IN Profile

ISSUE 3
AUTUMN 99

The magazine for all Trend Users

Furniture *focus*

Masking joint lines

Latest *new products*

Routing *with the CRT/MK2*

Techniques of table routing

Dovetailing *with the DJ300*

For construction of drawers

Dust *extraction*

The new Trend T30 extractor

trend®
routing technology

A balanced act..

..router cutters manufactured and tested to meet the Holz BG standard for design, safety and performance.

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in this issue

Along with quality products and reliable service, part of Trend's tradition has always been to provide the customer with informative and instructional literature to enable the reader to achieve the full potential of their products.

IN*Profile* is part of that tradition, sharing the knowledge and experience of Trend's technical staff, demonstrators and dealers, along with the comments from both professional and amateur woodworkers and tradespeople.

In the third edition of **IN***Profile* we have again covered many of the latest new products.

I hope this information and the accompanying features will keep you informed, not only of what is new in the Trend range, but in the ever developing field of routing technology.

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router table *for the* craftsman MK2

This Autumn we launch the latest version of the CRT MK2 Craftsman's Router Table.

Following on from the success of the original router table, the new CRT MK2 with many new and improved features built into it, is specifically aimed at helping the woodworker attain a greater degree of accuracy and versatility from his router.

Why a Router Table?

For many routing operations it is easier, more accurate and safer to use a portable router inverted beneath a rigid machining table. In this way, many of the problems of clamping and holding the workpiece are overcome, the work being supported on the table, leaving both hands free to guide it across the cutter.

The use of a routing table also introduces a wider range of operations. For instance edge planing, rebating and other basic woodworking operations are quicker and easier to set up. Also the possibilities of using much larger diameter cutters, offers endless opportunities for cabinet making, joint making, moulding and profiling. We take a look at some of the improved features and applications of this router table. IP

Table Top

An improved cast aluminium, heavily ribbed table top ensures adequate rigidity and stability. It provides a flat, low friction working surface.

Extensions

Steel extension tables are fitted at both ends to provide extra support when routing long lengths of timber.

Inserts

Three alternative inserts are supplied as standard to allow the table aperture to be altered to suit the cutter diameter. The plastic inserts are a secure press fit in the aperture recess.

The CRT MK2 router table is designed for use with all popular routers. For setting up, the router is bolted to a rigid steel plate which is then bolted to the underside of the table. Four alternative plates to suit specific router makes/models are available and to be specified when ordering the table, thus enabling the corner plate to be supplied to suit your existing or new router. This system allows the router to be quickly removed for hand held operations and avoids the problem of adjusting a surface mounted plate to lie flat and level with the table surface.

Plunge Bar

For precise adjustment and ease of operation, it is advisable to fit a fine adjuster or Plunge Bar to the router. While the adjuster is ideal for making fine precision adjustments to the cutting depth, the Plunge Bar, used in conjunction with the routers depth stop, simplifies the vertical adjustment of the router. Trend Plunge Bars can be fitted to both the T5 and T9 routers, but alternative models are also available to suit most popular routers.

Floor Stand

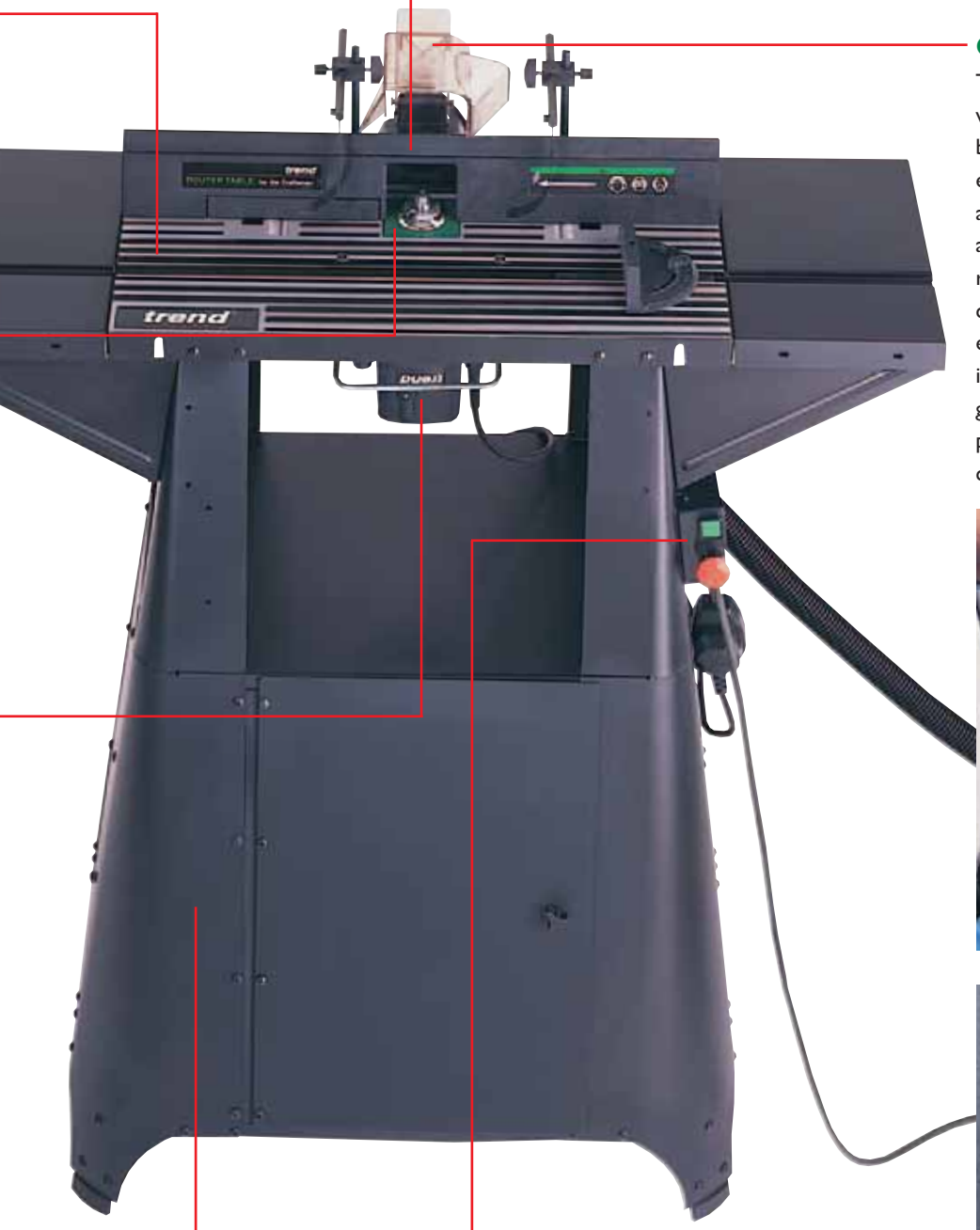
An optional rigid floor stand is now available, designed to support the CRT MK2 table at a convenient and safe working height. The pressed steel stand bolts permanently to the table legs and can be fitted with a front door and side panels (available separately) to form a useful storage cabinet.

Backfence

To allow easy and accurate adjustment, the backfence slides in v-grooves cast into the aluminium table top and can be set to precise measurements against a graduated scale.

Planing Fence

By setting the planing fence proud of the backfence cheeks, planing or moulding operations that remove material across the full face of the workpiece can be made. As the material is removed, the exposed face of the wood is supported against the adjustable planing fence.



Guard

To minimise the risk of finger contact with the cutter and waste material being thrown up into the operators eyes, a clear plastic guard is fitted that automatically rides over the material as it is fed across the cutter. By reducing the open area around the cutter, the guard also increases the efficiency of the dust extraction port in the rear of the backfence. The guard is fitted using a quick release pivot pin to allow easy removal for cleaning and maintenance.

No-Volt Release Switch

This provides a quick on and off facility for the router. It also prevents the router from starting up without warning after an unintentional interruption to the power supply. The router power lead is plugged into the switch, which in turn is plugged into a normal power socket.

Curved Work

Curved and straight workpieces can be trimmed or moulded to a template which is mounted on the workpiece. The cutter height is adjusted to allow the bearing to run along the template. For these operations, the table should be fitted with the optional clear plastic guard and a lead-in pin. The pin allows the work to be supported whilst being gently fed into the cutter.

Tenon Push Block

A tenoning push block is fitted to the backfence to allow the rail end to be cut against the side flutes of the cutter rather than the less effective bottom flutes. The push block incorporates a clamp to hold the rail vertically against the fence.

Dust Extraction

A vacuum extractor can be connected to the dust extraction port on the rear of the backfence. A short length of extraction hose with a large 58mm diameter is now available for this purpose allowing the full efficiency of the extractor to be used. The 1200 watt motor and large capacity waste container of the Trend T30A extractor make it ideal for dust free operation of the CRT MK2 router table.

Spring Pressure Clamps

To prevent the workpiece rising as it is fed across the cutter, a set of two optional hold down spring pressure clamps are available. These bolt onto the fence and are fully adjustable to suit smaller workpieces that cannot be held safely or securely by hand.

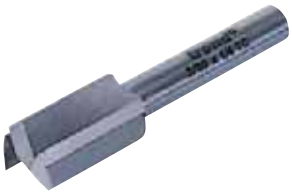
Routing operations *on the* CRT MK2

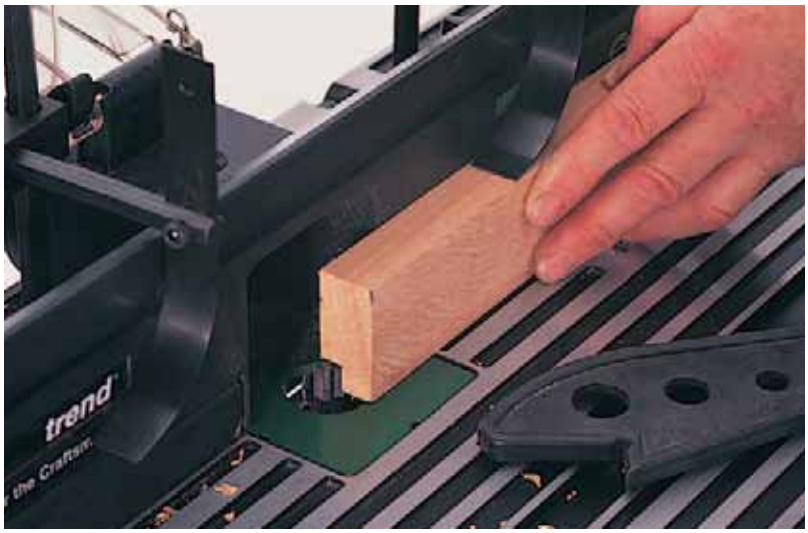
Edge Planing

When edge planing, the planing fence is adjusted proud of the out-feed fence face. As a general guide, the maximum depth of cut when planing should not exceed 2mm.

