

Advent calendar train steams in!



The Woodworker

December 2013

www.getwoodworking.com

& Woodturner

Pure & Simple

No screws, no glue



RAINBOW VASE

- Workshop re-fit
- Casing the joint
- Bagpress basics
- Bandsaw tenons
- Turning for beginners

PLUS: HAMMER PLANER ■ 6 MORE TESTS

mytime media WOODWORKING GROUP



£3.95

“**ONLINE ORDERING IS EASY AND THE NEXT DAY DELIVERY NEVER LETS ME DOWN.**

...Within building maintenance, time is at a premium, so it's good to know that the goods will arrive when you need them.

Tony Duffy

Trustscore for IronmongeryDirect is 9.3 of 10, based on over 2000 customer reviews.

**UK'S
BIGGEST RANGE
NEXT DAY DELIVERY
MINIMUM 5 YEAR
GUARANTEE
FREE 'NO QUIBBLE'
RETURNS**

**CALL TODAY FOR YOUR
FREE CATALOGUE**

 **0808 168 28 28**

 **IronmongeryDirect.com**

 **DOWNLOAD OUR
FREE APP FROM
YOUR APP STORE**

 **Available on the
App Store
Google play**

**OR TEXT RBA23
to 62244 FREE!**
With name, address and email.



IronmongeryDirect

MASTERS OF OUR TRADE

**DOOR FURNITURE • WINDOW & JOINERY HARDWARE • SLIDING DOOR HARDWARE • HINGES • DOOR CLOSERS • FIRE CONTROL • SIGNS
LOCKS, LATCHES & SECURITY • CABINET FURNITURE • SHELVING & STORAGE • BOLTS & STOPS • SEALANTS & ADHESIVES • SCREWS & FIXINGS**

welcome

After hours of planning and careful preparation – probably preceded by days of sourcing the right materials, often at considerable cost – there comes the moment when you have to make an actual start to the work. You may find yourself checking and double checking, pausing to sharpen something or check an email, but



finally, you just can't put it off any longer. It's time to make the first cut.

For me, this usually goes one of two ways. Generally it starts a bit shakily, but soon gathers confidence and momentum, and

usually comes off the saw pretty damn near exactly where it should be. It's then that I let my breath out, relax a bit and carry on with the next step, feeling pretty good and looking forward to my tea break.

Feel the fear

Every now and then though, usually when I'm in uncharted waters, no sooner has the blade passed through the timber than the fear rushes in. This, thankfully, though intense, is fairly brief; the moment when you're pretty sure you've made a terrible mistake, but have yet to fully face up to the reality of it. Disbelieving thoughts like "No, surely not!" or "I don't believe it!" or even worse "Not again!" rush

through the mind, and within seconds you're mentally rearranging the day to accommodate another trip to the timber yard.

Chin up

I don't know if it's a good or a bad thing, but, after plenty of experience of these matters, the initial feelings of despair, frustration and annoyance are soon tempered, and a semi-cheerful resignation takes their place. Yes, things often stray from the carefully planned path and there's little point in worrying about what might have been. It could have been worse, you might say; no injuries occurred, and I didn't really like that piece of timber anyway! Yes, the only thing to do is to start again, and try to learn from the experience.

Keeping me posted

I hope that you, the reader, will not have been experiencing the fear, but however your work has been progressing, remember that I'm interested in hearing all about it. Seeing photos of readers' work is also high on my request list, so please keep them coming in and be sure to share your stories with the rest of us. I extend my thanks to everyone who has done so recently, and look forward to communicating with more fellow woodworkers from around the world.

mark

You can contact Mark on mark.cass@mytimemedia.com. He'll always find the time to reply.



If you can't always find a copy of the magazine, help is at hand! Complete this form and hand it in at your local store, and they'll ensure that a copy of each issue is reserved for you. Some stores may even be able to arrange for it to be delivered to your home. Just ask!

Subject to availability

Please reserve/deliver my copy of **The Woodworker** on a regular basis, starting with issue.....

Title..... First name.....

Surname.....

Address.....

.....

Postcode.....

Telephone number.....

If you don't want to miss an issue



CONTENTS

*What's in store for
you this month*



page
19



page
70

page
15
**THE PURE
TABLE**

**NEXT
ISSUE**

THE JANUARY 2014 ISSUE
IS OUT ON DECEMBER 13TH



page
72



page
72

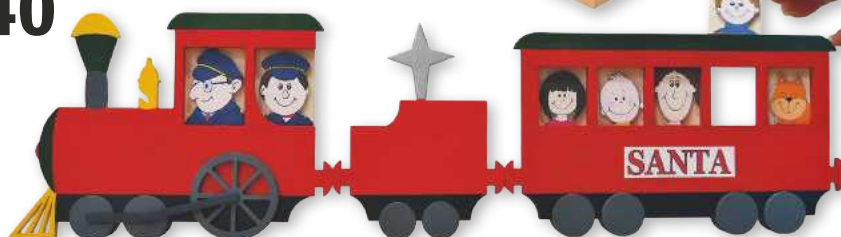


page
27



page
64

page
40





REGULARS

- 3** Welcome
- 8** News & Diary
- 11** News
- 13** Readers' letters
- 50 & 63** Subscriptions
- 88** Marketplace
- 90** Archive

WOODWORK

15 The Pure table

Just-graduated product designer Jiefu Yu presents a table and stool set made without any adhesives or fixings, relying solely on precise joints for its strength and integrity

19 On the case

Editor Mark Cass makes a hinged attaché case which he uses as a workshop practice piece when teaching his class at West Dean College

27 Stars in stripes

In his second article on using stripwood, Ian Wilkie shows off some projects made from contrasting hardwood strips assembled into sheets

33 Going into space

Michael Forster has just moved house, and has acquired not one but two new workshops as a result. Here he begins to describe the process of fitting out his new space

40 The Santa Express!

Fred and Julie Byrne present a stunning variation on the Advent calendar theme that builds up day by day into a colourful festive train

47 Pressed for success

Mark Cass has been putting his newly acquired Bagpress vacuum unit through its paces, and is agreeably surprised at the outcome

53 Cutting tenons on the bandsaw

Alan Holtham reckons he's at last found the ideal way of cutting tenons quickly and accurately by machine. He uses his bandsaw...



TURNING

59 A beginner's guide 2

In the second part of his short series, Colin Simpson introduces a basic turning toolkit and describes the various accessories – drive centres, chucks and faceplates – you'll need to get turning

64 Over the rainbow

Bob Chapman uses a few plywood offcuts and some experimental colouring techniques to create a stunningly original hollow form



ON TEST

70 Hammer time 2: Mark Cass continues his ongoing review

72 Black & Decker MT143K
MultiEvo multi-tool

74 Axminster AWEBDS610
belt/disc sander

76 Proxxon KGS 80 chop saw

79 Trend RT/11/PK1
replaceable-tip cutter

80 DeWalt DWS778 sliding
mitre saw

82 Bosch GAS 35 M AFC extractor

SUBSCRIBE & SAVE UP TO 34%

**PLUS: RECEIVE A FREE
HITACHI 102pc DRILL & DRIVER SET**



SEE PAGE 50
FOR DETAILS

OFFER CLOSING 13TH DECEMBER 2013

The Woodworker & Woodturner

December 2013

Published by **MyTime Media Ltd**
Hadlow House, 9 High Street,
Green Street Green, Orpington, Kent BR6 6BG

Tel: 0844 412 2262
From outside UK: +44 (0)1689 869840
www.getwoodworking.com

SUBSCRIPTIONS

UK - New, Renewals & Enquiries
Tel: 08456 777 807
Email: mytimemedia@subscription.co.uk
USA & CANADA - New, Renewals & Enquiries
Tel: (001) 877 363 1310
Email: expressmag@expressmag.com
REST OF WORLD - New, Renewals & Enquiries
Tel: +44 (0)1689 869896

BACK ISSUES & BINDERS

Tel: 0844 848 8822
From outside UK: +44 (0)2476 322234
Email: customer.services@myhobbystore.com
Website: www.myhobbystore.co.uk

EDITORIAL

Editor: Mark Cass
Email: mark.cass@mytimemedia.com
Production editor: Mike Lawrence
Email: mike.lawrence@mytimemedia.com

PRODUCTION

Design Manager: Siobhan Nolan
Designer: Malcolm Parker
Illustrator: Michael Lindley
Retouching Manager: Brian Vickers
Ad Production: Robin Gray

ADVERTISING

Business Development Manager: David Holden
Email: david.holden@mytimemedia.com
Tel: 01993 709545

Online Sales: David Holden
Email: david.holden@mytimemedia.com
Tel: 01993 709545

MARKETING & SUBSCRIPTIONS

Sarah Pradhan & Kate Scott

MANAGEMENT

Head of Design & Production: Julie Miller
Group Sales Manager: Duncan Armstrong
Chief Executive: Owen Davies
Chairman: Peter Harkness

mytimemedia
print & digital media publishers

© MyTime Media Ltd. 2013
All rights reserved ISSN 1752-3524
The Publisher's written consent must be obtained before any part of this publication may be reproduced in any form whatsoever, including photocopies, and information retrieval systems. All reasonable care is taken in the preparation of the magazine contents, but the publishers cannot be held legally responsible for errors in the contents of this magazine or for any loss however arising from such errors, including loss resulting from negligence of our staff. Reliance placed upon the contents of this magazine is at reader's own risk.

The Woodworker & Woodturner, ISSN 1752-3524, is published 13 times per year by MyTime Media Ltd.
c/o USACAN Media Dist. Srv. Corp. at 26 Power Dam Way
Suite S1-S3, Plattsburgh, NY 12901. Periodicals postage paid at Plattsburgh, NY. POSTMASTER: Send address changes to The Woodworker & Woodturner c/o Express Mag, P.O. Box 2769, Plattsburgh, NY 12901-0239.



When you have finished with
this magazine please recycle it.

Paper supplied from wood grown in
forests managed in a sustainable way.



'THE' TOOL SUPERSTORE DM-TOOLS.CO.UK

Your No1 choice for Hand Tools, Power Tools & Machinery



D&M Tools has been family owned and managed since 1976. We have earned a reputation with our customers as a trusted partner with the personal touch, combined with expert advice from our trained staff, great value and speedy nationwide delivery service – **PLUS delivery is FREE for most orders over £99.**

LOW TRADE PRICES!

Whether you're buying online, by phone, email, post or visiting us in-store, D&M provides you with the widest range of quality hand, power tools and machinery all at the keenest prices and from stock.

UNBEATABLE VALUE!



Visit our easy-to-use website to see what we mean about range and value. Browse and buy with confidence 24hrs a day from the biggest brands in the business, all at prices you'll find hard to beat.

Why not subscribe to our regular email to keep up with our latest deals and offers!

FREE CATALOGUE

OVER 650 PAGES
PACKED
FULL
OF THE
BEST
DEALS
+ THE
LATEST
KIT!

GET YOURS NOW!
VISIT OUR
WEBSITE OR
TEL: 020 8892 3813



MASSIVE CHOICE FROM THE BIGGEST BRANDS!



THE UK's No.1 BRANDED HAND,
POWER TOOLS & MACHINERY EVENT



'THE' TOOL
SHOW '14
WWW.THETOOLSHOW.COM

KEMPTON PARK RACECOURSE
10-12th OCTOBER 2014

VISIT OUR EXTENSIVE TWICKENHAM SUPERSTORE
73-81 HEATH ROAD • TWICKENHAM • TW1 4AW
020 8892 3813 • SALES@DM-TOOLS.CO.UK

FIRST WITH THE LATEST PRODUCTS & NEW INNOVATIONS



Follow us on Twitter
@DM_Tools

Like us on Facebook
facebook.com/DandMTools

Subscribe on YouTube
youtube.com/DMTools1

FESTOOL 769191 DRC 18/4 LI 4.2 PLUS GB 18V CORDLESS DRILL 2 X 4.2AH LI-ION BATTERIES

- Brushless EC motor for maximum service life, extremely efficient
- Lithium ion battery for maximum power density at minimum weight
- EC motor combined with lithium ion battery for almost 100% greater fastening capacity
- 4-speed gearbox capable of 3800 rpm for rapid, clean drilling results
- Individually selectable LED lighting and battery status display
- Optional angle attachment



FESTOOL 769194 PDC 18/4 LI 4.2 PLUS GB 18V CORDLESS COMBI HAMMER WITH 2 X 4.2AH LI-ION BATTERIES

- For easy fastening, drilling and impact drilling
- Brushless EC motor for maximum service life, extremely efficient
- EC motor combined with lithium ion battery for almost 100% greater fastening capacity
- 4-speed gearbox capable of 3800 rpm for rapid, clean drilling results
- Axial impact feature (PDC) that can be deactivated for drilling in brickwork
- Individually selectable LED lighting and battery status display
- Universal solution for fastening operations that require high torque and for drilling large diameter holes
- Optional angle attachment



FESTOOL 769205 DWC 18-4500 LI4.2 SET GB 18V CORDLESS SCREWDRIVER WITH 2 X 4.2AH BATTERIES

- EC-TEC is highly efficient and offers a virtually unlimited service life
- Energy-saving start/stop function
- Electronic switch-off function
- Precision working. Depth stop virtually eliminates tedious & time consuming reworking!
- DuraDrive's short overall length and balanced centre of gravity provides effortless power transfer to the screw
- Steel inserts & guide bushes
- The magazine can be dismantled in seconds without tools & cleaned with ease



FESTOOL 769198 DR 18/4 E FFP-PLUS GB QUADRILL 240V

- Five machines in one thanks to the FastFix interface: drill, impact screwdriver, angle drill, angle screwdriver and screwdriver
- Universal application with 4-speed transmission and speed levels from 400 to 4000 rpm
- No run-down: The machine brakes immediately after the accelerator trigger is released
- Extremely manageable weighing only 1.7 kg and up to 10 cm shorter than traditional machines
- EC-motor with maximum efficiency delivers more power per watt
- 7.5 m cable for maximum action radius
- Optional angle attachment



FESTOOL 769202 PD 20/4 E FFP-PLUS GB PERCUSSION DRILL 240V

- Five machines in one thanks to the FastFix interface: drill, impact screwdriver, angle drill, angle screwdriver and screwdriver
- Universal application with 4-speed transmission and speed levels from 400 to 4000 rpm
- Impact rate up to 79,000 ipm
- No run-down: The machine brakes immediately after the accelerator trigger is released
- Extremely manageable weighing only 1.7 kg and up to 10 cm shorter than traditional machines
- EC-motor with maximum efficiency delivers more power per watt
- 7.5 m cable for maximum action radius
- Optional angle attachment



FESTOOL 769211 SSU 200EB-PLUS 240V CARPENTRY CHAIN SAW

- Ideal for construction sites
- 200 mm cutting depth
- Only weighs 6.5kg
- Wide application - mitre cuts up to 60°
- Efficient electronics for constant power
- Various chains for perfect cuts in wood & insulation materials



DEWALT DWE315KT-GB 240V 300W OSCILLATING MULTI-TOOL WITH T-STAK CASE & 37 PIECE ACCESSORY KIT

- Quick accessory change, no Hex Key required
- Superior Ergonomics
- 0 - 22,000 opm Variable Speed Trigger for ultimate control
- Sanding Platen included
- Universal Adaptor included
- Powerful 300w Motor
- LED worklight
- T-STAK Kitbox
- 37pc Accessory Set
- Dust Extraction Adaptor
- Depth Stop / Straight Cut Guide



NEW



THE WAIT IS OVER! NEW 4.0AH 18V LI-ION BATTERY & MACHINES

Features:

- Up to 33% extra runtime
- **36 minute charge time**
- Same size and weight as 3.0Ah
- Compatible with existing fast chargers
- Computer controlled optimum charging
- Compatible with starred terminal or yellow terminal machines
- Cooling System for max battery life
- Battery protection circuit

See our website for full details and prices



NEW



All offers subject to availability. Prices subject to change without prior notice, prices correct at time they went to press. We cannot be responsible for any mistakes. Illustrations are not binding in detail. We offer a full range of tools, these are just a few.

Ref: 091301



020 8892 3813



www.DM-TOOLS.CO.UK



ALL OUR INC VAT PRICES ARE CALCULATED AT CURRENT RATE OF 20%

In brief...



A better connector

The new award-winning Tenso P-14 connector from Lamello is the perfect glue aid for all Lamello Zeta owners or those thinking of buying one. Based on the innovative P-System profile groove, this invisible self-clamping connector offers strong anchorage in the workpiece and is ideal for use in materials with a thickness of 13mm and more. The very high level of cramping force allows workpieces to be glued without the need for screw cramps or pressure. A pack of 80 connectors costs £53.95 www.brimarc.com



A better laser

Stanley Tools' new Cubix cross-line laser is able to self-correct up to 4°, removing the need for a spirit level. It's effective indoors at up to 8m, with accuracy up to 0.8mm/m, and is supplied with a universal mounting bracket. It projects a cross onto the wall directly in front of where it's placed, making it the perfect tool for tiling or paperhanging. The price is £59.99. www.stanleytools.eu

A better cramp

Triton's new all-steel SuperJaws XXL has an increased cramping width of 1m and a load-bearing capacity of up to 250kg. It will handle anything from timber and boards to doors and fence panels. The improved frame and leg design mean setting up and folding down is faster and easier too, and overall stability is taken



care of with the larger rear foot. It's priced at £170.54 www.tritontools.com



A better service

Peter Sefton Tool Shop has significantly expanded its product range following the purchase of Wood Workers Workshop from founder Roger Phebey. Roger has recently retired and entrusted the ongoing success of the business (which he first established in 1997) to husband-and-wife team Peter and Sarah Sefton, along with technical director Garry Rowberry. Peter Sefton Tool Shop is now re-branded as Wood Workers Workshop, and sells a range of hand tools to suit all budgets. www.woodworkersworkshop.co.uk

A better offer

The Tormek T-7 is the world's number one sharpening system, with a current price of £489.95. Tormek are now offering free grindstones for life (up to three stones per customer) when you buy a T-7. To get the required certificate, register your T-7 purchase on the Tormek website before 15th January 2014 and put FGL in the comments section. This offer is valid until 31st December 2013. www.tormek.com

Better hearing

Unlike traditional foam, wax or silicone earplugs. Auritech Hearing Protectors contain precision-tuned patented ceramic filters. These ensure maximum protection from sawing, drilling, hammering and any other noises which can harm your hearing, while still allowing conversation to remain audible without the muffling effect of conventional earplugs. They cost £19.95 a pair. www.auritech.info

DIARY

NOVEMBER

Axminster Skill Centre Courses

25 Pyrography
27 Christmas decorations
28-29 Beginners routing *
28-29 Christmas decorations
28-29 Woodcarving **
 * Course held in Sittingbourne, Kent
 ** Course held in Nuneaton, Warwickshire
 Unit 10 Weycroft Avenue, Axminster EX13 5PH
 0800 975 1905
www.axminsterskillcentre.co.uk

John Boddy's courses

21-22 Woodcarving: Peter Berry
28-29 Woodturning: Simon Whitehead
 01423 322370 ext 257
www.john-boddys-fwts.co.uk

John Boddy's demonstrations

30 Woodturning: Simon Whitehead
 Details as above

North of England Woodworking & Power Tool Show

22-24 Great Yorkshire Showground, Harrogate HG2 8QZ
 01474 536535
www.skpromotions.co.uk

Wood Workers Workshop

30 Open Day
 The Threshing Barn, Upton-on-Severn, Worcestershire WR8 0SN
 01684 594683
www.woodworkersworkshop.co.uk

DECEMBER

Axminster Skill Centre Courses

7 Penmaking
11-12 Woodcarving
12-13 Beginners woodturning
16-17 Beginners routing
16-17 Beginners woodturning
 Details as above

John Boddy's courses

5-6 Woodcarving: Peter Berry
 Details as above

John Boddy's demonstrations

7 Woodcarving: Peter Berry
 Details as above

West Dean College courses

5-8 Introduction to picture framing
9-13 Woodcarving gift days
13-16 Making simple furniture
20-22 Turning greenwood
 West Dean College, Chichester PO18 0QZ
 01243 811301
www.westdean.org.uk

IronmongeryDirect

MASTERS OF OUR TRADE

**ORDER UP TO 7.30PM FOR
NEXT DAY DELIVERY**

8am-8pm 7 days a week
0808 168 28 28



24/7 ordering
IronmongeryDirect.com



GPS

More than just resin!

