

Charnwood W650 table saw

Bigger can be better sometimes, as this impressive saw clearly demonstrates

It makes sense that the next logical step from the Kity 419 clones would be a bigger version of table saw. First looks with this one certainly give the impression that this is the case, as it has the same sliding carriage – which I would say is a positive thing for many reasons. A sliding carriage can take up huge amounts of space if it needs an outrigger and has a long travel, and unless you work sheet stock regularly, it's not an essential. Even so, a carriage can be a big asset; I find one very useful for repeat work when cutting components to identical sizes, and with a cutting travel of 490mm (19in) on the carriage and 860mm (34in) using the flip-stop, it will cut some decent-sized stuff while retaining a compact size.

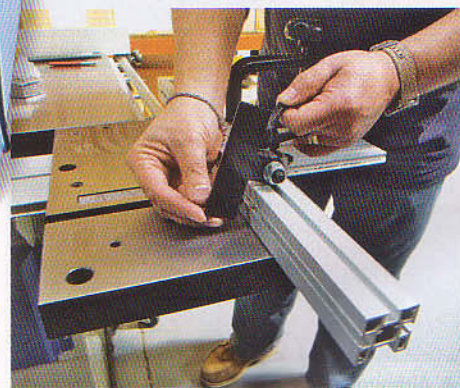
The carriage is cast iron, like the table itself. The slot in the carriage is designed to allow the fence to alter for angled work and has a small stop for returning to the zero mark. You have to rely on the carriage for crosscut work as the main table has no slots for small mitre fences.

With offset cam wheels on the underside, the carriage can be set to run as smooth as silk and the running rail can be altered to suit the best position for the cut being made, plus the brackets it sits on are simple to adjust to get the carriage in perfect alignment.

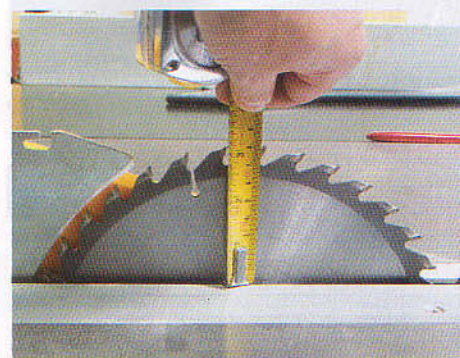
A bigger table saw certainly has its advantages



▲ Pic.1 The crosscut fence can be adjusted for angles and repositioned at the rear of the table



▲ Pic.2 An adjustable flip-stop is included for repeat work



▲ Pic.3 Blade projection is 80mm, but capacity is less with the crown guard fitted



▲ Pic.4 Adjustments for the blade height and tilt are smooth

Two auxiliary pressed steel fences are also supplied, one to the right, and one behind the blade. The right extension allows a maximum ripping capacity of 605mm (24in), making sheet conversion economical, with the rear table offering additional support and also ensuring hands are kept well away from the blade for anyone taking material off from the back of the saw.

With the basic capacities dealt with, let's look at the saw itself.

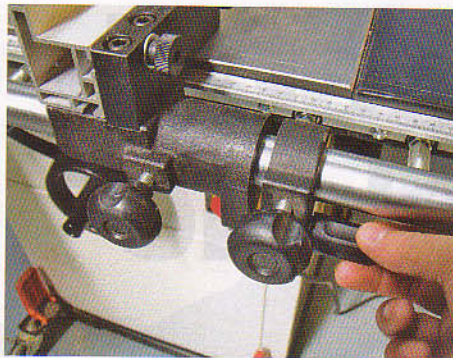
Blade & performance

Thanks to its 250mm (10in) blade, the saw has an 80mm (3in) projection, although allowing for gullet clearance should bring that down to 70mm (2¾in). In fact, I found that with the crown guard in place, the maximum stock it would take was 67mm (2½in). Ripping to that depth on some rather knotty pine, the saw was more than capable, though. In comparison, if my Kity 419 has a flaw, it's that it struggles when trying to cut at its full depth. The Charnwood doesn't seem to suffer that fate!

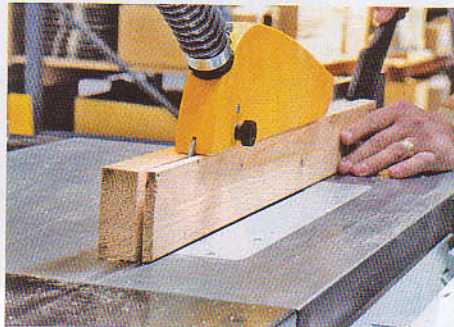
Next to my Kity, the saw does sound slightly rougher on starting, but it settles into a quiet rhythmic hum, and it's induction-motored so not nearly as loud and brash as a brush type. There's no discernible vibration through the saw as it runs either, so all in all it's a very stable machine. Finish from both crosscut and ripping was good, though I was using this demo model's original, old blade. A new blade would no doubt raise the saw higher still.

