

TOOLS OF ATTRACTION

A strong magnetic force that you can switch on and off makes these little gems a giant help in the shop.

BY RALPH BAGNALL



Magjigs, 30mm and 20mm

Magnetic featherboards, 20mm and 30mm.

Magsquares, 50mm and 30mm

FEATHERBOARDS, HOLD-DOWNS AND OTHER JIGS should be considered shop essentials. And with all the steel and cast iron around the average woodshop, magnetic force is a natural way to hold these essentials in place. Unfortunately, magnets powerful enough to stay in place are usually difficult to set in a precise spot.

Magswitch has addressed this shortcoming with their “switchable” magnets, which can be set in place unmagnetized, then “switched” on with the turn of a knob. The concept is not entirely new; the magnetic base of a machinist’s dial indicator set has been switch-enabled for many years. But Magswitch has created a compact yet powerful version.

Basically, two rare earth magnets are arranged so that turning the switch aligns their polarity, resulting in a strong attraction. Misaligning the magnets by turning the switch off cancels the attraction. It’s like using an electromagnet without needing a power source. Magswitch has put the

power of rare earth magnets into a compact form that can be turned on and off without using electricity.

They offer this technology in a number of new forms for woodworkers. I recently tested two of their featherboards, their Magsquare, and two sets of their Magjigs.

Featherboards

The featherboards work really well. I use featherboards quite often in my shop, and these are easy to position and hold fast to the tabletop. Magswitch sells two sizes, Standard and Pro models. The Pro has larger magnets and slots for mounting an optional vertical featherboard. The Standard uses the smaller magnets and does not have the slots. There is also a low-profile featherboard for use on steel fences.

Both were easy to use and stayed put during use. In fact, for my first cut, the magnets spanned the T-slot on my table saw and still held perfectly well. They are a joy to use. Set the featherboard in place and turn the knobs. Afterwards, a simple turn of the knobs releases it. An added bonus is that they are easy to store. I simply keep them stuck to the rear of the saw.

Magjigs

The heart of the featherboards is the magnet system. Fortunately for those of us who like making jigs, Magswitch sells the magnet system separately. Called Magjigs, they also come in two sizes, 25mm and 30mm. Magswitch claims that the 25mm holds with 95 lb of force, and the 30mm holds to 155 lb. While I could not measure this precisely, I believe the claims; they really hold. Like screws, they are best used in pairs. A single holds well, but can be spun in place. Adding a second prevents rotation.

The jigs are very much the same as the mechanisms used in the featherboards, but ears are added for screw eyes. Simply drill through holes in the jig base (1¼" for the 20mm or 1½" for the 30mm) and secure them with #8 pan-head screws. They are designed for use with ¾"-thick stock. If there is a fault to these things, it is that most plywood comes ²³/₃₂" thick, so I had to add small washers under the Magjigs to fill the gap.

I've been meaning to make a steady rest for my new lathe, and it seemed an ideal opportunity to use the Magjigs. My old steady rest used a clamping plate inside the lathe bed to hold it. It worked great, but was not convenient to attach and adjust. This new one is a breeze. I can simply set it on the lathe bed, slide it to where I want it, and turn the switches.

Magsquares

The other Magswitch offering I tried out was the Magsquare. It is the same mechanism as the 30mm Magjig, but encased in a steel cube. It worked quite well right out of the box to hold my square while I fiddled with my drill press table. The

base has a semicircular cutout so it can be attached to pipes and rods. It is drilled and tapped on each face to accept M5 machine screws. Using these holes and shop-made brackets, I can see measuring setups, light mounts, vacuum and air line holders; you get the idea.

All of the products I tested worked exactly as advertised, and I'm very happy with the results I got. Prices range from \$25 for the 20 mm Magjig to \$100 for the 50 mm Magsquare. As much as I like the featherboards for capability and ease of use, the Magjigs have really sparked my interest. I feel like these little gems could have thousands of uses. Just think of all the clamps and fences and stops and jigs and ...

— *Ralph Bagnall is a contributing editor to Woodcraft Magazine.*



A TINY GAP WAS LEFT when using the Magjigs with ²³/₃₂" plywood, which is the standard size. I shimmed it with small washers.

THE MAGSQUARE in tandem with a metal square can help straighten out even the most obstinate drill press.

ADJUSTING THE STEADY REST on my lathe is much easier with these Magjigs attached.