Rebating

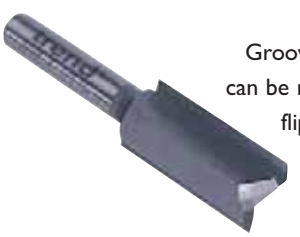
Rebates can be cut against the backfence using a straight two flute cutter.





Moulding

Decorative moulding operations using all styles and sizes of cutters can be carried out on the CRT MK2. When moulding panel edges, cutting tenons or carrying out other operations with the timber held vertically against the backfence, the optional vertical routing support prevents the bottom of the workpiece moving away from the fence and provides better guarding of the exposed cutter.



Grooving

Grooves cut on the face of the workpiece can be routed with extra safety by using the flip over cutter guard. After setting up the cutter and checking that the guard lifts freely, the work is fed across the cutter, held tight against both the table and the in and out feed faces of the back fence. Once the workpiece has cleared the cutter the guard drops back to cover it.

Safety First

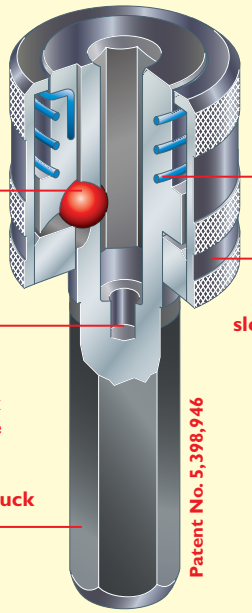
Always use a pushstick, keeping your fingers well clear of the cutter. Never allow your fingers to be in contact with the part of the workpiece that is passing over the cutter, (guard retracted for clarity).

Snappy®

The Quick Release Drill System

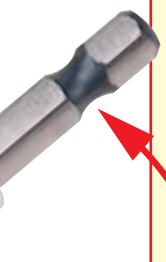
The Snappy range has proved to be successful with Tradesmen, DIYers and Woodworkers. The range has been extended to include Forstners, Flat Bits and Tungsten Carbide Drill Countersinks. We take a look at these and how the system works.

HOW DOES THE QUICK CHUCK WORK?



New extra long Quick Chucks

Two new extra long chucks, 3 inch and 6 inch in length with a smaller 18mm diameter head to give ease of access, are now available. These will accept Snappy and insert type bits and can be fitted to the Quick Chuck or directly into a drill chuck.



'Its all about this....'

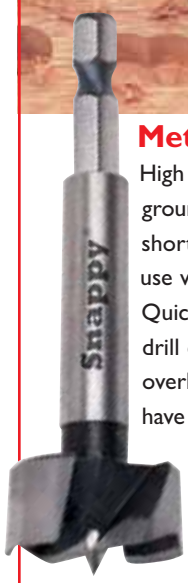
Snappy tool shanks have a 1/4 inch hexagon shape with a relieved neck to locate in the Quick Chuck.

QUICK SYSTEM CHUCK

Look for this logo on your tool packaging!

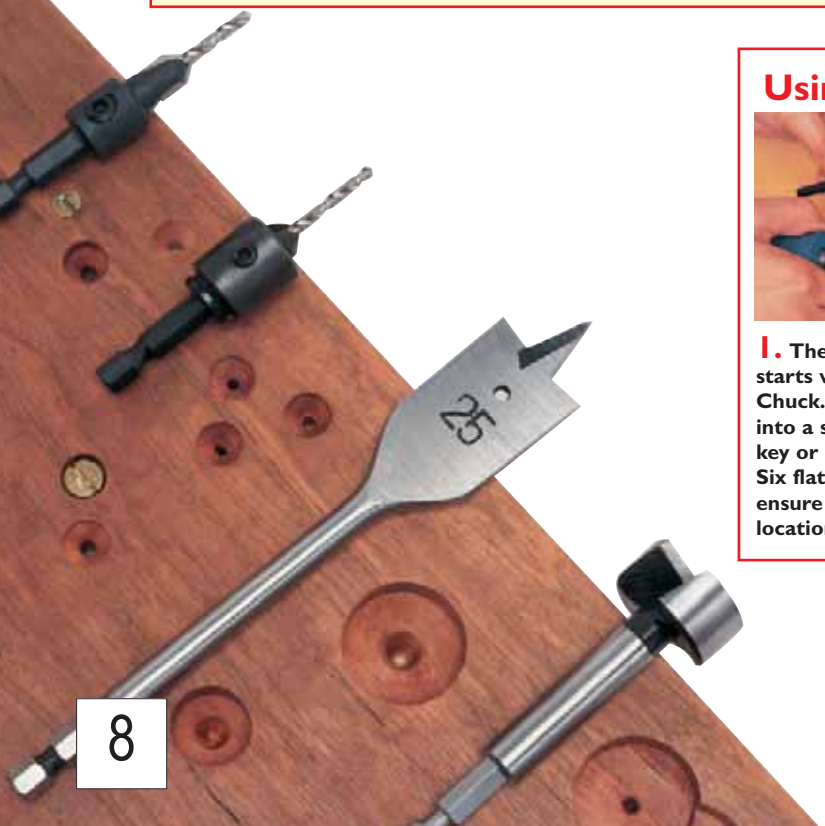
Metric Forstners

High quality forged and ground carbon steel short forstner bits for use with the Snappy Quick Chuck. They will drill clean accurate and overlapping holes. They have an overall length of 86mm and are offered in 13 sizes (SNAP/FS/10 etc).



Forstner Set

A boxed set of five Snappy forstner bits. Diameters 15mm, 20mm, 25mm, 30mm and 35mm (SNAP/FS1/SET).



Using the Snappy System

1. **The Snappy system starts with the Quick Chuck. This is fitted into a standard 3/8 inch key or keyless chuck. Six flats on the shanks ensure precise location.**

2. **Snappy bits or any direct drive 1/4 inch hex bits will then 'snap' in effortlessly and will not release until the sprung loaded outer sleeve is retracted.**

3. **A sprung loaded outer sleeve makes it easy to remove attachments. Just pull it back to release tool.**

DID YOU KNOW.....

...that if you have any tool with this 1/4" hex drive design, you can use it with a Snappy Chuck.

NEW

Metric Flat Bits

An economical bit for cutting quick holes in timber. They have 152mm overall length with a centre point, back tapered cutting edge and ground chip breakers. 17 sizes are offered (SNAP/FB/8 etc).

Flat Bit Set

Three piece set comprising a 16mm, 19mm and 25mm diameter Snappy flat bit (SNAP/FB1/SET).

NEW

TCT Drill Countersinks

Tungsten Carbide tipped versions of the popular Snappy drill countersinks with an adjustable drill are now available. These tools can be used in abrasive materials such as laminated chipboard or MDF. They produce pilot hole drill sizes from 5/64 inch to 9/64 inch and screwhead/plug holes of 3/8 inch or 1/2 inch (SNAP/CS/4TC, etc.)

5 Piece TCT Countersink Set

Set of five Snappy TCT drill countersinks (SNAP/CSTC/SET).

NEW

Depth Stops

Adjustable depth stops to fit Snappy drill countersinks. Two sizes are offered, 3/8 inch diameter drill (for SNAP/CS/4-10) and 1/2 inch diameter (for SNAP/CS/12).

Also available Snappy Plugmakers, Snappy Twist Drills and Hinge Drill Bit Guides

frame & panel door construction made easy

by John Perkins

Profile scribed frame joints can now be produced economically by the amateur or DIY woodworker

Making frame and panel doors using the router is now an accepted and common practice for many professional woodworkers. For the home craftsman it used to be expensive as there was a need for a heavy duty router, router table and 12.7mm shank cutters. However, with the addition to the Craft Range of 1/4 inch and 8mm shank profile scribing cutters, router power and the cost of professional tooling is no longer a consideration. These profile scribers are now available in three styles: Flat Classic, Straight Bevel or Ogee Panel Profile and can be used in conjunction with various shaped panel raisers. Such tools with smaller shanks are ideal for use with the Trend T5 router fitted in the CRT MK2 router table or with other routers above 850 watts.

Frames and Panels

For strength, profile scribed joints rely on a tongue cut by the scribing cutter to form a tenon. This tenon engages into the panel groove that is cut along the inside edge of the door rails and stiles. By reassembling the cutter components, both parts of the joint can be routed to produce a high degree of accuracy.

Cutting Profile Scribed Joints

It is general practice when cutting profile scribed joints to cut the rail end tenon and scribed moulding first, otherwise the bearing guide may drop into the groove routed when making the profile mould.

Setting out and cutting the materials to size:

- First decide on the overall size of the door by measuring the cabinet door opening.
- Decide on the width of the stiles and rails. Remember by making the bottom rail slightly wider than the top rail and stiles, the door will look better balanced.
- Plane the frame timber to an equal thickness, between 18mm and 22mm.
- Calculate the length of the top and bottom rails. This will equal the width of the door minus twice the width of the stiles plus twice the depth of the panel groove (example 420mm - (2 x 52mm) + (2x12mm) = 340mm rail length). Cut the rails exactly to this length leaving the ends square.
- Cut the stiles 20mm to 30mm overlength, the door length can be set out as the doors are glued up, any excess being trimmed off later.
- Decorative curved edge top rails are cut to length in the same way, only the width of the rail will differ.
- Cut several pieces of similar size timber for use as test pieces.
- Mark the face side and edge on each piece.

