

Kit & Tools

When you go down the route of combination machines there are usually two main factors that play their part: space and budget. There tends to be a train of thought that believes a combi frees up space and will work in smaller workshops. However, with a combi you generally need good all-round access to be able to use it to its full potential as they tend to come with a lot of features that need space.

This particular model, with its sliding carriage for the saw table as well as the gull-wing outboard tilting planer beds for the thickening function, requires a wide work area but it does come with a wheel kit and jockey wheel so you can move it around easily enough to orient for the job in hand.

On the budget side, the AW4 certainly gives you plenty for your money and with decent capacities across the board.

The 3-motor system means you don't have to start swapping belts to move between functions, although there's still swapping or moving of fences and tables on the top of the



Budget combination

This combination machine is fairly easy on the pocket, but it takes up more space than you might expect

machine as with any combi. While the three motors are advantageous, the setup demands a 16amp power supply.

Taking a look at the individual functions reveals some excellent features...

First, the saw

Starting with the saw, there's a scoring function as standard; alongside the sliding carriage it gives clean splinter-free cuts on veneered or laminated stock.

It's a single blade, not a shimmable one, so it must be matched to the main blade if you swap it for a different tooth count etc.

The scorer is easily adjusted with the top-accessible setting points.

The carriage has a 2000mm crosscut capacity when using the adjustable fence. The

fence will also alter on the carriage for angled cuts. It's certainly solid enough; a heavy-duty cast bracket supports the squaring table frame well, and there are adjustments that ensure the carriage tracks perfectly to the blade.

The clamping shoe on the fence is nothing to write home about, but it retains its setting well enough; as with many machines where savings need to be made, things like this tend to be some of the areas where this happens, along with the odd locking knob or two.

Ripping capacities are maybe a little shy for a 250mm-diameter blade, 65mm at 90° is fine but the 45° tilt is a tad limited at 45mm.

The maximum overall ripping width with the ripping fence is limited to 460mm; and this is an area where combi machines in general can come up short, more so on a compact model like this one.

The fence cam locks to the front running rail well, and there's also a rack & pinion fine adjustment facility that does a good job of tweaking any setting.

Separate rise and fall/tilt wheels work well,



▲ The jockey wheel makes it easy to reposition the machine as needed



▲ Sliding the carriage back gives excellent access to both blades



▲ There are adjustments for the scoring blade through the table

Axminster AW4 combi



▲ There's also a raft of adjustments to set the fences and tables accurately



▲ A heavy casting supports the squaring table well



▲ Adjustment wheels run fluidly and sit flush when not required



▲ The sliding carriage fence locates on a pivot pin



▲ A big hold-down clamp keeps things secured and can be used in conjunction with the flip stop



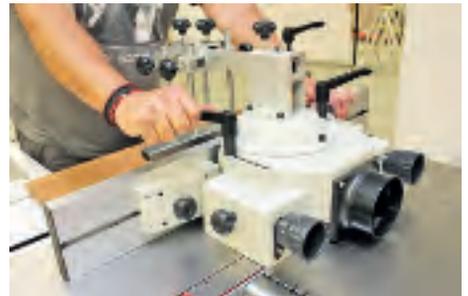
▲ The fence has a solid cam lock along with a fine adjuster



▲ A spanner and hex key are used to swap blocks



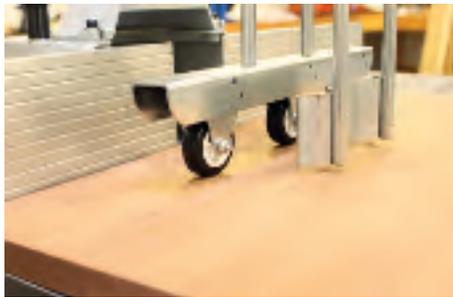
▲ Reducing and blanking rings are supplied



▲ The spindle hood is solidly made and secures with Bristol levers



▲ The fences are fully adjustable to suit the work



▲ These wheels allow the work to pass through easily



▲ Heavy box sections ensure the guards stay rigid under load

and have folding handles to give a clearer work area when walking work through the functions.

