

TOOLS on TEST

The WoodRat

Text: Jeff Loader

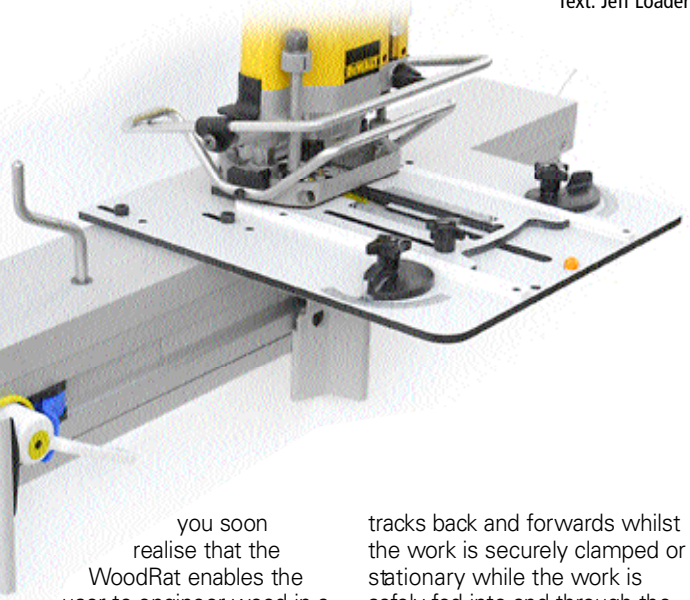
While ago, I got to grips with the WoodRat's smaller sibling, the LittleRat. So impressive did this excellent item of woodworking equipment prove to be, that we thought that the big WoodRat itself merited closer inspection. Although the basic concept and working principles of the WoodRat is surprisingly straightforward, it does require time, imagination and the wit of the operator to fully exploit and comprehend it.

Therefore, I was despatched to the picturesque village of Godney, set way down in the depths of the Somerset levels, to meet Martin Godfrey, the inventor of the WoodRat, to fully explain it and to help put the large rodent through its paces.

The first, and in fact the main, hurdle for the uninitiated to tackle is to understand what exactly is the WoodRat.

Many label it, and think of it, as a dove tail jig. Sure, it can produce the widest range of dovetail joints, both in size and type, than any other jig available, but it is much more than that.

The legend under the WoodRat logo, in their current advertisements, calls them "precision joinery machines". This terminology is fairly accurate, but once you learn that the WoodRat is capable of tackling a staggering range of woodworking jointing and moulding tasks,



you soon realise that the WoodRat enables the user to engineer wood in a unique way.

Another hard pill of comprehension to swallow is that an item of woodworking equipment that claims — quite truthfully as it turns out — to assist in the production of just about every constructional jointing task known to traditional cabinet making, comprises of such few main, and relatively lightweight, components.

There are no heavy-duty cast iron tables, no large sheet metal panels, no big leg stand and no complex electronic gadgetry — except for the need to utilise your regular router power tool.

It is simply mounted onto a straightforward to make wooden wall plate fixed to a workshop wall. Provision for dust extraction can be, and should be, made by the user following directions in the excellent user manual.

The system operates unlike any other woodworking machine or jig, although its basic principles are straightforward.

The router, unlike a router table, is operated the 'right way up' at all times. It either

tracks back and forwards whilst the work is securely clamped or stationary while the work is safely fed into and through the cutter.

When joint cutting, no guide bushes and templates are used, so you can usually always obtain a clear view of the cut. One of the great advantages of the WoodRat, especially when joint cutting, is that both the router and the work are clamped.

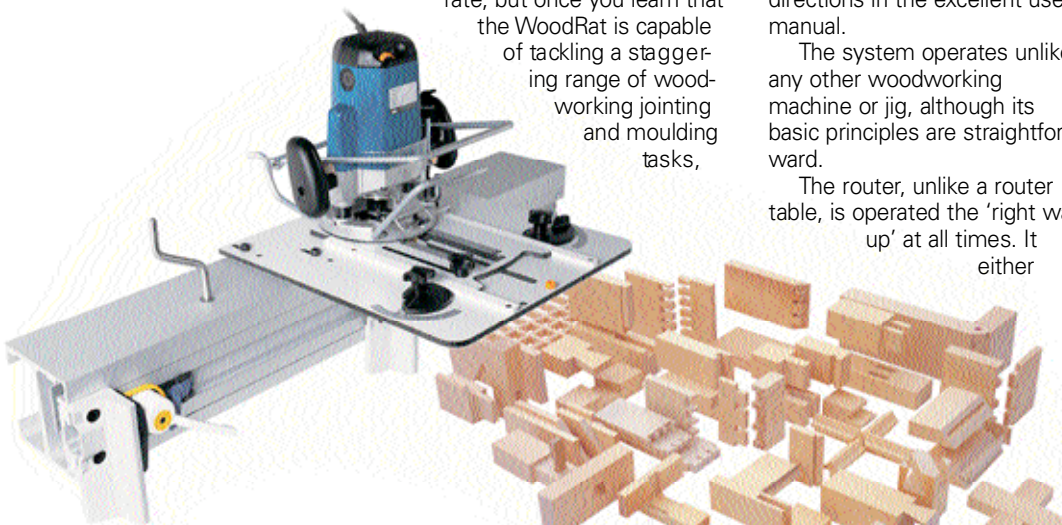
And as the sliding rail is cranked along the channel, the WoodRat provides, what is in effect, a power feed system!

One of the main components of the WoodRat is the channel, which is made of aluminium extrusion anodised silver.

