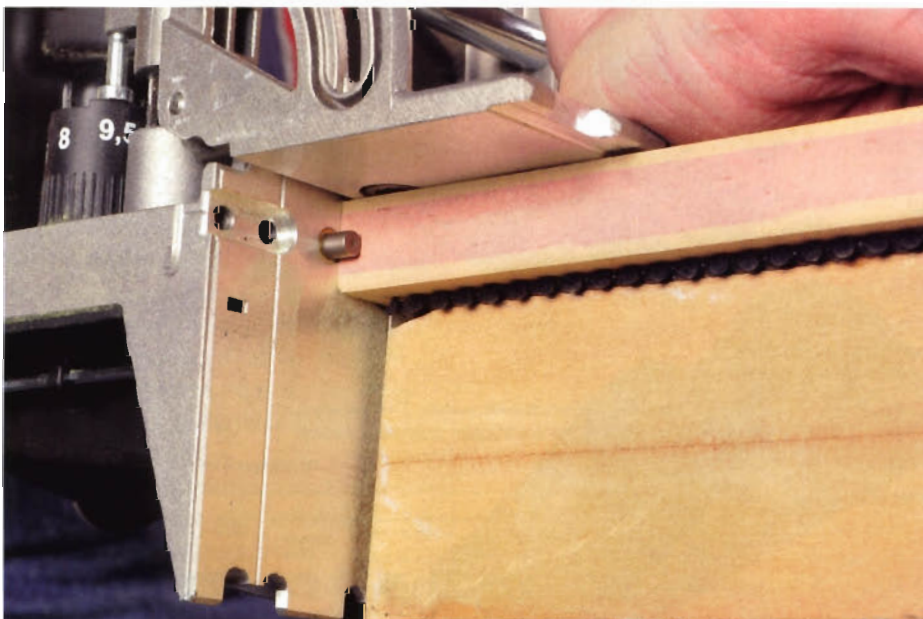


# Mafell Duo Dowel System



Michael Huntley tests a machine that will fix and locate dowel holes in small components

PHOTOGRAPHS BY GIMC/ANTHONY BAILEY



Retractable stop resting against edge of MDF panel

**T**his robust and versatile jointing machine can be used to produce carcasses and frames quickly. The heart of the machine is a 700W motor to which are attached two 10mm carbide-tipped 'dowel' drills which slide in and out of an adjustable fence assembly similar to that of a biscuit jointer.

The fence assembly is extremely adjustable with several pre-sets and has the ability to lock into a drilling template which is available as an optional extra. For carcass work this template is ideal.

In practice the quadrant fence is set for the angle required, usually 90° no doubt, but angle settings between 0° and 90° are possible. With the timber secured against a stop the dowel hole can be drilled. The mating component is similarly secured and the mating hole is drilled. It's that simple. Certainly the ease with which polygonal



butt joints can be made is impressive.

The fence is marked with centre lines and a transparent window so that you can see to locate the dowel holes in all configurations.

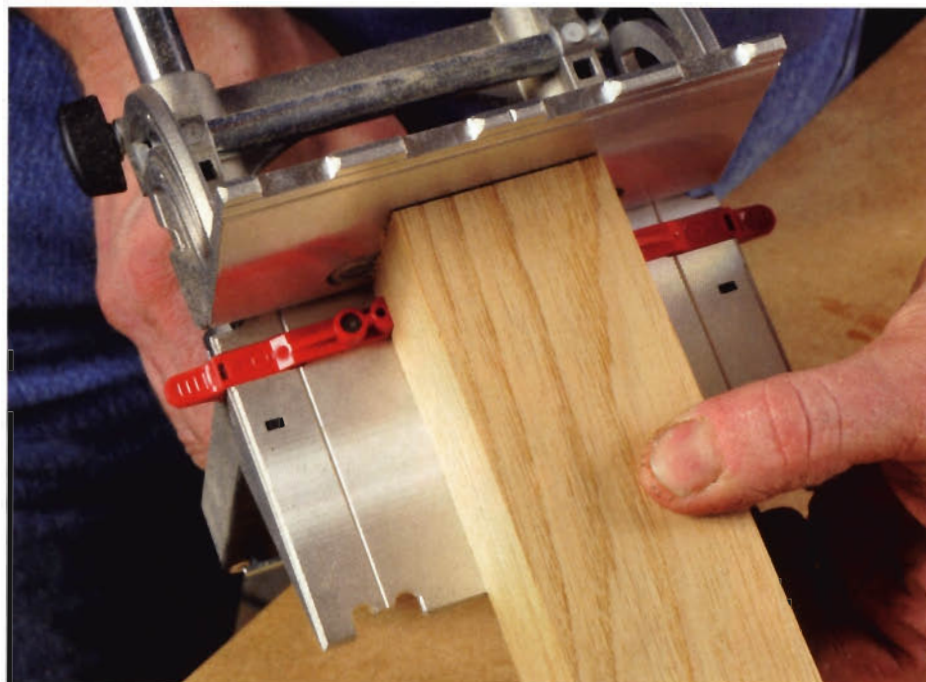
The maximum distance between fence and a 10mm pair of dowels is 42mm. There are presets for various distances between 6.5mm and 12.5mm.

