

New in this edition of the catalog, Magswitch has adopted a NAAMS mounting flange for all M and AR tools excluding the 110 models. This allows for easier precision mounting. New size 20 versions of the LAY and AY series add improved selections for thin sheet metal handling applications. A new high temperature range of AR tools are also available for handling hot formed parts. Check out these new items throughout this Automation section.



AR-Series:

Shown here is an AR110 with customized pole shoes to allow the magnet to pick up pipes from an end. Removable pole shoes allowing for extreme versatility and handling on 3 sides including irregular shapes. See page 5 for full description.

MAGSWITCH CUTAWAY – OFF POSITION

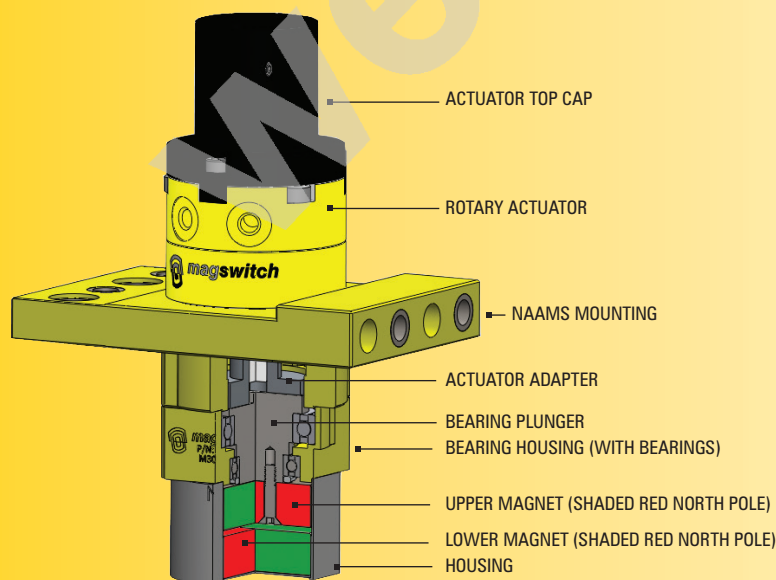


Table of Contents

Field Depth Comparison	P4
M-Series	P5
AR-Series	P5
LAY-Series	P6
AY-Series	P6
ME-Series	P7
SHLAY-POD	P9
Accessories	P9
Sensors	P9
Custom Applications/Machining	P10

Field Depth Comparison



M15AY ASC and JSC Field Line Comparison

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 material that has 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 de-stacking 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.

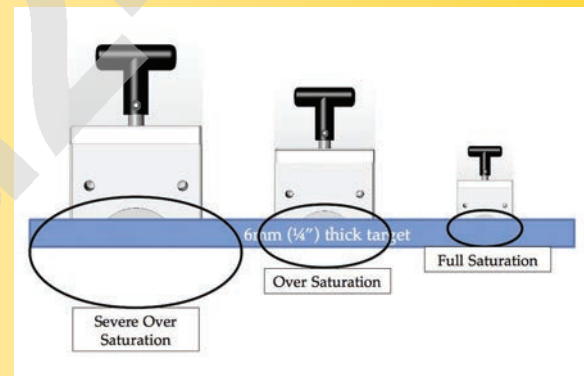


Shallow Field = (N-S) (N-S) (N-S)
Alternating Star
Dissimilar poles should face each other. This is the case with our AY ASC series which is specifically designed to hold better on thinner sheets. Field Depth is represented in the charts for each series by the Optimal Material Thickness Column.

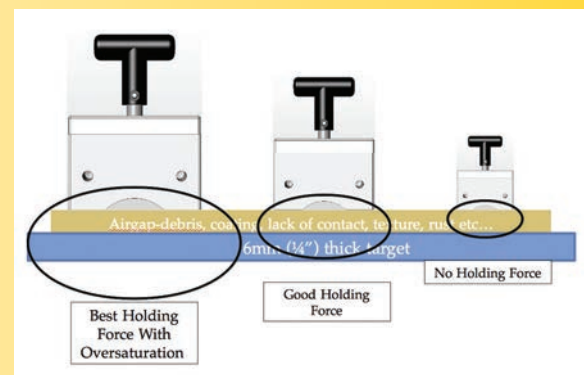


Field Depth (6mm (1/4") thick target)

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



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



M-Series

Part # NAAMS	Part # CLASSIC	Description	Suggested MAX Safe Working Load 4:1	Optimal Material Thickness	Unit Weight
8140670	8140440	M15	13.8lbs/6.2kg	11 ga/3mm	0.59lbs/0.27kg
8140671	8140485	M20	17.5lbs/8.0kg	11 ga/3mm	0.78lbs/0.35kg
8140672	8140477	M30	34lbs/15.5kg	10ga/3.5mm	1.42lbs/0.65kg
8140674	8140389	M4040	93lbs/42.3kg	3/8"/9.5mm	3.63lbs/1.65kg
8140675	8140343	M50	150lbs/68.2kg	1/2"/12.7mm	5.53lbs/2.5kg
8140676	8140170	M70	244lbs/110.9kg	1/2"/12.7mm	14.8lbs/6.7kg
8140749	N/A	M110	890lbs/405kg	1.5"/38.1mm	64lbs/29.1kg

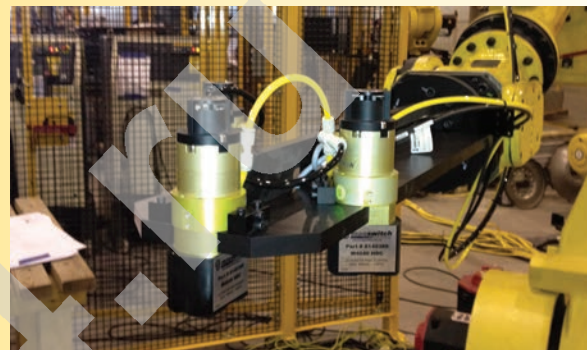
All M Series products now come with NAAMS mounting with the exception of the M110

Designed to optimize the saturation of a target, the "M"-shaped housing on these magnets provides maximum lifting strength on flat steel. Apply these tools in pick and place, cast material handling, and anywhere you need high strength holding on a minimized surface area.

Classic design:



Scan link or go to <http://youtu.be/JqvK3Qe-DOY>



This tool utilizes 3 M4040 magnets to change wheel hub dies in a press. Compact with a powerful deep field to hold strong on flat surfaces.

Part # Standard	NAAMS High Heat	Part # CLASSIC	Description	Suggested MAX Safe Working Load 4:1	Optimal Material Thickness	Unit Weight
8140677	8140717	8140331	AR15	9.4lbs/4.3kg	12ga/2.7mm	0.64lbs/0.29kg
8140678	8140718	8140481	AR20	15.75lbs/7.2kg	11 ga/3mm	0.85lbs/0.39kg
8140679	8140719	8140480	AR30	33.5lbs/15.2kg	10ga/3.5mm	1.53lbs/0.7kg
8140715	8140720	N/A	AR40	95.25lbs/43.3kg	3/8"/9.5mm	3.7lbs/1.85kg
8140680	8140721	8140319	AR50	137lbs/62.1kg	3/8"/9.5mm	6.1lbs/2.8kg
8140681	8140722	8140320	AR70	244lbs/110.7kg	1/2"/12.7mm	14.92lbs/6.8kg
8140740	N/A	N/A	AR110	783.25lbs/356kg	1.5"/38.1mm	62.48lbs/ 28.4kg

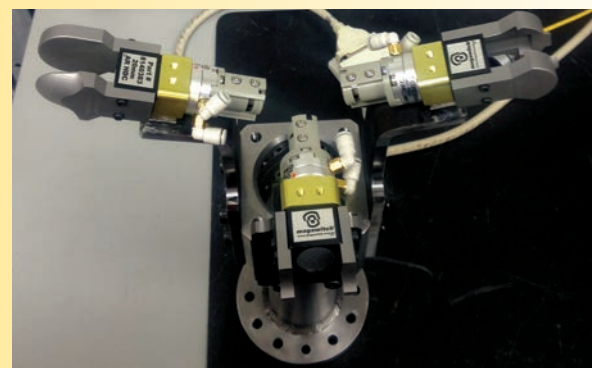
All AR Series products now come with NAAMS mounting with the exception of the AR110

The "AR" contains a rectangular housing with removable pole shoes, which work well with irregularly shaped surfaces: pipe, cylinders, etc. This tool is the best choice when no flat area exists on the target. With three possible work faces, the tools provide tremendous flexibility for multiple end of arm applications.