**GPS
Agencies
have moved!**



The GPS Range of Products

For all types of turning by woodturners

All materials are enjoyable to use and turn – creating a breathtaking finish

Used either on their own or incorporated as part of another project

A quality finish which cannot be found in other alternative material

You can see our extensive product range

www.gpsagencies.co.uk

Please contact us for your nearest stockist

email: gpsagencies@btconnect.com

GPS

GPS Agencies Ltd.
Unit 5, Petersfield Trade Park, Bedford Road,
Petersfield, Hampshire GU32 3QN
Tel: 01730 233366 Fax: 01730 260917

Welcome to THE TURNERS WORKSHOP

*The Company
with Traditional Values*

Our aim is to provide
quality items at a fair price.

THE TURNERS WORKSHOP

*The Company with
Traditional Values*

Vincent Coates - proprietor

*In the hussle-bussle
and impersonal world we
live in today, I want to turn
back the clock and provide
a good old fashioned,
personal, professional and
friendly service to all my
customers.*



- Pen Kits
- Woodturning Tools
- Abrasives • Adhesives
- Bushing Sets
- Finishing Products
- Books & DVDs
- Pen Making Accessories
- Workshop Furniture
- Knife Making Sets
- Turning Projects



*The Turners Workshop will appeal to all Woodturners, Pen Makers,
Pen Collectors, Craftsmen and Craft-ladies! Visit our comprehensive shop at:*

www.theturnersworkshop.co.uk • email: mail@theturnersworkshop.co.uk • Tel: 07870 587615

The Turners Workshop, Newcastle Business Village, 33 Bellingham Drive, Unit 5A,
North Tyne Ind. Est., Newcastle Upon Tyne NE12 9SZ



Precision. Innovation. Simplicity.



2012
HANDY
MAGAZINE
INNOVATION
AWARD

Kreg

**No Measuring.
No Marking.
No Chalk Lines.**

Attaches to almost any Circular Saw for precise, no-nonsense ripping through large plywood and MDF panels up to 61mm (24") wide.



Rip-Cut™
KMA2675

Find your nearest stockist
kregtool.eu



John Boddy's
Fine Wood & Tool Store Ltd



**Selected Timbers
Discounted
in our
Timber Store**



Woodworking Courses

- woodcarving
- woodturning
- french polishing & restoration
- chair caning
- gilding
- 1 to 1 courses by arrangement

- ☐ Self Service Store
- ☐ Mail Order Service
- ☐ Certified Timber
- ☐ Flooring
Solid Hardwood & Engineered
- ☐ Solid Oak Door Kits
- ☐ Profiles/Architectural Mouldings
- ☐ Oak Beams & Scantlings for Restoration Work
- ☐ Easy access from A1M, Jct 48

Opening Times

Mon – Fri 8am – 5pm Sat 8am – 4pm
Closed Sundays & Bank Holidays

Riverside Sawmills, Boroughbridge, N. Yorks, YO51 9LJ.

Tel: 01423 322370 Fax: 01423 324334

email: sales@john-boddys-fwts.co.uk web: www.john-boddys-fwts.co.uk

the **MUSCLE
CHUCK™**

Life made simple
but what else would you expect from WoodRat?



A finely balanced replacement collet, giving your bit just the right amount of extra depth.

No more spanner and awkward push-lock

No more barked knuckles or dropped bits

and no more damaged bit shafts or reduction sleeves
Cutter change in seconds, with half a turn of an Allen key

Made to the demanding standards of the US aviation industry
Distributed by WoodRat Ltd 01458 832744 www.woodrat.com

HOW TO MAKE THIS WINDSOR SIDE CHAIR

by Peter E Judge



**ONLY
£15.00**
Plus £7.00 p&p
for UK
Delivery



The book is packed full of useful diagrams and colour photos on how to make this Windsor chair from start to finish. Every part of the process

is explained in easy language, and in a step by step format, supported by dedicated photos and drawings, throughout its 420 pages.

In the woodturning chapters, the beautifully shaped legs, stretchers and upper chair spindles can be created easily using this format.

In other sections of the book, the making of the seat and the crest piece are covered extensively. While in the final chapters, how to assemble the chair, including staining and French polishing, are fully explained.

View a selection of pages from the book at website:

www.makingwindsorchairs.co.uk

Order through PayPal on the website, or please contact Peter by calling **0121 705 2196** or Email: peterjudge@gmail.com or write to: Peter E Judge, 21 Somerby Drive, Solihull, West Midlands B91 3YY.

For delivery to Europe £15.00 plus £14.00 p&p or to America £15.00 plus £23.00 p&p.

What's new from



'THE' TOOL SPECIALISTS • WWW.DM-TOOLS.CO.UK • 020 8892 3813



'THE' TOOL
SHOW '13
WWW.THETOOLSHOW.COM

ANOTHER RECORD YEAR!

Visitors flocked to Kempton Park racecourse in Sunbury-on-Thames, Middlesex, on an unusually sunny and warm weekend at the beginning of October for our 13th annual exhibition, 'THE' TOOL SHOW '13. Once again the show proved to be our most successful, with visitors travelling from far and wide to take advantage of the exclusive show deals and offers, and to see and buy newly launched products, many on show for the first time in the UK. These included the new Makita cordless 4Ah range, the new DeWalt oscillating tool, and new cordless drills and drivers from both Fein and Festool.

Next year's show dates have already been announced – 10th to 12th October 2014 – so put them in your diaries now!



Above: Finishing expert **Mark Raby** on the Record Power stand
Above right: **Phil Beckley** from Festool demonstrates the power of one of their new 4.2Ah cordless drills

Right: **Alan Holtham** uses a guide rail on the Makita stand

Below: **Vic Tesolin** presents a range of Veritas tools

Below right: Professional joiner **Julian Collins** shows off the new DeWalt DWE315KT oscillating multi-tool



PLEASE CHECK OUR WEBSITE WWW.DM-TOOLS.CO.UK FOR THE LATEST PRICES AND DEALS

MAXIMUM STRENGTH. MINIMUM MESS.

ELMER'S GLUE-ALL MAX

Enjoy all the benefits of Elmer's strongest polyurethane formula:

- Bonds metal, stone, wood and more
- Low foaming and waterproof
- Sandable and paintable
- Interior / Exterior use



Available on the App Store

Incredible strength, less foamy mess!

LEADING BRAND	Elapse dry time 12 hours	GLUE-ALL MAX
12mm	3mm	

Find your nearest stockist
elmersglue.eu



Wood
Workers
Workshop



01684 594683

www.woodworkersworkshop.co.uk

Tool Shop Open Day
Saturday 30th Nov

NCRA

Veritas

Ashley Isles

CLIFTON

ROUTER BOSS
A Tool for Fine Craftsmanship

Thomas Flinn & Co.
New Manufacturers Ltd. 2013

EASY WOOD TOOLS

Router Technologies

Woodpeckers

MICRO JIB

MICRO FENCE
M

THE VERY BEST WOODWORKING TOOLS

Sourced by woodworkers
for woodworkers

Quality tools from the finest
UK, US & Canadian manufacturers



THE NEW MICROCLENE MC280 & MC560 A UNIQUE DESIGN FOR AN ALL IN ONE



IDEAL FOR
WOODWORK, TURNING, CARVING,
MARQUETRY, PYROGRAPHY &
SCROLL SAWING,

OR ANY WORK THAT NEEDS LIGHT
AND DUST REMOVAL

IDEAL FOR NAIL SALONS

THE BODY IS MADE FROM STEEL THAT IS POWDER COATED
FOR A LONG LIFE

VERY EFFICIENT AIRFLOW WITH LITTLE NOISE.

ONLY 48 WATTS POWER WITH FILTER AND LIGHTS ON FOR THE MC280
AND 96 WATTS FOR THE MC560

THE SIZE IS ONLY 73 X 48 X 20CM, WEIGHT IS 8.8KGS & 10KGS

A CARBON FILTER IS AVAILABLE FOR REMOVING FUMES ETC



THE MC 280 & MC560
FILTERS 280 & 560 M/3 OF
AIR PER HOUR THERE
ARE 60 BRIGHT WHITE
LED'S TO
PROVIDE A NICE EVEN
LIGHTING SOURCE.
NO HEAT FROM THE
LIGHTS AND NO DANGER
OF DUST BURNING.
THE MC280 HAS ONE
MOTOR AND THE MC560
HAS TWIN MOTORS

MADE IN ENGLAND
ACROL UK LTD
WWW.ACROLLTD.CO.UK
0044 (0) 2392 502 999

Peter Sefton
Furniture School .com



Short Courses Include

- French Polishing & Refinishing
- Wood Machining
- Dovetailing & Drawer Fitting
- Veneering & Laminating
- Chairmaking
- Routing
- Sharpening
- 'Make a Box'
- 'Make a Table'
- Beginners Course

Woodworking & Furniture Making Courses

Learn to craft wood and make fine
furniture on our long and short
courses at purpose-built workshops
in Worcestershire



John Rook
9 month student

Chairmaking
5 day course

Garry Rowberry
9 month student

Veneering & Laminating
4 day course

Call us on 01684 591014

or find us online for information on all the courses

www.peterseftonfurnitureschool.com



In your own write...

Our letters page faded away several years ago when readers simply stopped writing. But today email and on-line forums make it easier and quicker for you to get in touch with us, so please drop us a line and we'll send you a *Woodworker* badge if your name appears in print!

SNAIL MAIL OR EMAIL?

You can write to us at, The Woodworker, MyTime Media Ltd, Hadlow House, 9 High Street, Green Street Green, Orpington, Kent, BR6 6BG **or send an email to** mark.cass@mytimemedia.com



ARTS & CRAFTS

Hi there,

It's good to see that someone else still cuts dovetails by hand, as Michael Forster relates in the October 2013 issue. I first cut a set like the ones in your photos when I was 17, back in the 1950s, and it got me a place at Loughborough College! I have a set made of yew on my bench now, still waiting to be assembled. The purpose of the extra fat pin is so that the top can be separated from the rest of the box and will therefore fit perfectly.

Edward Barnsley was a consultant lecturer when I was at Loughborough, and I still have some of my drawings with his comments on them. My final college project was a needlework cabinet in English walnut that included two small drawers and a dovetailed tray to hold cotton reels. I saw Mr Barnsley inspecting it and pulling out the drawers, then pushing them in with his finger right on the edge. Years later I came across a chest of drawers in a museum that he had made, and I was able to return the compliment!

Maurice Curzon, Chesterfield.

What an honour to have met Edward Barnsley, who died in 1987. He really helped set the standards for the whole furniture industry from his famous Cotswolds workshops. A friend of mine trained there, and it's still the number one destination today for many a hopeful furniture student.

MC

TOO WET TO WORK?

Dear Mr Cass

I read with interest the article by Richard Hardy in the October 2013 issue of the magazine concerning the cabinet in native elm, with particular reference to the moisture content level that was mentioned.

I have very recently completed a two-tier unit in European oak as a wedding present and I experienced significant levels of shrinkage in some areas of my work. The recommended moisture content given in British Standard BS EN 942 for centrally heated buildings is 9 to 13 per cent, but I believe that my oak was perhaps at the top end of this range. Is it ever possible to obtain 9 per cent?

I've been in contact with the Timber Research & Development Association (TRADA) on a number of occasions recently. I was trying to determine their level of control over timber suppliers. Not a lot, it would appear, when one sees wagonloads of timber left totally uncovered and open to the elements!

I'm approaching 70 years of age and have been associated with the timber trades since I was 15. Nothing appears to have changed regarding moisture content in timber over those years, and we continue to accept sometimes quite wet materials.

Is it not time that we made a bit of an issue concerning the continual need for remedial work to completed articles? Surely TRADA should move into the 21st century of heated, insulated and draught-proofed homes? If TRADA cannot influence the suppliers, who can?

Alan Mee (a frustrated cabinet-maker), **Northumberland**

Yes, I've noticed myself how much more lively timber seems to be these days, even with a second seasoning. I'd be very interested to hear what the relevant trade bodies have to say on the matter. Do any other readers have solutions to this common problem?

MC

TAKING A STAND

G'day! The hallstand project on page 54 of the August 2013 issue of *The Woodworker* caught my eye. Several decades ago I built a traditional Australian-style home in the bush which has an entry hall just crying out for a traditional style hallstand. For a few years now I've been anxiously perusing every issue of *The Woodworker* and *Good Woodworking*, searching for a plan or article on building one.

However, I'm afraid this project simply didn't make the grade for me. For a start, those pieces of steel on the front just didn't look right. Secondly, that very plain horizontal finial on the top rail was way too plain. A little attention or adornment to the top of the rear legs might have helped too. But I have to say it gave me some ideas regarding building one of my own.

Keith McCarthy, Dubbo, NSW, Australia

Well, I for one am glad we're all different. True, I probably wouldn't choose to live with a hallstand like that myself, but you have to admire the work that John-Henry put into it (and remember he was a young bloke just starting out). The good thing is that it has inspired you to have a go at designing and making your own. Good luck with it!

MC

Distributors of the original RELAX workshop stoves



- Cast iron tops
- Superior air controls
- Unbeatable quality
- Range of 7 stoves
- Best workshop stoves on the market
- Still sold with a personal service

Phone: 01889 565411

Dovefields Industrial Estate, Uttoxeter ST14 8GA

Find us on Facebook "thehotspotuk" 

www.thehotspot.co.uk



hamilton beverstock

CNC sharpening & metal cutting specialists



- TCT CIRCS • SERVICING • ROUTER CUTTERS • POWER TOOLS
- ABRASIVES • TURNING TOOLS • PLANER BLADES

BAND SAW BLADES

Welded to any length



With over 33 years experience in the saw industry, and as a supplier to major machine manufacturers, we know, like thousands of other satisfied customers, you'll be happy with our high quality band saw blades for cutting wood, metal, plastics, food...

... If you're a hobbyist or a professional, call us today for a friendly service, free advice and competitive prices.

Hamilton Beverstock Ltd.

Grange Industrial Estate, Llanfrechfa Way,
Cwmbran, Torfaen NP44 8HQ.

Tel: (01633) 838900 • Fax: (01633) 873803

email: sales@hamiltonbeverstock.com



Founder Member of the Saw Doctor Association



BY JIEFU YU

The 'Pure' table

This table and stool set is assembled without the use of glue or any fixing devices, relying solely on precise joints for its strength and integrity. Here its maker tells the story in his own words... (along with a few of ours in the picture captions)

My name is Jiefu Yu. I am a product designer. Please let me introduce myself. I just graduated from Edinburgh Napier University this year. My major project is the 'Pure' table.

Now our environment have some problems, for example global warming, air pollution, white pollution, industrial pollution and so on, especially in developing countries. I saw and heard lot of cases from TV, radio, internet, then I think I need design a product that not will damage environment. Finally, as you see, this project's name is 'Pure'.

For local consumption

This project focuses on building a table for use by street food sellers in China, with the aim to create a better and healthy eating environment. 'Pure' is a green product, simple and pure. The whole project was built by hand, it is constructed without the use of any glue or screws, and only uses mortise

and tenon joints to connect each part. The material used is solid wood, 100 per cent recyclable and easily biodegradable. Meanwhile, it is very suit for cleaning, you don't need to put stools on the table anymore to clean the floor.

In China, lot of street food sellers use plastic table and stool for customer use, but these plastic products does not have good quality, sometimes will broken then cut people's finger, sometimes will catch children's finger. So in my project, I choose solid wood to build product and try to make the product surface more smooth, I think this will reduce accidental injury.

Wood is green

Use solid wood may be you think that will damage the rain forest. In fact, use wood can tackle climate change. Wood is a very green material, when they grow up will absorb carbon dioxide. If the woods are been cut down they will lock the carbon dioxide on their



1

The table's underframe reveals its interlocking structure and the two stool support rails. Most of the components are turned



2

The complete set consists of a table and four matching stools, and was designed for use by street food sellers in China



3

At the end of the day the legs of the stools are simply hooked over their support rails, allowing easy floor cleaning beneath



4

The stool legs are joined to each solid, chamfered seat with wedged mortise-and-tenon joints. Note the laser engraving

5

The three solid sections forming the table top are locked together with full-length dovetailed tongues for strength

6

The narrower cylindrical part of this turned column will be wedged into a large hole bored in the table top





7

The set contains 20 tapered legs, two turned columns and four short linking rails. Note the scale models in the background



8

Each table leg will be linked to the turned column by a short rail that is drilled to receive one end of the stool rail



9

The underframe is assembled piece by piece. Finally the turned central column is fitted into the table top and cramped tightly

10

The two stool support rails fit between the pairs of short turned end rails, and run the full length of the table

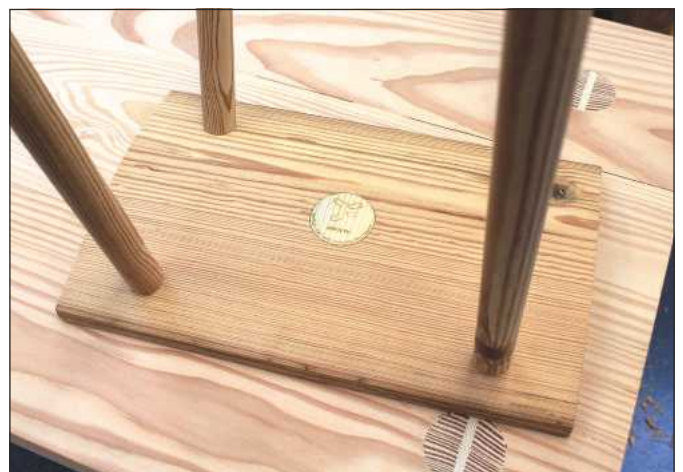


11

Every tenon in the set is locked securely into its mortise with a contrasting wedge; no glue is used anywhere in the assembly

12

Each stool bears a small laser-engraved disc let into a shallow recess on its underside and carrying its maker's name



body, then use these woods make product no more carbon dioxide will be released. If these wood products become useless, burning woods also can be a good energy. Burning wood release carbon dioxide is equal to the wood absorb carbon dioxide when they are grow up. These woods must been cut down from a health and sustainable forest, only use illegal logging wood will damage rain forest.