This houses a sliding bar that is operated by means of a crank handle and Bowden cable (wire) system. Two excellent cam locks fix the work vertically, when appropriate, to two fences that are attached to the rail.

Your router is attached to the base plate, which locates on the top of the channel. Rest assured that pretty much all of the components are of good build quality; and a testament to this is the incredibly smooth operation of all aspects of the WoodRat. Rotating the crank handle moves the sliding bar instantly, with no slack or backlash, and it becomes a real joy to feed the work and/or cutter into action.

So what can the Woodrat do? Well, it would be easier to name the very short list of



things it cannot be used to accomplish. However, Martin reckons that there are about 120 named woodworking joints and all these can be undertaken with the WoodRat.

And when you get to grips with the tool you can well believe this incredible claim. The WoodRat can be used for a multitude of profiling and grooving tasks and when hand-feeding the work, a scrubbing brush (it has to be seen to be believed!) ensures the work is kept stable to the cutter and doesn't kick back. Incredibly this works a treat!

Trenching, sliding dovetails, halving joints, bridle joints and mortice and tenons of all varieties are all readily achievable. The process of cutting some tenons is particularly interesting, as a tenon can be machined in four cuts, due to the fact that the work is vertical and the cutter used can be long. Some types of joints require a simple add-on accessory or two, but these can be shop made inexpensively out of MDF and a block or two of wood.

The only main accessory that WoodRat sells separately is a mitre box that can be used for a variety of work including secret dovetailing. Aluminium Guide Rails – which are especially useful for mass-producing tenons.

Of course, the WoodRat is famous for, and quite rightly so, for being able to produce just about any type and practical size of dove tail joint. Due to the way in which this type of joint is worked – the WoodRat utilises a marking system which allows one half of the joint to become the template for the other half – no guide bushes or fixed 'following' finger template accessories need be purchased or used.

As a consequence, the dove tail joints may be spaced as you wish and cut in even the thinnest of wood pieces.

Regular TCT dove tail cutters may be used, or you can use the ones obtainable direct from WoodRat. These are a full range of graded HSS dovetails cutters that enable finished joints that very much match the appearance of hand cut ones.

WoodRat has chosen high-speed steel for the cutters as it

allows for very slim and elegant dovetail profiles to be produced. The surprisingly long cutters appropriately enable long tails to be formed and the really small ones can produce tails that defy the casual observer to believe that they are machine made.

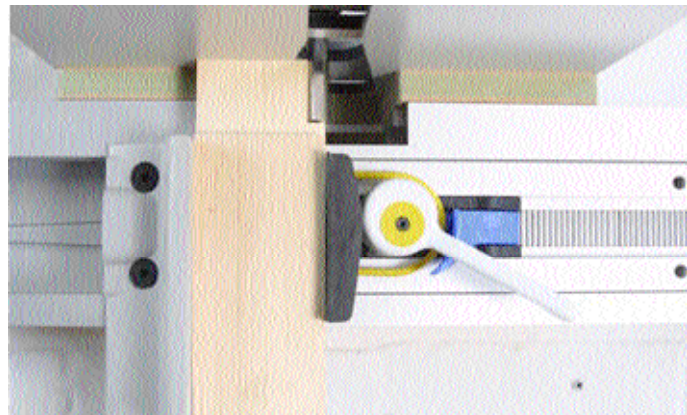
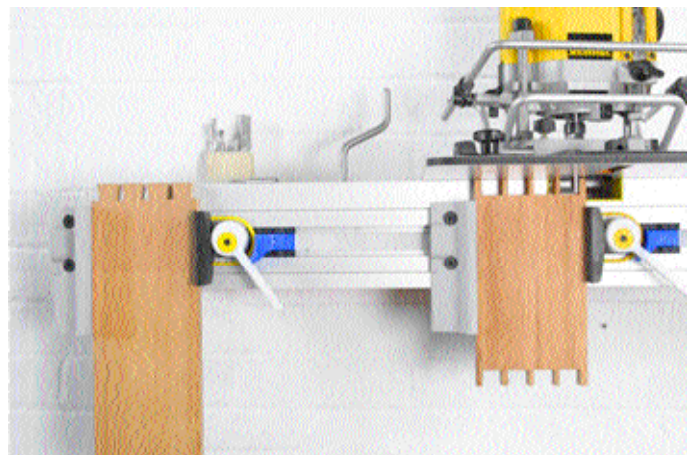
On learning more about the WoodRat, what became clear to me was that the range and scope of the jointing work it can achieve is mainly dependant upon the imagination of the user and his/her timber budget!

Unlike any other machine, mechanical aid or system, the WoodRat promotes, and in fact performs, tried and tested woodworking practises. Craftsmen of yesteryear have developed certain specific ways of jointing wood, as this was the best way for the structure of the wood and the construction of the item, or piece of furniture, itself.

The WoodRat enables the woodworker to produce the project with the best time honoured methods and not to make compromises due to his/her lack of skill or the shortcomings of regular mechanical jointing machines, jigs, systems and aids.

The potential for the professional woodworker, such as the furniture designer/maker, is incredible. For exacting constructional methods can be carried out to match the accuracy and delicacy of hand-tooled work, but in a fraction of the time. Fully mastering the WoodRat will take quite a while, but there is no question that this will be time very well spent.

At the beginning of this article, I discussed the difficulty of determining exactly what the WoodRat is. After finding out more about it, I would simply say it's a woodworking tool – and a darn good one at that!



Verdict A small price to pay for an almost complete joinery system

Price WoodRat: £475.00 inc. VAT & Carriage
PlungeBar: £29.95 inc. VAT
Mitre Box £18.06 inc. VAT

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