Classic design:



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



This rotating robotic end effector utilizes AR tools with custom pole shoes to pick components from a stack of different pieces.

LAY-Series



An oil coolant shell and bundle is handled by a PLAY70x2 unit with customized pole shoes. Long and narrow for increased hold on long and round materials with ability to customize poles to match irregular shapes.

Part #	Description	Suggested MAX Safe Working Load 4:1	Optimal Material Thickness	Unit Weight
8100387	E50 900/660 CE	450lbs/204kg	1/2"/12.7mm	18.7lbs/8.5kg
8140575	PLAY20x4	72.1lbs/32.8kg	3/8"/9.5mm	2.62lbs/1.19kg
8140405	PLAY50x2	275lbs/125kg	1/2"/12.7mm	10.6lbs/4.8kg
8140393	PLAY50x3	413lbs/187 kg	1/2"/12.7mm	18.3lbs/8.3kg
8140404	PLAY50x4	572lbs/260kg	1/2"/12.7mm	30lbs/13.6kg
8140391	PLAY70x2	530lbs/240.9kg	3/4"/19.1mm	36lbs/16.3kg
8140544	PLAY70x3	719lbs/326.8kg	3/4"/19.1mm	48.8lbs/22.2kg
8140417	PLAY70x4	975lbs/443kg	3/4"/19.1mm	53.6lbs/24.3kg



PLAY20x4 available in High Heat version (8140711)

Note: "E" = Electric, "CE" = Cordless Electric (w/Remote), "P" = Pneumatic



Scan link or go to <http://youtu.be/WDoLeaYqRfk>

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

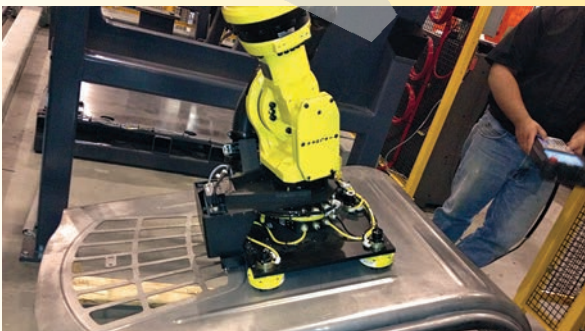
AY-Series



Part #	Description	Suggested MAX Safe Working Load 4:1	Optimal Material Thickness	Unit Weight
8140543	M10AY ASC	13.25lbs/6.0kg	20ga/1mm	1.0lbs/0.45kg
8140550	M10AY JSC	13.5lbs/6.1kg	14ga/1.9mm	1.0lbs/0.45kg
8140447	M15AY ASC	40lbs/18.2kg	12ga/2.7mm	1.8lbs/0.8kg
8140332	M15AY JSC	47lbs/21.4kg	9ga/3.8mm	1.8lbs/0.8kg
8140591	M20AY ASC	95lbs/43.2kg	3/16"/4.8mm	3.2lbs/1.45kg
8140590	M20AY JSC	98.2lbs/44.6kg	1/4"/6.4mm	3.2lbs/1.45kg
8140263	M30AY ASC	131lbs/59.4kg	10ga/3.4mm	6.4lbs/2.9kg
8140176	M30AY JSC	175lbs/79kg	1/4"/6.4mm	6.4lbs/2.9kg



Note: "ASC" = Alternating Star Configuration, "JSC" = Jointed Star Configuration



The roof of a skid steer is moved into position by 5 M15AY tools. Maximum performance on thin sheets and ideal for de-stack operations with a high shear hold capability.



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

A highly technical tool series that allows maximum saturation (performance) on thin material, array units ("AY") offers the increased power of multiple Magswitches in a compact, single actuator package. These units are suited to sheet handling on the fly or in shear. This is a revolutionary automation tool that, for the first time, truly challenges suction systems while delivering fast payback on the initial investment.

Units can be specified for deep field (JSC) or shallow field (ASC) operation.

See page 4 for a description of deep field vs. shallow field.

Part # NAAMS	Part # CLASSIC	Description	Suggested MAX Safe Working Load	Optimal Material Thickness	Unit Weight
8140682	8140500	ME3020 Pin Attachment: Female	23lbs/10.5kg	10ga"/2.5mm	1.53lbs/0.7kg

Coming soon: ME4040 NAAMS

Classic design:



Combining the strength of the "M" housing and the ability to clamp single skin sheet steel, the Magswitch pin clamp revolutionizes a difficult application. Over-saturation achieves a unique clamping feature that reduces the need for mechanical clamps in welding jigs and automated fabrication. The pin shape can be customized to fit your application.



Scan link or go to http://youtu.be/Rn0mV_t-sE



Custom Design – Machined Components

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

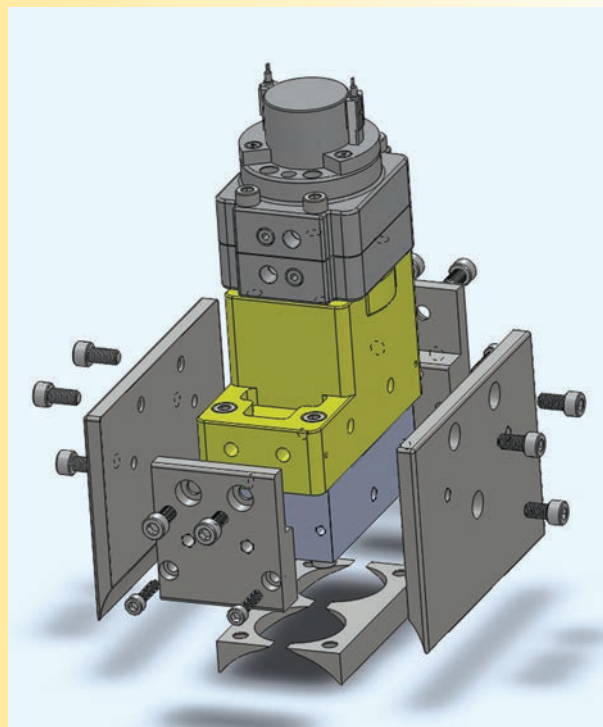
Don't hesitate to run your pole ideas past our engineers. If a custom pole shoe is required, Magswitch can provide design assistance to facilitate drawing generation. Custom accessory and fixture machining is also offered at competitive rates.

Send your designs to [Magswitch](mailto:misinfona@magswitch.com.au) for a free quotation.

Magswitch Technology Worldwide
8774 Yates Drive, Suite 140
Westminster, Colorado 80031

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

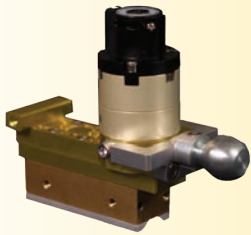
Email - North America: misinfona@magswitch.com.au
Email - Global: misinfogl@magswitch.com.au



Mounting Accessories

Ball Mounts

Ball mounts for M/ME/AR/AY units



Available upon request: Apple Core & other custom mounting styles

Magswitch Part Number	Description: Ball Mounts
8800102	M15AY Raised Ball Mount (28.5mm ball)
8800103	M/AR 15 Ball Mount (28.5mm ball)
8800104	M/ME/AR 20 Ball Mount (28.5mm ball)
8800105	M//ME/AR 30 Ball Mount (28.5mm ball)
8800106	M/ME/AR 40 Ball Mount (28.5mm ball)
8800126	M15AY Raised Ball Compensation Mount

Each Standard ball mount has a 28.5mm steel ball which can mount to many existing EOAT mounting arms, easily replacing existing tools on a fixture such as suction cups.

Vertical Mounts

Vertical Mounts for M/ME/AR/AY units



Magswitch Part Number	Description: Vertical Mounts
8800107	M15AY Vertical Mount
8800108	M/AR 15 Vertical Mount
8800109	M/ME/AR 20 Vertical Mount
8800110	M/ME/AR 30 Vertical Mount
8800112	M/ME/AR 40 Vertical Mount
8800121	Spring compensator Mount M10x1.5 Thread

Vertical mounts include a thread adapter from M10x1.5 to G3/8 pipe thread. This may be used to easily replace suction systems currently in use, or can be removed and directly mounted via the M10 threaded hole.

