Magnetic Fence

Needing to resaw and surface some thin pieces of veneer, and frustrated by trying to precisely clamp fences to machine tables with webbings on the underside, I came up with a better method to attach a fence – a magnet. While small, rare earth magnets are strong, they are not sufficient for this purpose. I turned to the magnetic base used by machinists to securely mount their dial indicators. (Lee Valley 88N31.02, \$20) These come with a metric threaded hole, typically M8 x 1.25, which can be used to mount the required fence to the base. The fence can then be placed carefully on the cast iron machine table, and easily locked in place with a smooth, rotary OFF-ON switch on the magnetic base. With the magnet ON, you can't budge the base short of a sharp blow with a hammer. Far quicker and easier than with any clumsy, annoying clamp.

Fence construction is straightforward. I glue the resaw fence in a mortise cut in the piece bolted to the base, which allows it to be checked for plumb while the glue dries as shown at the right. The hardwood fence is tapered to a gentle edge and jointed before gluing. I joint the fence edge first and then use a 45° bit in the router table to form the edge, but it could also be just planed.



Shown below is the resaw fence on my band saw and my drum sander. Accurate, thin slices cut on the band saw are subsequently surfaced on the drum sander to the desired finished surface and thickness. Of course, different size fences can be used by simply bolting them to the magnetic base.





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