On this project, I choose mortise and tenon joint to connect each parts, did not use any glue and screws for it, to keep this product be 'pure'. On the other hand, I know lot of Chinese old buildings are use mortise and tenon joint, and they can be hundreds of years. I believe this structure is very strong and smart.

On the research process, I found in many restaurants, staff usually put chairs or stools

on the table then cleaning the floor, this is not good. On my project, people only need to put stools inserted the table, very convenient and suit for clean.

You will find some Chinese words on the top of stools, that is Chinese food poetry. I use laser engraving technique to engraving poetry on stool. I want people can learn something or see something before they sit.

hand tools and wood chisels specialist

Ashley Iles - Henry Taylor - Robert Sorby - Joseph Marples
Veritas - Clifton - Thomas Flinn - Titebond - Ice Bear...

All items in stock, ready for dispatch..
*unless marked otherwise all prices inclusive of VAT



saw horses



bradawls

scrapers

drill bits

wood glue

punches

abrasives



Order online today at
www.toolnut.co.uk
or call to order on 01424 224269

GREAT GIFTS



OVER 25
DIFFERENT
CHISELS



OVER 90
DIFFERENT
CARVING TOOLS



OVER 30
DIFFERENT
TROUSER BRACES

£12.50

BAGPRESS

Specialists in Veneering and Laminating


worldskillsuk
The Skills Show
Competition Sponsor

Why Buy From Bagpress?

- Bagpress is the only company that, not only makes and sells vacuum pressing equipment, but also uses it daily, to manufacture panels and components for a wide variety of commercial clients. This means that, if you buy your vacuum press from Bagpress, you have access to probably the best vacuum pressing technical support resource in the world.
- All of our products have been designed and refined as a result of our own manufacturing experience. From our entry level MiniPress MkII to our FramePress Pro flat bed machines, all have benefited from being used in our workshops on real life manufacturing projects.
- Bagpress supplies Styromould tooling made out of high density polystyrene blocks cut on a CNC hot wire cutter. Styromoulds are very lightweight, highly accurate and don't take up any of your valuable workshop time. Simply send us a drawing and we will give you a fixed price quotation to make the moulds for you. Trim marks and other reference points can be cut into the foam as part of the main cutting process ensuring absolute accuracy every time.
- We like helping to support the UK education market and have several products designed specifically with schools and colleges in mind. We regularly supply material off-cuts from our own workshops free of charge and run a Free Veneer Scheme for our educational customers. We collect veneer off cuts from several large commercial customers and then ship it out, completely free of charge, to any school or college placing a paid for order. This not only saves taxpayers' money but also reduces the wastage of a valuable natural resource.



Our best selling model - BPEL08

Continuously rated 8m3 per hour 240v electric vacuum pump
300 micron 1300mm x 2500mm seamless polyurethane bag
Foot switch, breather fabric and all tubing and connectors.
RRP £649+VAT (£778.80 inc. VAT)

Please send us your post code if you require confirmation of delivery charge.



BY MARK CASS

On the case

As much as I like a cardboard box for carrying stuff around – readily available, reasonably long-lasting, attractively decorated – there’s nothing like a proper case for real ease of storage. Here’s how to make one

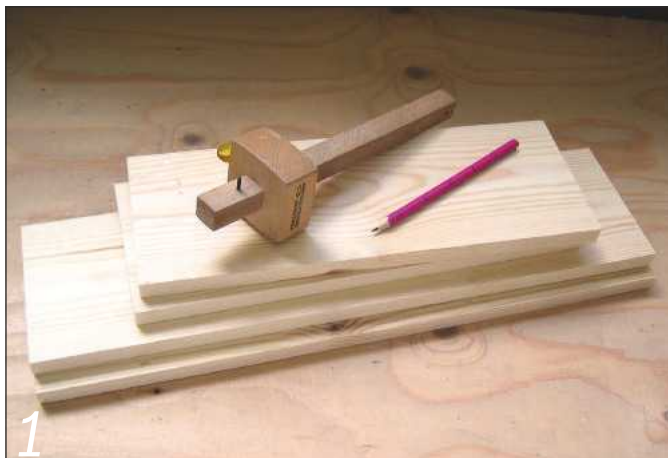
Combining security and portability and offering easy access with numberless interior options, a case lets you go places and still have one hand to carry something else. It’s no surprise that most power tools come in cases. How else can you transport them and their many accessories?

The hinged attaché case has long been a staple of the woodwork teachers’ exercise book. It’s not too difficult for a beginner, there are plenty of ways in which to construct it, and the finished result is eminently useful. This one here I teach to my class at West Dean College. It can be accomplished with very little previous knowledge or experience and, if you take

the extra time and effort, you can make something you’ll be really proud of.

Standard sizes

Not everyone has access to cutting and planing machines, so the *Woodworker* case is designed to be constructed from standard 100 x 20mm prepared softwood. This is readily available from your local timber merchant, but there’s nothing to stop you using anything else, just as long as it’s straight and flat and not too thick for the job. I’ve gone for the classic James Bond dimensions – 18 x 13 x 4½in (457 x 330 x 115mm for metric spies) – but you can always modify your own to suit specific contents.



1 Start by cutting your components to length. Both pairs (the top and bottom, left and right sides) should be the same size as each other; mark each one clearly so you know which is which. Greater accuracy now will make for a better job later on



2 I'd recommend you to use dovetail joints for the corners; it really is the best solution, not to mention the most satisfying to pull off. Set a marking gauge to just over the thickness of your timber, and mark both faces and edges on each end of every component



3 One of the attractions of dovetail joints is that you can choose for yourself how they look, but I'd recommend a layout very similar to the one pictured here. Note the wide pin positioned where the lid will be cut



4 The slope of the dovetail is a ratio of 1:6 (I'd use 1:8 for hardwood). This can easily be created by measuring out an X and Y axis on a piece of scrap. Set your sliding bevel from the resulting angle and use it to mark your tails



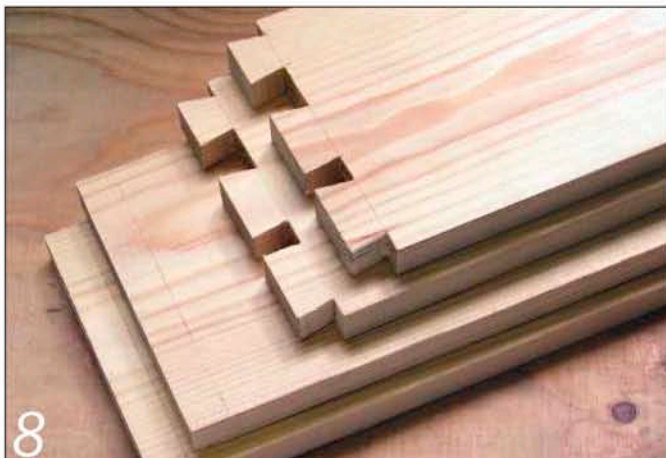
5 After marking out the face sides (outsides) of the two side pieces, square the lines across each end. If you put these together inside face to inside face, your marks should all line up



6 Hold these together and cramp them firmly in a vice, not too high up. Using a small tenon saw or similar, make a series of clean cuts down to your gauge line



7 You can remove the waste at the ends with your saw, but between each dovetail you'll need a sharp chisel of the appropriate size



8

The more care you take with each step, the easier the next one will be. Here's how the finished dovetails should look



9

Put one of either the top or the bottom in the vice and carefully position the matching side on its end. Use a bench plane to support the other end, then knife the positions of the dovetail pins with care



10

Square the knife cuts down, mark the waste areas and cut on that side of the lines to form the dovetail pins



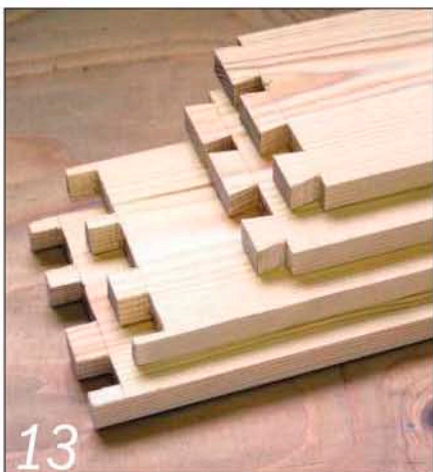
11

With a piece of spare timber cramped behind the work to act as a guide, use a coping saw to cut along the gauge line...



12

...before tidying up the shoulders with a sharp chisel, driven with the aid of a mallet. Make sure the chisel is held vertically



13

Check to see if the dovetails are going to fit, and make any necessary adjustments. Don't fully assemble the joint just yet, though



14

Get everything together that you'll need for your glue-up and assembly, including a paintbrush, a damp rag and all your cramps



15

If you've made a neat job of it, your joints should tap together in a very pleasing manner



16

Loosely cramp the job up, wipe off the worst of the excess glue and then measure the diagonals to check for square. If they're equal, it is. Adjust if necessary; when you're satisfied, tighten the cramps



17

Your final check will be for what woodworkers call wind (rhyming with behind). By sighting across the job from one side to the other, you can soon spot if the work is twisted. If it is, correct it by shifting your cramps and adding more if necessary



18

Once the glue has dried, cut out the case lid and bottom from thin plywood. Lightly glue the edges of the case and pin each panel into place. Take care to space your pins neatly, as this really gives a professional look



19

To make sure of a really tight joint, stick on strips of masking tape between the pins and punch their heads below the surface once you're done. Note the perimeter pencil guide to keep the pins on line



20

When everything is dry, clean up each corner with a sharp plane. Ideally your dovetail and pin ends will all be projecting very slightly, which will make this job easier



21

Use a pencil gauge (I converted an old marking gauge to make mine) to mark the cut line which will separate the lid from the body of the case. It's centred on the wide pin you marked in **step 3**



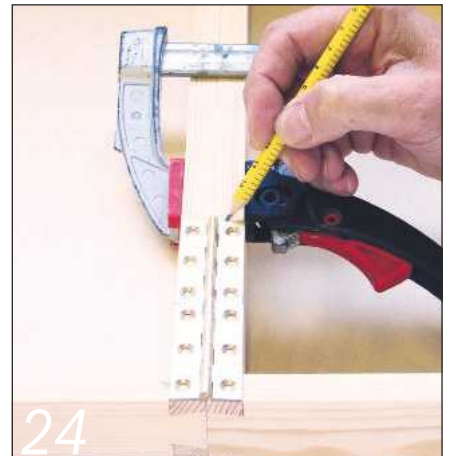
22

Use your favourite handsaw to do the deed. Take particular care here, as an erratic cut could ruin all your earlier hard work



23

Plane the rough edges until you're happy that the case and lid sit cleanly on each other. Make sure you match up the grain, and try to achieve the minimum gap possible



24

Once the edges are prepared, cramp case and lid together so you can mark out the hinge positions. It's customary to set them in from the end by one hinge length



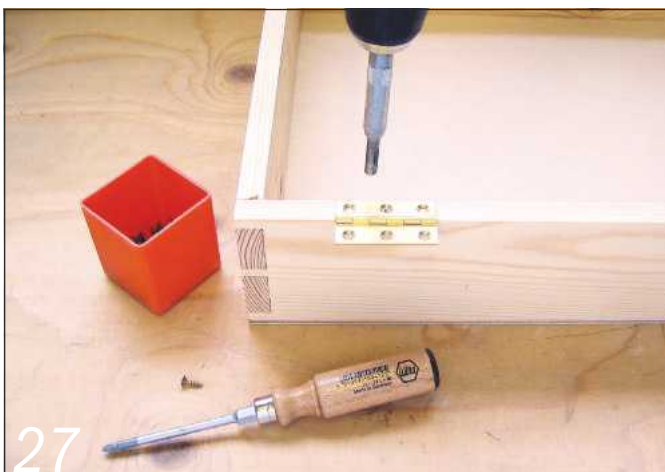
25

Set a marking gauge to the thickness of one of the hinge leaves, and use this to mark the hinge recess depth on the long sides of the case and lid



26

Carefully chop out the hinge recesses; this is made a lot easier if you can find hinges with leaves that match the thickness of your timber, as here



27

Fix the hinges initially with just one screw in each leaf, have a trial opening and adjust things if necessary. You've got two more screw chances to improve things, so just go one step at a time and don't panic!



CASE HARDWARE

Once you're satisfied with the closing of your case, fit the catches. Whichever style you go for, I would advise you to do a test fitting first to make sure that they close tightly. Add the handle (with small machine screws and nuts) and some feet. Then remove all the hardware again, apply a finish, put it all back on, and you're good to go! Case concluded...

NEW STORES
Luton now open
Cheltenham now open
Exeter opens November

Machine Mart

NOW 64 SUPERSTORES NATIONWIDE

WHERE QUALITY COSTS LESS

Clarke
TABLE
SAWS
CTS100

LEG STANDS AVAILABLE
FOR CTS11 & CTS100
£22.99 EX VAT
£27.59 INC VAT

FROM ONLY
£69.98
EX VAT
£83.98
INC VAT



INCLUDES LEFT & RIGHT TABLE EXTENSION

*Moulded base

MODEL	MOTOR	BLADE	EX VAT	INC VAT
CTS800B	600w	200mm	£69.98	£83.98
CTS11*	1500w	254mm	£139.98	£167.98
CTS100	1500w	254mm	£149.98	£179.98



CS4-6D
£84.99
EX VAT
£101.99
INC VAT

Clarke
4" BELT/
6" DISC
SANDER
 • Dust extraction facility
 • 4" x 36" belt tilts & locks 0-90°
 • 225mm x 160mm table, tilts 0-90°
 • 370w, 230v motor



Clarke
6" BELT/
9" DISC
SANDER
 • Includes stand
 • 1 Hp/ 230v/ 1ph motor
CS6-9C
£219.00
EX VAT
£262.80
INC VAT



Clarke
1" BELT & 5" DISC SANDER
CBS1-5
 • 5" dia. circular sanding disc runs at 2,800rpm
 • 1" x 30" sanding belt operates at 13.5 metres/sec.
£59.98
EX VAT
£71.98
INC VAT



Clarke
CONTRACTOR
RANDOM ORBITAL SANDERS
INC 6 DISCS
CROS2
£49.98
EX VAT
£59.98
INC VAT
 • For fast removal of paint or for fine swirl free finishing
 • 6 x 150mm diameter sanding discs
 • 4000-7000 rpm



evolution
255mm MULTI-PURPOSE TABLE SAWS
FURY 5 ONLY
£169.98
EX VAT
£203.98
INC VAT

MODEL	MAX DEPTH CUT (mm)	TABLE SIZE (mm)	EX VAT	INC VAT
FURY5	54mm	73mm	£169.98	£203.98
RAGE5	55mm	79mm	£279.98	£335.98

*FURY power: 1500w (110v available)
 *RAGE power: 1800w/230v table extensions included



Clarke
CIRCULAR SAWS
GREAT RANGE IN-STORE
CCS-2
£54.99
EX VAT
£65.99
INC VAT

MODEL	MOTOR	MAX CUT	BLADE	EX VAT	INC VAT
		90°/45°	BORE DIA.		
FURY	1200w	54/35mm	185/20	£54.99	£65.99
Clarke	1300w	60/45mm	185/20	£64.99	£77.99
CCS-2					
Makita	1200w	66/46mm	190/30	£109.98	£131.98
5704RK					
Rage	1050w	54/35mm	185/20	£89.98	£107.98



Clarke
SHEET SANDERS
CON300
£17.99
EX VAT
£21.99
INC VAT

MODEL	SHEET SIZE	MOTOR	EX VAT	INC VAT
COS200	190X90mm	150w	£14.99	£17.99
CON300	230X115mm	330w	£29.98	£35.98
Makita	112X102mm	200w	£56.99	£68.39
B0455				



Clarke
RANDOM ORBITAL SANDERS
CROS1
£27.99
EX VAT
£33.99
INC VAT
 • For sanding & polishing
 • 125mm diameter sanding discs
 • 4000-11000 opm
INC 5 DISCS



Clarke
CONTRACTOR
BELT SANDER
CBS2
£69.98
EX VAT
£83.98
INC VAT
 • Top mounted cable to keep clear of working surface
 • Two handles for increased control
 • Input power: 1200w
 • Belt size: 100x610mm
 • Belt speed: 480M/min



Clarke
DOVETAIL JIGS
 • Simple, easy to set up & use for producing a variety of joints
 • Cuts work pieces with a thickness of 8-32mm
 • Includes a 1/2" comb template guide & holes for bench mounting
 • Router not included
CDTJ24
£59.98
EX VAT
£71.98
INC VAT

MODEL	SIZE	EX VAT	INC VAT
CDTJ12	300mm	£59.98	£71.98
CDTJ24	600mm	£89.98	£107.98



Clarke
POWER PLANERS
CON1020
£29.99
EX VAT
£36.99
INC VAT
 • 82mm cutting width
 • 125mm diameter sanding discs
 • 4000-11000 opm

MODEL	INPUT POWER	DEPTH OF CUT	EX VAT	INC VAT
Clarke CEP1	650w	2mm	£24.99	£29.99
Clarke CON1020	1020w	3mm	£36.99	£44.39
Bosch PHO20-82	680w	2mm	£64.99	£77.99
Bosch GH026-82	710w	2.6mm	£129.98	£155.98



Clarke
ROTARY TOOL KIT
CRT40
£26.99
EX VAT
£32.99
INC VAT
 Kit includes:
 • Height adjustable stand with clamp
 • Rotary tool
 • 1m flexible drive
 • 40x accessories/consumables

Clarke
MULTI FUNCTION TOOL WITH ACCESSORY KIT

• Great for sawing, cutting, sanding, polishing, chiselling & much more
 • 230-240v, 250w motor
 • Variable speed 15,000 - 21,000 strokes/min
£36.99
EX VAT
£44.39
INC VAT



Clarke
BISCUIT JOINERS
CMFT250
£49.98
EX VAT
£59.98
INC VAT
 • 10,000rpm no load speed
 • 600w motor
 • 16mm max cutting depth
 • 100mm cutting dia.