Pole Shoes

Stock replacement shoes for AR and LAY units



These shoes are stock replacements for the Magswitch AR and LAY tools. For custom shoes, please inquire with your distributor or direct to Magswitch.

Even more custom accessories available upon request. Custom Pole Shoes, Custom pin design and custom bin picking guarding (MagArmor).

Magswitch Part Number	Description: Replacement Pole Shoes and Fasteners for AR and LAY units
8800068	AR15 Combo Flat/Pipe Pole Shoe Std
8800069	AR20 Combo Flat/Pipe Pole Shoe Std
8800070	AR30 Combo Flat/Pipe Pole Shoe Std
8800071	AR50 Combo Flat/Pipe Pole Shoe Std
8800072	AR70 Combo Flat/Pipe Pole Shoe Std
8800073	AR110 Combo Flat/Pipe Pole Shoe Std
8800172	LAY20x4 Std Pole Shoe
8800074	LAY50x2 Std Pole Shoe
8800075	LAY50x3 Std Pole Shoe
8800076	LAY50x4 Std Pole Shoe
8800077	LAY70x2 Std Pole Shoe
8800078	LAY70x3 Std Pole Shoe
8800079	LAY70x4 Std Pole Shoe
8800080	LAY70x6 Std Pole Shoe



New High Heat resistant Pole Shoes available upon request

Magswitch Part Number	Description: Array Accessories
8800160	M15AY Shroud
8800161	M20AY Shroud
8800163	M20AY Boot
8800164	M30AY Boot

NEW!

Coming Soon!

NEW!

Protective shrouds now available to prevent damage to AY series magnets during a crash. Boots to allow array tools to handle Class-A surfaces also available soon.



Sensors

Magswitch tools accept sensors for actuation detection, improving the reliability and safety of your automated systems. The table below lists the sensor requirements for each model. Please contact your dealer for more information.

Units Utilizing Proximity Sensors

Product Series	Product Size	Sensor Type	Mounting Style	Diameter	Min. Length Required to Seat	Sensing Range
M	15	Face Shielded Inductive Proximity	Flush	5mm	12mm	1.2mm
M	20, 30, 40, 110	Face Shielded Inductive Proximity	Flush	8mm	28.5mm	1.2mm
AR	15	Face Shielded Inductive Proximity	Flush	5mm	12mm	1.2mm
AR	20, 30, 40, 110	Face Shielded Inductive Proximity	Flush	8mm	28.5mm	1.2mm
AY	10, 15	Face Shielded Inductive Proximity	Flush	8mm	28.5mm	1.2mm

Units Utilizing Auto Switch

Product Series	Product Size	Sensor Type	Mounting Style
M	50	Solid State Magnetic Field Sensor	D-S7P1 & D-S7P2 D-S791 & D-S792
AR	50	Solid State Magnetic Field Sensor	D-S7P1 & D-S7P2 D-S791 & D-S792
AY	20, 30	Solid State Magnetic Field Sensor	D-S7P1 & D-S7P2 D-S791 & D-S792
LAY	50, 70	Solid State Magnetic Field Sensor	D-S7P1 & D-S7P2 D-S791 & D-S792

Super Heavy Lifters

Hook-and-go units featuring wireless controls and can be customized to fit your application.

For designed solutions, contact: Email - North America: misinfona@magswitch.com.au
Email - Global: misinfogl@magswitch.com.au

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.

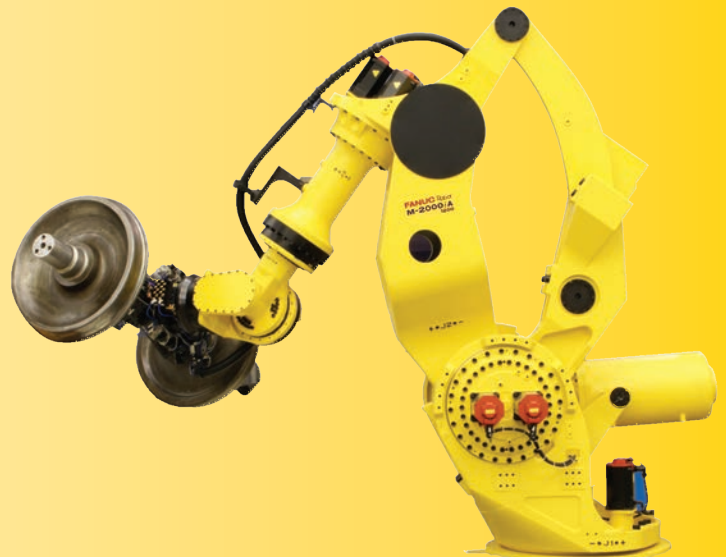
No two projects are ever the same, so make sure and give your application the attention it deserves. Magswitch prides itself on having one of the most knowledgeable distribution networks and a team of engineers to handle any application presented. It is highly recommended that you contact your local 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://tinyurl.com/av345o6>

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: misinfona@magswitch.com.au for North American contacts, and misinfogl@magswitch.com.au for all other countries.



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



Scan link or go to <http://youtu.be/H80LH1vWpwU>

As Magswitch becomes more of a mainstream product, professional welders and fabricators are demanding more tools and sending in ideas that expand on the tremendous application benefits already taking place worldwide. Unprecedented and timesaving characteristics like a self-cleaning surface and powerful hold on thin material are quickly becoming a favorite among casual welders, too. Consider the following game-changing impacts of Magswitch on welding and fabrication:

- Large sheet leveling in seconds.
- True sheet de-stack without any sticking.
- Lightweight magnets that reliably and safely hold heavy loads .
- Holding power that doesn't rely on electricity to stay activated.
- Cordless heavy lifting for hard-to-reach steel.



Welding & Fabrication Table of Contents

Magnetic Ground ClampsP11
 Mini Angle.P12
 Multi Angle MagVise.P12
 MagSquareP15
 Pivot AngleP13
 BoomerAngleP13
 90 Degree AngleP14
 Extenda-Lift.P14
 Hand Lifters.P16
 Sheet Aligning ToolP21
 Sheet Handler ToolP21
 Mag-Utility HookP17

Specs	On/Off Magnetic Ground Clamp		
	200	300	600
Part #	8100340	8100315	8100316
Hold (lbs/kg) on thick steel	60/26	90/40	200/89
H= (in/mm)	2.4/62	2.2/57	2.6/66
W= (in/mm)	1.6/40	1.6/40	2.7/69
D= (in/mm)	2.1/55	2.7/69	3.9/101
Wt=(lbs/kg)	0.2/0.1	0.7/0.3	1.8/0.8

Strong grip on flat or round surfaces.

High Heat Ground Clamps available upon request

Magswitch On/Off Magnetic Ground Clamps let welders quickly set up, weld and move on to the next job. Simply place it on a clean work surface, turn it on and start welding. Instant ground on flat or pipe.



Stays clean. Turn off Magswitch and wipe away debris.



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

Magnetic Ground Clamps



No more tacking on tabs and searching for a ground location.

Fast setup. Grounds instantly.

Mini Angles



On/off magnetic Mini Angle. When off, metal debris falls off.



Mini Angle offers a 45/135° and 90° Mini Multi Angle with Ground Clamp – grounds and holds at the same time!

Specs	Mini Angle	Mini Multi Angle	Mini Multi Angle w/ 300 amp Ground
Part #	8100352	8100350	8100351
Magnet Power (lbs/kg)	90/40	90/40	150/67
H= (in/mm)	2.1/55	2.5/65	3.4/87
W= (in/mm)	1.2/32	1.2/32	1.6/42
D= (in/mm)	2.3/59	2.8/72	3.5/89
Wt=(lbs/kg)	0.4/0.2	0.4/0.2	0.9/0.4

The Magswitch line of Mini Multi Angle workholding magnets offers you more angles in one product than any other magnetic angles. If you're tired of Mini Angle magnets that claim they shut off, but really don't, then you'll love Magswitch. Magswitch Mini Angles are hassle free.



They stay clean for years of use. Once you use Magswitch Mini Angles, you will never settle for anything less!

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

Scan link or go to <http://youtu.be/3lbqXYNgkJ4>

Multi Angle MagVise



Dual purpose: multi angle workholding tool and quick disconnect and connect vise.



