On Test Special

When kit is bigger or more expensive than usual, **ANDY KING** takes a closer look to help you make the right choice

Moretens H410 Planer Thicknesser

£1900.00 ☎ 01903 216113

www.moretens.com

Tables: 1400x310mm **Knives:** Two **Thickness capacity:** 410x260mm **Feed speed:** 5 m/min **Motors:** 3000W (planer) 3 phase, 180W (feed)

Surfacing tables are 1400mm long overall

Asked to name a Swedish manufacturer, most of us would come up with Volvo, Saab or Abba (manufactured music?). Narrow the field to woodworking and you'd probably be struggling. But this could soon change, if the Moretens range of woodworking machinery, brought into Britain by Wood Factors, gets the attention it deserves.

At present Wood Factors are importing three machines, designed primarily for the small woodworking business. Their PH260 four cutter is aimed clearly at the trade user, but the H410 planer thicknesser and MF30 spindle moulder could be a good investment for any woodworker, amateur or professional, wanting quality, heavy duty tooling with good capacities at reasonable prices. Pete Martin and I visited Wood Factors' Chichester base recently to check out the range.

Planer Thicknesser

At first glance the H410 planer looks pretty much like any other high quality machine. Closer inspection reveals a unique feature, a wider thicknessing bed and cutterblock than its surfacing capacity. This enables timber up to 310mm wide to be surfaced, but 410mm wide to be thicknessed. This extra width is designed to allow the planer to be adapted at a later date if required to turn it into a shaper. For this the standard two-knife block is replaced with a retro-fit special knife block kit. Normal thicknessing capabilities are retained, but the extra width allows standard spindle moulding cutters to be fitted into the block alongside the knives for moulding work such as deep skirtings, architraves and so on.

That would be a bonus for the future, but what about the basic planing and thicknessing modes that most users will be buying this machine for? The usual method of supporting the thicknessing table on higher end planers is a central hydraulic ram, but Moretens favour four chain-driven square threaded (acme?) supports, one in each corner. They have opted for this to eliminate any chance of flexing when running heavy components to one side of the table. Whether this is a viable argument is open to debate, but it certainly works smoothly enough.

Maximum thicknessing depth between bed and block is 260mm. Combine this with the extra width and you get excellent capacities that outperform most planers within the price band. Depth is adjusted from above, using a removable crank handle, again something rarely found at this price level. This handle has a scale wheel built in, which corresponds to a 4mm adjustment per revolution. The wheel is incremented down to 100ths of a millimetre for exceptionally fine adjustment, and, although there is some backlash before the slack is taken up, it's very positive once engaged. The need for such fine adjustments are probably beyond the realms of woodworking (these are engineering tolerances), but the ease of adjustment for really fine cuts with an easily readable scale is a distinct advantage. Just don't mislay that handle! The standard setting scale is still read via a pointer on the thicknessing bed, but this is easily done while still standing upright.

Control switches are mounted at the back of the surfacing bed. You might think reaching over the machine dangerous, but buttons are easy to reach and not prone to damage. The control panel is

You have to reach across the surfacing table to get to the on/off buttons (housed in a sturdy casing). This means there is no fumbling around beneath the table

housed in a heavy steel casing, well away from the actual sufacing table. It's nice to be able to operate a machine without having to stoop, although I have to admit that a couple of times during testing I was still groping around below the thickness table for the buttons!

Everything about this machine appears to be built to last. Surfacing and thicknessing tables are rock-solid, cast iron with a slightly rippled finish. This helps prevent suction between a planed surface and bed, making it easier to pass work through the machine. Like most planers, the fence is an extruded aluminium section. It's 1100mm long by 150mm deep, running on twin 30mm diameter steel rods. These fit into aluminium plates, 19mm thick on the machine and 11mm thick on the fence. Bristol levers are used to adjust the angle (up to 45°) and lock everything absolutely rigid. It can be calibrated for both 90° and 45° positions.

