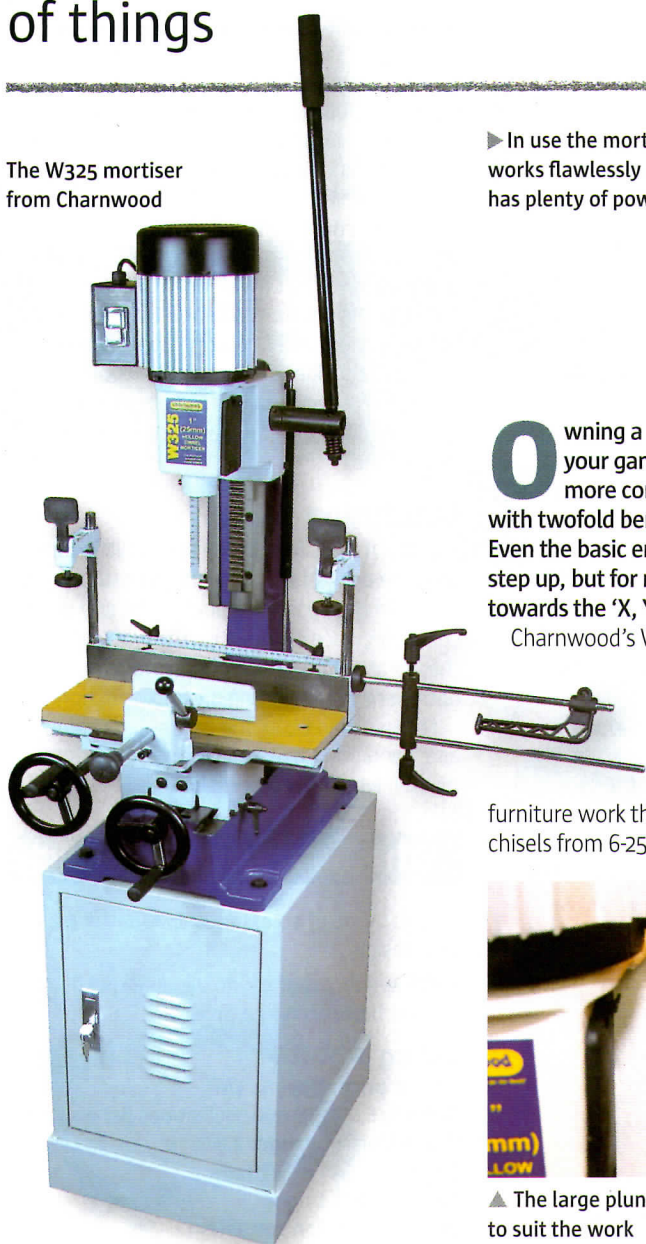


Heavy-duty joinery mastered

The cast-iron construction of the Charnwood W325 mortiser means it's up to the challenge of heavy-duty joinery, but it's equally at home on the finer side of things

The W325 mortiser from Charnwood



► In use the mortiser works flawlessly and has plenty of power

Owning a mortiser immediately ups your game when you want to make more complex or stronger work, with twofold benefits of speed and accuracy. Even the basic entry level ones are a massive step up, but for real speed you need to look towards the 'X, Y' traversing bed machines.

Charnwood's W325 mortiser is a trade-rated machine but at a price that's affordable for anyone who wants a solidly built piece of kit with capacities that will cover the smallest furniture work through to heavy joinery, taking chisels from 6-25mm.

You can work 205mm stock when fitted with a 12mm chisel, making it suitable for door construction where muntins between bottom and middle rails are needed with through mortises achievable by flipping the timber.

The plunge handle is plenty long enough to get good leverage when fitted with bigger chisels and its spring-loaded toothed intersection with the mortiser head allows it to be repositioned to suit the workpiece.

Chisel swaps are much of a muchness on any mortiser, and no change here, as a hex screw retains the chisel, while a standard three-jaw chuck holds the drill bit, with the chuck being accessed through side flaps on the mortiser head.