Offers several common angles: 45/135°, 60/120°, 75/105° and 90°.

Specs	Multi Angle 400 MagVise	Multi Angle 1000 MagVise
Part #	8100438	8100450
Magnet Power (lbs/kg)	400/181	1000/454
H= (in/mm)	3.7/95	5.7/146
W= (in/mm)	2.5/65	4.3/110
D= (in/mm)	5.0/129	7.2/184
Wt=(lbs/kg)	2.6/1.2	9.7/4.4

Imagine a vise that you don't have to bolt in place! The Magswitch Multi Angle MagVise sets up in seconds and holds flat, round or odd shaped pieces. Perfect for drilling, cutting, grinding and beveling of small to medium size pieces. Doubles as a multi angle work holding tool. Two sizes offer incredible hold force.



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

Pivot Angle 200

Specs	Pivot Angle 200
Part #	8100367
Hold (lbs/kg) on thick steel	200/90
H= (in/mm)	9.4/240
W= (in/mm)	3.5/91
D= (in/mm)	9.4/240
Wt=(lbs/kg)	3.5/1.6

Magswitch Pivot Angle offers a range of angles from 22 to 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. The dial on the elbow features indicators every 5 degrees. 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. Perfect for repetitive work on uncommon angles.



Scan link or go to <http://youtu.be/EhLOFxz2FFc>



Odd angles in seconds.



Degree angle indicator on elbow.

Each magnet holds on two sides.

Specs	BoomerAngle 150	BoomerAngle 400	BoomerAngle 600
Part #	8100091	8100453	8100090
Hold (lbs/kg) on thick steel	150/68	400/181	600/272
H= (in/mm)	7.7/197	10.2/258	10.1/258
W= (in/mm)	5.5/140	4.3/109	6.6/169
D= (in/mm)	7.7/197	10.2/258	10.1/258
Wt=(lbs/kg)	2.9/1.3	6.6/3.0	9.7/4.4

Magswitch BoomerAngles offer virtually unlimited angle with a rotating MagSquare at the end of each axis. Magswitch BoomerAngles offer not only a fixed 90-degree angle on the inside and outside, but adjust to any angle in between. Featuring the benefits of Magswitch, including incredible power and precision control, Magswitch BoomerAngles are easy to use, and can be used on larger and heavier steel.



Scan link or go to <http://youtu.be/Z-OrHidsYhM>

BoomerAngles



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



Rotating Magswitches for virtually unlimited angles.

Preset 90 degrees inside or outside.

90 Degree Angles



MagSquares can be repositioned or reversed on each axis.



New 90 Degree Angle 1000 for heavy fabrication work.

Add MagSquares on each axis for extra holding power.

Specs	90 Degree Angle 165	90 Degree Angle 400	90 Degree Angle 600	90 Degree Angle 1000
Part #	8100548	8100454	8100495	8100503
Hold (lbs/kg) on thick steel	150/68	400/181	600/272	1000/454
H= (in/mm)	8.0/205	11.2/288	11.2/288	11.3/287
W= (in/mm)	1.85/47	3.8/98	4.1/104	5.7/145
D= (in/mm)	8.0/205	11.2/288	11.2/288	18.6/474
Wt=(lbs/kg)	1.8/0.8	6.2/2.8	8.2/3.7	21.2/9.6

Magswitch 90 degree Welding Angles are the most versatile in the market. Featuring the benefits of Magswitch, including incredible power and precision control, Magswitch 90 degree angles are easy to use, and can be used on larger and heavier steel. All Magswitch 90 degree angles allow you to reposition the magnets up or down on each axis (only vertical axis on #8100503), or reverse from outside to inside. If you want more strength, just add more MagSquares.



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

Extenda-Lifts



No need to bend over and pick up materials.



Super strong hold.

Picks up flat or round shapes.

Specs	Extenda-Lift 600	Extenda-Lift 1000
Part #	8100025	8130177
Hold (lbs/kg) on thick steel	600/272	1000/454
H= (in/mm)	28.2/724	28.2/724
W= (in/mm)	2.7/68	4.2/107
D= (in/mm)	4.6/117	4.8/122
Wt=(lbs/kg)	5.3/2.4	9.8/4.4

The Magswitch Magnetic Extenda-Lift allows you to pick up and move steel without bending over and using your hands which offer convenience and safety advantages. You can pick up plate, pipe, or steel scrap off the floor with ease. The Extenda-Lift also works great for picking up hot, sharp or dirty steel without touching it. Extenda-Lift 600 has 600 lbs (272 kg) of hold force. Extenda-Lift 1000 has 1000 lbs (454 kg) of hold force. Ideal for cities and utilities, valve box and small lid removal.



Scan link or go to <http://youtu.be/vklagoSHGv8>



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!

Specs	MagSquare 165	MagSquare 400	MagSquare 600	MagSquare 1000
Part #	8100494	8100238	8100106	8100099
Hold (lbs/kg) on thick steel	150/68	400/181	600/272	1000/454
H= (in/mm)	2.6/65	3.5/90	4.2/106	5.7/147
W= (in/mm)	1.2/31	1.6/41	2/52	2.8/72
D= (in/mm)	1.9/48	2.5/64	2.9/75	4.2/108
Wt=(lbs/kg)	0.5/0.2	2/0.9	3/1.4	7.4/3.4



Also available in High Heat; MagSquare165 (8100610), MagSquare400 (8100625) & MagSquare 600 (8100624)

MagSquares – workholding and fixturing.
The most versatile workholding tool ever.
A must have tool for every welding professional.

Welders and fabricators are raving about the versatility, convenience and efficiency of Magswitch MagSquares—extremely powerful on/off magnetic blocks with strong holding force available on all sides. Welders can now enjoy complete control over incredibly strong magnets (1,000 lbs (454 kg) on the MagSquare1000), which feature multi-plane workholding capability in a design that can be positioned easily and precisely. A 180-degree knob twist is the only action required to turn MagSquares on and off, making them superior to manual clamping in these areas and others. Once you've had a chance to experience the benefits of this technology firsthand, you'll want the entire line.

Enjoy these innovative MagSquare features:

- Incredible strength
- Fast, precise positioning
- Mounts anywhere – no limitations like clamps
- Magnetic grip on five sides
- Mounts to flat and pipe
- Pre-tapped holes on all sides for mounting
- Great for making your own fixtures
- Can work in multiples to destack sheets

MagSquares are also the ultimate fixturing tool. Incredibly flexible with mounting capabilities on four sides. Just a simple 180 degree turn of the knob and you are set up. Use stand alone, or mount fixturing aides to sides. Great for supporting guides and walls. Magnetic hold on five sides. Use non-ferrous materials in fixture attachments.



Scan link or go to <http://youtu.be/FsvUMzH56t4>



High Heat tools recognizable by their gold housing



Align two pieces of steel – flat or round.



Helping hand – a temporary support to hold a part or tool on a vertical wall.



Use as a guide anywhere on a steel table. No limitations like clamps.



Fabricate angles quickly; pull corners together with hold on multiple sides.



Great for making your own fixtures.



Secure steel for fabricating or cutting.



When you set up and position steel for a weld, it should be easy and fast. Positioning mechanical clamps or getting a helping hand is time consuming and adds to the number of hands on the material. Magswitch is fast on, turns off, saves time and burrs in your fingers.

Hand Lifter 60-M (Manual)



Hand lifter for all your small steel handling needs.



Pivot handle allows use as a hand lifter or a sheet dragger.

Pipe groove for transporting pipe.

Specs	Hand Lifter 60-M (Manual)
Part #	8100359
Hold (lbs/kg) on thick steel	235/106*
H= (in/mm)	5.5/140
W= (in/mm)	4.7/120
D= (in/mm)	2.3/60
Wt=(lbs/kg)	1.3/0.6

**We recommend a safe lifting load of 60 lb/27 kg for hand lifters.*

Add safety and convenience to every workstation. The Magswitch Manual Hand Lifter 60-M lets you pick, place, slide and reposition steel without using your fingers. No need to touch hot, sharp, or dirty steel. Ideal for small steel handling, dragging sheet, picking, placing and pulling parts out of burn table or handling scrap.



Scan link or go to <http://youtu.be/655UAQ0TyDQ>

Hand Lifter 60-CE (Cordless Electric)



Perfect for removing parts and cut outs from burn tables. The cordless hand lifter holds hot, sharp, dirty steel with the press of a button!