Spindle function

Spindle work makes good use of the sliding carriage; ideal for working end-grain mouldings and scribing cuts, and with a top-threaded spindle, it is fitted with a suitable flush rebating block to enable tenon cuts to be made as well.

There is a set of collars as well as reducing rings along with a central blanking cap to give a clear flat table when the spindle is wound below the table and isn't in use.

Spindle speed adjustment is accessed through a hatch and needs a spanner to release

the tension on the belt to allow it to be moved and there's decent room to do so, making it fast and easy to achieve.

The hood is much the same as most on the market, but certainly better than many budget offerings. It has a heavily cast-alloy main section with thick walled box section aluminium for the guarding, so everything is kept rigid while the work is fed through. I found the use of a set of rollers on the top hold down was a bonus as it helped the work feed through more slickly while still keeping it down to the table.

The fences are aluminium with the standard adjustments for offset work, with each fence

facing having jacking screws to gain perfect parallel and coplanar alignment.

Planer talk

Moving to the planer, if there is an area where it could prove frustrating, it's the need to bolt down the dovetailed fence-retaining plate to the table when you want to face up stock.

I found that while it worked well when needed, to use the other machine functions I had to remove it, and with a hex wrench needed, along with the chance that the retaining bolts could be mislaid, I'd prefer an easier system to secure the fence as well as swapping the functions over.



▲ The bridge guard removes when not required



▲ The planer tables have to tilt away for thickness work



▲ You have to have the hood in place to use the thicknesser



▲ This bracket has to be fitted for the planer fence



▲ A cast-iron fence is a great feature and it adjusts easily



▲ The central ram is a feature normally found on more expensive models



▲ Various power options are dotted around the machine



▲ The saw functions are powerful and accurate



▲ The gull wing tables aren't ideal for thicknessing work



▲ There's loads of table space to support the work on the spindle

The plus side of things makes up for it though: a 3-knife block, while still offering the similar cuts per millimetre of a 2-knife block, does gain faster feed speeds through the thicknesser – 8m per minute in this case.

Alongside this there's a central ram-supported table that runs easily. You have to swing both tables away from the block and reposition the hinged fabricated dust hood to cover the block safely during this operation.

While access to the thickness table itself is first class, I found the tables themselves can get in the way when feeding stock through on your own as they restrict easy access around the machine to pick up the work as it ejects.

Conclusion

A foible or two doesn't detract from what is a very well-constructed machine for the money; the three motors all seem to be man enough for the tasks in hand, and with switching for the functions well positioned for either initial start up or to switch off after use, it's pretty user friendly.

It takes a more methodical approach to get a combi to work well as you don't want to be constantly swapping modes, but if you can get along in this way then you have three decent core machines here for a lot less than the individual machines would cost if you bought them as separates.

Good The Woodworking Verdict

+ Smooth adjustments; great capacities; micro fence adjustments

– A couple of cheap knobs; odd sub fence configuration; fine adjuster could get damaged

Rating ★★★★★

GENERAL

Number of motors: 3
Power: 3000W (saw)
2000W (planer)
3000W (spindle) 230V
Weight: 370kg

SAW FUNCTION

Blade speed: 4050rpm
Blade Tilt: 0-45°
Max depth of cut @45°: 45mm
Max depth of cut @90°: 65mm
Max ripping width: 460mm
Scoring blade diameter: 80mm

SPINDLE FUNCTION

Cutterblock diameter: 75mm
Cutterblock speed: 4,000rpm
Spindle speeds: 3500, 5500 & 7500rpm

PLANER FUNCTION

Feed speed: 8m/min
Fence tilting: 0-45°
Knives: HSS x 3
Max depth of cut: 2.5mm
Max planing width: 250mm
Max thicknesser capacity: 180mm

Web: www.axminster.co.uk