

MICROJIG MATCHFIT DOVETAIL RATCHET CLAMP AP & MATCHFIT GRR-RIP CLAMPS



MicroJig MATCHFIT
Dovetail Ratchet
Clamp AP



MATCHFIT
Grr-rip clamp



The MATCHFIT Dovetail Ratchet Clamp AP



The Grr-rip clamp is more conventional

Jonathan Salisbury takes a look at MicroJig's MATCHFIT Dovetail Ratchet and Grr-rip clamps from Wood Workers Workshop to see if either has a place in his growing collection



Both clamps use a standard 14° dovetail groove

There's always a job for which the clamps – or cramps? – I have aren't ideal. My collection is relatively small, with miniature speed clamps, a few G-clamps, F-clamps and sash clamps; I often need to balance parts as I attempt to tighten a clamp that's determined to slip into the wrong position.

The new MicroJig DVC-700RAP Dovetail Ratchet Clamp looks a little like a modified F-clamp, having a cam that presses on a pad on the end of a rotating arm instead of the more familiar screw. There's no matching face on the end of the bar, however, which is instead forged into a dovetail profile. As one of MicroJig's MATCHFIT range of clamps, it's designed to slide into a groove to provide a clamp-down.

What makes the DVC-700RAP better than my standard F-clamps is the lack of undesirable travel of the clamping head. A small anti-pivot (AP) spring keeps enough pressure on the bar to pull the clamp head in, and friction does the rest; it needs two hands to use, but this does mean that wherever you set the arm it won't move, even when hanging underneath the work.

Once the clamp head makes contact with the workpiece, final tightening is achieved with



Plain black for the Grr-rip dovetail bar



The ratchet lever provides power



A large release button removes force



Close-up of the ratchet mechanism



Mechanism detail



The swivelling head is liable to slipping



Good for fixing down work...



... but mechanisms can get in the way

one squeeze of the trigger. From a light pinch to surface-damaging potential, the long lever's mechanical advantage is impressive. As soon as the spring-loaded, six-step ratchet is engaged, this clamp is going nowhere. The plate that applies pressure is also a good size, which makes it better for spreading the large clamping force. The release button opens the clamp head to where it was when first set up, since the AP spring stops the arm from moving any further. It's much easier to adjust the position and retighten with this system.

Turning to the new Grr-rip clamps, these have a very similar dovetail side – same dimensions, although finished in black and not bright-zinc – but a more conventional method of fixing them in place. The trigger mechanism is held in place by friction and can be pushed up and down the bar for initial positioning. Squeezing it tight provides a more secure hold, but the clamping force is nowhere near as great as with the ratchet. It would be sufficient for keeping items in place on drill tables, for holding jigs in place or for lighter clamping duties, however.

Groovy

The dovetail ends of each bar are destined for use in MATCHFIT Dovetail Grooves. These can be made with a standard $\frac{1}{2}$ in wide, 14° dovetail router cutter, or you could always treat yourself to MicroJig's MATCHFIT Dovetail Bit, which rounds over the top edges to leave a cleaner finish. Essentially a home-made dovetail version of the T track, this is a very versatile method of clamping on bench-tops, drill or router tables, or as part of a jig; a quick look online provides many examples. Adding a MATCHFIT X-Pad would also turn them into F-clamps.

Conclusion

In use, I encountered two issues. The first is that when used to clamp work to a surface, the bars and trigger mechanisms can be a nuisance as they stick up quite a long way. On a drill, they need to be fitted away from the chuck, which means that they can't be used to hold small workpieces, and when used with planes they get in the way. The second is that the Ratchet's clamping face pivots, so it needs a reasonably large surface to prevent it from slipping.

MicroJig's pricing is very competitive in the



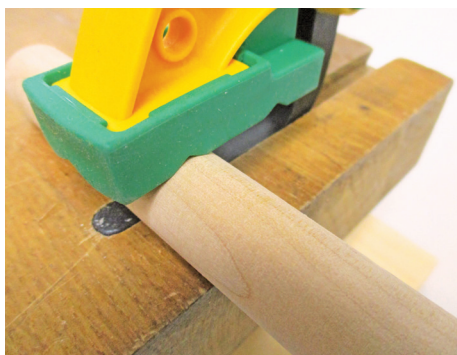
Light to medium clamping with the Grr-rip



Release pressure with the green button



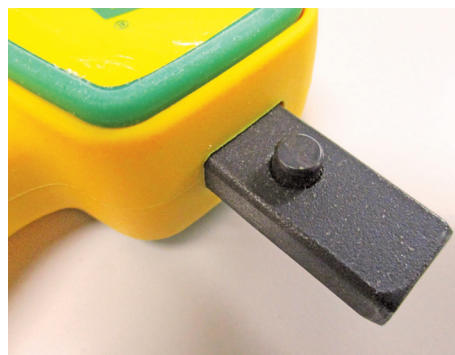
The grooved clamp head...



... is good for large dowel...



... as well as small



A pin prevents further travel



Replaceable facing...

USA, but significantly higher in the UK. The ratchet clamp costs \$42 – that's £33 at current exchange rates – but once the cost of getting it to the UK

SPECIFICATION

MicroJig MATCHFIT Dovetail Ratchet Clamp AP

- Exclusive AP Spring keeps the arm where you set it, even when hanging upside down.
- Fast-acting ratchet clamping achievable in three simple steps.
- Use anywhere you can mill the MatchFit Dovetail Groove or even in some T-Tracks.
- The ratchet mechanism won't vibrate loose when sanding or carving.
- Large clamping face with moulded cover to protect surfaces in use.
- Clamping pressure – 269.88kg; clamping range – 215.9mm.



... for both models

has been factored in, the RRP becomes £52.20. The Grr-rip clamp price was still not established at the time of testing.

MATCHFIT Grr-rip clamp (2 pack)

- Designed to work flawlessly with MATCHFIT Dovetail Grooves, this clamp can be used anywhere a ½in 14° groove can be cut.
- Easily apply up to 68kg of clamping force with a squeeze, providing the strength required without the hassle.
- Features a large, grooved anti-mar clamp pad that protects workpieces from damage and securely holds odd shapes in two directions.
- The ergonomic release trigger allows instant loosening of the clamp without breaking your grip, therefore making adjustments smooth and effortless.

The more I use them, the more I like the flexibility of dovetail clamping. More than once, they've come to my rescue when F clamps couldn't be used. For those woodworkers prepared to pay the price, these clamps would be very useful additions to your collection. ✂

THE VERDICT

PROS

- Large clamping face with moulded cover to protect surfaces; long ratchet handle makes them easy to use, even for those with hand grip issues; positive ratchet lock mechanism resists loosening

CONS

- Bars and triggers can cause an obstruction when used on surfaces; pivoting ratchet face can sometimes slip on narrower pieces; price

RATING – PERFORMANCE: 4 OUT OF 5

RATING – VALUE: 3 OUT OF 5

- Boasts a 158mm clamp capacity and 48mm throat depth, making it versatile enough for a wide range of projects.

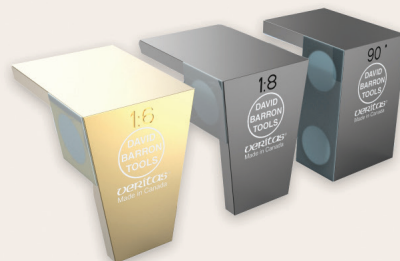
Typical prices: MicroJig MATCHFIT Dovetail Ratchet Clamp AP – £52.20; MATCHFIT Grr-rip clamp – £TBA

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