When I was a lad (!), this design of planer was the only type out there, with none of the flip-up or removable tables found today on many machines. The timber was simply fed over or under in one operation. Despite protests from Pete Martin, who prefers easy and visible access to the thicknessing bed, I still think this is the best design. Having to remove or adjust things to change functions only complicates matters. Years ago when I used this type of machine regularly it was a doddle to quickly surface, then thickness a piece of wood if you were half way through machining and found you'd forgotten a piece. This isn't possible with flip-up or removable tables. Some people may like to see what's going on as you feed timber, or clear chippings, but efficient extraction minimises the need to clear debris. Once the feed roller grabs the work, you've had it anyway! I've certainly never found this design a problem.

The 100mm diameter dust port is efficient, coping with both surfacing and thicknessing well. Again, with this permanent fitment there's nothing to remove, reposition or lose. Guarding really only applies when surfacing. A neat sprung-loaded aluminium bridge guard enables up to 150mm to be passed beneath it. Bristol levers lock height and position across the cutterblock.

I surfaced and thicknessed some beech to check out both power and finish. Despite the standard block only having two knives, the five metres per minute feed speed (powered by a separate motor) gave a fantastic finish when thicknessing, with no hint of the dreaded snipe, and no loss of power under load. The serrated steel infeed roller is

Moretens PH260 Four-cutter

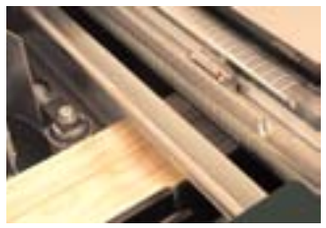
The Mortens PH260 four-cutter machine is probably beyond the scope of most *Good Woodworking* readers, aimed more at the small industrial user. Rough sawn timber is fed in at one end, to emerge at the other smooth, square-edged and with any moulding you care to put on it.

This is achieved by the use of four cutterblocks, each driven by an independent motor. The side ones are standard spindle blocks to cut the edges of the stock. Upper and lower ones are four-knife blocks to the same design as those used on the H410 planer. Two of the slots take shaper cutters to form the profiles, while the other two are fitted with standard planer knives to clean the timber faces as it passes. Blocks have indexing grooves scored on them to make cutter positioning easier.

In its four-sided operation the PH260 will mould timber up to 260mm wide and 80mm deep. For two-sided work its capacity increases to an impressive 300x230mm. The micro-switched safety hood has clear windows so you can see the operation as the timber passes through the machine. Adjustable sprung bearings push the timber firmly against the fence as the power feed pulls it through.

The speed at which this machine deals with timber is amazing. A 2400x100x25mm piece of sawn softwood was cleaned up and moulded in less than 10 seconds, leaving all four sides planed, with a scalloped moulding on the face.

There are viewing windows in the top so you can see timber as it passes through (here cover is removed)



Timber emerging from the machine is fully machined on all four edges. Moulding possibilities are endless

Small joinery shops specialising in mouldings could make a real killing with this machine, running out batches of skirting, architraves or dadoes to match existing profiles quicker than it would take to square-edge standard stock.The Moretens is a superb machine at a price that could pay for itself in a few months.

Cost: £5132 inc VAT

Twin Bristol levers lock the aluminium fence on hefty steel rods and castings. It can be locked up to 45° and calibrated

To adjust cutting depth when surface planing you slacken off a Bristol lever and move a steel lever up or down

A removable cranked handle and graduated wheel is used to set thicknessing depth

complemented by a rubber outfeed roller, to minimise damage to the finished surface as it emerges.

When surfacing, a smooth and responsive adjustment lever drops the bed by up to 10mm, although the maximum cut indicated in the manual is 8mm. Either way, try taking such a big hit on a wide board on any machine and you'll regret it. The amount of kickback generated by the block trying to hog such a large amount makes it a dangerous operation. But, for quickly reducing a board to width by edge planing, this huge capacity is a great advantage.

This planer is superb value. The standard of finish, capacities, and components used in the construction are to industrial standards. The 'old fashioned' method of over/under feeding without removing beds is, in my opinion, a distinct advantage, especially in a restricted shop where opening up the tables demands more floor space.

Having tested the H410 planer, I had the opportunity to check out two more excellent machines from Moretons, each having some unique functions. One was the MF30 Multi moulder, the other the PH260 Four-cutter.