### Grub screws

The model that I tested was supplied with 6, 8 and 10mm drills, all of which had 8mm shanks. They were secured into the chucks with grub screws. If I were using this machine for site work I would definitely carry a few spares; 3mm, 12mm and 16mm drill bits are also available but the 16mm drills only fit the large version of the doweller, the DD40P.

The holes bored fit standard compressed beech dowels. One interesting extra is a pair of plastic auxiliary stops. These come in various sizes and enable standard timber sections to be easily centred and gripped for drilling.

The baseplate is fitted with two sprung stop pins. Being sprung these retract when the tool is used for face work but they can be used as indexing pins when registered in a hole that was drilled earlier. The pins are not the same size as the dowel holes so it is necessary to ensure that the pin is tight up to the edge of the



Auxiliary stops for drilling narrow components are included

old hole, but they make a very quick and accurate way of producing a long series of dowel holes freehand. In case you want to check the alignment there are grooves cast into the baseplate which line up with the edges of these sprung stop pins.

The model I tested also came with two anti-slip mats which make working without cramps possible, but not always advisable. The easily reached extraction port did not cause the hose to impede use of the machine at all. **F&C**

### F&C verdict

This is an extremely useful tool which will provide fixing and locating dowel holes in smaller components than other compressed beech fixing systems.

Having said that, though, I think any well-equipped workshop would want a biscuit joiner as well. For more information on how to use the machine see the supplement published with F&C 153.

#### Pros

Quick, versatile, repetitive accuracy  
3-year guarantee  
Robust build

#### Cons

Expensive

#### The numbers

**Mafell Duo Doweller DD40G**  
Motor 700W  
Drilling depth 0-37mm  
Drill spacing 32mm  
Nominal no-load speed 18,500rpm  
Weight 2.8kg

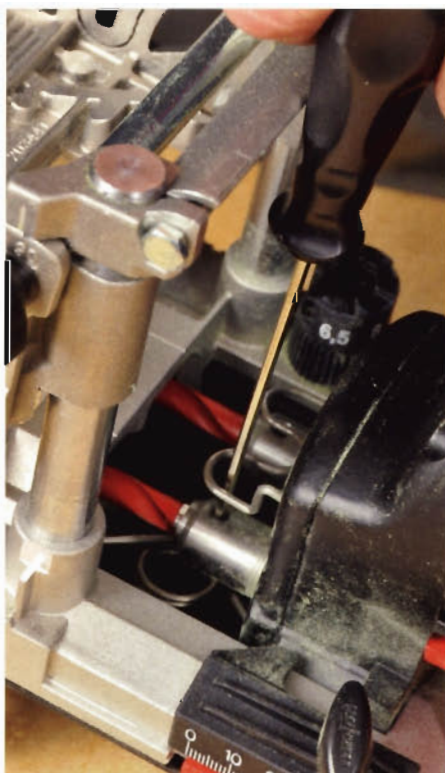
Prices, inc VAT

**Machine** £494.50 (midi version)  
**Spare bits from** £20.70 upwards  
**Drilling template** £144.21

From NMA Agencies Ltd  
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Changing cutters is simple