Cutting the Scribed Rail Ends

The profile scribing cutter consists of a threaded arbor with lock nut, moulding cutter, a grooving cutter and a guide bearing. There are also three copper shims and a steel washer. The cutter is assembled ready for cutting a scribe when it

leaves Trend and easy to follow assembly diagrams for changing its mode are supplied. In order to reduce stress on the cutter, turn one of the cutters so that they are at 90° to each other.

Mount the cutter in the router and set the cutter height to give a top quirk depth of no less than 1.5mm. When cutting, the rail ends must be run against the backfence with the rail at right angles to it. Use a steel rule to adjust the fence so that the face of the bearing is aligned with the face of the fence. Also check that the fence is parallel to the mitre fence groove on the table.

To hold the rail square to the fence, it is advisable to make up a sliding workholder incorporating a secure means of clamping the timber.

Mount a test piece in the workholder face side up with the end against the fence and a backing piece (spelch block) of the same thickness behind it to prevent breakout. Before starting the router, check that the guard and cutter are secure.

Switch on and pass the rail end across the cutter keeping the workpiece flat to the table. Turn the wood around and repeat the cut on the other end.

Cutting the Edge Profile

With the router collet held by the spindle lock, use a spanner to loosen the nut and remove the cutters and bearing from the arbor.
Reassemble the cutter fitting the moulding cutter first, followed by shims and the grooving cutter. Fit the other shim and guide bearing before fitting the steel washer and nut. Check that the nut is tightened firmly, but avoid turning the arbor in the collet.

Using the scribed end, lay the rail face down on the table and adjust the height of the cutter to align the grooving cutter against the tenon and the moulding profile cutter against the quirk.

Start the router and run the edge of a test piece across the cutter.
Assemble the joint and check that the front and rear faces are flush, if not, adjust the cutter height and cut a new test piece.
Check that the joint is a good sliding fit. If not, partially disassemble the cutter and remove or add one of the shims. Reassemble and cut a new test piece and check the fit.

Making the Panel

Panels can either be cut from sheet material or made up from solid timber. The width of the panel will be the same dimension as the rail length, including the tenon length at each end. The length will be equal to the full height of the door, minus the width of the top and bottom rails, plus twice the tenon length.
In both cases, deduct 2mm to allow for clearance and on solid timber panels, deduct a further 2mm across the width (i.e. across the grain) to allow for movement.

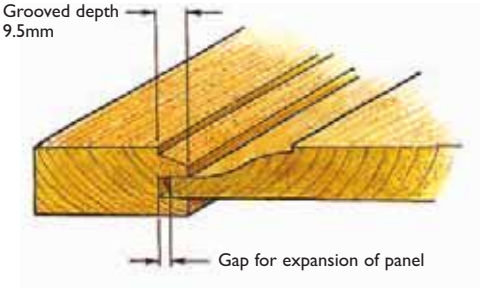
Cutting Flat Panels

Use sheet material 4mm to 6mm thick. With material over 4mm, a rebate will need to be cut around the edge on the rear face to leave a finished thickness of 4mm.

Glued panel finished to consistent thickness

Solid panels are generally made up of two or more boards glued edge to edge. For normal purposes use timber planed to a finished thickness of 12 to 15mm. Glue the edges together, alternating the grain direction on each. When dry, plane and sand the faces flat and cut the panel to size. The edge will now need to be rebated to fit into the panel groove.

As a decorative feature, a wide moulded rebate is generally used to form a 'raised field'. The thickness at the edge of the panel will need to be a fraction less than 4mm to form a sliding fit in the groove.



Panel Raising Cutters

There are two designs of panel raising cutters for this purpose - horizontal or vertical, both types are best suited to use in a router table. The mould should be cut in a series of 3 to 4 passes adjusting the cutter for each pass until the full depth is reached on the final one.

Curved Top Rails

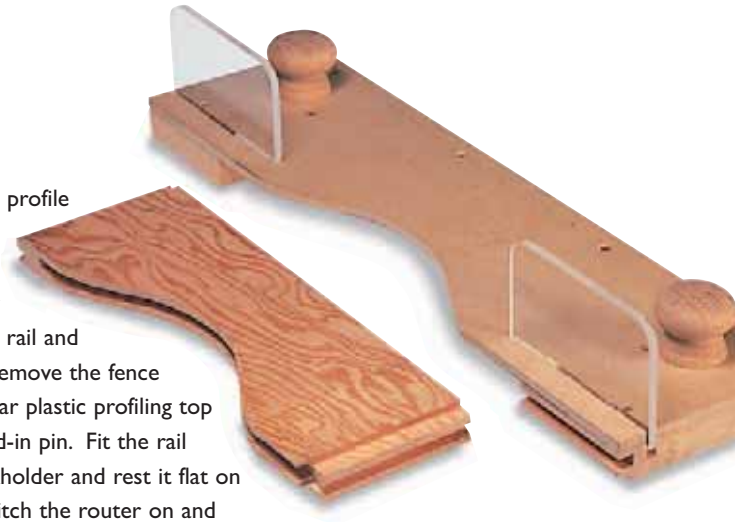
Top and bottom rails can be made with a curved inner edge, grooved and moulded to take the door panel. For this the rail will need to be cut from wider material with the curved edge shaped and squared before cutting the profile.

To cut the curved edge, mark out the shape on the template material (6mm MDF or plastic). Cut the curve with a jigsaw and finish true and square. Leave extra length at each end to allow a bearing guided cutter to enter and leave the curved face smoothly.

Cut the scribed profile at each end of the rail. Make up a workholder as shown, using the template to position the rail. Fit the rail into the workholder and draw along the curved edge. Remove the rail and cut the curve, leaving no more than 3mm waste material on the waste side of the line. Cut along the curve with a jigsaw.

Mount the rail in the workholder and use a bearing guided flush trimming cutter to trim the curved face flush to the template.

With the router disconnected from the power source, set up the router table with the profile scribing cutter assembled for machining the rail and stile edges. Remove the fence and fit the clear plastic profiling top guard and lead-in pin. Fit the rail into the workholder and rest it flat on the table. Switch the router on and feed the work into the cutter, starting with the lead-in section of the workholder against the lead-in pin. It will be necessary to cut the profile to the full depth in one pass. Therefore adjust your feed rate to allow waste to clear and keep the stress on the cutter as minimal as possible.



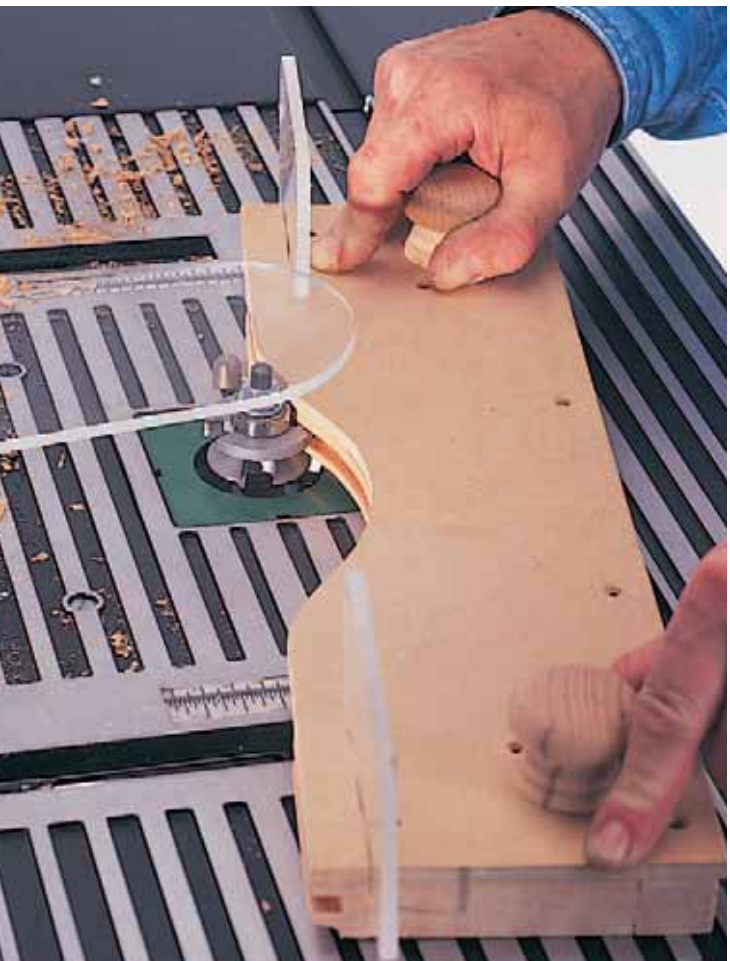
Assembly

Before gluing the joints, assemble the frame and panel dry. Finish all surfaces that cannot be sanded easily after assembly and have sash cramps and soft packings (to prevent the cramps marking the wood) ready to hand. The panels should not be glued into the groove, but be pinned with a brass panel pin at the top and bottom.

Assemble the door using the cramps to pull the joints tight. Wipe away any excess glue and check that the door lies flat and square before leaving to dry. If the door is to be given a clear finish, ensure that no traces of glue are left on the surface. IP

FREE BOOKLET

All profile scribers and panel cutters are supplied with a 64 page instruction booklet which features the construction of frame and panel cabinet doors.



Routing Guide

NEW

This pocket book is a 260 page compilation of the popular series of Trend's A6 routing booklets including the 'How to make a Frame & Panel Cabinet Door' booklet shown above. The book also includes sections on:

- Cutter & Collet Care
- Routing - A Guide to Getting Started
- Routing Techniques for Doll's House Mouldings
- 30 Routing Techniques for Tradesmen and Home Improvers

carving *into the future*

Achieve impressive results with the use of Trend's unique Router Carver system.

by Matt Shepherd

The Router Carver enables anybody, irrelevant of skill, to achieve variable depth carvings on any flat surface such as drawers and door panels. The carving system works by using an adjustable V-Groove cutter which has a 45° aluminium guide cone.

