

# AXMINSTER TRADE SELF-ADJUSTING TOGGLE CLAMPS

Jonathan Salisbury takes a closer look at two of the self-adjusting toggle clamps from Axminster's Trade range – one horizontal and one vertical



I've been making spoons for over a year and used a G-clamp to hold blanks on my bench when rough shaping the outside using a drawknife. I thought a toggle clamp would be a better alternative, but the lock position of toggles needs to be changed when thickness increases (otherwise the clamp won't shut) and when thickness decreases (otherwise the clamping force isn't enough to hold securely). After receiving an email from Axminster Tools & Machinery advertising their new Trade Self-Adjusting Toggle Clamps, they sent me two to try, one vertical and one horizontal, both manufactured for them by AMF.

At first glance they are large and very sturdy-looking; the handles are chunky and the rubber texture provides non-slip grip, so the operating hand will hopefully not slip or hurt when large forces are being applied. Both have large baseplates to allow easy fixing to surfaces using 5mm screws.

### How do they work?

As the lever is pushed down and the foot meets the material, resisting forces move the sprung 'clamping force mechanism', situated behind the lever, backwards. As this locks in place, the clamp then operates in the same way as a 'normal' toggle. Clamping pressure is adjusted by a small screw behind the linkages and, once set, the same amount (more or less) is applied regardless of the thickness of material under the foot. I racked up the pressure just to test it and the screws attaching it to the board couldn't hold it down! Both clamps can be adjusted for reach in the same way as ordinary toggles.

### In use

The clamp feet are a generous size and have a soft plastic cover to limit damage. They swivel to allow them to pivot onto the workpiece, but they rotate a little too easily, even under high clamping forces, and I have had wood move while



Adjustment screw and clamping force lock mechanism

being cut; using a piece of non-slip matting to increase friction stopped this, however. The only real niggle I have is that it is very difficult to adjust the horizontal clamp's foot; there is a generous amount of travel but nowhere to drive the threaded bar, and the small amount left when it is almost fully in provides no space for fingers and insufficient grip for pliers.



One setting for thick...



... and thin, with no adjustment necessary



Horizontal clamping on a bench hook



The horizontal clamp's reach is difficult to adjust fully

### Conclusion

The self-adjusting toggle clamp is not new, but it is a recent addition to Axminster's catalogue – so I thank them for bringing them to my attention! The vertical clamp is far more useful for my spoon carving, and I liked how the clamp's foot lever retracts neatly into the handle to get it right out of the way when open. The horizontal ones hold work firmly to bench hooks and mitre saws and will also come in useful on the bench drill, planing jigs and no doubt many other applications when I start looking. The vertical clamp deserves full marks. The horizontal clamp is arguably less useful, but it is the adjustability issue that is the only real negative in a great product. ✂

### THE VERDICT

#### PROS

- Do not need resetting when material thickness changes; large handles for comfortable use

#### CONS

- Horizontal clamp's reach is difficult to adjust fully; require secure fixing to work surface; more expensive than other clamping methods

RATING: 4.5 out of 5

### SPECIFICATION

#### Axminster Trade Clamps Self Adjusting Horizontal Toggle Clamp 20

- Fast, firm hold-downs for securing workpieces
- Invaluable for custom-made jigs
- Ideal for router table and spindle moulder jigs
- Quick to lock and unlock
- Automatically adjusts to different work heights
- Adjustable clamping force
- Perfect for small-scale production use
- Max reach 35mm; max thickness approx 35mm

#### Axminster Trade Clamps Self Adjusting Toggle Clamp Push/Pull 15

- Versatile, strong, durable toggle clamps
- Automatically clamps any thickness within capacity
- Adjustable clamping force variable up to 2,000N
- Threaded extension for manual length adjustment
- Swivelling clamp shoe with non-marring cover
- Wide dual-component handle with comfort insert
- Galvanised and passivated steel for a long service life

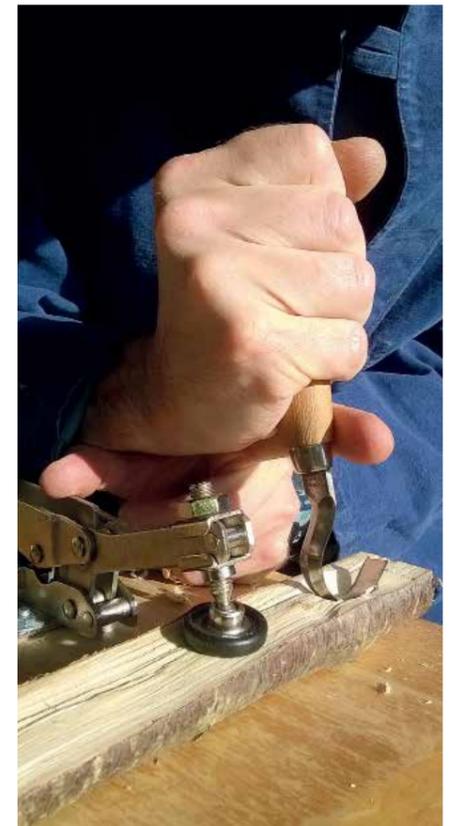
#### Depending on model:

Maximum reach: 35mm-60mm

Maximum workpiece thickness: 35mm-70mm

Typical prices: £21.65-£24.20

Web: www.axminster.co.uk



Work clamped firmly for cutting the spoon bowl

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