Clarke
STATIC PHASE CONVERTERS
BJ600
£49.98
EX VAT
£59.98
INC VAT
 • For use with bigger woodworking machines inc. saws, planers etc.
 • Variable output power to match HP of motor to be run
ROTARY PHASE CONVERTERS ALSO AVAILABLE

Clarke
LIGHTWEIGHT ALUMINIUM
QUICK RELEASE ALUMINIUM SASH CRAMPS

MODEL	SIZE	EX VAT	INC VAT
CHT374	600mm	£6.99	£8.39
CHT375	900mm	£7.99	£9.59
CHT376	1200mm	£9.98	£11.98



Clarke
CONTRACTOR
CR2 ROUTER
£109.98
EX VAT
£131.98
INC VAT
 • Includes 15 piece router bit set worth over £20 INC. VAT

• Powerful heavy duty machine ideal for trade use
 • Variable speed control from 7,400-21,600 rpm
 • 2100w motor
 • 0-60mm plunge depth
 • 1800w CR3 Router with 15 Piece Bit Set also available only £94.99 £113.99



Clarke
ROUTER TABLE
CRT-1
£56.99
EX VAT
£68.39
INC VAT
 • Converts your router into a stationary router table
 • Suitable for most routers (up to 155mm dia. Base plate)

TACWISE
NAILERS & STAPLERS
DUO 50
£22.99
EX VAT
£26.39
INC VAT

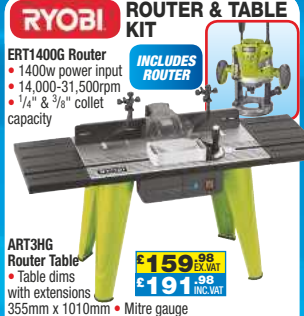
MODEL	TYPE	NAIL SIZE	EX VAT	INC VAT
140EL	Nail/Staple	10-15mm	£22.99	£27.59
181EL	Nail	10-35mm	£54.99	£65.99
DUO 50	Nail/Staple	15-30mm	£119.00	£142.80
400EL	Nail	15-40mm	£99.98	£119.98
DUO 35	Nail/Staple	15-30mm	£79.98	£95.98



Clarke
ROUTERS
RYOBI trend
CR1C
£39.99
EX VAT
£47.99
INC VAT

MODEL	MOTOR	PLUNGE (mm)	EX VAT	INC VAT
CR1C*	1200w	0-50	£39.98	£47.98
Ryobi	1400w	0-55	£99.98	£119.98
ERT1400R#				
Trend T5#	1000	0-50	£149.98	£179.98

* DIY # PRO



RYOBI
ROUTER & TABLE KIT
ERT1400G Router
 • 1400w power input
 • 14,000-31,500rpm
 • 1/4" & 3/8" collet capacity
£159.98
EX VAT
£191.98
INC VAT



Clarke
JIGSAWS
CS380
£17.99
EX VAT
£19.99
INC VAT
 *DIY #Professional

MODEL	POWER (W)	DEPTH OF CUT (WOOD/STEEL)	EX VAT	INC VAT
Clarke CSJ380*	420w	55/6mm	£14.99	£17.99
Clarke CON750#	750w	80/10mm	£29.98	£35.98
B & D KS600*	450w	60/5mm	£33.99	£40.79
Bosch PST700*	500w	70/4mm	£49.98	£59.98



Clarke
BELT SANDERS
BS1
£29.98
EX VAT
£35.98
INC VAT

MODEL	WATT	M/MIN	EX VAT	INC VAT
Clarke BS1	900w	380	£29.98	£35.98
Clarke CBS2	1200w	480	£69.98	£83.98
Makita 9911	650w	75-270	£94.99	£113.99



Clarke
HARDWOOD WORKBENCH
CHB1500
£129.98
EX VAT
£155.98
INC VAT
 • Includes guide holes and bench dogs
 • 2 heavy duty vices
 • Large drawer for tool storage
 • Dims: LxWxH 1520x620x855mm



Clarke
CONVERT 230V 1PH TO 400V 3PH
PC60
£229.00
EX VAT
£274.80
INC VAT

MODEL	MAX. MOTOR HP	FUSE	EX VAT	INC VAT
PC20	2Hp	10amps	£229.00	£274.80
PC40	3.5Hp	20amps	£269.00	£322.80
PC60	5.5Hp	32amps	£319.00	£382.80



Clarke
BOLTLESS SHELVING BENCHES
£29.98
EX VAT
£35.98
INC VAT
 • Simple fast assembly in minutes using only a hammer
QUANTITY DISCOUNTS
SAVE 10% WHEN YOU BUY ANY 5 PRODUCTS FROM THIS RANGE*
CHOICE OF 5 COLOURS
RED, BLUE, BLACK, SILVER & GALVANISED STEEL
150
PER SHELF
 (evenly distributed)
 Strong 9mm fibreboard shelves
350
PER SHELF
 (evenly distributed)
 Strong 12mm fibreboard shelves
MODEL
SHELF DIMS WxDxH(mm)
EX VAT
INC VAT
 150Kg 800x300x1500 £29.98 £35.98
 350Kg 900x400x1800 £49.98 £59.98



Clarke
PLANERS & THICKNESSERS
CPT800
£139.98
EX VAT
£167.98
INC VAT
 • Ideal for DIY & Hobby use
 • Dual purpose, for both finishing & sizing of timber
 *Max planing width 152mm

MODEL	MOTOR	MAX THICK. CAPACITY	EX VAT	INC VAT
CP-6	1100w		£139.98	£167.98
CPT600	1250w	120mm	£179.98	£215.98
CPT800	1250w	120mm	£199.98	£239.98



Clarke
WOODWORKING LATHES
CWL1000
£114.99
EX VAT
£137.99
INC VAT
 • 3 PCE CHISEL SET INCLUDED WITH CWL1000

EX VAT	INC VAT
£139.98	£167.98
£179.98	£215.98
£199.98	£239.98



Clarke
WOODWORKING LATHES
CWL1000
£114.99
EX VAT
£137.99
INC VAT
 • 3 PCE CHISEL SET INCLUDED WITH CWL1000

TURNING CAP.	TURNS SPEEDS	EX VAT	INC VAT
350mm	4	£114.99	£137.99
305mm	5	£199.98	£239.98

FROM ONLY

£114.99
EX.VAT

£137.99
INC.VAT

Clarke MORTISING MACHINE

• Accurately creates deep square recesses
• Table size 150 x 340mm
• Maximum chisel cap. 76mm
• Robust cast iron base & column ensures stability & accuracy

MODEL DEPTH EX. VAT INC. VAT

Clarke CBM1B 95mm £144.99 £173.99
Record RPM75 76mm £149.98 £179.98

CHISELS AVAILABLE FROM £7.99 EX VAT £9.59 INC VAT

visit machinemart.co.uk

FOR OVER 13,000 PRODUCTS

INCLUDING NEW **Xtra**

SPECIALIST PRODUCTS

NEW CLICK & COLLECT

NEW CATALOGUE

Over **600**

PRICE CUTS & NEW PRODUCTS

Machine Mart

NEW STORES

Over **600** PRICE CUTS AND NEW PRODUCTS

CLICK & COLLECT

GET YOUR FREE COPY NOW!

• INSTORE
• ONLINE
• PHONE

0844 880 1265

Clarke 12" CONTRACTORS SAW

INDUCTION MOTOR

CCS12

• 1600w motor
• 315/30mm blade / bore diameter
• 90mm max cut depth at 90°

FROM ONLY £239.00 EX VAT £286.80 INC VAT

Clarke SCROLL SAWS

CSS16V

• 120w, 230V motor
• 50mm max cut thickness
• 400-1700rpm variable speed
• Air-blower removes dust from cutting area

MODEL MOTOR SPEED EX VAT INC VAT

CSS400B 85w 1450 £64.99 £77.99
CSS16V 120w 400-1700 £84.99 £101.99

Clarke DUST EXTRACTOR/CHIP COLLECTORS

FROM ONLY £129.98 EX VAT £155.98 INC VAT

METABO ALSO AVAILABLE

• Powerful 750w motor
• 56 litre bag capacity
• Flow rate of 850M3/h

MODEL MOTOR FLOW RATE BAG CAP. EX VAT INC VAT

CDE35B 750w 850 M3/h 56Ltrs £129.98 £155.98
CDE7B 750w 850 M3/h 114Ltrs £139.98 £167.98

Honeywell 2.5KW STEEL BODIED ELECTRIC FAN HEATER

CZ2104E

• Thermostat
• Overheating protection
• Adjustable heat output
• Safeguard tip-over switching

FROM ONLY £38.99 EX VAT £46.79 INC VAT

Clarke QUALITY CAST IRON STOVES

BUCKINGHAM

REGAL II

• 18 GREAT STYLES AVAILABLE

FROM ONLY £113.98 EX VAT £139.98 INC VAT

Clarke WOODWORKING VICES

Record W7

FROM ONLY £13.99 EX VAT £16.19 INC VAT

MODEL MOUNTING JAW (WIDTH/OPENING) DEPTH EX VAT INC VAT

Clarke CHT152 Bolted 150/152/61 £13.49 £16.19
Stanley Clamped 72/60/40 £16.99 £20.39
Multi-Jaw Bolted 72/60/40 £16.99 £20.39
Record W75B Clamped 75/50/32 £18.99 £22.79
Clarke W7 Bolted 180/205/78 £24.99 £29.99

Clarke PORTABLE THICKNESSER

CPT250

• Max thickness capacity 130mm
• Planing depths adjustable from 0-2.5mm
• Powerful 1250w motor
• 8000rpm no-load speed

FROM ONLY £179.98 EX VAT £215.98 INC VAT

Clarke BANDSAWS

FROM ONLY £119.98 EX VAT £143.98 INC VAT

DEWALT

HUGE RANGE IN CATALOGUE & ONLINE

MODEL MOUNT MOTOR THROAT EX VAT INC VAT

Clarke Bench 350w 190mm £119.98 £143.98
CBS190 Floor 370w 245mm £179.98 £215.98
CBS250 Floor 1000w 315mm £499.00 £598.80
DeWalt Floor 1000w 315mm £499.00 £598.80

Clarke DUST EXTRACTOR

CDE1000

• 50 litre tank capacity
• 183 m³/h flow rate
• 1100W input wattage

OTHER MODELS AVAILABLE

FROM ONLY £99.98 EX VAT £119.98 INC VAT

Clarke CONTRACTOR 18V CORDLESS DRILL/DRIVERS

• 10mm chuck size
• 2 Speed, Variable control - 0-350/0-1250rpm
• 21 torque settings

FROM ONLY £69.98 EX VAT £83.98 INC VAT

MODEL BATTERIES EX VAT INC VAT

CON18Ni 2 x Ni-Cd £69.98 £83.98
CON18Li 2 x Li-Ion £89.98 £107.98

Clarke WHETSTONE SHARPENER

• Produces accurate razor sharp cuttings
• Edges on chisels, scissoring tools etc
• 120w motor
• Grinding disc dims: 200mm dia x 40mm x 12mm bore
• Wet bath

FROM ONLY £109.98 EX VAT £131.98 INC VAT

Clarke FOLDING SAW HORSES

CSB1

• Anti-slip top

PER PAIR £29.98 EX VAT £35.98 INC VAT

FOLDS FLAT FOR STORAGE

Clarke 1000M VARIABLE SPEED WOOD LATHE

CWL1000V

• Large 350mm turning capacity; great for producing stair spindles, balusters, table and chair legs etc.
• Lockable tailstock
• High quality cast iron build

FROM ONLY £269.00 EX VAT £322.80 INC VAT

Clarke DRILL PRESSES

• Tables tilt 0-45° left & right
• Depth gauge
• Chuck guards
• B=Bench mounted
• F=Floor standing

FROM ONLY £69.98 EX VAT £83.98 INC VAT

MODEL SPEEDS EX VAT INC VAT

CDP50D 250/5 £69.98 £83.98
CDP101B 245/5 £79.98 £95.98
CDP151B 300/5 £106.98 £128.39
CDP10B 370/12 £159.98 £191.98
CDP301B 510/12 £199.98 £239.98
CDP451F 510/16 £239.98 £287.98
CDP501F 980/12 £429.00 £514.80

Clarke BENCH GRINDERS & STANDS

• Stands come complete with bolt mountings and feet anchor holes

STAND AVAILABLE FROM ONLY £41.99 EX VAT £50.39 INC VAT

FROM ONLY £27.99 EX VAT £33.59 INC VAT

6" & 8" AVAILABLE WITH LIGHT

CBG8W features 8" whetstone & 6" drystone.
With sanding belt

MODEL DUTY WHEEL DIA. EX VAT INC VAT

CBG6RP DIY 150mm £27.99 £33.59
CBG6RZ PRO 150mm £37.99 £45.59
CBG6RSC HD 150mm £47.99 £57.59
CBG6SB* PRO 150mm £49.98 £59.98
CBG6RWC HD 150mm £54.99 £65.99
CBG8W (wet) HD 150/200mm £55.99 £67.19

airmaster TURBO AIR COMPRESSORS

• Superb range ideal for DIY, hobby & semi-professional use

BIG 2HP 7.8CFM

CLARKE 8MM AIR HOSE FROM ONLY £5.99 EX VAT £7.19 INC VAT

HUGE CHOICE OF STAPLE AND NAIL GUNS AVAILABLE

FROM ONLY £79.98 EX VAT £95.98 INC VAT

Clarke BOSCH CORDLESS DRILL/DRIVERS

PSR18

FROM ONLY £36.99 EX VAT £44.39 INC VAT

HUGE CHOICE IN-STORE AND ONLINE

MODEL VOLTS BATTS EX VAT INC VAT

CCD180 18v 1 £36.99 £44.39
CCD240 24v 1 £46.99 £56.39
Bosch PSR18 18v 1 £59.98 £71.98

EVOLUTION MITRE SAWS

RAGE3

Clarke

FROM ONLY £49.98 EX VAT £59.98 INC VAT

• Quality Range of Mitre saws and blades available

MODEL BLADE DIA MAX CUT EX VAT INC VAT

BT-MS2112 210/30 55/120mm £49.98 £59.98
Fury 3 210/25.4 60/200mm £119.98 £143.98
Clarke 254/30 78/340mm £129.98 £155.98
CMS10S2 Evolution 255/25.4 75/300mm £169.98 £203.98
Rage 3 Makita 260/30 95/130mm £199.98 £239.98
LS1040

Clarke 10" SLIDING MITRE SAW ON BASE

• For easy, precise and smooth cutting of wood parts
• Carbide tipped saw blade
• Rotating table for precise angle cuts ranging between -52° and +60°

FROM ONLY £159.98 EX VAT £191.98 INC VAT

RT-SM430U

• Includes laser guide

MODEL BLADE MAX. DEPTH EX VAT INC VAT

RT-SM305L* 210/30mm 65mm £159.98 £191.98
RT-XM305U 250/30mm 75mm £199.98 £263.98
RT-SM430U* 250/30mm 75mm £239.98 £287.98

Clarke 6" BENCH GRINDER WITH SANDING BELT

• For sanding/shaping wood, plastic & metal
• Supplied with coarse grinding wheel & sanding belt
• Complete with tool rest, eye shield & wheel guard

FROM ONLY £49.98 EX VAT £59.98 INC VAT

CBG6SB

Clarke MOTOR CFW TANK EX VAT INC VAT

BT-AC200 1.5Hp 6.2 24ltr £79.98 £95.98
Tiger 8/36 1.5Hp 6.3 24ltr £109.98 £131.98
Tiger 8/44 2Hp 7.8 24ltr £114.99 £137.99
Tiger 11/250 2.5Hp 9.5 24ltr £119.98 £143.98
Tiger 8/510 2Hp 7.5 50ltr £139.98 £167.98
Panther 10/500 2.5Hp 9.5 50ltr £159.98 £191.98
Tiger 11/510 2.5Hp 9.5 50ltr £149.98 £179.98
AM17EC150* 3Hp 14 150ltr £419.00 £502.80

*** Was £155.98 inc VAT * Was £203.98 inc VAT**
*** Was £191.98 inc VAT**

VAC KING WET & DRY VACUUM CLEANERS

Earlex

FROM ONLY £47.99 EX VAT £57.59 INC VAT

• A range of compact, high performance wet & dry vacuum cleaners for use around the home, workshop, garage etc.

MODEL MOTOR CAPACITY EX. INC. VAT

CVAC200P 1250w 16/12ltr £47.99 £57.59
WD1000 1000w 13.5/12ltr £59.99 £68.39
CVAC200S* 1400w 16/12ltr £59.98 £71.98
CVAC255S* 1400w 19/17ltr £64.99 £77.99
CVAC303SR* 1400w 24/21ltr £86.99 £104.39

*** SS = Stainless Steel**

Clarke RAGE3

FROM ONLY £49.98 EX VAT £59.98 INC VAT

• Quality Range of Mitre saws and blades available

MODEL BLADE DIA MAX CUT EX VAT INC VAT

BT-MS2112 210/30 55/120mm £49.98 £59.98
Fury 3 210/25.4 60/200mm £119.98 £143.98
Clarke 254/30 78/340mm £129.98 £155.98
CMS10S2 Evolution 255/25.4 75/300mm £169.98 £203.98
Rage 3 Makita 260/30 95/130mm £199.98 £239.98
LS1040

Clarke 10" SLIDING MITRE SAW ON BASE

• For easy, precise and smooth cutting of wood parts
• Carbide tipped saw blade
• Rotating table for precise angle cuts ranging between -52° and +60°

FROM ONLY £159.98 EX VAT £191.98 INC VAT

RT-SM430U

• Includes laser guide

MODEL BLADE MAX. DEPTH EX VAT INC VAT

RT-SM305L* 210/30mm 65mm £159.98 £191.98
RT-XM305U 250/30mm 75mm £199.98 £263.98
RT-SM430U* 250/30mm 75mm £239.98 £287.98

Clarke 6" BENCH GRINDER WITH SANDING BELT

• For sanding/shaping wood, plastic & metal
• Supplied with coarse grinding wheel & sanding belt
• Complete with tool rest, eye shield & wheel guard