Using special MDF templates, the cutter is plunged into slots of varying widths that control the rise and fall of the cutter into the workpiece. The process of carving takes only a few minutes to complete leaving a design of which any craftsman would be proud. A large range of styles are available and with the Classic and Royal styles, you can continue the theme throughout a number of furniture items. Remember that you don't necessarily have to use the complete design, sometimes 'less is more'. You can even integrate designs together to give a unique appearance.

Operation

First fix the template frame either with G cramps or pinned to a batten jig holding the workpiece.

Select the first of your templates, (there could be up to four in total). Fit the first template into the frame and plunge the cutter in the wider section of each slot. Do not lock off

the router but keep a firm downward pressure, moving along the slot. The cutter will automatically rise and fall. Always run through the cut twice to ensure a clean and complete groove.

Once all the shapes in the template have been routed, it is then removed, rotated or inverted and placed back into the frame and routed again. This is repeated so that each slot is used up to four times.

When completed the workpiece is immediately ready for finishing.

To help the carving stand out, stain the workpiece before carving, highlighting the end result. IP

by Tom Rogers

furniture focus 3

Tom Rogers outlines ways of hiding undesirable joint lines.

Butt jointing has never been the most attractive or effective way of fixing one square piece of wood to another. The natural and inevitable expansion and contraction of timber will always distort a butt joint leaving an irregular line.
One way of overcoming such a problem is to exaggerate the joint by creating a mould or profile along the joint line helping to disguise any overhang, bowing, wavy or damaged edges and make the joint look consistent. Here are just a few examples showing how this can be achieved. IP

A core box profile using a 8/20 sunk bead cutter.

The new Trend bearing guided V-groove trimmer 46/85.

A 33/60 arbor, SLK slotter and a B280 bearing to provide a 5mm by 6mm deep groove.

A multi core box profile using a 8/30 bead cutter.

A rounded overhang on the horizontal section using a staff bead/nosing cutter 9/3 as a moulding.

Bearing Guides

Any of the bearing guided options can be used on curved or shaped joints as the bearing automatically follows the vertical section.

An example of a typical butt joint exposing an unattractive glue line. Any timber movement would be immediately highlighted. Such a joint never looks finished.

The new Trend bearing guided V-groove trimmer ref. 46/85 is specifically designed for improving the look of a butt joint. It will trim the horizontal section at the same time as creating the V-groove.

why spiral cutters?

Jim Phillips gives an insight into the benefits of using spiral cutters.

by Jim Phillips

Straight fluted Tungsten Carbide tipped cutters are certainly the most popular type of cutter used by router users. Improvements in design, materials and manufacturing technology over the years has enabled these cutters to cut a multitude of abrasive manmade materials.

With certain applications, the impacting action of straight fluted cutters as the tool rotates can cause fibres to pick up and this results in feathering on veneers and softwoods. Also when feeding fast they can cause the chips to choke up in the cut grooves, limiting cutting efficiency and this reflects in the finish.

But, with the arrival of the spiral or helical shaped fluting which is machined from solid carbide rods or high speed steel, a number of advantages appeared, especially for the large operators with CNC equipment. But even those using hand routers are now choosing to benefit from the slicing "scissor type action" of helical fluting. This slicing action imparts an even load on the router and reduces vibration, as there is always a cutting edge in contact with the material.

The design of spiral tooling enables faster feed rates, up to 10 metres a minute depending on the cutting depth. The helical geometry of spirals vary to suit different applications of the industry. There are three basic types:

Up-cut spirals with right hand helix

This type of fluting lifts the chips in an upward direction away from the cutting area, thus preventing clogging. Although this is an advantage, some form of dust extraction is necessary.

Burning when plunge cutting is all but eliminated and drilling with the router set at a lower speed, becomes an attractive proposition.

On laminated boards there may be some surface feathering which a down-cut tool would prevent. The upwards action of the up-cut may cause the workpiece to rise and good clamping is recommended.

Down-cut spirals with left hand helix

With "down-cuts", feed speed is a little restricted but feathering is virtually eliminated and the finish of cut is first rate. For this reason, such tooling is often chosen when machining boards faced with veneers, laminates or foils.

Combination up and down-cut spirals

When boards are faced on both sides, the combination spiral comes into its own. If the router is grooving or trimming veneer edgings, the finish is guaranteed to have a clean cut edge on both faces. In operation, the upper down-cut part of the spiral severs the grain on the top surface of the board and the lower up-cut severs the grain on the underside.

When deciding on the choice of cutter, the extra cost of using spiral cutters should be considered. First check to see whether your standard TC cutters have been regularly honed to bring them back near to the original edge.
A tendency to feather edge can also be avoided by scoring a pre-cut line prior to routing the groove. IP

Up-cut spirals remove the waste, but leave a slightly ragged edge.

Down-cut spirals give a clean sharp edge but compact the waste in the mortise.

on-site 3

To obtain close fitting joints when fitting kitchen worktops, a good router and well designed jig are essential. Trend's new Combi 65 jig provides the perfection expected by both kitchen fitters and their customers.

by Miles Davey

When joining postformed worktops, the use of aluminium jointing strips does not create the same appeal as a continuous surface for either appearance or hygiene.
But traditionally, only expensive kitchens had joints as perfect as this. Now the option for perfect fitting joints is open to all kitchen fitters and even DIYers, who, using the Trend Combi 65 jig, can rout these joints economically on site.

Basic Requirements

To produce a neat corner joint both pieces of the worktop need to have an edge routed to an exact shape to fit together perfectly. The Trend jig enables this to be done accurately. The jig itself has an aperture that guides the router (fitted with a 30mm guide bush) to cut both faces of the joint. The router must have a 1/2 inch collet and at least 1300 watts power. Here we will take you through the basic steps to make a perfect corner joint. IP

1. Guide Bush & Cutter

The guide bush, when fitted to the router, must be concentric with the cutter, otherwise a poor joint would be created. To obtain concentricity with certain makes of router, a sub-base will be needed. This is fitted to the base of the router and aligned using a 'line-up pin'.

2. Fitting a Guide Bush

When using the Trend T9 router, the system for ensuring concentricity is built into the base design. This has an inner plate onto which the guide bush is mounted. When concentric, a 1/2 inch (12.7mm) diameter x 2 inch (50mm) long cutter can then be fitted.

3. Setting up the Jig

Three aluminium bushes are supplied for positioning the jig. These are fitted into holes in the jig, one being used to set the cut length to suit 600, 640 or 650mm wide worktops.

4. Female Cut

Two more of the bushes are located along the edge of the jig to butt up against the postformed edge. Depending on whether the joint is a left or right hand joint, the laminate surface may be facing up or down. The jig is held securely to the worktop with two clamps. The routing operation is then made in three or four passes depending on the thickness of the worktop.

5. Male Cut

Two of the aluminium bushes are now re-positioned and the jig laid across the second worktop for the male cut. Again, the laminate of the worktop may be facing up or down. The router is guided against the left hand side of the aperture as before.

7. Biscuit Jointing

The strength of the joint can be increased by biscuit jointing at regular intervals along the chipboard core. This can be carried out with the router fitted with the 342 Biscuit Joint cutter set. Use large No. 20 biscuits and fit at least four biscuits per joint.

6. Connector

With the two worktops now cut, slide them together face down. The worktops can now have the recesses cut for the connection bolts. A minimum of two bolts are required per joint, positioned at least 150mm from either end. The exact positions will be governed by the supports of the carcass as access will be required to tighten the bolts. The recesses should be cut to a depth so that the centre line of the connector is aligned with the centre line of the worktop.

8. Assembly Tips

In some kitchens, assembly may be difficult without an extra pair of hands. Apply PVA glue to the slots, place biscuits in position and spread glue evenly along each edge. It is also a good idea to run a silicone bead along the top edge to prevent any moisture from entering the joint when pulled tight. Once the joint is together, ensure that the top surface is flush. Finally, tighten the bolt connectors with a 10mm spanner and remove any excess glue or silicone.

Cutters to use

A 12.7mm (1/2 inch) diameter long reach cutter is required for cutting the joint. Conventional brazed tipped cutters reference 3/83D or C153 can be used. Alternatively a replaceable tipped tool reference RT/11 offering increased economy and productivity.

drawer on tradition

Dovetailing drawers with the DJ300 Jig

Having worked for the forestry commission for 35 years, Emrys now runs his own business making furniture and restoring antiques.

by Emrys Owen

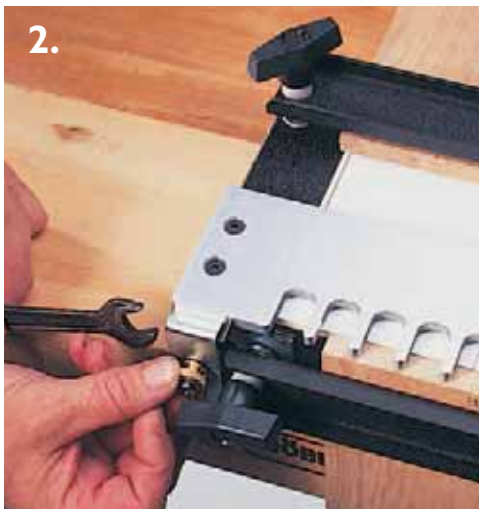
The use of traditional dovetails still remains the strongest and most attractive method of drawer construction. Traditional methods of hand-cutting dovetails require time, skill and patience. With a router and a dovetail jig, joints for drawer fronts can be easily cut with only minimal setting-up to achieve professional results. I take the DJ300 through it's paces to produce a variety of drawer styles.

First of all when cutting dovetail joints, it is imperative that the timber is finished square and the sides are of equal width and length. The spacing of the tails and pins is automatically set by the spacing of the fingers of the templates. The width of the drawer sides and front should ideally be a multiple of the template's spacing to ensure there are no partial dovetails created. Adjustments can be easily made to ensure that the half pins at each end appear equal.