Faster and safer handling of steel.

Push button on/off control. Ideal for fast, repetitive lifting.

Specs	Hand Lifter 60-CE (Cordless Electric)
Part #	8100385
Hold (lbs/kg) on thick steel	235/106
H= (in/mm)	8.2/209
W= (in/mm)	6.7/173
D= (in/mm)	2.9/75
Wt=(lbs/kg)	2.4/1.1



Includes two rechargeable batteries and charger.



Hand Lifters are among our best safety tools.

The - world's first - Cordless Electric Hand Lifter! The Hand Lifter 60-CE is a must for every metal fab shop. Ideal for pulling parts out of a burn table, picking up steel to place on a work table, in a fixture, or handling scrap parts, 2000 actuations per charge.



Scan link or go to <http://youtu.be/655UAQ0TyDQ>

- Replacement Parts:
- 4 Volt Rechargeable Batteries (2-Pack) – #8800053
 - Battery Chargers:
 - US/CAN – #8800054
 - UK/SA – #8800054UK
 - Europe – #8800054GE
 - Australia – #8800054AU

Mag-Utility Hooks

Specs	Mag-Utility Hook 25	Mag-Utility Hook 40
Part #	8100012	8100006
Hold (lbs/kg) on thick steel	25/11	40/18
H= (in/mm)	3.5/89	4.0/103
W= (in/mm)	1.6/40	2.7/69
D= (in/mm)	1.8/47	2.7/69
Wt=(lbs/kg)	0.4/0.2	1.8/0.8

The perfect - helping hand - Magswitch Mag-Utility Hooks let you hang tools, lights, support wires, air hoses, ground lines and more, right where you need them, quickly and easily. Ideal for keeping hoses and lines off the floor for a safer work environment. Mag-Utility Hooks are convenient and easily move from job to job.



Save time by keeping parts or tools within reach.



Eliminate trip hazards. Use Mag-Utility Hooks to keep lines and hoses off the floor.



Scan link or go to <http://goo.gl/NJrxNq>



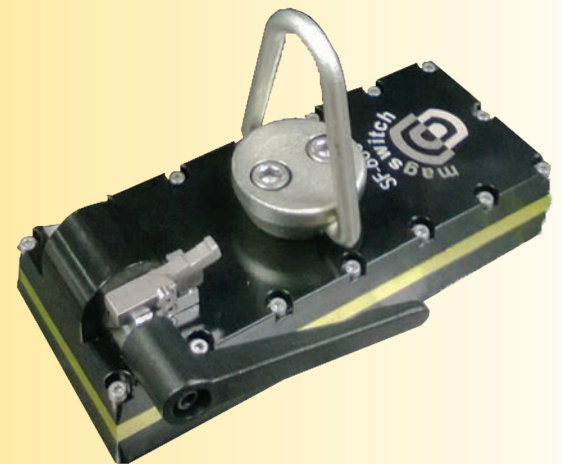
Attaches to flat or round surfaces.

Hang tools, nuts or bolts near your work area.

Magswitch R&D

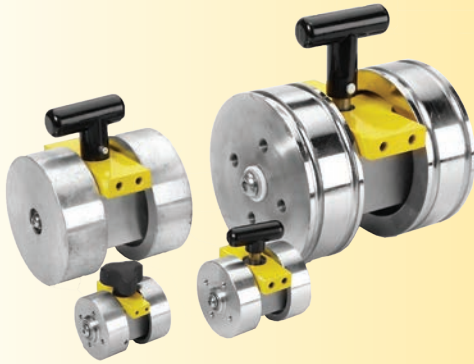
Magswitch is constantly working on new and improved technology in switchable permanent magnets. This is evidenced by a new lifter design shown here. We hope this lifter will revolutionize the industry with its ultra-light weight and compact design added to Magswitch's already powerful hold on thin materials.

Magswitch plans to open a new R&D facility in Germany in 2014 which will enhance our technology improvement efforts.



Every Magswitch product is proudly designed, developed, manufactured and tested by Magswitch to ISO 9001:2008 standards.

MagWheel – Roller Guide



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



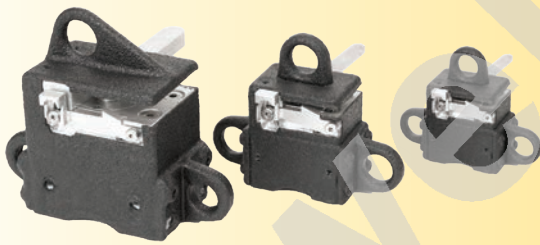
MagWheel illustrated on a Bug-O® automated welder.

Specs	MagWheel 95	MagWheel 150	MagWheel 600	MagWheel 1000
Part #	8100401	8100074	8100075	8100250
Size	0.8"/20mm	1.2"/30mm	2"/50mm	2.75"/70mm
Breakaway Force	38.5lbs/17.5kg	65lbs/29.5kg	292lbs/133kg	528lbs/239.5kg
Unit Weight	0.7lbs/0.3kg	2.2lbs/1kg	6.6lbs/3kg	20lbs/9kg

The Magswitch MagWheel offers powerful connection for drive units on any ferrous surface, enabling flat, vertical or inverse travel. Applications include positioning and guiding, sheet feeding, pipe handling, fitting and fabrication and numerous OEM automation and fixturing applications. MagWheel can be fitted with drive units for mobile applications. This tool results in efficiency, new applications and productive solutions.

Underneath the patented MagWheel design is the highly functional AR Housing. Through clever innovation of the original Magswitch, the MagWheel provides all the features of a standard Magswitch on the move. The magnetic flux path through the wheels means climbing, carrying, and driving anywhere above or below a ferrous surface is now a reliable, fail-safe reality.

Marine Products – MagTethers



Mounts to flat or curved surfaces.



Tethers personnel or gear.



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

Specs	MagTether 300	MagTether 600	MagTether 1000
Part #	8100111	8100077	8100051
Hold (lbs/kg) on thick steel	240/108	600/272	1000/455
H= (in/mm)	5.2/131	7.2/184	10.0/253
W= (in/mm)	2.0/50	2.0/50	2.8/71
D= (in/mm)	4.2/106	4.2/106	7.5/190
Wt=(lbs/kg)	2.2/1.0	4.0/1.8	10.0/4.5

Ideal for underwater welding and tethering.

Magswitch Marine Tethers provide fast and super strong switchable magnets that allow above and below water operators to fasten themselves or their equipment while working on steel hull ships or structures with an easy 180° turn of a lever. Underwater repairs and inspection can be difficult work while trying to maintain position. Magswitch Tethers solve this challenge with quick connect and disconnect, and strong hold. Ideal for use in military and commercial applications including oil and gas. Tethers include marine-grade corrosive-resistant coating and are equipped with positive locks.

NOT FOR USE AS A PERSONNEL SAFETY DEVICE

MagJig Fixturing

Specs	MagJig 95	MagJig 150	MagJig 235	MagJig 60 Keychain
Part #	8110004	8110005	8100377	8100514
*Hold (lbs/kg) on thick steel	*Maximum hold force on 1/4 inch (6mm) thick steel.			
	95/43	150/68	235/106	60/27
H= (in/mm)	1.9/47	2.1/52	3.1/78	1.75/44.6
W= (in/mm)	2.3/57	2.6/67	3.5/88	1.55/39.4
D= (in/mm)	1.4/34	1.7/44	2.4/60	1.00/25.4
Wt=(lbs/kg)	0.4/0.2	0.6/0.2	1.0/0.5	0.2/0.1

 Also available in High Heat; MagJig 150 (8100582)

MagJigs are ideal for downward pressure clamping and come with a 3/4" standoff for flush mount. Simply drill a hole in the fixturing material and place the clamp in. The MagJigs come with screw holes so you can secure the jig in the fixture. We recommend at least two MagJigs per fixture to minimize slippage.