FROM ONLY £49.98 EX VAT £59.98 INC VAT

CBG6SB

VISIT YOUR LOCAL SUPERSTORE OPEN MON-FRI 8.30-6.00, SAT 8.30-5.30, SUN 10.00-4.00 *NEW STORES

BARNESLEY Pontefract Rd, Barnsley, S71 1EZ B'HAM GREAT BARR 4 Birmingham Rd. B'HAM HAY MILLS 1152 Coventry Rd, Hay Mills BOLTON 1 Thynne St, BL3 6BD BRIGHTON 105-107 Manningham Lane, BN1 3BN BRIDFORD 123 Lewes Rd, BN2 3QB BURTON 13 Church Rd, Lawrence Hill, B55 9JJ BURTON UPON TRENT 12a Lichfield St, DE14 3QZ CAMBRIDGE 181-183 Histon Road, Cambridge, CB4 3HL CARDIFF 44-46 City Rd, CF24 3DN CHESHIRE 85 London Rd, CA1 2LG CHILTERNHAM 84 Fairview Road, GL52 2EH CHESTER 43-45 St. James Street, CH1 3EY COLCHESTER 4 North Station Rd, CO1 1RE COVENTRY Bishop St, CV1 1HT CROYDON 423-427 Brighton Rd, Sth Croydon DARLINGTON 214 Northgate, DL1 1RB DEAL (KENT) 182-186 High St, CT14 6BQ DERBY Derwent St, DE1 2ED DONCASTER Wheatley Hall Road DUNDEE 24-26 Trades Lane, DD1 3ET EDINBURGH 163-171 Piersfield Terrace	21226 732297 0121 358 7977 0121 7712433 01204 365799 01274 390962 01273 915999 0117 935 1060 01203 245 1080 01223 326275 029 2046 5424 01228 591666 01242 514402 01244 311258 01206 762831 024 7622 4227 020 8763 4620 01325 380 841 01304 373 434 01332 290 931 01302 245 999 01382 225 140 0131 659 5919	EXETER 16 Trusham Rd, EX2 80G GATESHEAD 50 Lobley Hill Rd, NE6 4XA GLASGOW 290 Gt Western Rd, G4 9EJ GLoucester 221A Barton St, GL1 4HY GRIMSBY Ellis Way, DN32 9BD HULL 8-10 Holderness Rd, HU9 1EJ ILFRD 746-748 Eastern Ave, IG2 7HU IPSWICH Unit 1 Ipswich Trade Centre, Commercial Road LEEDS 227-229 Kirkstall Rd, LE4 2AS LEICESTER 69 Merton Rd, LE1 6PN LINCOLN Unit 5, The Pelham Centre, LN5 8HG LIVERPOOL 80-88 London Rd, L3 5NF LONDON CATHFORD 289/291 Southend Lane SE6 3RS LONDON 6 Kendal Parade, Edmonton N18 LONDON 503-507 Lea Bridge Rd, Leyton, E10 LONDON 100 The Highway, Docklands Luton Unit 1, 326 Dunstable Rd, Luton L4 8JS MAIDSTONE 57 Upper Stone St, ME15 6HE MANCHESTER ALTRINCHAM 71 Manchester Rd, Altrincham MANCHESTER OPENSHAW Unit 5, Tower Mill, Ashton Old Rd MANSFIELD 169 Chandfield Rd, South MIDDLESBROUGH Mandale Triangle, Thornaby	01392 255 744 0191 493 2520 0141 332 9231 01452 417 948 01452 354435 01482 223161 0208 518 4286 01473 221253 0113 231 0400 0116 261 0688 01522 543 036 0151 709 4484 0208 695 5684 020 8803 0861 020 8558 8288 020 7488 2129 01582 728 063 01622 769 572 0161 9412 666 0161 223 8376 01623 622160 01642 677881	NORWICH 282a Heigham St, NR2 4LZ NOTTINGHAM 211 Lower Parliament St. PETERBOROUGH 417 Lincoln Rd, Millfield PLYMOUTH 58-64 Embankment Rd, PL4 9HY POOLE 137-139 Bournebank Rd, Parkstone PORTSMOUTH 277-283 Copnor Rd, Copnor PRESTON 53 Blackpool Rd, PR2 6BU SHEFFIELD 453 London Rd, Heeley, S2 4HJ SIDCUP 13 Blackfan Parade, Blackfan Rd. SOUTHAMPTON 516-518 Portsmouth Rd. SOUTHERN 1139-1141 London Rd, Leigh on Sea STOKE-ON-TRENT 382-396 Waterloo Rd, Hanley SUNDERLAND 13-15 Ryhope Rd, Grange Town SWANSEA 7 Samlet Rd, Llansamlet, SA7 9AG SWINDON 21 Victoria Rd, SN1 3AW TWICKENHAM 83-85 Heath Rd, TW1 4AW WARRINGTON Unit 3, Hawley's Trade Pk. WIGAN 2 Harrison Street, WN5 9AU WOLVERHAMPTON Parkfield Rd, Bilston WORCESTER 48a Upper Tything, WR1 1JZ	01603 766402 0115 956 1811 01733 311770 01752 254050 01202 717913 023 9265 4777 01772 703263 0114 258 0831 0208 3042069 023 8055 7788 01702 483 742 01782 287321 0191 510 8773 01792 792969 01793 491717 020 8892 9117 01925 630 937 01942 323 785 01902 494186 01905 723451
---	---	---	---	--	---

Massive Discounts on Planer Blades

Sizes and prices

310mm £8.12 each
350mm £8.99 each
410mm £10.20 each



**Tersa
M42+**



**Hand
held
Makita**

£3.85 per pair

Sizes and prices

310mm £7.65 each
350mm £8.42 each
410mm £9.20 each



**Tersa
HSS**



Woodstar

Prices per pair

Model PT 106 £19.95
Model PT 85 £19.95

Sizes and prices

310mm £7.25 each
350mm £8.10 each
410mm £8.61 each



**German
Tersa
M42**



Charnwood

Prices per pair

Model W575/1 £14.99
Model W588/1 £17.99
Model W585/1 £16.99
Model W570/1 £14.99

Sizes and prices per pack of 6

260 £31.80 inc vat
310 £37.80 inc vat
410 £41.90 inc vat
510 £47.40 inc vat



Felder



SIP

Prices per pair

Model 01335 £19.99
Model 01552 £13.99
Model 01543 £19.99

Sizes and prices per pack of 3

260mm £24.99
310mm £29.99
410mm £35.99



Hammer



FOX

Model 22-564 8"
£16.99

Sizes and prices per pair

85mm x 5.5mm x 1.1mm
80mm x 5.5mm x 1.1mm
75mm x 5.5mm x 1.1mm
Dewalt Model £3.99
Bosch Model £3.99



**Dewalt/
Bosch**

Woodford
WOODWORKING
MACHINERY • TOOLING LTD

Many more sizes and makes available. Please contact us at:
0161 439 5683
www.woodfordtooling.com





BY IAN WILKIE

Stars in stripes

In last month's article I explained how to prepare accurate, thin strips of wood for inlay work, edging, modelmaking and the like. Here I'll show you some projects made from contrasting hardwood strips which have been made up into sheets

My method involves gluing the strips to a 1mm thick plywood backing. You could use veneer to achieve similar effects; however, it's very satisfying to use wood you've prepared yourself if you have the machines and the skill and aren't in a great hurry. This type of woodwork does need patience and attention to detail, and you must be prepared to reject anything that doesn't go together accurately.

Arranging the strips

The effect works best if the strips contrast noticeably in colour. For instance, sycamore and walnut work very well, while sycamore and steamed pear give a softer appearance. Old, recycled mahogany is very useful too. The strips shown for most of the projects here are 10mm wide, but one example has alternate bands 10 and 20mm wide. Lay out the strips in the pattern you want on a piece of 1mm birch plywood just slightly over the size you require, **photo 1**, to give you some room for manoeuvre.

Making up a sheet

Glue down the first strip and hold it in position until the glue grabs. I've found that Wudcare 5-minute super-fast PVA adhesive works well for this. I apply it with a brush to avoid any staining. Continue to glue on the strips, finishing up with one the same colour as the starter strip.

Let the glue grab for a while to ensure that the strips don't slip; then cover the sheet with a board offcut and weight it down. I have several old cast-iron weights which I've bought from junk shops, cleaned up and painted. Glue a piece of ply or mdf to the bottom of the weight to reduce the risk of it marking your work.

Sand the sheet smooth when the glue has cured, **photo 2**. Then either varnish the sheet now or leave it until the wood has been turned into a project. My sheets of walnut and sycamore and steamed pear and sycamore are now ready for use, **photo 3**.



TOP TO BOTTOM

This rectangular container has two striped sides, two plain sides in walnut, a sycamore frame around the top and a plywood base. Mine is about 170mm high and 70mm square. Start making it by cutting the four pieces that make up the sides of the container. Note that on the four striped sides the light wood strips need to be at the edges so that the vertical striped pattern is maintained where they join the darker plain walnut sides.

Rout a rebate 6mm wide and 2mm deep along the bottom inside edge of all four pieces. Rout a 2mm deep rebate along each long edge of the two plain sides, wide enough to match the thickness of the front and back. Remove any fibre whiskers with fine abrasive paper.

Assembly time

Fit the components together as a dry run first, make any adjustments and then glue them and clamp them up, **photo 1**. Cut a piece of 6mm ply and sand it to fit into the bottom rebates to form the base, **photo 2**. Then sand the top edges absolutely flat; a disc sander is good for this, **photo 3**.

Next, cut the four pieces of sycamore to make a frame for the top and mitre the corners, **photo 4**. This frame neatens up the top and protects the edges of the plywood sides. Glue the pieces to the container, **photo 5**, place a scrap of mdf on top and hold it down with a weight. When the glue has dried, apply a coat of clear varnish and the job's done, **photo 6**.

ROUND AND ROUND

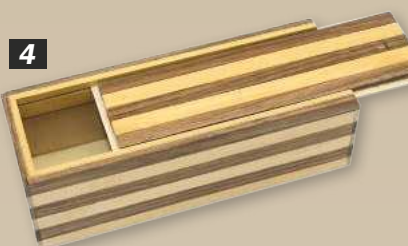
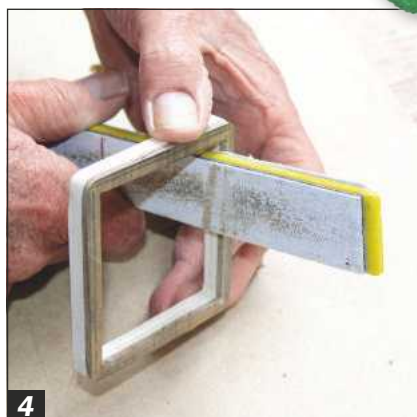
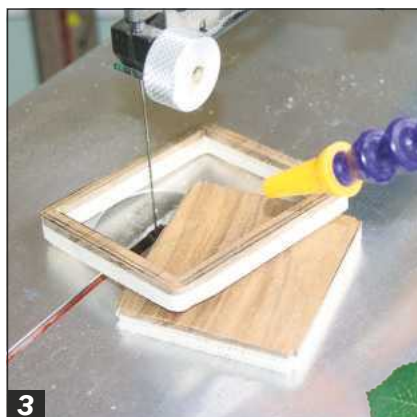
This container is 80mm high and about 90mm square, and the banding runs horizontally round all four sides. The two central sycamore strips on each side are twice as wide as the pearwood ones. Again it has a plywood bottom, and a walnut frame on the top.

Cut the four pieces exactly the same size. Make sure that the same coloured strip runs right round the container, **photo 1**; you need to work this out first before you cut the panels. The bottom edge of each piece is routed all round to accept the base, and the vertical edges of two of the side pieces are also routed; all the rebates are 6mm wide and 2mm deep, as before. Glue and cramp up the sides, **photo 2**, and insert the base.

A one-piece frame

For this project I cut the top frame out on the scrollsaw from one piece of thin walnut, **photo 3**, held to a scrap of backing plywood with double-sided tape. Cutting very small mitre joints is tricky and doesn't always succeed; this method guarantees a neat finish. I sanded the inside of the frame, **photo 4**, and then removed the backing ply before gluing it to the top rim of the container.

I sized this project carefully to fit round a small square glass container, **photo 5**, making it a perfect specimen vase.



OPEN-AND-SHUT CASE

This container is a traditional pencil box with a sliding lid. It has horizontal banding on the four sides and the lid, and a plain plywood bottom.

Make up the carcass as described earlier; note that one end of the box is 5mm smaller than the other to allow the lid to slide in and out.

Glue and cramp narrow strips of hardwood to the sides and end of the box, **photo 1**, with their top edges about 5mm below the top edges. When these are dry, glue a further three narrower strips above them, leaving a 1.5mm gap in between to form a groove in which the edges of the lid will slide.

Making the lid

Glue the piece of banding that will form the lid to a sheet of 1mm thick plywood sized so it projects by 4mm at the end and along the sides. Check its fit in the grooves, **photo 2**. Then gently chamfer the long edges of the banding with an apron plane, **photo 3**, and make a D-shaped fingernail notch at one end with a small carving chisel. Check that the lid slides in and out smoothly, **photo 4**; you can apply a little wax to the edges to facilitate this.

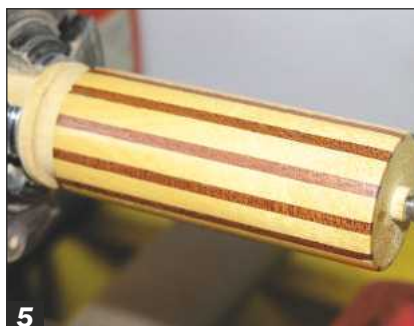


SANDER UPGRADE

The 125mm Proxon disc sander comes with a silicone film for the surface of the plate which gives it a very flat surface and makes changing discs easy. Readers who have the larger 250mm model may be interested to know that a similar film disc is now available with a diameter to suit the bigger sander, which is a great improvement.

To fit it, first remove the old sanding disc; a hair dryer is good for this, **photo 1**. Clean the surface thoroughly to remove any residual stickiness; Sticky Stuff Remover works very well, **photo 2**. Now align one side of the self-adhesive silicone disc to the plate, **photo 3**, and peel away the backing as you press the rest of the disc into position.

When you put on a new sanding disc it will now be absolutely flat, **photo 4**, and easy to remove from the film, which remains in place. When you remove a sanding disc, place it on the 'keeper' to avoid any dust getting on the disc; then it can be used again. In this way you can go from coarse to fine with no bother at all, rather than making do with whatever disc is on the sander.



ODDS AND ENDS

I experimented with the last full sheet of glued-up stripwood and cut it accurately into strips 10mm wide. The strips were then offset and glued to the top of a box lid to produce a chequered effect, **photo 1**. This was fun to do, and shows what scope there is for design variety using this technique. By varying the widths of the strips, the way the sheet is cut and the colours of the woods used, you can produce any number of geometric patterns.

Don't waste any remaining offcuts. Glue them to thicker plywood and round off the corners, **photo 2**, apply several coats of varnish and you have a useful coaster or two!

Last but by no means least, I made this little turned vase for dried flowers, **photo 3**, by gluing thin strips of reclaimed mahogany into routed grooves on a cylindrical sycamore blank. I then planed away the surplus wood with the blank held in the bench vice, **photo 4**. Finally, the blank was turned between centres, **photo 5**, hollowed out and fitted with a separate turned top and bottom to finish it off.

Bring on the **new signings.**

The best you can get on the transfer market.



You'll never work alone.

SERVICE
all-inclusive



Meet our 11 new German Engineered stars at a dealer near you. These players are recognised for power and accuracy together with a rugged design for tough work.

For fastening, drilling and sawing, these tools only have one goal; to make your daily work faster and better.

For a demonstration of their performance visit your local dealer or www.festool.co.uk for more information

FESTOOL

Tools for the toughest demands

www.festool.co.uk



PRECISION CUTTING

Close cutting

The slim blade guard allows a cut within 18 mm of a wall.



Blade diameter

165mm blade

Veritable speed dial

2,000 - 5,200 rpm

Rubberised grip

Ergonomic soft grip for better working comfort.

Dust extraction

Dust extraction can easily be attached to the SP6000J1 by attaching the hose to the ejection port on the back of the machine.

Adjustable depth and bevel angle

Plunge depth: 0-55mm
Bevel angle: 0-45°



Guide rails & accessories

1.4 meter guide rail: 194368-5

3 meter guide rail: 194367-7

Guide rail connector x1: P-45777

Guide rail connector x2: P-20177

Clamp Set: 194385-5

Adjustable bevel guide: 194433-0



Connector case

The SP6000J1 comes with a 821552-6 connector case



Plunge Cut Saw SP6000J1

Blade diameter	165mm
Bore diameter	20mm
Max. cut @ 90°	55mm
45°	39mm
Input wattage	1,300w
No load speed	2,000-5,800rpm
Net weight	4.4kg



Watch the video



Makita SP6000J1
Scan the QR code or visit
www.makita.uk.com



Visit www.makita.uk.com
to register for your Makita
3 Year Warranty.
Terms and conditions apply.



Follow to be entered into the prize draw.
Web: www.makita.uk.com



BY MICHAEL FORSTER



Going into space

It was a wet summer's day in London when an email came through, stopping the rain and bringing out the sun by telling me that contracts had finally been exchanged on my new workshops. I was going into space

The workshops in question are set in a beautiful garden, at the end of which is a bungalow – very convenient for living in during breaks from woodworking. Woman with Ring on Finger, of course, saw it differently. 'Workshops? Oh, you mean we've got the bungalow!' Priorities never were her strong point...

A simple request

When we decided to move house, I set just one definite condition: I wanted a bigger workshop. With all my kit and a number of machines crammed into a 14 x 7ft space, **photo 1**, I was quite literally feeling the pinch. In particular, I wanted to be able to leave machines in position and not have to wheel one into a corner and another out at every change of operations.

When preparing timber, I always like to have a planed, true face against the fence while ripping to avoid cumulative errors, which means I need to alternate between saw and planer – close to impossible in that set-up, **photo 2**. Who knows? With some

extra space available, I might almost find timber prep enjoyable again!

What I've now got isn't just a bigger workshop, **photo 3**; it's far better. A small purpose-built workshop stands beside a large single garage with a handy personal-access door, as shown in the main photo. This means that I can have a dedicated space for machines, **photo 4**, and a similar one for handwork – the stuff I really enjoy and that which occupies most of my time.

Moving in

I found myself facing a dilemma as we unloaded the removal vans. Should I begin by setting up the workshops so I'd be fully equipped to tackle all the work I knew would be needed in the house... and the additional list that was bound to emerge as we got things the way we wanted them? There was a definite logic to that approach, but somehow I couldn't see myself convincing Woman with Plans of that, so I settled for getting out the essential kit and setting up a temporary 'shop indoors, in what would later become my

study. However, that left a lot of valuable kit sitting in insecure outbuildings screened by trees at the other end of the long garden. If nothing else, I had to attend to their security.

Boarding up

The logical starting point was the obvious stuff: the door locks. Each building had two – a night latch and a mortise lock – but only the night latches worked, and they could be opened easily after smashing a pane of glass in each door and reaching inside, **photo 5**.

The first quick solution was to screw a piece of mdf to the inside of each door, behind the glass. Sadly this reduced the light entering the building, but it was only temporary. Later, I'd change those night latches to the kind that can be deadlocked from outside. Ten minutes' work had made a massive improvement in the security.

Quick fixes

My next task was to adjust the mortise locks so they worked – a simple matter of realigning the striker plates. Again, I'd upgrade the three-lever



1 My previous workshop contained all my woodworking equipment...



2 ...and cramped was certainly the word! It was definitely no Tardis



3 My first sight of the spacious new workshop interior was like a dream come true!



4 I planned to use the garage as a dedicated machine shop

5 Night latches on single-glazed doors offer very poor security. These had to go



6 The monitored alarm system was extended from the house to the workshops



locks to more secure five-lever versions one day soon, but for now I was simply buying time.

The garage was also fitted with a metal up-and-over door, the lock on which was probably about as effective as that on a 1970s Ford Escort. The door's too useful to disable permanently, but I did need an effective quick fix. Some wooden blocks attached to the inside of the frame with long screws should make forced entry a laborious and noisy affair at the very least, while a couple of G-cramps on the tracks quickly provided a second line of defence.

Enjoying the view

None of the windows actually opens, and they all look out on the garden rather than the road – but I was glad, even so, that the previous occupier had fitted curtains to foil prying eyes on the lookout for easy pickings. We considered fitting bars or grilles to the windows, but haven't actually done anything yet. These, after all, are domestic outbuildings and as such are part of our garden scenery, and all things considered I'm not sure whether bars are appropriate or overkill – especially in view of what I'm coming to next.

Getting alarmed

Alongside all this activity, the domestic moving-in process continued, and one of our priorities was a monitored burglar alarm system. We'd really valued the peace of mind this had given us in our previous house, and were keen to get a similar one for the bungalow. So it was a fairly simple matter to include the workshops as a separate zone, and a few extra pounds got us a prominent ADT bell-box on each shop as well. As is fairly well known in the circles where it matters, ADT only do monitored alarms – and only supply boxes to genuine clients – so their logo is a good deterrent. They also fitted double PIR detectors in the two workshops, **photo 6**, to ensure an immediate no-questions-asked police response if they were broken into.