The endstops have offset edges to automatically position the drawer side one full spacing to the right or left of the drawer front so that the tails and pins are cut at the same time.

Setting Gauge

To assist setting-up the jig each time with different templates, a setting gauge can be made and used. This consists of a rectangular piece of MDF or plywood with the offset lines drawn down each edge. Alternatively keep a joint produced with each template and use them for setting-up.



Adjust template position

Adjust the lock nuts to align the back of the template slots with the 15mm line on the setting gauge.

Setting-up the Jig

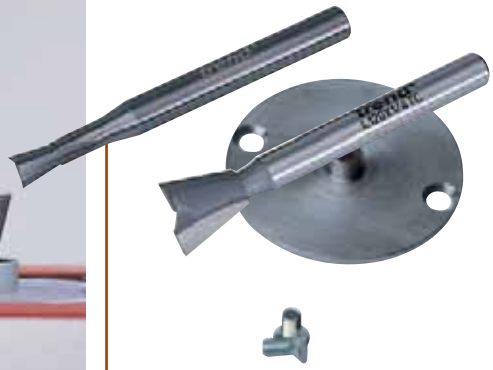
Ensure that the jig is assembled and secured to a work surface as shown in the instruction manual. Before continuing check that the correct edge guides are fitted to suit the template being used. There are 4 sets of guides, each set consisting of a left-hand and right-hand plate to suit each template. Extra guides are provided should rebated drawer fronts be required.

Carry out the following steps for 1/2 inch dovetails; steps one to three are carried out only once on initial set-up:

Clamp the gauge in position with the setting line aligned with the inside edge of the first slot in the template. Remove the template and slide the edge guide along until it is against the gauge. Tighten the locking screw and repeat this procedure at the other end of the jig. Remove the setting gauge and retain it for future use.

Clamping the timber

Following the sequence marked on each piece, position the first drawer side beneath the front bar on the left hand side of the jig and tighten the clamp. Position the drawer front under the top bar, butting it against the drawer side and the edge guide, and clamp it firmly. Slacken the drawer side and raise it until flush with the top surface of the drawer front and re-clamp.



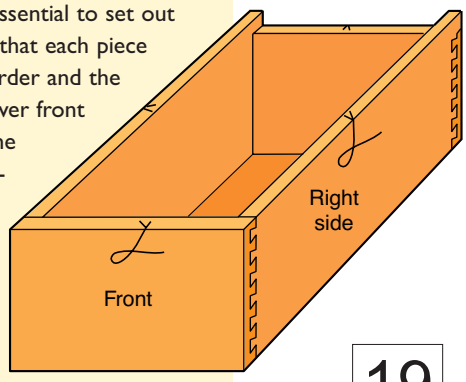
Fit the guide bush to the base of the router and the dovetail cutter in the collet. (Use the large guide bush ref. GB157 for 1/2 inch dovetails, and the small diameter guide bush ref. GB774 for 1/4 inch dovetails). The height of the 1/2 inch dovetail cutter should be set approximately 17mm above the router base and the 1/4 inch dovetail cutter approximately 11mm. The exact height can be obtained by making a test joint and adjusting it to suit the tightness of joint required.

Ideal Timber Widths

For the 1/2 inch dovetail template the finger 'pitch' is 21.5mm therefore the timber widths should ideally be multiples of 21.5mm (e.g. 3 tails = 64.5mm, 4 tails = 86mm etc). For the 1/4 inch template the pitch is 11.3mm therefore the material widths are 3 tails = 44mm and 4 tails = 45mm etc. A simple lookup table is provided in the instruction manual.

Marking out the Components

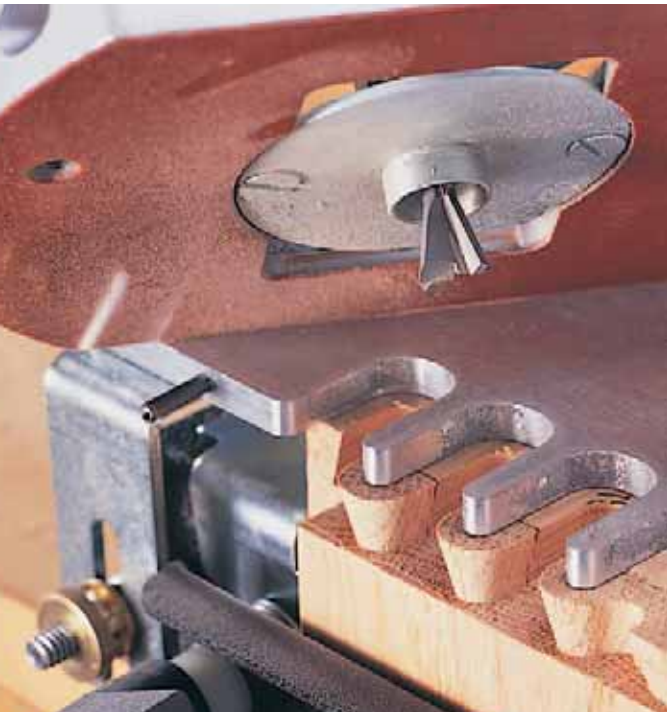
Having cut the timber to size, it is essential to set out and mark the order of assembly so that each piece is fitted into the jig in the correct order and the right way up. When joining the drawer front to the sides, the dovetail joint on one side of the drawer is cut on the left-hand side of the jig and the other is cut on the right. Remember that the joints are cut with the inside faces of the drawer facing up (drawer front) and outwards (drawer side).



Routing the Joint

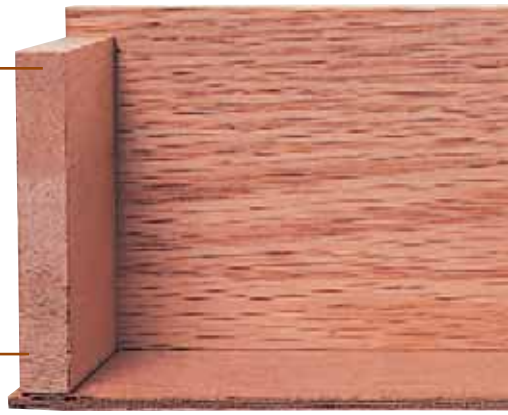
Start the router and rout across the front edge, feeding the router from right to left (this will prevent break out along the front edge).
And then from left to right move the router in between the fingers of the template. Check that all waste has been removed before removing the workpiece or making any adjustment to the jig. Repeat the procedure for the opposite side taking care to follow the correct procedure.

Never attempt to lift the router upwards - you may catch the template with the cutter. And always wait for the cutter to stop rotating before sliding it away from the template. IP



When fitting drawers into enclosed cabinets, make the back lower to avoid air pressure behind the drawer making it difficult to close

Drawer back fitted to sides with lapped dovetails (as cut for front), or rebated joints and glued or pinned to plywood bottom



Use a slotter mounted on an arbor to cut to a depth of 4 to 5mm to produce the groove for the drawer bottom. This can be easier to do with it set-up in a router table. Alternatively a 4 mm straight fluted cutter can be used using a sidefence portably.

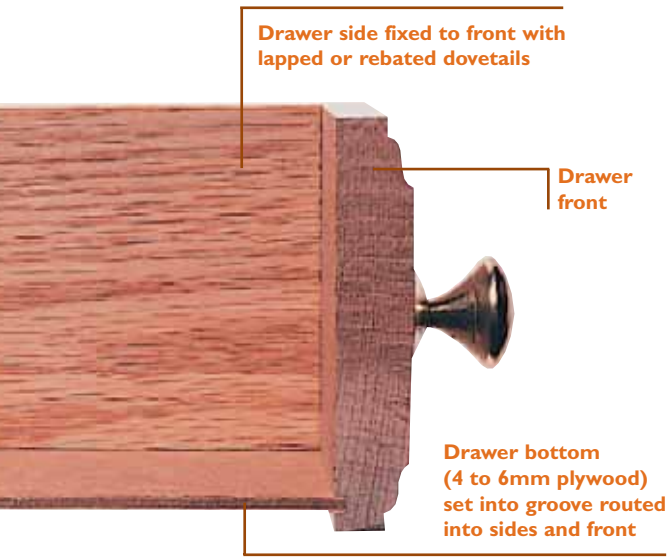
1/2 inch dovetail with rebated front

Rebated Dovetails

Rebated dovetails are cut in two stages. First the drawer front is rebated using a straight cutter, guided by the router sidefence or fitted in a router table, or by using a rebate cutter. The second stage, using the DJ300 dovetail jig is the same as the cutting sequence for flush sided drawers, but using edge guide set No.2 for 1/2 inch dovetails and No.4 for 1/4 inch dovetails.

1/4 inch dovetail with rebated front

All the operations shown can be repeated for 1/4 inch dovetails using the 1/4 inch template, different edge guides, the 1/4 inch dovetail cutter and the smaller guide bush.



Drawer front can be moulded with a suitable moulding cutter.

Timber Thickness

To achieve a well fitting joint, the depth of the pins must equal the thickness of the tails. This is governed by the position of the template which can be adjusted.

Although each pair of sides should be of a uniform thickness, the actual thickness is not crucial. For the 1/2 inch template use material between 11mm and 25mm thick. For the 1/4 inch template use material between 8mm and 12mm (a packing piece fitted under the front clamping bar will be needed with the smaller thickness).

Cutting a Test Piece

Before cutting dovetail joints on the actual workpiece, cut one or several test pieces so that the correct cutter height, position of the edge guides and template position can be confirmed.

safety in *numbers*

Safety when using power tools and cutting tools is always of paramount importance. We briefly explain how and why router cutters should meet the HOLZ BG international standard to ensure they have a safe and approved design before using them.

In past years, the reporting of large numbers of accidents, has led to the establishment of international standards for the design and manufacture of tools for the woodworking and plastics industries. The standard is governed by the Holz BG institute in Munich where rigorous testing is carried out and certificates issued to manufacturers complying with certain rigid rules.

These rules state specific standards for a router cutter's design, the materials used, and tolerances in manufacture. The design must also be of a safety style to reduce risk of injury and possibility of kickback.