Scan link or go to <http://goo.gl/uSDYHL>



8110005

Specs	MagMount 150	MagMount 235	MagMount 300	MagMount 400	MagMount 600	MagMount ME3020
Part #	8100579	8100451	8100595	8100523	8100580	8100576
Hold (lbs/kg) on thick steel	150/68	235/106	300/136	400/182	600/272	90/41
H= (in/mm)	1.6/40	1.7/44	1.8/45	2.6/65	2.8/72	1.8/46
W= (in/mm)	1.7/44	2.7/68	3.5/90	3.3/82.5	3.5/90	1.7/44
D= (in/mm)	3.1/79	3.8/98	4.7/120	4.6/116	4.7/120	3.1/79
Wt=(lbs/kg)	0.8/0.4	1.2/0.5	1.2/0.5	1.2/0.5	3.3/1.5	1.3/0.6

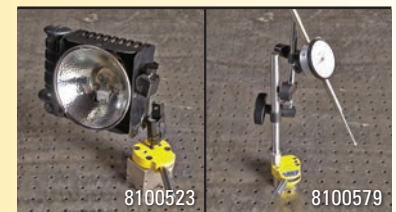
 Also available in High Heat; MagMount 235 (8100695) & MagMount 300(8100696)

Introducing the new MagMount series, featuring 90° side-actuation handle leaving the top of the tool free for mounting a variety of accessories. Available in four sizes, each MagMount has multiple threaded holes on the top for easy mounting of virtually any accessory.

NEW!



Scan link or go to <http://goo.gl/sSn50q>



8100523

8100579

Specs	M10AY ASC	M10AY JSC	M15AY ASC	M15AY JSC	M20AY ASC	M20AY JSC	M30AY ASC	M30AY JSC
Part #	8100724	8100725	8100726	8100727	8100728	8100729	8100641	8100642
Suggested MAX Safe Working Load	13.3lbs/ 6.0kg	13.3lbs/ 6.0kg	40lbs/ 18.2kg	47lbs/ 21.4kg	92.9lbs/ 42.2kg	92.9lbs/ 42.2kg	131lbs/ 59.4kg	175lbs/ 79kg
Optimal Material Thickness	20ga/ 1mm	20ga/ 1mm	12ga/ 2.7mm	9ga/ 3.8mm	1/4"/ 6.4mm	3/16"/ 4.8mm	10ga/ 3.4mm	1/4"/ 6.4mm
Unit Weight	1.0lbs/ 0.5kg	1.0lbs/ 0.5kg	1.0lbs/ 0.5kg	1.0lbs/ 0.5kg	3.2lbs/ 1.5kg	3.2lbs/ 1.5kg	6.4lbs/ 2.9kg	6.4lbs/ 2.9kg

NEW!



Scan link or go to <http://goo.gl/cui7XH>



8100641

Arrays Manual

SHIPBUILDING TOOLS

Changing the way ships are built.



Join the fast growing list of major shipbuilders who are using Magswitch.

Benefits:

- » Faster fit ups
- » Creative new applications
- » Safer material handling



New tools that solve old issues.



Why Magswitch for shipbuilders?

The time you spend welding temporary supports, just to break them and grind them off, and then inspect the metal can be substantially eliminated in large and small applications with the use of Magswitch.

We all know that time is money and that delays at the back end of shipbuilding are inevitable, so we are dedicated to helping you cut time on the front end.

Let us show you how.



Shipbuilders are realizing the benefits of these tools:



Stiffener Alignment Tool Accessory
Part # 8100554

Requires: MLAY1000x2 Magswitch.



Heavy Sheet Leveler Accessory
Part # 8100540

Requires: MLAY1000x3, MLAY1000x4 or MLAY1000x6 Magswitches.



Beam Press Accessory
Part # 8100553

Requires: MLAY1000x4 or MLAY1000x6 Magswitches.



Stiff Jack
(6,000 lbs/2,700kg holding force; steel frame)

Requires: Two MLAY 1000x3 Magswitches.

*Higher capacity available

Also see these tools in this catalog:

90 Degree Angle 1000
See page 14

Sheet Aligning and Handling Tools
See page 21

Multi Angle MagVise
See page 12

Hand Lifter 60-CE (Cordless Electric)
See page 16

Heavy Lifting Magnets
See page 23-28

MagSquares
See page 15

Sheet Aligning Tools

Specs	Mag Pry	Sheet Handler
Part #	8100081	8100361
Hold (lbs/kg) on thick steel	1100/500	1800/818
H= (in/mm)	19.8/508	60.6/1539
W= (in/mm)	5.6/143	9.2/234
D= (in/mm)	6.2/160	8.0/203
Wt=(lbs/kg)	9.3/4.2	21.2/9.6



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

Ask any welder how long it takes to align large sheets with precision. Magswitch offers two solutions that yield incredible time savings. The MagPry features 1,100 lbs (500kg) of hold force instantly! Using magnetic force and leverage, the tool aligns the sheets. The Sheet Handler operates on the same principal, but for large sheets. The Sheet Handler offers up to 1,800 lbs (818kg) of hold force, and features an extendable handle.



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



Center Sheet Handler over the seam, turn Magswitch on, press to align and tack.



Incredible time saving.

Align sheets in seconds.

Specs	Sheet Handler	Mag Dolly	
Part #	8100361	8100433	The heavy lifter recommended for the Mag Dolly is MLAY1000x3 (pt # 8100403). 3000lb hold force on page 15.
Hold (lbs/kg) on thick steel	1800/818	NA	
H= (in/mm)	60.6/1539	36.1/917	
W= (in/mm)	9.2/234	13.5/343	
D= (in/mm)	8.0/203	71.9/1826	
Wt=(lbs/kg)	21.2/9.6	40.6/18.5	

Magswitch offers two tools for large sheet handling, the Sheet Handler and the Mag Dolly. The Sheet Handler enables you to pivot and lift sheet up and onto a wheel so it can be dragged or moved. This is a perfect tool if you need to lift and slide one sheet over another. The Mag Dolly (#8100433) has large solid rubber wheels and can move larger sheets. The Mag Dolly is more suited to lift and carry sheet, pipe or any steel object over a greater distance.

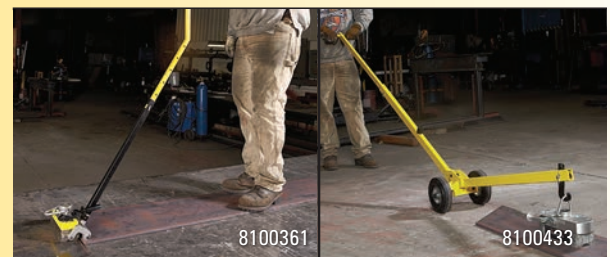


Scan link or go to <http://youtu.be/Jp3AJ3B-h5g>

Sheet Handler Tools



Easy on/off magnet actuation. Complete control – stays clean.



Save time by using on off magnets and wheels to move sheet.

Mag Dolly lifts flat or round shaped steel.

Magswitch Infrastructure Tools for Utility Companies and Cities

Magnetic Manhole Dolly and Valve Box Lifter.

In world of back-breaking hard work filled with “workers comp” 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 comp” 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!



No need to get down on your knees. Eliminates pinching your fingers.

Manhole Cover Lifting System



Specs	Mag Dolly	MLAY1000x3 Lifting Magnet	MLAY1000x4 Lifting Magnet
Part #	8100433	8100403	8100418
Lift capacity on cast iron (lbs/kg)	NA	300/135	400/180
H= (in/mm)	36.1/917	10.0/254	10.0/254
W= (in/mm)	13.5/343	10.2/259	10.2/259
D= (in/mm)	71.9/1826	10.7/272	13.8/350
Wt=(lbs/kg)	40.6/18.5	35.7/16.2	44.6/20.2



Scan link or go to <http://youtu.be/X7S2nETEm7I>

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.

Magnetic Valve Box Lifter



Specs	Extenda-Lift 600	Extenda-Lift 1000
Part #	8100025	8130177
Lift capacity on cast iron (lbs/kg)	100/45	140/65
H= (in/mm)	28.2/724	28.5/730
W= (in/mm)	2.7/68	4.2/107
D= (in/mm)	4.6/117	4.8/122
Wt=(lbs/kg)	5.3/2.4	9.8/4.4



Scan link or go to <http://youtu.be/IYLhy1Px03Q>

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.

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.

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.

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.



Lighter, Stronger, Easier
and Safer to use.

Heavy Lifters Table of Contents

Technology & Feature Advantages	P24
Selecting the Right Lifter	P25
MLAY600x1, x2 Lifting Magnets	P26
MLAY600x4 Lifting Magnet	P26
MLAY1000x1, x2 Lifting Magnets	P27
MLAY1000x3, x4, x6, x12 Lifting Magnets	P27
E50 - 900/660 CE With Remote	P28



Magswitch Heavy Lifting Magnets.