Thinking on the job

With workshop security vastly improved and further developments scheduled, I was able to focus my mind on the moving-in process – but of course the workshops were never far from my thoughts as I worked with minimal kit, in what was supposed to be my study, to get the dreaded household DIY jobs out of the way.

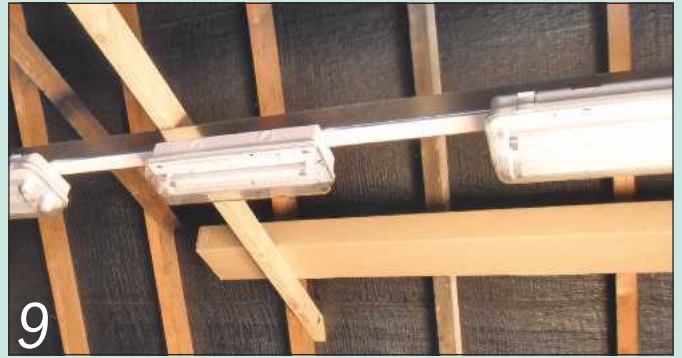
While I was drilling, screwdriving and hammering indoors, my mind was full of workshop plans, and I quickly realized that with all the extra space I could now



7
The machine shop electrics consisted of a few plastic power points in all the wrong places



8
The existing lighting was provided by a couple of low and unprotected fluorescent tubes



9
New shielded tubes located high up in the roof space will flood light down into the work area



10
A complete rewire began with a small modern consumer unit fitted with a residual current circuit breaker for safety



11
Metal-clad socket outlets are much more suitable than plastic ones in a workshop. I made sure I had plenty of them

12

I now have a dedicated 16-amp supply for my new bandsaw



accommodate some serious kit – but not before I'd had the electrics checked out and upgraded, and had paid attention to other safety-related matters which were all best carried out now, before the shops were in regular use.

Power play

The electrics in the machine shop consisted of some old plastic power points, **photo 7**, with lighting provided by a couple of dangerously low-slung and unprotected fluorescent tubes, **photo 8**, all powered by a cat's cradle of surface-run cables. It was time to call in the electrician.

He began by suggesting that I fix horizontal braces across the rafters to provide mounting points for a steel duct that would carry the new cables and some modern, well-protected fluorescent tubes, **photo 9**, set high in the roof-space to flood light down into the work area.

Thus began a complete rewire of the machine shop, including a new consumer unit, **photo 10**, lots of metal power points, **photo 11**, and emergency lighting. Sparky also modified the supply from the house to ensure that any accident in the machine shop didn't plunge the house into darkness, and included a 16-amp connection, **photo 12**, for the new industrial bandsaw I'd bought to celebrate my extra space. Now that's a point to emphasize: before buying any big machine of that kind, get

your electrics checked out to make sure you can actually power it.

The electrics in the nearby joinery shop weren't ideal but they were safe to use, so they're staying untouched until I've used the place enough to know what's needed.

Staying safe

I've never had a serious injury while woodworking – largely (I flatter myself) because I generally observe some very simple rules: keep hands behind cutting edges, use the machine guards, don't wear loose clothing when machining, stand to one side of the planer and so on. But there's a bit more to being safe than that – and everyone is subject to the occasional lapse. So it seemed right at this stage of the setting-up to think about incorporating some basic safety features.

I first ordered some fire extinguishers – one for each shop – taking some time to research and choose the most useful types. For this, you need to consider what's going to be kept in there. I went for the universality of dry powder, as it can be used on both electrical and chemical fires as well as to extinguish more mundane combustibles.

When it comes to fire, prevention is clearly the best approach – and like most people, I guess, I keep a small amount of chemicals in there which really should be in a metal cabinet. The COSHH (Control of Substances Hazardous to Health) regulations don't apply

in a domestic workshop, but they do provide a good guide nonetheless – and observance would put me in a good position if I ever did have an insurance claim. Oh, and the yellow cabinet with red symbols certainly brightens up the dull machine shop, **photo 13**, which is a bonus!

Being prepared

A proper first aid kit was also on my 'start-as-you-mean-to-go-on' list – but I wasn't sure what it ought to contain as my experience in this field is well out of date. The easiest and probably best way was to hit the St John Ambulance website and check out their kits. Again, I'm not obliged to observe industry standards in this area, but they do provide a useful yardstick for someone lacking specialist knowledge, and St John Ambulance offer kits specifically designed for different situations. Their 'small workplace box' met my needs pretty well, **photo 14**.

Dealing with dust

Dust management was high on my list. It's not the most popular area for spending money – a nice rosewood-and-brass infill plane would have been more exciting. However, dust is a serious health and safety issue. The high-pitched roofs on both shops had caught my eye right from our first viewing of the property – somewhere to install extraction ducting where I wouldn't be banging my head on it.



13

This colourful metal cabinet provides a safe storage space for flammable materials



14

A simple first-aid kit is an essential feature, even if it's rarely needed (I hope!)



15

My ambient air cleaner is now way up in the roof space for best effect



16

If you're using plastic ducting, be sure to earth it against static build-up



17

I replaced the top bag on my main extractor with an optional fine filter unit



18

Cleaning the floors is a job for my shop vac, which also has a fine filter

I also took the opportunity of getting my ambient air cleaners up there out of the way. These devices supplement the extraction by filtering out any very fine dust (the really dangerous kind) left suspended in the air. The Microclene in my joinery shop is set on a timer so that it runs for two hours twice per day – as I don't make a great deal of dust in that shop, that's more than enough. In the machine shop, my Jet air cleaner with its remote control and timer settings can also be high up out of reach, **photo 15**. It runs off a dedicated roof-space power point installed as part of the rewire.

Plumbing it in

Primary dust extraction in the machine shop is through 100mm ducting. As I never could cope with working metal – and time was pressing by now – I went for Axminster's kit of clear plastic tubing and fittings, which costs about £140. It's not as robust as a metal system, but it's cheap and for most home workshops it's very simple to install, **photo 16**. However, it did need to be earthed to prevent the movement of dust from causing a build-up of static electricity, which can be a fire hazard if a spark finds its way in. Axminster supply a simple grounding kit for this, costing just £18.

The power is provided by a bag-over-bag extractor, but I've replaced the bag with a fine filter, **photo 17**. I know I've got the air cleaner, but preventing as much dust I can from getting into the air in the first place has to be a good thing.

Separate extraction

The mitre saw and router table don't really lend themselves to 100mm extraction, so I have a separate vac serving those two machines. For a while I also used this for the floor, but quickly realized that it wasn't a good idea if I wanted to be kind to the planet. The waste from the machines is pure wood dust and therefore recyclable, but once it's contaminated with general workshop debris it's only really fit for landfill. So I got myself a dedicated shop vac just for the general cleaning up, **photo 18**. That little lot should help even me to keep things reasonably clean and tidy.

Most, although not all, of this activity had centred on the machine shop. The small joinery shop was pretty well ready to use. The main task would be installing my own bench in place of the one left behind by the previous owner, and then unpacking and arranging all my kit... and I was really looking forward to that! Don't miss the next instalment in the January issue, which is on sale in mid-December.

Invisible, secure and highly configurable...

the strong and robust fastener for all your furniture and interior projects



...with practical accessories

jigs and marker tools to make fitting easy, quick and precise



button-fix™
the secret fixing for panels



To find out more...

- visit www.button-fix.com
- Email: info@button-fix.com
- call us on +44 (0)20 8150 7190
- follow us on twitter @buttonfixjulie
- request a FREE sample pack TODAY!



Manufacturers of Timber Drying Kilns for over 30 years!

Small Commercial Timber Drying Kiln

Kiln Services was established in 1975 and is today the leading U.K. manufacturer of timber drying and heat treatment kilns.

We manufacture a full and comprehensive range of conventional Hardwood and Softwood Drying kilns, Pallet Drying/Heat Treatment Kilns, conforming to ISPM15 and De-Humidifier Kilns.

Kilns can be loaded using fork lift trucks or trolleys on track. We provide a complete service including design, manufacturing, installation, training and commissioning.



Kiln showing fans and motors

Ideal for drying small batch loads of either hardwood or softwood

List Price: £19200 - Offer Price: £15600

Drying time for 1" oak from an air dried condition of approximately 28% down to 10% would be 12-14 days. 1" softwood from fresh sawn can be dried in 3 days.

- Timber stack size 5 Metres long x 1.5 Metres high x 1.2 Metres wide giving a capacity between 3 and 5 Metres³.
- All aluminium heavy frame with 100mm thick aluminium insulated panels and silicone seals.
- Aluminium door with omega silicone seals and stainless steel door hinges.
- Aluminium axial fans with housing, Class H Siemens motors suitable for high temperature and humidity.
- Aluminium fan bulkhead and intermediate ceiling.
- Heat exchangers with extruded aluminium fins.



Drying programs for over 100 species of wood are included!

Kiln during manufacture

- Timber moisture content readout system with 4 wood measuring points to allow monitoring of the drying process.
- Steam humidification system for pre drying and conditioning phases.
- Kiln ventilation system for control of the relative humidity.
- Fully automatic control panel with setting points for relative humidity and temperature.
Actual kiln conditions are continuously displayed at the control panel.
- Purpose made track and trolley system for loading/unloading.



This kiln can be connected to any existing hot water supply with a spare capacity of 18kw and water temperature of between 80 and 90 degrees centigrade. A 3 phase electricity supply is also required along with a mains water connection to the steam humidification system.

Tel: 01621 785935 • Fax: 01621-785937 • e-mail: kilnservices@btconnect.com

Kiln Services Limited • Rowan House, Burnham Business Park, Burnham On Crouch, Essex CM0 8TE

HAPPY HOBBY DAYS



Scheppach BTS 800
Belt & Disk Sander
HEAVY DUTY CAST IRON
£144.00 inc VAT!

**Inc
1400mm
rail**



Scheppach PL45 & HD2P
Plunge saw & Extractor + Vac + Inflator
145mm PLUNGE SAW WITH 3 IN 1 VAC AND BLOWER KIT
£199.00 inc VAT!

**FREE
103 PC
TOOLKIT!**



Scheppach SD 1600F
Scrollsaw & model making
System
COMPLETE WORKSHOP KIT
£129.95 inc VAT!



Scheppach Basa 1
8" Heavy duty Benchtop
Bandsaw
ULTIMATE BANDSAW TECHNOLOGY
£179.95 inc VAT!



Scheppach HS 120-o
Standard Site Sawbench
INC MITRE FENCE ONLY
£279.00 inc VAT!



Scheppach PL 55
155mm Plunge Saw
INC 2 1400mm TRACK & ACCESSORIES
£239.95 inc VAT!



Scheppach Tiger 2000s
Wet Stone Sharpener
BEST SELLER
£119.95 inc VAT!



Scheppach HD2P
Vacuum, Extractor, Inflator
3 IN 1 VAC/BLOWER KIT
£62.95 inc VAT!



Scheppach OSM 100
Oscillating Sander Machine
BEST SELLER
£149.50 inc VAT!



Scheppach HMS 2000
Planer & Thicknesser
NEW MODEL FOR 2013
£295.00 inc VAT!

NEW!



Scheppach HA 1000
Dust Extractor inc 7 pc
Reducer Kit
BEST SELLER
£119.00 inc VAT!

WARM WINTER NIGHTS



Scheppach HBS 20
205mm Benchtop Bandsaw
BEST ENTRY LEVEL BANDSAW

£109.95 inc VAT!



Scheppach HL 520
Horizontal Hydraulic Log Splitter
VARIABLE STROKE SETTINGS

£289.95 inc VAT!



Scheppach OX-1 650
Vertical Hydraulic Log Splitter
PROFESSIONAL PERFORMANCE

£599.00 inc VAT!



Scheppach HA 1600
Dust & Chip Extractor
BEST SELLER

£199.95 inc VAT!



Woodster ST 12
12" Site Saw with STC

BEST SELLER

£299.95 inc VAT!



Woodster ST 8
8" Bench Mounted Hobby Saw Table

AMAZING VALUE

£95.00 inc VAT!



Woodster LH 45
Horizontal Hydraulic Log Splitter

BEST SELLER 4 TON LOG SPLITTER

£199.95 inc VAT!



Woodster PT 65
Planer & Thicknesser
AMAZING VALUE

£199.95 inc VAT!



Woodster SD 16
Hobby Scrollsaw
AMAZING VALUE

£99.95 inc VAT!



Woodster SL10LU
10" Sliding Compound Mitre Saw
INC FLOOR STAND

£179.95 inc VAT!



Woodster SW 41
Light Duty Swivel Log Saw
MOTOR RATING INTERMITTENT

£269.00 inc VAT!

All prices valid until 20th December 2013

Tel: 01484 400488
Email: sales@nmauk.com

Birds Royd Lane, Brighouse, West Yorkshire HD6 1LQ



BY FRED & JULIE BYRNE

THE SANTA EXPRESS!

Advent calendars have been a popular way to count down the days until Christmas since the early 19th century. Here's a variation on the theme that builds up day by day into a festive train

The Santa Express is a great way for children to count the days before Christmas. It consists of 24 separate components, each concealed in a numbered envelope. One is opened each day to reveal a part of the train itself, a piece of luggage or one of its passengers, with Santa himself appearing on the last day to complete the train. We've kept the design simple so you have time to make it before December arrives.

Magic magnets

The train is a free-standing construction made from 3 and 6mm thick birch plywood. The train crew, the passengers, the parcels and Santa are held in position with strips of self-adhesive magnetic tape (easily obtainable on the internet – see the web



YOU WILL NEED...

A scrollsaw plus a No 5 reverse-tooth blade and No 3 regular or double-skip tooth blade

A pillar drill fitted with a 1.5mm diameter twist drill bit

Abrasive paper in 180, 240 and 320 grits

Masking tape (narrow and extra-wide)

Adhesive tape (extra-wide)

Double-sided tape

Glue stick or aerosol adhesive

Self-adhesive magnetic tape (types A and B – see the panel on page 45)

Circle template (optional)

PVA wood adhesive

Acrylic sealer and paints

Length of cord or thin leather

Envelopes – see the panel on page 45



links listed at the end of the article). Of course, you may be lucky enough to have a local hardware or craft shop that stocks it.

Start by making two copies, enlarged from A4 to A3, of each of the drawings of the engine, tender, carriage and goods van. The second copy will be used later for cutting out the wheels, but if you have a circle template with 25 and 21mm circles, only double up on the engine pattern for its large spoked wheel. Similarly, take three copies of the sleigh, two of which will be used to cut out Santa and the presents later. You'll need just one colour copy of the crew, passengers and numerals.

Making the patterns

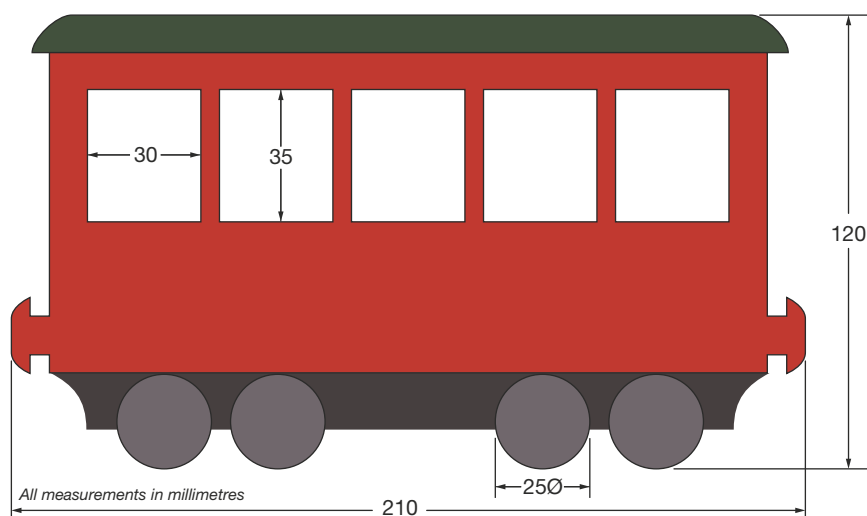
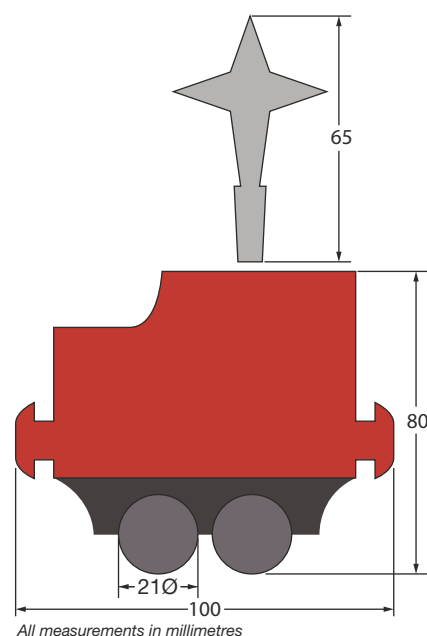
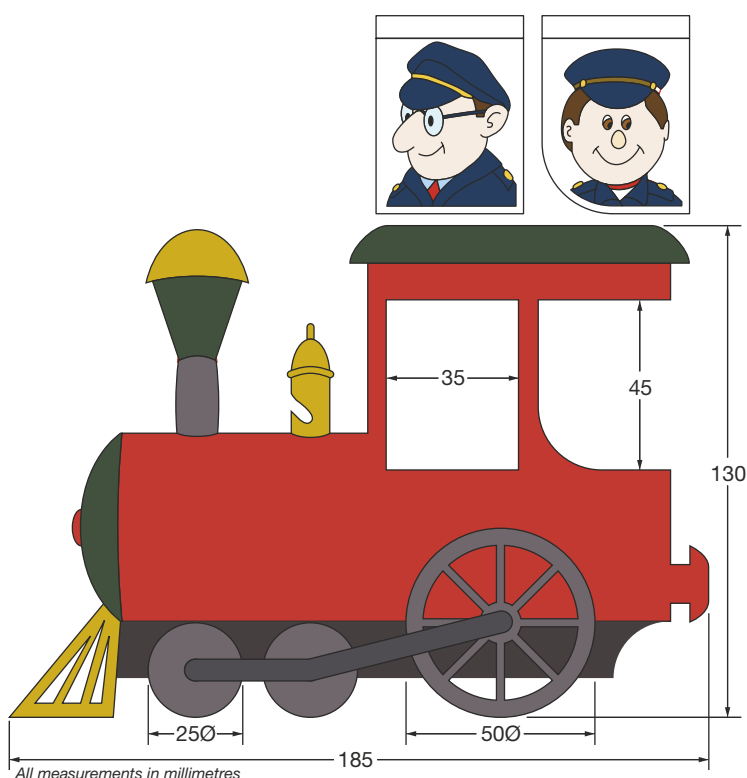
Cut all the plywood sections to size (see the cutting list) and sand the surfaces with 180 and then 240-grit abrasive paper. This will save time later, as you will need only to de-burr and slightly round over the edges when you cut them out on the scrollsaw.