Our professional range of router cutters have been designed and manufactured to the Holz BG standard for a number of years. Confirmation of this can be found on the shank and on the packaging of each product. Claims by other manufacturers that their router cutters have the Holz BG form, e.g. cutters with a round body, should not be automatically accepted as having passed the Holz BG test. Cutters conforming to the Holz BG test have a specific test number. Our test numbers are as follows:

BG-TEST 159-001	BG-TEST 159-002

BG Rules:

1. Cutters should conform to a precise geometric design, and use high quality materials complying with specific DIN specifications to ensure a safe tool with a high degree of precision and balance.
2. The thickness of chip limit must be a cutting edge projection of 1.1mm over the total length of the cutting profile. This is to limit the injury to any part of the body, that may come in contact with the rotating tool.
3. Restricted maximum chip clearance width, including the regrinding range as a function of the cutting flight circle. This is intended to limit the kickback energy to a minimum and to prevent injury to the user.
4. Maximum rotation speed is determined according to the tool dimension and materials with the help of a computer program. The tests include dynamic balance and overspeed testing to twice maximum RPM.

Just a trim

The quality of finish required when trimming veneers and laminates can only be achieved by using precision router cutters designed specifically for this purpose.

Most of the furniture that we come into contact with today, in the home or at work, is made of faced sheet materials. That is, a veneer or facing of real wood, plastic, metal foil or resin impregnated paper glued to a base or core of MDF, plywood, chipboard or other stable material.

Whichever facing or laminate is used, it will need to be trimmed flush with the edges of the base material. This is where the router and tungsten carbide tipped trimming cutters come into their own. Light and portable, the router can be taken to the 'job', or inexpensively built into laminating machines and presses where the board can be faced, edged and trimmed, in one continuous process. It is not only veneers and laminates that can be trimmed in this way, self-guiding trimming cutters can also be used for producing and finishing template and pattern work, saving both time and cost over traditional hand finishing methods.

Template Profiling

Veneer and Laminate Trimming Bonding

To produce a smooth square edge, the edges of the board itself must be cut true and finished square and smooth. The reason for this is that the trimming cutter is guided by a flush guide bearing that follows the board edge, reproducing the exact contour, straight or curved. All trimming and profiling cutters follow this simple basic concept, however they do vary in some aspects. In particular, the number of cutting edges and the cutter profile. Bearing guided trimming and profiling cutters are fitted with guide bearings that are marginally oversize to minimise the effects of surface scoring and to avoid any cut-back of the veneer edge to produce a sharp, square corner when jointing or facing the trimmed edge.

Adhesives

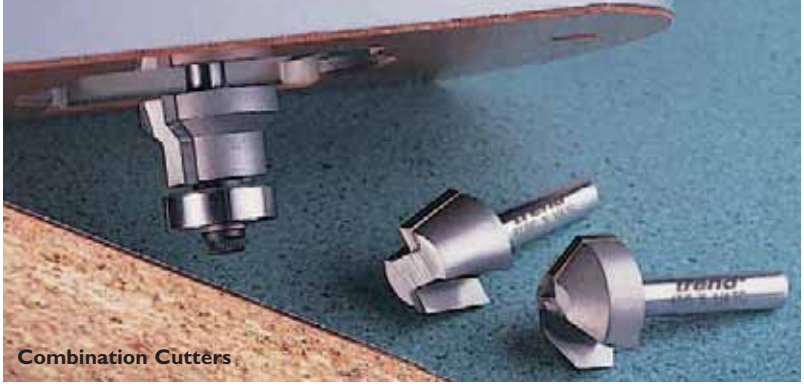
Whichever adhesive is used to bond the facing to the base material, two important points must be observed. The first is that the adhesive must be allowed to dry or set thoroughly before trimming, if not, the adhesive is likely to 'gum up' the bearing. Bearings cannot be cleaned and re-greased and will therefore need replacing. The second point to be observed is that any excess adhesive left on the guide face (i.e. the board edge), will catch the guide bearing, leaving an irregular edge to the facing.

Trimming Cutter Variations - Triple Flute

Ground with three TCT cutting edges, this cutter will produce an extremely clean sharp edge on all materials. Ideal for plywood, veneer and laminate, these should generally be used as a finishing cutter. Two sizes are available, the larger being fitted with twin guided bearings for prolonged life.

Economy Trim Cutters

Made from solid carbide, economy trim cutters are intended for use on short runs only. Two versions are available, 90° flush trim with a self



Combination Cutters

guiding tip and a 90° - 60° cutter that will flush cut or bevel simply by adjusting the cutting depth. These cutters have fairly short cutting edge lengths (10mm and 6mm respectively).

Combi Cutters

These cutters perform two functions: First they trim the overlay flush, then they can bevel at various angles. Some types have a bottom cut to trim the upstand and others have bearings for self-guiding work.

Pierce and Trim Cutters

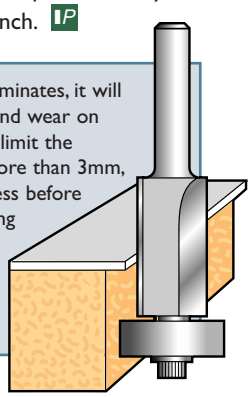
Combination pierce and trim cutters are used for cutting internal apertures when fitting basins, hobs and other inset units. These cutters are designed to drill through and cut around the laminate facing, following the outline of a pre-cut aperture beneath. The laminate is applied over the whole top and the adhesive allowed to dry, before the laminate is cut away. When applying laminates it is common practice to apply a balancing veneer or laminate to the reverse face to prevent bowing. Apertures can then be cut in a similar fashion as before, but using a twin cutting edge pierce and trim cutter to cut through both the face laminate and balancer at the same time.

Template Profiling Cutters

Intended for template work, these trimming cutters offer a more direct alternative to guide bushes. When using these cutters the template is made to the exact size required. Templates must be secured to the material firmly by clamping, pining or gluing. Hot melt glue will hold well and can be easily removed afterwards. For small projects, double-sided adhesive tape can be used. Both template profiling cutters with shank mounted bearings and trimming cutters with their tip mounted bearing can be used for template work, either fitted in an inverted router table, overhead router or handheld.

When using the handheld method, ensure that the workpiece is safely secured to the bench. IP

When trimming laminates, it will lessen the stress and wear on your cutter if you limit the overhang to no more than 3mm, removing any excess before trimming. A bearing guided overlap trimmer ref. 46/19 can be used for this purpose.



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mini mach

The portable clamping bed powered by a workshop vacuum extractor.

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- Powered by a workshop vacuum extractor.
- Holds sheet materials up to 1220mm x 1220mm down to 95mm x 95mm.
- Can be fitted to any workbench or secured to any flat surface.

NEW APPLICATION

Ideal for shaping small items to a template.

Now includes 2.5 metres of template gasket for template copying. Using vacuum power, the gasket enables the workpiece to be held down onto a template which in turn is held securely by the Minimach.

Extra seal available:
MMACH/SEAL/1 ____£1.95

straight & true

A straight edge clamped across the workpiece is common practice for guiding the router, but even such basic technology can be improved on.

by Gordon Warr

How many times have we all struggled when cutting large sheet material into smaller pieces, a batten in one hand, two cramps in the other and packing pieces so that we don't mark the surface!

Of course that was the bad old days, now we have Clamp Guides, Bench Clamps and Pro Tracks.

All three are designed to make life a lot easier on-site, at home or in the workshop. Made up with an aluminium extrusion fitted with one sliding and one fixed jaw, they are infinitely adjustable along their length and lock tight with a flick of a toggle. Once pressure is applied, the work is held firmly, the simple cam lock offering two clamping pressures - tight and tighter.

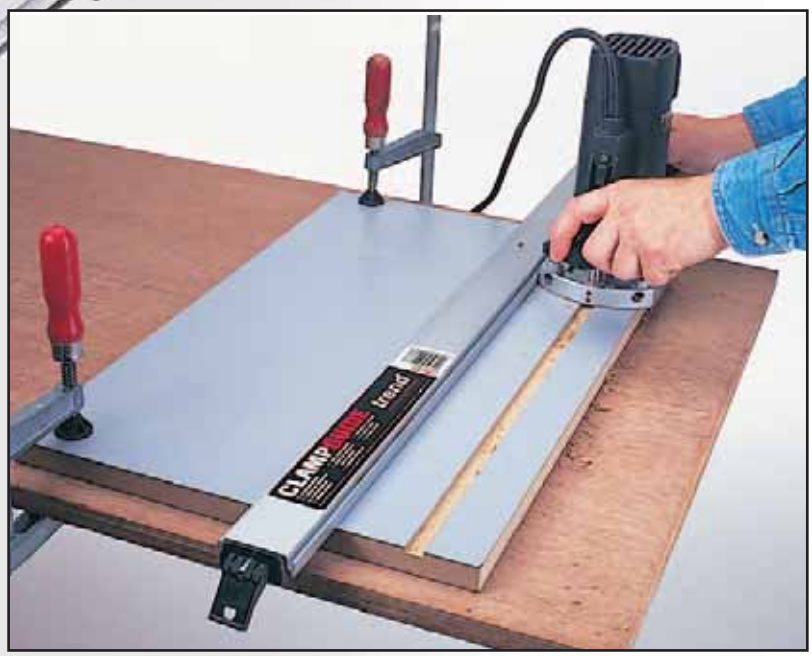
Clamp Guides

For use as a straight edge or sash cramp, the Clamp Guide locks onto any square edged, parallel sided material, to act as a router or saw guide. Alternatively they can be used for clamping several pieces together for machining or to supplement other cramps when gluing up. Available in three sizes 610mm (24 inches), 915mm (36 inches) and 1270mm (50 inches) between the jaws, the flat profile of the Clamp Guide (15mm high) minimises any risk of obstructing the power tool during the cutting operation.

The Clamp Guide can also be used as a general purpose straight edge for marking out and in particular when scoring with a craft knife as the guide can be clamped to the workpiece or a cutting board beneath it, allowing your fingers to be kept away from the guide edge and knife blade.
In the workshop you will soon find the Clamp Guide indispensable, as a supplementary long fence on band saws and saw tables, as a planing stop on a workbench and for a wide variety of other uses.