The saw has dual adjustments for blade height and tilt. Two hand wheels do the work, and both run sweetly. A locking lever holds any setting you make. Fence adjustment is equally sweet, and locks off rock solid. A large cast sliding shoe, complete with a basic but useful fine adjuster, holds the fence, sitting onto the round running rail. This glides very freely over the cast table, but is a little less so over the steel pressed extension. Adjusting the running bar or table slightly should overcome this easily, however.

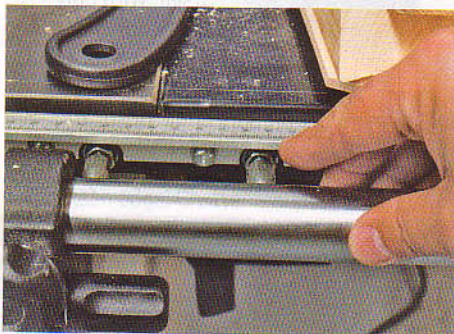
The running bar adjustments allow you to set the fence perfectly square to the table as well as parallel to the blade by simply running the locking nuts in or out accordingly. Spend some time here getting this spot-on and the saw will be a friend for life.



▲ Pic.5 The fence travels on a solid bar. The running shoe is cast and has a small fine adjuster



▲ Pic.7 Deep ripping is no problem – the saw has good power at a steady feed rate



▲ Pic.9 The running rail is fully adjustable for getting the fence perfectly aligned

The fence facing itself is aluminium, 80mm deep, so supports stock fully during ripping and can be flipped for narrow stock. It also slides back for ripping timber safely.

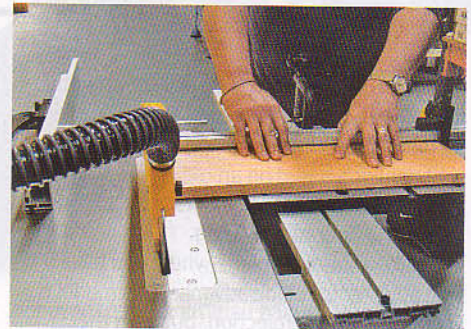
Overall size of the saw is a nice surprise as well. My own Kity, while having a wider ripping capacity when the side tables are fitted, takes up 1410mm (56in) width for the tables including the carriage. The Charnwood has a table width of only 1160mm (46in) by comparison, although you do have an additional 150mm (6in) of bar for the fence to contend with. Slide the carriage off when not needed and you can get the footprint down further – if space is limited, these savings can be important.

Conclusive findings

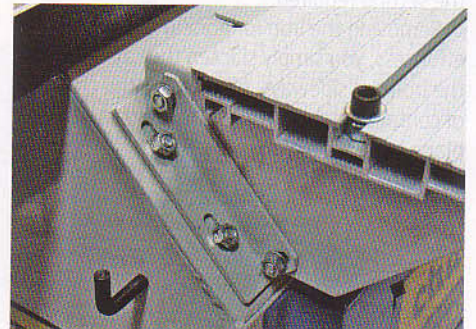
Overall, the plus points for me have to be that the Charnwood table saw is similar to the Kity saw that I have used for so long, but with better capacities. The dust extraction is superior to the Kity, (which isn't overly difficult!); moving the saw later, a small amount of dust had built up below the cabinet,



▲ Pic.6 The fence facing retracts for ripping timber and can also flip for narrow stock



▲ Pic.8 Crosscutting is a silky operation as the carriage is very smooth running



▲ Pic.10 These plates adjust to get the sliding carriage accurately aligned to the main table

but a dust kit is supplied with the machine, which is an additional bonus.

It's rated as a light trade model, and as long as it isn't hammered, the Charnwood should live up to that without any problem. The build quality is certainly good enough. It should appeal to many who have a smaller workshop but want a well specced saw, as well as those who don't have the need for a full-blown outrigger sliding carriage machine.

Good The Woodworking Verdict

- + Solid, good capacities
- No main table mitre slot, dust extraction

Rating ★★★★★

Typical price: £749

Made in: China

Motor: 1700W

Speed: 4000rpm

Blade diameter: 254mm

Weight: 125kg

Web: www.charnwood.net