Cover the surface of each piece of plywood with strips of extra-wide masking tape before gluing on the patterns. This makes it much easier to remove them after cutting them out.

Cutting out the engine

Drill 1.5mm blade entry holes within the patterns for the engine, the carriages, the large engine wheel and the sleigh. Place a piece of scrap ply beneath the piece you're drilling to ensure you get clean exit holes.

Use a No 5 reverse-tooth blade for cutting the 6mm plywood, and a No 3 regular or double skip-tooth blade when cutting the 3mm ply. First remove the



SANTA
SANTA

EXPRESS
EXPRESS

internal sections of the engine pattern. Then cut all round the perimeter and reverse the cutting direction to clean out the waste from the internal corners. Cut out the tender, carriages and goods van in the same way.

Tackling the sleigh

Attach the pattern for the sleigh to the 3mm ply only at this stage, and cut out the internal sections as before, **photo 1**. Use extra-wide adhesive tape to attach this cut-out section to the two 6mm blanks to form a three-deck stack. Then cut round the top of the perimeter and remove this section, leaving the bottom of the sleigh uncut, **photo 2**. Replace the top section to give support before continuing to cut off the remaining bottom section. Separate the three layers of ply.

Wheels and windows

Attach the pattern for the wheels onto a sheet of 3mm ply and cut out the spokes on the large wheel. Then stick this sheet to some 6mm plywood with extra-wide adhesive tape and cut round the perimeter of the large wheel, **photo 3**, followed by all the other wheels. Separate each wheel sandwich into its two layers, one 3mm thick and the other 6mm thick, and set them aside for now.

Cut out the window blanks next. These are 8mm taller than the corresponding window openings and 2mm wider, and are held in the openings by self-adhesive

magnetic strips. Each smaller blank carries the face of a passenger; the two larger ones carry the faces of the train crew.

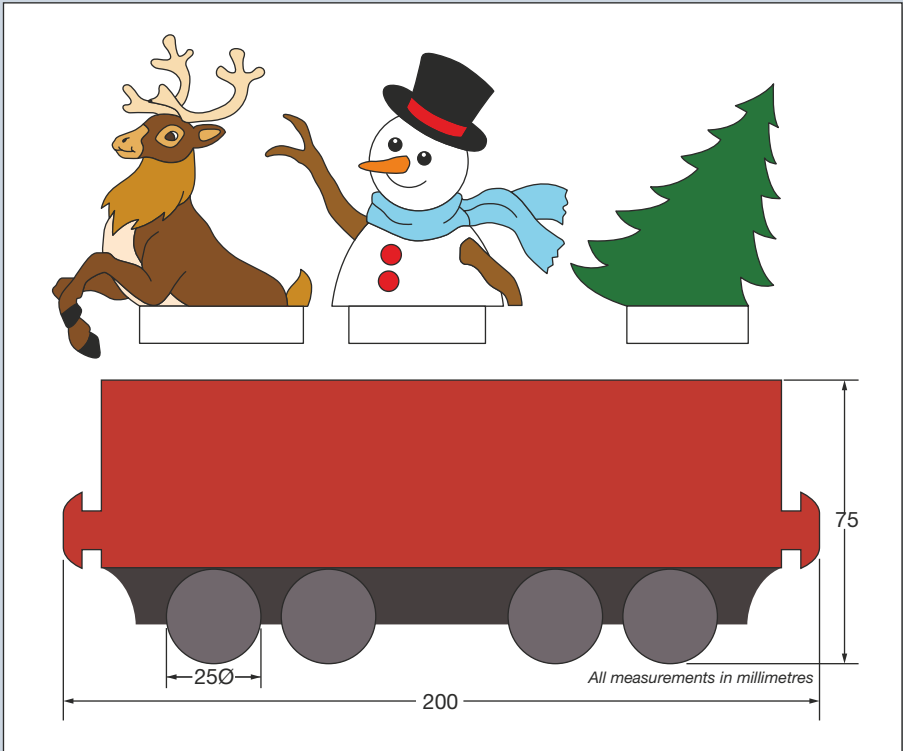
Hand-sand all the pieces you've cut out so far and slightly round over the edges with 240-grit abrasive paper. Then lay them out so you can check you haven't missed any, **photo 4**.

Passengers and crew

Print out an enlarged colour copy of the passengers and cut it into individual pieces. Then stick these directly to a strip of 3mm plywood. There's no need for masking tape this time, as you won't be removing the patterns. Next, cut carefully round the outlines using a fine No 3 blade, **photo 5**. Don't use a reverse-tooth blade, as it may pull up the edges of the patterns.

Santa and the rest

Patterns for Santa, the snowman, the reindeer, the star, the Christmas tree and the presents all need to be stuck to a two-layer stack of 3mm ply (held together

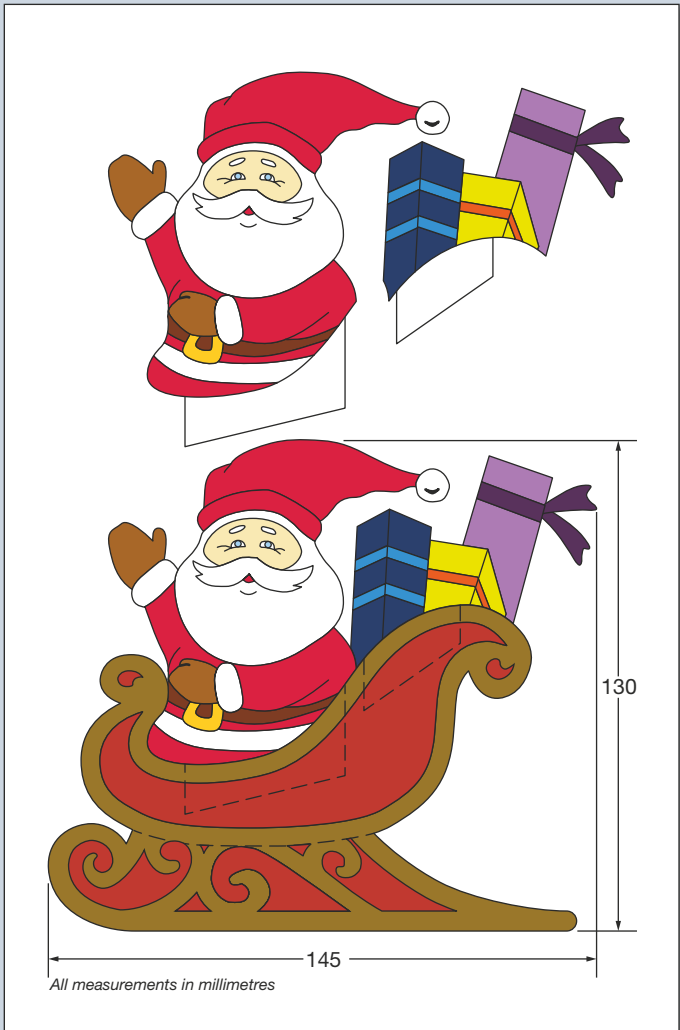


TRAIN PARTS CUTTING LIST

All dimensions are in millimetres

Part	Qty	L	W	T
Engine*	1	195	140	6
Tender*	1	110	90	6
Carriage*	2	220	130	6
Goods van*	1	210	85	6
Sleigh*	1	155	140	3
	2	155	140	6
Engine wheel	1	50 dia		3
	1	50 dia		6
Tender wheel	2	21 dia		3
	2	21 dia		6
Train wheel	14	25 dia		3
	14	25 dia		6
Window blank	2	53	37	3
	10	43	32	3
Figures (from)	1	450	200	3

* These parts include an allowance all round for trimming.



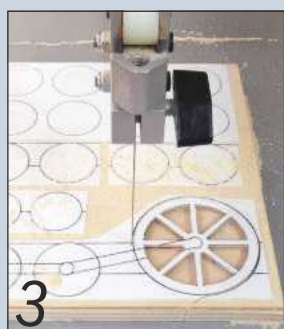
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15
16 17 18 19 20
21 22 23 24



1 With the paper pattern attached to 3mm ply, cut out all the internal sections within the sleigh first



2 Stick this layer to two 6mm thick blanks and cut around the sleigh's perimeter. Then separate the three layers



3 Cut out the inner sections of the spoked wheel. Then stick this 3mm layer to the 6mm layer and cut round its perimeter



4 Cut out all the other parts and separate the 3mm and 6mm wheel components. Set them all aside for now



5 Enlarge and photocopy the passenger faces, stick them to a strip of 3mm thick ply and cut carefully round each one



6 Stick the other patterns to a two-layer stack of 3mm ply (held together with double-sided tape) and cut them out



7 Separate the two 3mm thick layers and cut the tab off the layer with the pattern



8 Check that Santa and the presents fit inside the sleigh correctly

with double-sided tape) before being cut out, **photo 6**. Each pattern includes a tab at the bottom to which magnetic tape will be stuck. Prise each cut-out pair apart, and trim off the tab from the piece carrying the pattern, **photo 7**.

Unlike poles attract

The self-adhesive magnetic tape that makes this little project work is just like any magnet, and comes in two types (A and B) with opposite polarities. Stick one type of tape to the train and the other type to the figures, and they'll attract each other surprisingly strongly.

Make sure the surface of the ply is free from dust to get a good bond; we found attaching the tape before applying any finish gave the best adhesion.

Getting things taped

Check that Santa and the presents fit inside the sleigh correctly, **photo 8**. Then turn the sleigh face down and mark the positions for the magnetic tape, **photo 9**. Cut strips of tape to size and place them within your markings on the sleigh. Then carefully remove the excess tape with a craft knife.

Place Santa and the presents in position on the reverse side to check the fit, **photo 10**, and then stick reverse-polarity tape to their tabs. Repeat this for the other figures and the window blanks that will be mounted magnetically on the train.

Finally place more magnetic tape (remembering the opposite polarities) just above the windows of the carriages and the engine, and on the tender and the goods van, **photo 11**.

Adding colour

First seal the all the pieces using a clear water-based acrylic sealer, and when it's dry lightly sand all the surfaces with 320-grit abrasive paper. For the colouring we used acrylic paints thinned 50:50 with acrylic slow-dry gel medium, which helps to maintain an even coverage.

Use masking tape to section off the roof and undercarriage of each part of the train; it's the only way to guarantee straight lines unless you've got a very steady hand.

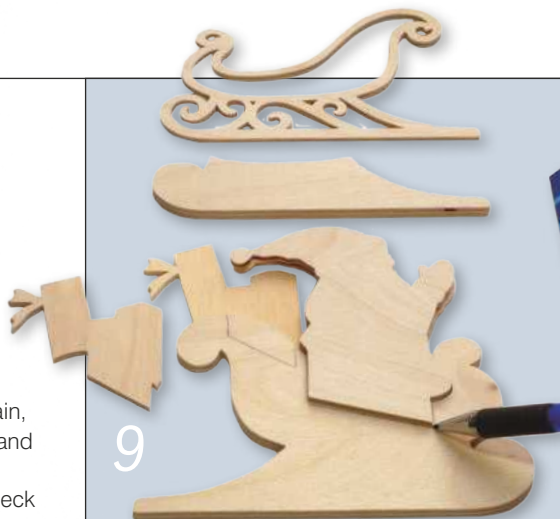
We used green to paint the engine cab and carriage roofs, and black for the undercarriage. When it's dry, remove the masking tape carefully, **photo 12**, and reapply fresh tape so you can paint the central areas red. Continue in this way until

all the pieces have been painted, and set them all aside to dry.

Finishing touches

Start by gluing the wheels onto the train, with the 3mm thick ones on the front and the 6mm one on the back, **photo 13**, cramping them until the glue sets. Check that they don't slip out of alignment.

Next, position the window blanks behind the windows of the engine and the carriages, and glue each of the crew and



9 Separate the various layers of the sleigh so you can mark the positions for the magnetic tape. Stick them on and trim them



10 Place Santa and the presents in position on the reverse side to check their fit, then stick reverse-polarity tape to their tabs



11

Place tape strips just above the windows of the carriages and the engine, and along the top edge of the goods wagon



12 Mask off the roof and undercarriage and paint them. Then remove the masking tape and paint the central areas red

passenger faces to their blanks. Finally, glue the other figures to their tabbed backing pieces, **photo 14**.

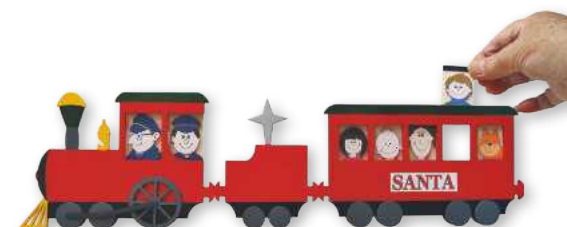
Add small strips of magnetic tape to the buffers of the train, print out and attach the SANTA EXPRESS signs if you're using them, and prepare a small length of cord ready to attach the sleigh to the back of the goods van. Fit each passenger face into its window and the train is complete.



13 Glue the wheels onto the train, with the 3mm thick one to the front and the 6mm one on the back



14 Stick the other figures to their tabbed backing pieces, ready for fitting in place on the train



PACKING THE ENVELOPES

We used red envelopes in three sizes to pack the train components up – size C5 for the engine, the carriages and the goods van, size C6 for the tender, the sleigh, Santa, the snowman and the reindeer, and 94 x 62mm 'miniature' envelopes for everything else. We got ours from www.simply-envelopes.co.uk

Enlarge and copy the 24 numbers and stick them to the appropriate size of envelope for the piece it will contain. Here's the order of delivery:

- | | | |
|-----------------|-------------------|-----------------|
| 1 Engine | 9 Passenger 3 | 17 Star |
| 2 Engine driver | 10 Passenger 4 | 18 Snowman |
| 3 Tender | 11 Goods van | 19 Passenger 9 |
| 4 Fireman | 12 Passenger 5 | 20 Passenger 10 |
| 5 Carriage 1 | 13 Passenger 6 | 21 Sleigh |
| 6 Passenger 1 | 14 Christmas tree | 22 Reindeer |
| 7 Passenger 2 | 15 Passenger 7 | 23 Presents |
| 8 Carriage 2 | 16 Passenger 8 | 24 Santa |



FURTHER INFORMATION

Self-adhesive magnetic tape

- Specialist Tapes
- 0800 5335 408
- www.specialist-tapes.co.uk
- Tape2Go
- 0161 351 9515
- www.tape2go.com

The Hobbit Stove



Height 465mm
Width 302mm
Depth 272mm
Efficiency 75%

Cleanburn
&
Airwash

4 KW

Top or Rear
Flue

Options
Include
Back Boiler
Stand
Colour

**DEFRA
APPROVED**

Multi fuel
wood
smokeless fuel
briquettes

Riddling Grate
Ashpan
Multi tool

**5yr
warranty**

www.salamanderstoves.com

thehobbit

Every Hobbit stove is hand finished in our Devon workshop and configured as either a **DEFRA APPROVED** or standard model. Options include; stove stand, back boiler, galley rail and coal bars.

Choose from a wide range of **STOVEBRIGHT** colours and either **SOLID BRASS** or **CHROME** fittings.



Shepherd's Hut



Workshop



Yurt



Small Fireplace



Boat



Cabin



TURNERS TOOL BOX
DAVID MARTIN



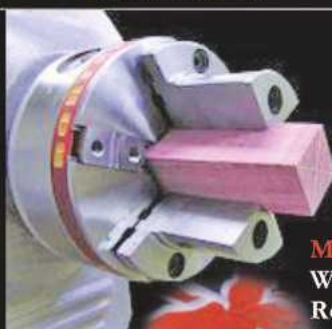
CREATIVE WELSH WOODTURNING LTD.

Turners Tool Box.Com

WOODTURNING – WOODWORKING – WOODCARVING
TOOLS & ACCESSORIES

LOG ON TO:

www.turnerstoolbox.com



Manufactured in the UK -
With the pen turner in mind, the New Robert Sorby Pen Jaw set enables the Accurate drilling out for the brass tube



Pen turned by Vernon Bowker



New from rotur

The New Pen Mandrel Support –
Aids in keeping the pen mandrel shaft steady.
Without causing any damage to the shaft or the rotating centre normally used



Sawtooth Forstner Bits Sizes from
3/8" (9.5mm) up to 4" (101.6mm)
Forstner Extension Bar - 8" (200mm) & 11" (280mm)
And the Colt MaxiCut Woodturning – Drilling / Boring Set



For more information on the New Pen Jaw Set & Our monthly Special Offers:

Visit www.turnerstoolbox.com

Order online Open 24hrs – All at the click of a button and delivered straight to your door

Email: info@turnerstoolbox.com – Tel: 01873 831 589 – Mobile: 07984 987 336

DELIVERED WORLD WIDE

PARCEL FORCE
WORLDWIDE



BY MARK CASS

Under pressure

Sticking things together used to involve lots of clever contortions with cramps, cauls and weights. Now you can achieve better results far more quickly with little more than a plastic bag and a straw... and some help from Bagpress

Among the many boxes, bags and bundles that have been heaved in and out of various cars and vans the last few times I've moved workshop, I've frequently come across a small cardboard box which, on examination, has revealed a mini Bagpress vacuum unit. I can't remember where it came from, but each time I opened said carton I recall thinking "Oh, the Bagpress. I'll have to get me a vacuum bag and make use of that!" before re-taping the box and parking it back on a shelf.

As time goes by

The years have passed by. I'm settling into my current best workshop yet, and in the last couple of weeks I've just got round to investigating the recently discovered lost world of the meter cupboard corner. Yes, you've guessed it. I've found the missing Bagpress box again, but this time I've finally taken steps to acquire a bag and nothing's going to stop me from using it!

Weighed down

Prior to the newly ushered-in 'vacuum era', I would likely have turned to that old workshop standby, the gravity press. I expect quite a few readers have their own versions of this. Mine usually involves a sandwich of a stout board or two each side of the workpieces to be pressed, topped off with anything heavy which can be piled on, including stage weights, my compressor, tool bags and boxes, the kitchen sink and

so on. It's a hit-and-miss affair; sometimes everything is fine, at other times less so. It's also a lot of aggro to hump, stack up and balance a whole load of heavy objects, so a vacuum press promised to relieve me of a weighty burden.

Meeting the bag

The friendly Darren King at Bagpress sorted me out with a standard bag – measuring 1300 x 800mm, and suitable as a starter for most woodworkers – which matched my MiniPress vacuum unit very well. After reading the instructions (yes, I really did) I got all the necessary tools together and prepared to fit the valve in the corner of the bag.

I have to say at this point that it's made of a curious rubbery plastic which feels sufficiently robust to stand up to the rigours of atmospheric pressure testing. I'm told you can also get a tougher one, but even so, I was pleased to see a kind of bicycle repair kit available for patching your bag if you were unlucky enough to damage it. It was at this point that I made a mental note to do all I could to avoid a puncture; I suggest this sort of good husbandry is top of your list when it comes to your own Bagpress experiments.

One-way valve

Once I had the bag opened up, it didn't take long to fit the all-important extraction valve. This is an easy job really; you need just a Stanley knife and a 14mm spanner

and you're ready to go. I sealed up one end of the bag with the deceptively simple closing mechanism provided (low-tech, but very effective nonetheless), and prepared to load up the press for the first time.