Technology and Feature Advantages:



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

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

Better hold on uneven, dirty steel or on 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.

» No ergonomic nightmares when turning on a Magswitch lifter.

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



Dual hook: Stability control
(Patent Pending – App #61/665,611 USA).
» Use both hooks for safer lifts; the force of the lift stabilizes the magnet and reduces dangerous swings in the load.



Single hook: lift from horizontal to vertical.
» Use one swivel hook when lifting from flat to vertical.

Lock on, lock off handle
» Safer.



Replaceable pole shoes
» The bottom takes the beating – periodically replace the pole shoes to maintain safety and extend the life of the lifter.

Selecting the right Magswitch lifter

Choosing the right lifter is very important for safer lifting. NEVER select lifters based only on "max lift rating", which does not account for the dramatic lift rating drop on thinner steel. ALWAYS select lifters based on what you are lifting.

Important considerations when choosing a lifter:

What is the thickness of the piece I am lifting?

If 1/2" or less – you need a shallow field Tool. The MLAY 600 series is designed specifically for half inch material from 200 lbs to 800 lbs in one stability improved unit.

What is the weight of the piece I am lifting?

It is not recommended to lift material that is heavier than the SWL of the tool.

What is the dimension of the piece I am lifting?

If round or irregular in shape- The MLAY 1000 series is our deep field unit and the better choice. Designed for coated steel, rough surfaces and round stock.

What is the type of steel I am lifting?

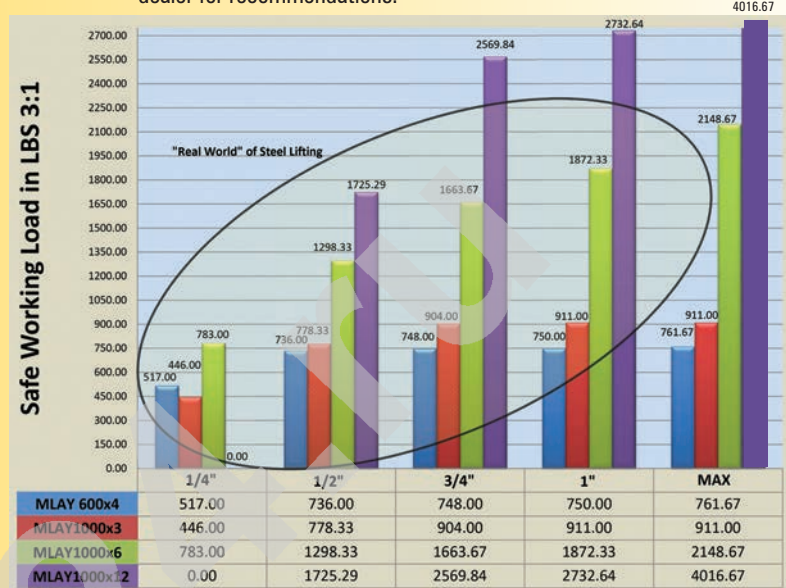
If a porous or dirty material, consider the MLAY1000 for deeper field hold.

Do I need remote on/off control?

For moving steel in hard-to-reach or unsafe locations, consider the cordless electric heavy lifter. (Part #8100387).

Magswitch delivers safety.

Always play it safe. Saving a few dollars on a magnetic lifter is not worth the risk. Look at the rated safe lift capabilities of each magnet on the grid below and note the magnets that qualify for the job. Keep in mind that a lifter should be selected based on multiple factors. Please consult your Magswitch dealer for recommendations.



For assistance selecting the appropriate lifter, fill out the form at the link below: <http://tinyurl.com/a8b8266>

Part #	Product Description	Max Safe Working Load 3:1	Full Saturation Breakaway (in LBS.)	THIN STEEL Safe Working Load on 1/4" 3:1
Shallow Field	8100089	200 lb	600 lb	170 lb
	8100360	367 lb	1,100 lb	248 lb
	8100364	762 lb	2,285 lb	517 lb
Deep Field	8100088	333 lb	1,000 lb	205 lb
	8100484	667 lb	2,000 lb	425 lb
	8100403	911 lb	2,733 lb	446 lb
	8100418	1,300 lb	3,900 lb	494 lb
	8100482	2,149 lb	6,446 lb	783 lb
	8100549	4,016 lb	12,000 lb	1,331 lb*
8100387	Magswitch E50-900/660 CE Lifting Magnet	600 lb	1,800 lb	380 lb



New heavy lifters training video
Scan link or go to <http://goo.gl/PCe9xg>



Heavy lifters in-use video
Scan link or go to <http://goo.gl/WHkLJm>

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

MLAY600 Lifting Magnets Series



8100089
Lightweight, small profile and strong lift.



8100360
Ideal for small to medium lifting.



8100364
Most powerful shallow field tool -
517lbs/234kg on only 1/4"/6.4mm

Specs	MLAY600 Lifting Magnet	MLAY600x2 Lifting Magnet	MLAY600x4 Lifting Magnet
Part #	8100089	8100360	8100364
Max. SWL 3:1 lift capacity (lbs/kgs)	200/90	367/166	762/346
Minimum de-stack thickness	Shallow 1/2"/12.7mm	Shallow 1/2"/12.7mm	Shallow 1/2"/12.7mm
H= (in/mm)	7.2/184	6.7/170	6.5/166.8
W= (in/mm)	4.1/106	8.9/226	8.9/226
D= (in/mm)	2.0/52	5.0/127	9.2/234
Wt=(lbs/kg)	4.4/2.0	9.5/4.3	17.9/8.1

The Magswitch MLAY600 series magnets are perfect for small materials and light to medium lifting. These lifters are lightweight and 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. The MLAY600x2 has the option to order a custom shoe that mounts underneath for handling of customized shapes. Manual on/off operation.

With full field saturation (hold force) at 1/2" (12mm) 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 patented dual hook for load stability, and single hook for lifting horizontal to vertical. With full field saturation (hold force) at 1/2" (12mm) 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



Scan link or go to <http://goo.gl/V7ddRN>



8100364

Safety: patented dual hook for added load stability.



8100089



8100364

Use the single hook to lift horizontal to vertical.

MLAY1000 Lifting Magnets Series

Specs	MLAY1000 Lifting Magnet	MLAY1000x2 Lifting Magnet
Part #	8100088	8100484
Max. SWL 3:1 lift capacity (lbs/kgs)	333/151	667/302
Minimum de-stack thickness	Deep 3/4"/19.1mm	Deep 3/4"/19.1mm
H= (in/mm)	9.9/253	10.6/269
W= (in/mm)	5.7/147	7.6/193
D= (in/mm)	2.8/72	3.8/96
Wt=(lbs/kg)	11.5/5.2	23.8/10.8



8100088



8100484

Specs	MLAY1000x3 Lifting Magnet	MLAY1000x4 Lifting Magnet	MLAY1000x6 Lifting Magnet	MLAY1000x12 Lifting Magnet
Part #	8100403	8100418	8100482	8100549
Max. SWL 3:1 lift capacity (lbs/kgs)	911/414	1300/591	2149/977	4016/1825
Minimum de-stack thickness	Deep 3/4"/19.1mm	Deep 3/4"/19.1mm	Deep 1"/25.4mm	Deep 1.25"/31.8mm
H= (in/mm)	10.4/265	9.8/250.8	9.5/242.5	11.9/301
W= (in/mm)	10.2/260	10.2/260	10.2/260	12.1/306.8
D= (in/mm)	10.7/272	13.8/350	20.1/510	19.5/496
Wt=(lbs/kg)	36.5/16.6	45.2/20.5	60.3/27.4	120/55



8100403



8100418



8100482



8100549

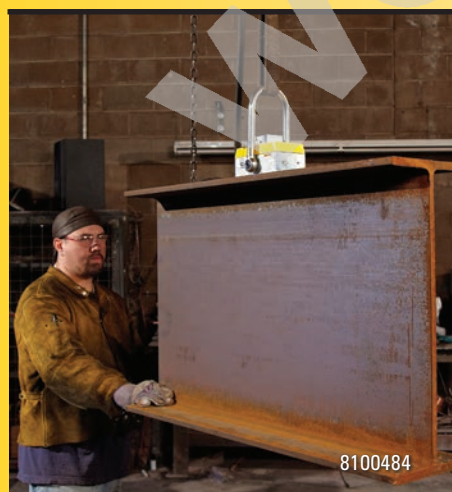
For heavy lifting, the MLAY1000 series lifters attain full hold on approximately 1 inch (25mm) thick steel. These lifters feature our full swivel hook for lifting from the top or the side. Each lifter is manually activated and features a safety lock in both on and off position.