Using the Clamp Guide

Simply mark off the position of the cut, allowing for the base of the router or saw (that is the distance from the cutter or sawblade to the edge of the baseplate). Position the clamp and slide the jaws against the edges of the material. Lock the toggle to the first position and check with a



try square that the guide is square to the edge of the workpiece. Set the toggle to the second position if you wish to tighten it. Soft facings are supplied with the Clamp Guide to protect edges of delicate workpieces.

Bench Clamps

Similar in operation to the Clamp Guide, the Bench Clamp is designed to hold a flat workpiece to a work surface leaving the face of the workpiece unobstructed. The Bench Clamp is fitted with fixed and sliding jaws on both sides of the aluminium extrusions. One set is used to clamp it to a flat parallel edged work surface, while the top jaws clamp to the workpiece. The lack of any protrusion above the surface allows total free access when freehand routing, sanding, hand planing and for many other machining and finishing operations.

The Bench Clamp is available in three sizes with capacities, between the jaws, of 460mm (18 inches), 915mm (36 inches) and 1270mm (50 inches). Clamped to vertical rails fitted to the front or end of a workbench or across the legs, the Bench Clamp can also be used to hold workpieces vertically, ideal when squaring or doweling the ends of panels.

Although generally used in pairs, the Bench Clamp can be used on its own to hold small items. Again soft facings are supplied to avoid marking the edge of delicate work, while curved jaw blocks can be easily cut and fitted to hold curved or irregular edges. The Bench Clamp can be fitted to most square edge surfaces including folding benches such as the Workmate®.

The Bench Clamp can be used in many similar ways to the Clamp Guide and can be used in conjunction with it, using the Bench Clamp to hold the workpiece to the bench and the Clamp Guide to guide the power tool across it.

New Jaw Extension
An extension jaw enables the Clamp Guide, Bench Clamp and Pro Track to clamp onto curved edges such as kitchen worktops.
Ref. CG/03 ___£3.95

Clamp Guide Pro Track

This is the most sophisticated of these three guide systems. Although similar in construction and materials to the other guides, the Pro Track has a 125mm (5 inch) wide extrusion to make it extremely rigid and is available in jaw opening capacities of 610mm (24 inches), 1220mm (48 inches) and 2440mm (96 inches). Both edges of the Pro Track extrusion have a T-slot that engages the machined edge of one or two alternative carriage plates, allowing them to slide along the guide edge over the face of the workpiece.

One plate is designed to take a router, the other a circular saw. This allows straight cuts to be made across the work face with no risk of wandering away from the guide edge.

Power Tool Mounting

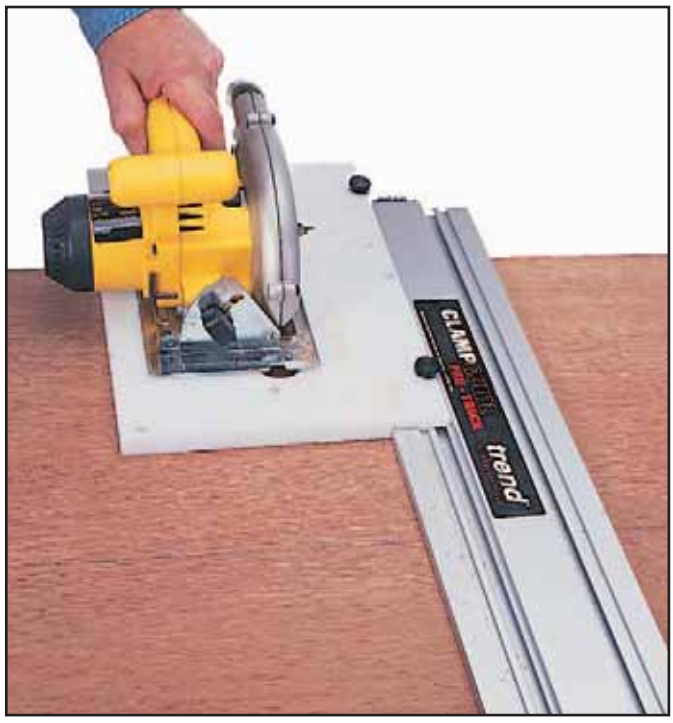
The carriage plates are made of nylon machined along one edge to fit into the T-slot as well as to extend over the top face of the extrusion. A second T-slot in the top face of the extrusion accepts a tee-bolt and thumb knob, fitted through the plate extension to stop the plate and power tool from tipping. This arrangement allows open frames as well as flush panels to be cut or routed, the power tool being supported on the plate as it is fed across the workpiece.

Both carriage plates are 19mm (3/4 inch) thick, the router plate having a circular recess of 190mm (7.5 inches) large enough to take most popular routers. To locate the router, the plate is pre-drilled to suit the table mounting holes in the router base on the Trend T9 & T5 routers. For other routers, both the router and carriage plate can be drilled to take countersunk machine screws (ensuring that the screw heads do not protrude below the plate). Alternatively, the router plate recess has a 30mm diameter centre hole that takes a 30mm outside diameter guide bush. With this size guide bush fitted, the router can be simply dropped into the recess, allowing the guide bush to both centre and locate it allowing the normal down force to hold it in place while routing.

The carriage plate for the saw measures approximately 355 x 240mm (14 x 9.5 inches) with the same thickness as the router plate but no recess. The saw can be either fitted to the edge of the plate by drilling both and using countersunk screws, or by cutting a central slot with a router cutter wide enough to take the blade and blade guard (always fit the saw in such a way that the blade guard continues to operate as before). When fitting jigsaws, a small hole can be drilled to take the blade and the base plate either screwed or clamped (with home made clamps) to the plate.

Length Stops

In order to limit the length or position of the cut, stop blocks to fit the Pro Track are available as an optional accessory. These simply engage in the tracks T-slot and can be locked with a T-nut as on the carriage plates. IP



the new UNIBASE

Guide bushes and templates using the new UNIBASE universal sub-base.

by Neil McMillan

The use of templates and guide bushes opens up a huge number of possibilities for router users. Cutters with a bearing guide on the end can only be used on the edge of a workpiece. However a guide bush places the guiding method above the cutter, allowing the workpieces to be routed either on the edge or in the centre.

Different diameter guide bushes are needed to suit different applications and router cutters. Here lies the problem. Most router manufacturers do not offer a wide range of guide bushes and each size and method of fitting differs from one manufacturer to another. Often guide bushes for a particular machine can be difficult to source and various jigs require a specific size of guide bush.

The new UNIBASE offers a solution for owners of most makes of router. Made from injection moulding plastic, it is formed with a range of hole positions to allow it to be fitted to all popular makes of router, using the bolts or screws provided. It is also supplied with two line-up pins with shank sizes for both imperial and metric collets and a 16mm line-up bush. These allow the UNIBASE, fitted with the guide, to be aligned concentric to the cutter.

Guide bushes ranging from 10mm to 32mm in 2mm increments and a 40mm bush are offered to give flexibility in the choice of router cutters for specific applications. Please note, the UNIBASE is not required for Trend routers as bushes fit direct into the router base. Additionally, the Trend T9 has an integral method of adjustment built into the base.

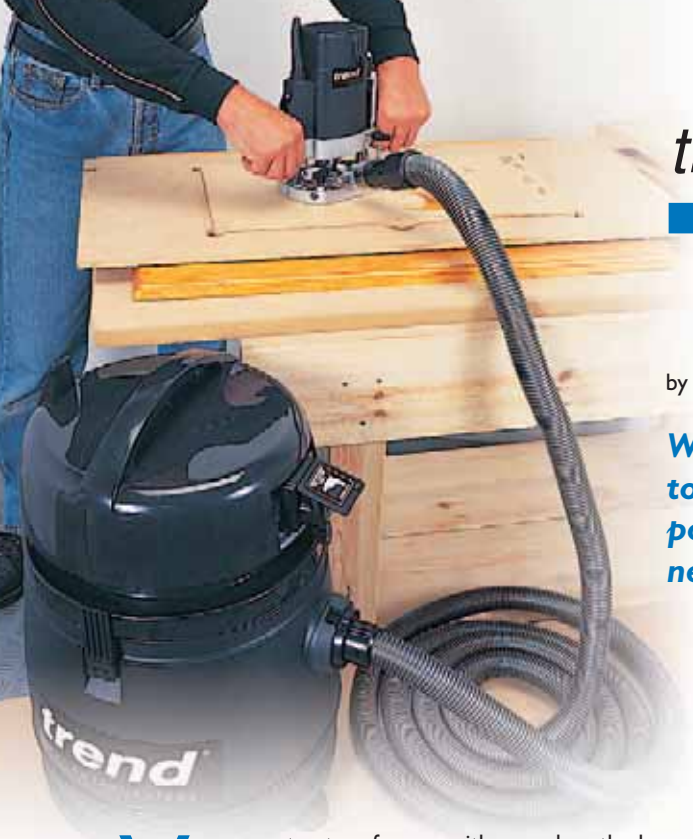
Templates

Templates can be made from plywood, MDF or plastic. The material should be hardwearing, stable and easy to machine.

The thickness of template must be sufficient to prevent the template ring from touching the workpiece, but not so thick as to cause a loss of cutting depth. A thickness of 6mm or 1/4 inch is ideal. IP

Guide Bushes

A guide bush consists of a projecting ring of a specific diameter, fitted to a mounting flange. Fitted to the base plate of the router, the guide bush ring projects beneath the base by approximately 5mm. The cutter is then free to revolve concentrically within the ring, as the outside edge of the ring follows the template contour. Due to the difference in diameter between the guide bush ring and the cutter, an offset or margin must be allowed for when setting and cutting out the template.



the new T30 workshop extractor

by Neil McMillan

With growing concerns about the damage to health from inhaling dust when using powertools, we highlight the merits of the new T30 vacuum extractor.