GW verdict

+ Extended thicknessing capacity
- Adjuster handle could get mislaid

Value for money ●●●●◐
Performance ●●●●◐

Thicknessing width capacity is actually greater than surfacing width

Moretons MF30 Multi moulder

Moretons' MF30 Multi moulder is a unique beast. In one guise it operates as a normal spindle, with the block projecting through the 400x900mm cast iron table for normal use. It's equipped with standard guarding for spindle work, plus micro-adjustable infeed and outfeed fences. Ring fence and normal straight cutting can be carried out.

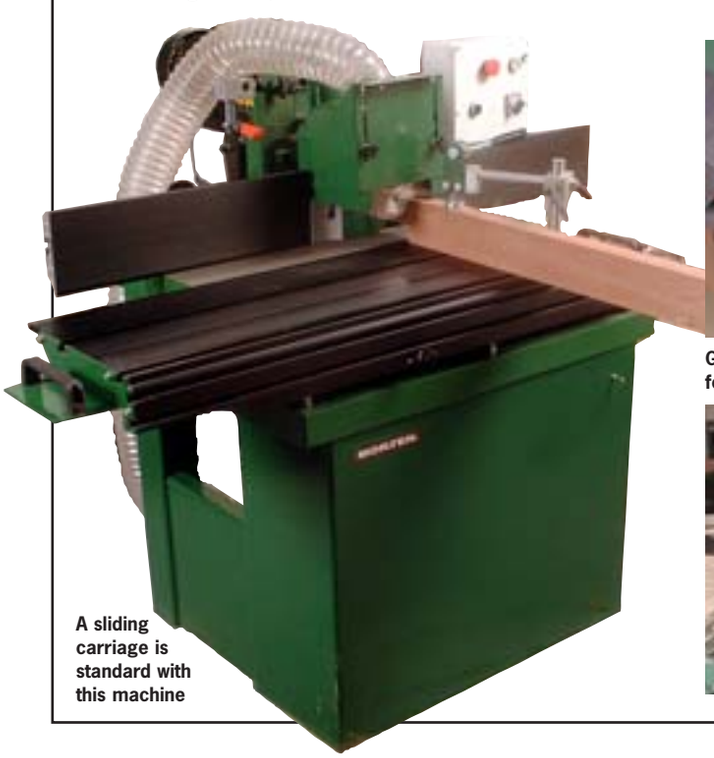
But there's more to the MF30 than this. While many moulders now use a tilting spindle to create a variety of profiles from a single cutter, the MF30 has put this into an X/Y axis. This enables the spindle not only to rotate through 270°, but to travel inwards and outwards across the table. This gives an unbelievable amount of scope, from overhead routing operations to horizontal tenoning work, and any angle in between. Safety is paramount on a spindle moulder, and to this end, the head is still fully enclosed within a steel guard at all times.

As with the planer, winding handles are micrometer-scaled, with rack and pinion action to pull the spindle around smoothly to any position. A rise and fall of 550mm accomodates both standard mode and inverted moulding and there's 400mm of horizontal travel.This could be a huge advantage in the small joinery workshop, enabling tenon cheeks to be cut in a single pass with a standard rebating block. This would be carried out with the 340x1100mm aluminium sliding carriage and 1200mm crosscut fence, which are supplied at no extra cost. For longer tenons the head is just wound out further and a second pass made. The machine can remove a full 100x15mm cheek in one pass, without faltering in the slightest.

Unlike ordinary spindle moulders, the MF30's fence can also be tilted for mitre cuts. Combined with the tilting head this creates a wide range of machining possibilities, way beyond that of a normal spindle. Complex shoulder cuts and obscure profiles can be made easily and safely.

The Moretons MF30 is probably as revolutionary as the router was when that first appeared on the scene. Its scope is limited only by your imagination. What's even more impressive is the price. At £2577, it's within reach of many small professional workshops. It certainly deserves to find its way into many of them.

Cost: £2577 inc VAT



A sliding carriage is standard with this machine

Graduated handwheels provide fine adjustment for fences, rise and fall, lateral movement and so on

You can move the spindle head accurately across the table. This is superb for jobs such as deep tenons

The spindle head can be rotated through 270°, ideal for compound joints