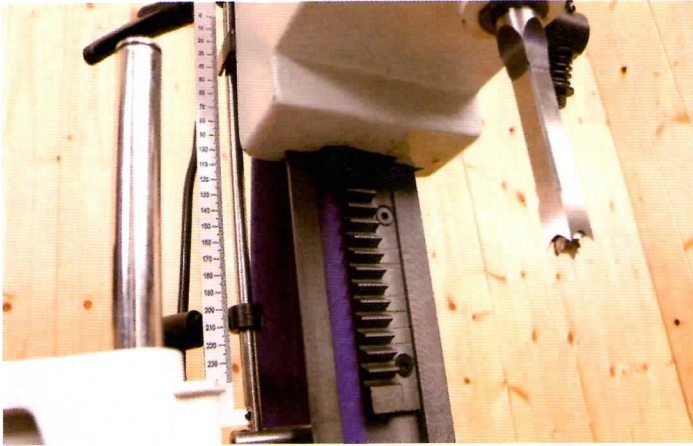


▲ The large plunge handle is easily repositioned to suit the work



▲ You need a hex wrench to secure the chisel

Charnwood W325 mortiser



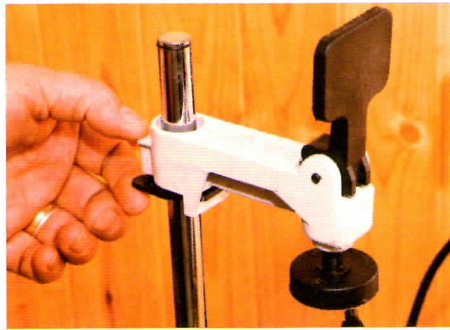
▲ The rack and pinion slide on the plunge head keeps things running smoothly



▲ The front to back adjustment is altered with this large wheel



▲ A push in clamp, locked with the cam lever secures work firmly



▲ This quick-release clamp is very fast to adjust



▲ The resulting mortises are clean and square

Heavy-duty

Cast-iron plays a big part in the construction of the mortiser; the beds and slides are all cast with rack and pinion adjustments for head travel and bed adjustments, each having gib strips to snug up and adjust as the machine wears in, all helping to make it a very robust and durable machine.

I found the adjuster wheels for setting the front to back mortise position and lateral

movement very useful, making it easy to position the work accurately, although I would prefer a larger lateral wheel that allows a steering wheel style operation rather than using the built-in handle of this particular wheel.

There are also a series of Bristol lever secured collars that can be set up against a stop to restrict the position and lateral travel for setting repeat mortises – in theory allowing you to work with minimal marking out. However, I found you can achieve a fair amount of pressure with the lateral adjuster wheel and if you rely on them without any setting out marks, then they start to nudge the stops or deflect, which could result in inaccuracy, so I prefer to mark out in the traditional manner and sneak up on the setting out marks.

Secure working

A further stop system is incorporated to limit the plunge depth for blind mortising and haunch work. Again, there's a lot of pressure generated against any stop that's set but this is perhaps not so problematic if it does move. Personally, I tend to file a mark on the chisel for setting specific depths, such as haunches, as I find visual marks more beneficial.

Securing the work is well catered for with two substantial tool-free adjustable hold down clamps that secure the work to the bed with a cam action for fast setting.

Holding the work against the fence is equally quick. A sliding shoe, set at an angle to apply

downwards as well as forwards pressure, is simply slid up to the work and as the lock lever engages, the shoe is forced forwards to nip the work securely.

Conclusion

With its solid build and easy adjustments the W325 hits the spot for heavy-duty joinery especially, but is equally at home on the finer side of things.

Weighing in at 120kg, it's ideally suited for a larger workshop that can afford the machine its own space without having to move it to gain space as needed.

That said, with mortisers usually sited against a wall, it doesn't need a huge amount of space if you are a little restricted – it's just a bit of a lump to shift around! **GW**

Good The Woodworking Verdict

+ Solid build; big capacities; fully adjustable; useful storage base cabinet

– The collars may be prone to moving if you use them

Rating ★★★★★

Typical price: £599 (inc VAT)

Motor: 750W

Motor speed: 1,400rpm

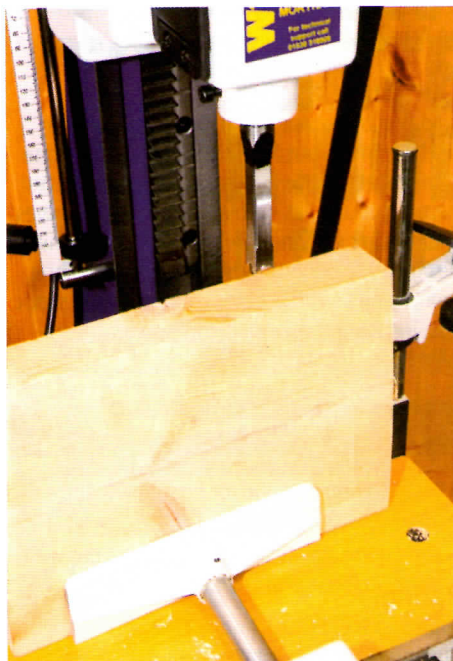
Max timber height with 12mm chisel: 205mm

Max clamping width: 145mm

Chisel capacities: 6-25mm

Chisel collar: 20mm

Web: www.charnwood.net



▲ Timber up to 205mm deep will fit below a 13mm chisel