The MLAY1000 series features a replaceable pole shoe, ideal for customizing to fit your application. With full field saturation (hold force) at 1"(25mm), this lifter is ideal for porous material and thick steel. The MLAY 1000x2,3,4,6 all have replaceable pole shoes.

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 1/2" (12mm) 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" (25mm) these lifters are ideal for porous material and thick steel.



Scan link or go to <http://goo.gl/V7ddRN>



8100484



8100403



8100418

E50 - 900/660 CE with Remote Control



World's first cordless electric heavy lifter.



8100387

Large remote helps prevent misplacement.

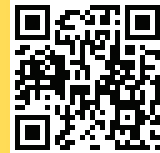
- Comes with two 12-volt rechargeable Lithium-ion batteries and a charger, so you always have a spare charged battery on hand.
- Battery offers up to 750 actuations per charge.
- Lifts flat and pipe.
- Manual on/off override feature, if battery loses charge.
- Compact – fits in narrow beams.



Specs	Magswitch E50 – 900/660 CE with Remote Control
Part #	8100387
Max. SWL 3:1 lift capacity (lbs/kgs)	600/272
Minimum de-stack thickness	Shallow ½"/12.7mm
H= (in/mm)	13.0/330
W= (in/mm)	4.0/102
D= (in/mm)	9.2/235
Wt=(lbs/kg)	19.4/8.8

Magswitch introduces the world's first cordless electric heavy lifter. This lifter is ideal for transporting steel in **hard** to reach places such as narrow beams where manual on/off lifters are **hard** to turn on, or places where using a manual lifter are **unsafe** such as steel located high up on racks or steel sheet being placed on a cutting or burn table. The Magswitch cordless electric lifter offers unprecedented convenience and safety for your employees. One operator can work alone and control the lifter from a **safer** distance.

- **Safety:** Load sensor prevents accidental release while under load.
- **Safety:** Warning light flashes on top of unit to give a 3-second warning to when the load is about to release.
- **Safety:** Holds load even if battery loses charge.
- **Safety:** Lifter magnet will not turn on unless on a sufficient steel target.
- **Safety:** Intelligent sequencing to prevent accidental off.



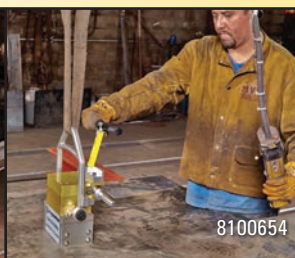
Scan link or go to <http://youtu.be/WJFsNGaHnfg>



M-AR 110 - Tilt Control



8100654



8100654

Specs	M-AR 110 - Tilt Control
Part #	8100654
Max. SWL 3:1 lift capacity (lbs/kgs)	1000/454.5
Minimum de-stack thickness	Shallow 1.3"/31.8mm
H= (in/mm)	16.4/417.6
W= (in/mm)	15/380.8
D= (in/mm)	7.6/191.9
Wt=(lbs/kg)	66.6/30.3

Magswitch introduces a new deep field lifter for lifting & positioning. Ideal for bin picking and for positioning parts for fabrication & assembly.

Magswitch technology is found increasingly in great brands around the world. When it comes to choosing the best technology, global brands are going with Magswitch. In many cases Magswitch designs and delivers complete products. However more often we see OEMs choosing to integrate Magswitch technology into new products designed and delivered by their own engineers. More great companies 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. You will be surprised where you can find Magswitch technology. We proudly support the products of our partners just as we do our own yellow tools.



Air Liquide
www.airliquide.com



Arc Product
www.arcproducts.com



Weld Tooling Corporation
www.bugo.com



Carter Products
www.carterproducts.com



CBS Arcsafe
www.cbsarcsafe.com



Gullco
www.gullco.com



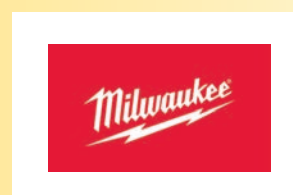
Industrial Magnetics, Inc.
www.magnetics.com



Koike Aronson, Inc.
www.koike.com



Lincoln Electric
www.lincolnelectric.com



Milwaukee Electric Tool Company
www.milwaukeetool.com



SOLO Magnetics
www.solomagnetics.com



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





Fast Setups / Safety / Versatility

The Magswitch Workholding System

All your table-top 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

It all starts here.

Add attachments for more versatility. Kit contains:
Two 150 lb. grip Mag Jigs, 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.



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.



Dual Roller Attachment

- » Ideal for tall panel feed.
- » Glide rollers - yet strong firm hold.
- » Adjustable roller bearings.
- » Great for hold on out-feed as well.



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.



18" & 36" Universal Track Attachment

- » Instant wall anywhere you need it.
- » Accepts standard hardware.
- » Accepts all standard T-bolts, 1/4" hex, 5/16" hex, and Kreg® clamps.



Add Extra Bases or MagJigs

- » Use the MagJigs in your own fixtures.

“Magswitch is one of the most significant breakthroughs this decade”

– British Woodworking Magazine

Magswitch Technology

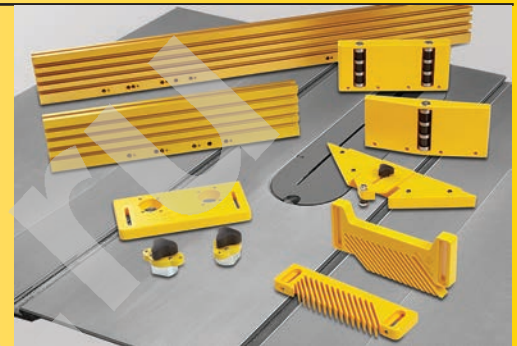
Magswitch is a mechanical device that turns a very powerful magnetic field on and off with a simple 180° turn of a knob. No electricity needed. The simple phase alignment of two magnetic discs in a steel housing is a patented breakthrough, now used worldwide in many industries. The days of fighting magnets are forever over. Woodworkers, your hobby just became easier, faster and a whole lot safer!



Magswitch Workholding System Order Guide

Item	Part Number
Starter Kit (Base, 2 MagJig 150's, Reversible Featherboard)	8110134
*Vertical Featherboard Attachment	8110178
*Resaw Guide	8110125
*Dual Roller Guide	8110130
*Ultimate Thin Stock Jig / Rip Guide	8110362
*18" Universal Track Wall	8110132
*36" Universal Track Wall	8110370
Mounting Base	8110112
Riser Kit(4) (for Vertical Attachment)	8110155

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



Individual Featherboards

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).

Item	Part Number
Universal Featherboard (two 95 lb. grip Magswitches)	8110015
Pro Table Featherboard (two 150 lb. grip Magswitches)	8110328
Pro Fence Featherboard (two 150 lb. grip Magswitches)	8110329
Reversible Featherboard	8100131



Universal

Pro Table

Pro Fence

MagJig – 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 3/4" 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.

Item	Part Number
MagJig 95	8110004
MagJig 150	8110005
MagJig 235	8100377
30mm Forstner Bit (For MagJig 95)	180098
40mm Forstner Bit (For MagJig 150)	180099
25lbs Automatic-On Cabinet Latch 8-325	8110043
12lbs Magnetic Cabinet Latch 8-32	8110007
12lbs Magnetic Cabinet Latch M4	8110082



See demo on
**Workholding
System.**

Scan link or go to <http://youtu.be/N13HkxyRsZc>



*Every Magswitch product is proudly designed,
developed, manufactured and tested by
Magswitch to ISO 9001:2008 standards.*

Proudly distributed by:



Magswitch Technology Worldwide
8774 Yates Drive, Suite 140
Westminster, Colorado 80031
Ph: 303-468-0662
Fax: 303-951-9918

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



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. In this catalog, we launch our new safety logo and we do so in the spirit of our commitment to making your workplace safe.