Vacuum extractors for use with powertools are designed to capture large and fine particles produced at source. This ensures that particles do not become airborne where they can be inhaled or caught in the eye.

The new T30A extractor captures particles by filtering the air through a paper bag, and finer dust particles are then removed by a cartridge filter. A pre-filter option can also be fitted that extends the life and performance of the cartridge filter.

A 1200 watt bypass motor provides the power to the unit and an auto start facility allows direct connection of any 240 volt powertool up to 2000 watts. With the extractor set to automatic, the extractor will start up when the powertool is switched on. When switched off, the extractor will run on for a further six seconds to clear the hose. This auto feature saves unnecessary switching on and off, while the extra long cable (7.8m) avoids the need for an extension lead!

The extractor has a generous five metre x 36mm diameter flexible hose that has an integral swivel connector that fits Trend and other makes of routers. This extra length proves ideal for power sanding. An optional larger 58mm diameter hose enables direct connection to router tables and stationery machines, offering an increase in performance due to the larger volume throughput.

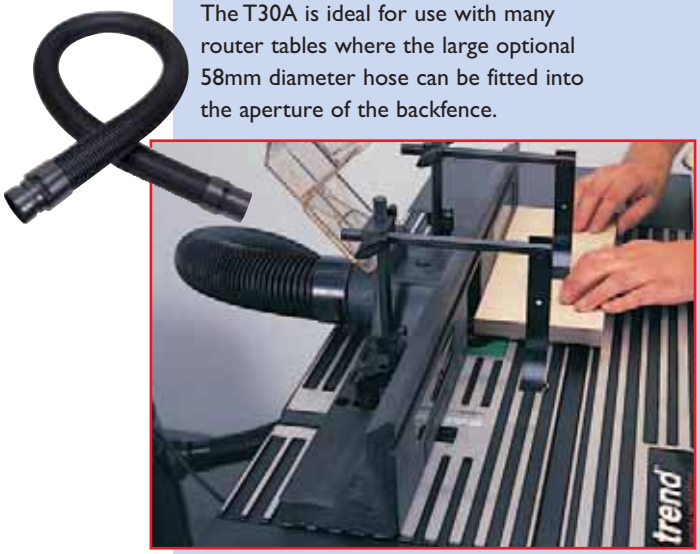
The T30AF version should be used when routing fine dust as it incorporates as standard a 0.5 micron cartridge filter and a nylon pre-filter. A paper filter bag should still be used. A T30A can be upgraded to a T30AF by replacing the standard cartridge filter with a 0.5 micron cartridge filter (ref. T30/5) and adding a nylon pre filter. (ref. T30/3). IP

Specifications

- 1200 watt bypass motor with two fans
- Large 34 litre dry container capacity
- Power tool take off with auto start for up to 2000 watts, and with a 6 second delay
- Extra long hose 5 metre x 36mm diameter
- Extra long 7.8 metre power cable
- Five castors for manoeuvrability and stability

Applications

The T30A is ideal for use with many router tables where the large optional 58mm diameter hose can be fitted into the aperture of the backfence.



For obstruction free clamping the Minimach and the T30A are ideal. By switching on the vacuum and turning the vacuum control tap to the open position, the MINIMACH clamps itself to the workbench and will then hold the workpiece down securely for sanding, routing and planing operations.

The T30A vacuum extractor can also be used in conjunction with portable circular saws.

Wet & Dry use

The T30A container has a 34 Litre dry capacity and a 25 Litre wet capacity. For normal dry use a paper filter bag, and the standard 12 micron cartridge filter should be fitted (filter filtrates particles above 12 micron in size). A cloth pre-filter (ref. T30/2) can be purchased separately which

prolongs the life of the cartridge filter. For wet use the extractor is fitted with a float that prevents water from entering the machine. The paper bag and cartridge filter must be removed. A no-foam filter accessory (ref. T30/4) is available which prevents foaming in the machine (if required). A nylon pre-filter (ref. T30/3) is also available that is washable and can be used for both wet and dry use.

Floor Kit

The T30A is supplied with a standard floor cleaning kit to allow the vacuum cleaner to clean up the work area and workshop. The floor kit comes with three types of brushes for flooring, carpets and vacuuming fluids. A crevice tool, upholstery tool and power tool adaptor are also included.

Yandles *course review*

***IN**Profile* sent Tom Rogers along to Yandles to review their one day routing course.**

Our second routing course case study took us to the one day beginners course set in the beautiful west country village of Martock, Somerset, the home of Yandles Woodworking.

Yandles showroom

As well as being spoilt by an extensively stocked showroom including hand tools, power tools and arts and crafts, you'll be impressed by the array of worldwide exotic timbers, thrilled by the works of art in the china, craft and doll's house galleries and tempted by the exquisite home-made food in the restaurant.

Dolls House gallery

The routing course is situated next to the sawmill in their course centre. As with any course that involves the use of machinery, the first stage covered health and safety issues with emphasis on 'always unplug your router before making any corrections or alterations' the rule so often told, yet rarely actioned. Once we were clear about the safety aspects we dealt with care and maintenance of routers and cutters, in particular, preventative maintenance.

The next stage, dealt with familiarity of the component parts and accessories of the router, their functions and the logical implications of misuse or overload.

For the rest of the morning, we followed the lecturers demonstrations with basic routing techniques, like sidefence work to produce grooves, rebates, stepped moulds and mortises, the benefits of the clamp guides and bench clamps, the use of guide bushes and templates and the advantages and accuracy of bearing guided cutters. Following lunch, we watched demonstrations on the Craftsman Router Table, the DJ300 Dovetail Jig and the Router Carver, all of which allowed time for practice periods.

Lastly, we were able to test some of the techniques we had attempted earlier in the day by producing a bread board:
Taking a square section of timber, this was held down to the bench using double-sided tape and the centre marked to locate the position for the trammel.

Then, using a two flute straight cutter we cut through our boards in stages to produce the complete circle.

Next we slid the router in along the trammel bar by 30mm then changed the cutter for a radius or core cutter to cut our crumb groove.
Finally, using an ovolo cutter, we profiled the outside edge to complete our board.

A little time is left at the end of the course when the lecturer can deal with particular requirements of the students.

The course covered safety and basic routing techniques in sufficient detail, provided plenty of hands-on and enabled the students to go home with a bread board they had made themselves. I thought the course was very good value for money and I highly recommend it! IP

Forming basic bread board shape

Completed bread board

Course Details:

One day basic through to advanced courses available. Includes hand-held techniques and table routing.

Course Price _____£55

Hurst Works, Martock, Somerset TA12 6JU Tel: 01935 822207
Contacts: Ann Pain or Carol Bulmer
Lecturers: Gordon Mitchell, John Parslow & John Stevons

routing courses

Trend sponsor a number of one and two day routing courses around the UK. For your nearest course centre please refer to the list below.

Course centres situated around the UK

AUSTIN EAMES
Plas Acton Precinct Pandy Lane
Wrexham Clwyd LL11 2UB
Tel: 01978 261095
Contacts: Peter or Richard Eames

CRAFT SUPPLIES ACADEMY
The Mill Millers Dale Nr Buxton
Derbyshire SK17 8SN
Tel: 01298 871636 **Contact:** Eve Middleton

EDINBURGH'S TELFORD COLLEGE
Crewe Toll Edinburgh EH4 2NZ
Tel: 0131 315 7229
Contacts: Keith Swann or Gregor Allen

JOE GREENERS WOODWORKING CENTRE
Valley Street North Darlington
Co. Durham DL1 1PZ
Tel: Freephone 0800 7312145
Contacts: Joe or Andy Greener

NEATH COLLEGE
Dwr-y-felin Road Neath Wales
SA10 7RF **Tel:** 01639 634271
Contacts: Dylan Wyn James or Wyn Pritchard

OAKLANDS COLLEGE
School of Construction
St Peters Road St Albans Herts
AL1 3RX **Tel:** 01727 737213
Contact: Jeanne O'Reilly

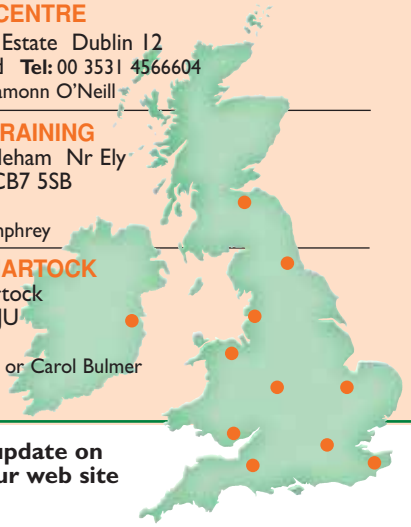
ROY SUTTON
14 St Georges Avenue Herne Bay
Kent CT6 8JU
Tel: 01227 372500
Contact: Roy Sutton

SPEEDWELL TOOL CO
62-70 Meadow Street Preston
PR1 1SU **Tel:** 01772 252951
Contact: Monica Parker

THE ROUTING CENTRE
Bluebell Industrial Estate Dublin 12
Republic of Ireland **Tel:** 00 3531 4566604
Contacts: Jim or Eamonn O'Neill

WOODCRAFT TRAINING
50 West Street Isleham Nr Ely
Cambridgeshire CB7 5SB
Tel: 01638 780978
Contact: Mike Humphrey

YANDLES OF MARTOCK
Hurst Works Martock
Somerset TA12 6JU
Tel: 01935 822207
Contacts: Ann Pain or Carol Bulmer



Get the latest update on courses from our web site

www.trend-uk.com

Our web site gives you details on our latest products, news, events and technical assistance. In addition to the information from our latest catalogue available on-line, it features:

- Product manuals, instruction leaflets, test reviews and other free literature to download.
- A section dedicated to getting started with a router, as well as information for tradesmen and other professional users.
- A facility to locate your nearest Trend stockist in the UK and full details of our overseas distribution network.
- Answers to frequently asked questions about our routers, cutters and jigs.

www.trendm.co.uk
Email: enquiry@trendm.co.uk

Bookmark our site in your web browser and make a regular visit. You can also email us for any further information or help you need.

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