A first attempt

My initial task was joining a couple of pairs of 6mm thick ply panels for a door I was making. Rather than buying a whole new 12mm board, I thought I'd take the opportunity to give the Bagpress a try-out and to use up a few offcuts into the bargain.

Mindful of the risk of damaging the transparent membrane (I don't know how great the risk actually is, but I'm always cautious when there's a threat to my pocket), I decided to wrap the boards – now glued up with standard PVA adhesive – in cardboard. All that remained was to seal the second end of the bag, connect the vacuum tube and then, almost like Gene Wilder in *Young Frankenstein*, to throw the switch!

Going down

Slowly, and in a situation that could well have been milked for its suspense value, the bag started to deflate, and the contents within gradually began to take on a flattened appearance. It all looked good to me. The vacuum was clearly doing its job as an atmosphere-assisted press, but I started to worry that the system might start to lose efficiency once the valve opening had vacuum-sealed itself up.





1 Opening up the bag is trickier than you'd think; it's quite rubbery to the touch



2 Mark the position of the valve; it should go about 300mm in from a corner



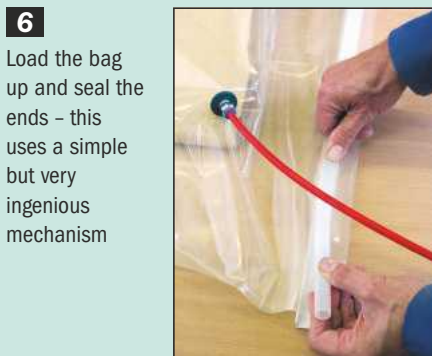
3 Pierce the membrane over the valve housing with the tip of a sharp knife blade



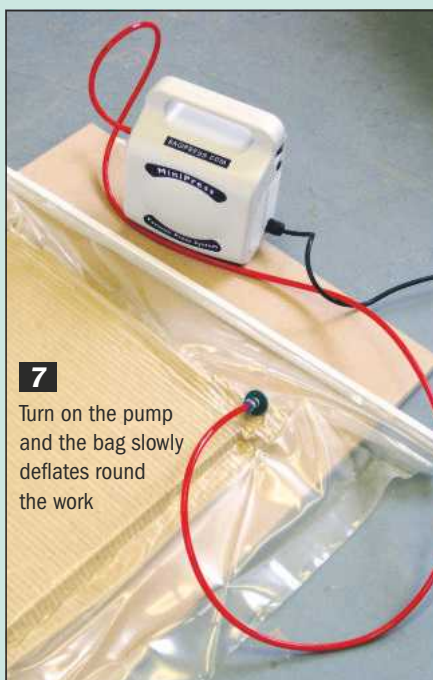
4 Reverse the valve housing and snap the two halves together. A soft hammer might help



5 Screw the valve itself into place in the housing with a 14mm spanner and connect the hose



6 Load the bag up and seal the ends – this uses a simple but very ingenious mechanism



7 Turn on the pump and the bag slowly deflates round the work



8 Fitting the nylon pan scourer to act as an air bridge was the required final touch



9 My four-sided block cramping experiment needs a little extra work, however...

Then I recalled the last time I'd seen a Bagpress in action. It was a while ago in my Aussie pal Paulo's workshop, and featured some kind of fabric webbing which bridged an air path from valve to pressed subject.

It was the work of a few moments to quell the vacuum, source a piece of nylon scourer and insert it in the bag at the appropriate juncture 'twixt valve and boards. I watched anxiously at the restart, but it wasn't long before I was gratified to see the parcel of pressed pieces even flatter than before.

Nail biting

My next anxiety was how long to leave the vacuum unit running, so once more I turned to Darren at Bagpress for advice. He instantly reassured me that the unit was continuously rated, so I'd be safe to leave it running all night if I fancied it. As it turned out I just gave it an hour or two. This proved to be long enough for the glue to go off, and the next morning I was very pleased with two fully set panels ready for trimming to size.

Extra pressure

Feeling I was on a bit of a vacuum roll, I loaded up the bag again, but this time with a more demanding pressing job. I had half a dozen shortish lengths of 75mm square softwood I wanted to join into a big block. Normally it would have taken either one very complicated cramp-up, or two slightly easier ones, plus lots of physical exertion. I figured that the bag would provide an even 360° of clamping pressure.

Despite my careful timber preparation, the finished result was pretty good but not quite perfect. On reflection, it might just have been too much to expect the four-sided pressure to take effect in the exactly the way I required it, so next time I'll probably do it in two stages after all.

Summing up

- A Bagpress is an asset for any workshop.
- I think my worries over bag damage from sharp corners are justified, if possibly somewhat exaggerated.
- The nylon scourer air bridge is a good thing.
- There's plenty of scope for further experiment. I can't wait to try some curved work or veneering next time, and I'd be very interested to receive any feedback from other Bagpress users out there.

FURTHER INFORMATION

Vacuum press system

- Bagpress
- 01462 483366
- www.bagpress.com

FOR SALE HOUSE, BARN & FITTED CABINET MAKERS WORKSHOP

LLANFILO, BRECON, MID WALES • £465,000 FREEHOLD

A wonderful, newly converted Grade II listed barn, with further stonebarn & adjoining 700 sq ft cabinet makers workshop in the Brecon Beacons.

The converted barn is a modern, open-plan home with 4 bedrooms. It is set over 3 floors and finished to a very high standard throughout.



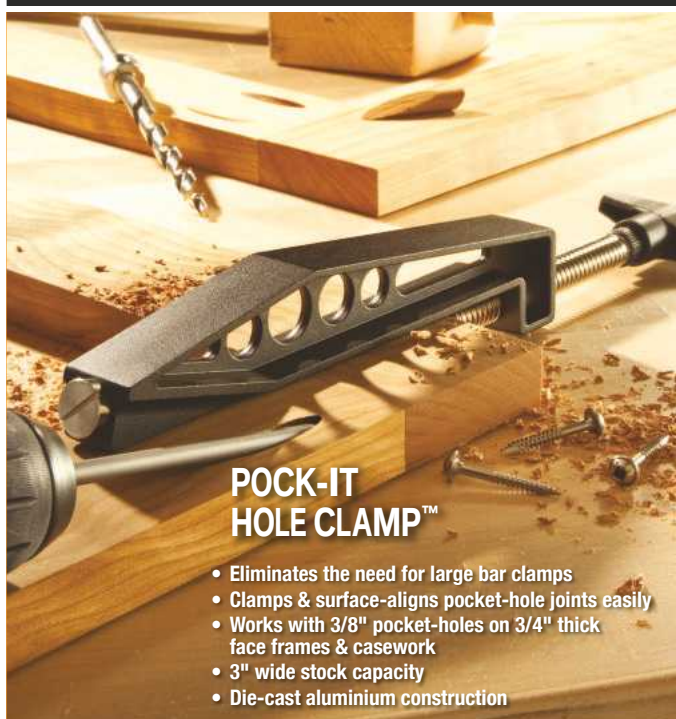
The workshop is a light and airy space, with oak beams and trusses. It has underfloor heating, 3 phase electricity, service for water, double glazing, a pair of large sliding doors and a B1 craft workshop license. *The sale also includes fitted Wadkin plant machinery and more, all in superb condition!*

There is also great potential in the adjoining stone barn, which has received planning consent for conversion into a separate dwelling.

For more details visit: www.rightmove.com

To arrange a viewing please call Darren Thomas at McCartneys on 01874 610 990

A woodworker's best friend



POCK-IT HOLE CLAMP™

- Eliminates the need for large bar clamps
- Clamps & surface-aligns pocket-hole joints easily
- Works with 3/8" pocket-holes on 3/4" thick face frames & casework
- 3" wide stock capacity
- Die-cast aluminium construction



Find your nearest stockist
benchdog.eu

Lathes

Chucks

Tools

Hardware

Abrasives

Polishes

Trend

Respirators

Wood blanks

Pyrography machines



Patriot Chucks
SuperNova Chucks
Record G3 Chucks
Chuck accessories

CUBIC BORON NITRIDE Grinding Wheels

Amazing edge on your tools
Better than diamond wheels
Cuts fast and cool
Does not wear down in size
Grinds on face and edge
No mess, long life

150mm x 40mm
machined to fit your
grinder **£162.75**

inc. mainland p&p
Other sizes in stock

Microcrystalline grinding
wheels also in stock



Hundreds of wood blanks
on display and priced



Shop is open
Tuesday to
Friday
9 to 4
Saturdays
9 to 12



We have manufactured fine pyrography tools for over 40 years.
Outfits starting at **£99.75**

Order online www.peterchild.co.uk
or telephone 01787 237291

PETER CHILD

WOODTURNING SUPPLIES

The Old Hyde, Little Yeldham, Nr Halstead, Essex CO9 4QT
Tel 01787 237291 Fax 01787 238522 www.peterchild.co.uk

Woodworker SUBSCRIPTION ORDER FORM

DIRECT DEBIT SUBSCRIPTIONS (UK ONLY)

Yes, I would like to subscribe to **The Woodworker**

- ☐ Print + Digital: £10.50 every 3 months
(SAVE 34% on shop price + SAVE 75% on Digital Download + FREE GIFT)
- ☐ Print Subscription: £8.50 every 3 months (SAVE 34% on shop price + FREE GIFT)

YOUR DETAILS MUST BE COMPLETED

Mr/Mrs/Miss/Ms.....Initial.....Surname.....

Address.....

Postcode.....Country.....

Tel.....Mobile.....

Email.....D.O.B.....

I WOULD LIKE TO SEND A GIFT TO:

Mr/Mrs/Miss/Ms.....Initial.....Surname.....

Address.....

Postcode.....Country.....

INSTRUCTIONS TO YOUR BANK/BUILDING SOCIETY

Originator's reference 422562

Name of bank.....

Address of bank.....

.....Postcode.....

Account holder.....

Signature.....Date.....



Sort code.....Account number.....

Instructions to your bank or building society: Please pay MyTimeMedia Ltd. Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with MyTimeMedia Ltd and if so, details will be passed electronically to my bank/building society.

Reference Number (official use only).....

Please note that banks and building societies may not accept Direct Debit instructions from some types of account.

CARD PAYMENTS & OVERSEAS

Yes, I would like to subscribe to **The Woodworker**, for 1 year (13 issues) with a one-off payment

UK ONLY:

- ☐ Print + Digital: £47.50 (SAVE 23% on shop price + SAVE 75% on Digital Download + FREE GIFT)
- ☐ Print: £39.50 (SAVE 23% on shop price + FREE GIFT)

EUROPE & ROW:

- ☐ EU Print + Digital: £67.00
- ☐ EU Print: £59.00
- ☐ ROW Print + Digital: £67.00
- ☐ ROW Print: £59.00

PAYMENT DETAILS

☐ Postal Order/Cheque ☐ Visa/MasterCard ☐ Maestro

Please make cheques payable to MyTimeMedia Ltd and write code X246 on the back

Cardholder's name.....

Card no:.....(Maestro)

Valid from.....Expiry date.....Maestro issue no.....

Signature.....Date.....

TERMS & CONDITIONS: Offer ends 13th December 2013. MyTimeMedia Ltd & The Woodworker may contact you with information about our other products and services. If you DO NOT wish to be contacted by MyTimeMedia Ltd & The Woodworker please tick here: ☐ Email ☐ Post ☐ Phone. If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: ☐ Post ☐ Phone. If you wish to be contacted by email by carefully chosen 3rd parties, please tick here: ☐ Email

POST THIS FORM TO: THE WOODWORKER SUBSCRIPTIONS, TOWER HOUSE, SOVEREIGN PARK, MARKET HARBOROUGH, LEICS LE16 9EF.

**HURRY
OFFER
CLOSES**
13th DECEMBER
2013



PRINT + DIGITAL SUBSCRIPTION

Free Hitachi 102pc Drill & Driver Bit Set worth £30.00*

13 Issues **delivered to your door**

Save up to **34% off the shop price**

Download each new issue to your device

A **75% discount** on your Digital subscription

Access your subscription on **multiple devices**

Access to the **Online Archive** dating back to January 2007

Exclusive discount on all orders at myhobbystore.co.uk



PRINT SUBSCRIPTION

Free Hitachi 102pc Drill & Driver Bit Set worth £30.00*

13 Issues **delivered to your door**

Save up to **34% off the shop price**

Exclusive discount on all orders at myhobbystore.co.uk

SUBSCRIBE TODAY

CHRISTMAS OFFER

**DIGITAL
SUBSCRIPTIONS
AVAILABLE ONLINE!**

Receive a **Hitachi 102pc Drill & Driver Bit Set** * when you subscribe today **WORTH £30.00**

**"A great assortment
of useful drilling
& driving bits"**



**SAVE
34%** ON THE
SHOP PRICE &
75% ON DIGITAL**

Assortment of 102 most commonly used drilling and driving bits 102 piece in a tidy carry case. SUITABLE FOR USE WITH METAL, WOOD, PLASTIC AND MASONRY.

20 x HSS black oxide drill bits 1x5, 1.5x5, 2x4, 3, 3.5, 4, 4.5, 5 and 6mm.

4 x Masonry bits carbide tipped 3, 4, 5 and 6mm.

1 x Countersink insert bit 12.7mm.

3 x Phillips 50mm insert bits PH1, PH2 and PH3.

3 x Pozidriv 50mm insert bits PZ1, PZ2 and PZ3.

2 x Torx 50mm insert bits T20 and T25.

19 x Phillips 25mm insert bits PH0x3, PH1x4, PH2x8 and PH3x4.

11 x Pozidriv 25mm insert bits PZ1x3, PZ2x5 and PZ3x3.

14 x Slotted 25mm insert bits 3 x3, 5 x3, 6 x4 and 6.5mm x4.

3 x Square 25mm insert bits S1, S2 and S3.

14 x Torx 25mm insert bits T10 x2, T15 x2, T20 x2, T25 x2, T27 x2, T30 x2 and T40 x2.

7 x Hex 25mm insert bits 1.5, 2, 2.5, 3, 4, 5 and 6mm.

1 x Magnetic insert bit holder 60mm chrome plated.

TERMS & CONDITIONS: Offer ends 13th December 2013. *Gift for UK subscribers only, while stocks last.

**When you subscribe by Direct Debit. Please see www.getwoodworking.com/terms for full terms & conditions.

SUBSCRIBE SECURELY ONLINE

 www.getwoodworking.com/subscribe

CALL OUR ORDER LINE Quote ref: X246

 **0844 543 8200**

Lines open weekdays 8am – 9.30pm & Saturday 8am – 4pm

BT landline calls to 0844 numbers will cost no more than 5p per minute. Calls from mobiles usually cost more.



AIRPRESS

Vacuum Veneering & Laminating Solutions



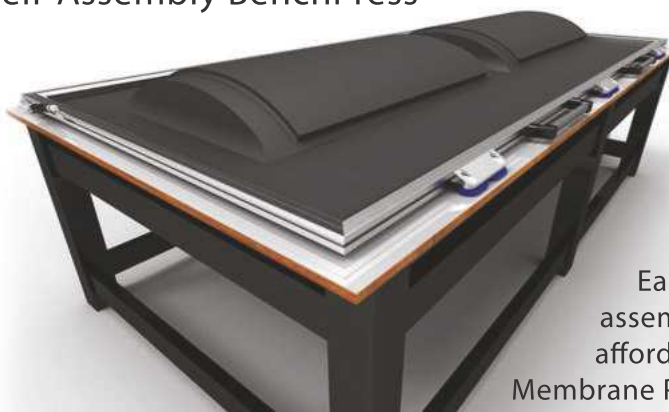
Veneer & Laminate all your flat and curved panels with the UK's No.1 Vacuum Pressing Systems

BenchTop Press



Easy to use, compact sized press, ideal for schools, colleges and small scale products

Self-Assembly BenchPress



Easy to assemble, affordable
Membrane Press

Call us for advice and information or visit our website for our full range of products



Industrial AirPress

Portable Vacuum Press



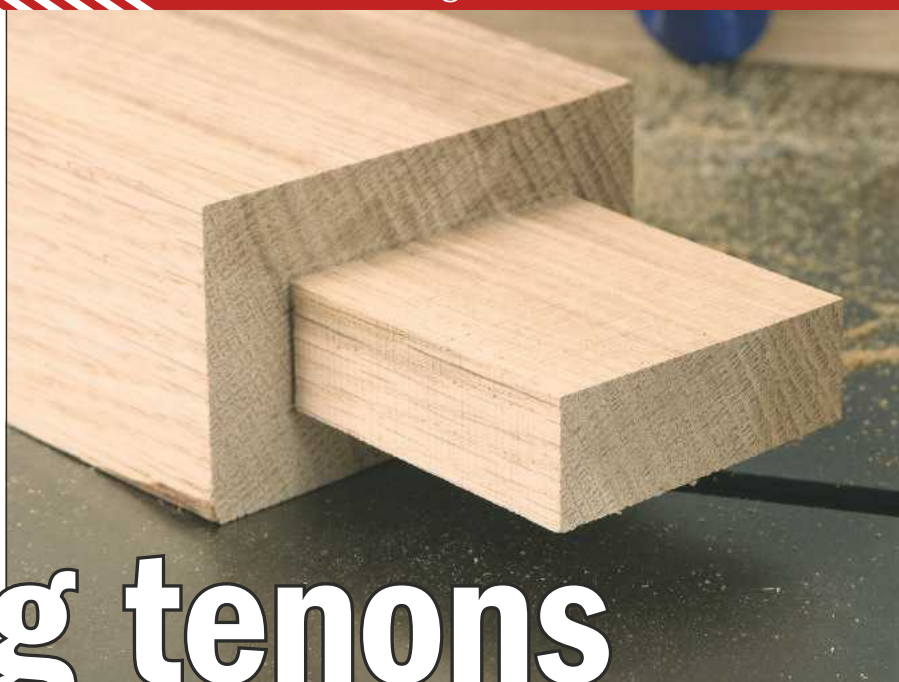
Professional AirPress

Choose from our range of portable vacuum press kits to suit all requirements - the low cost solution to all your veneering and laminating needs

www.airpress.co.uk

Tel: + 44 (0)1725 514426

How difficult is it to cut the perfect tenon? How long have you got? Do you want to do it by hand, or get a machine to help you? I've cut thousands of tenons in my time, and I think I've finally found the answer...



Cutting tenons on the bandsaw



BY ALAN HOLTHAM

Even with the massive range of cheap woodworking machinery that's now available, the job of cutting a simple mortise-and-tenon joint has still not been fully addressed. Small benchtop mortisers are readily available at very competitive prices, but there's a no easy way of cutting the other half of the joint – the tenon itself. This is a pity, because the mortise-and-tenon is one of the strongest and most useful of all woodworking joints. However, it relies on accurate cutting for its strength and neatly finished appearance. It's often used in heavy joinery work, and cutting the necessary large tenons accurately enough by hand is both difficult and time-consuming.

Machine options

In an industrial situation this is done on a very large machine dedicated to just this job, which not surprisingly is called a tenoner. However, there still isn't an amateur version of this machine, although a spindle moulder can sometimes be used provided you have the appropriate expensive tooling. This is successful to some extent. However, depending on the size of moulder, it will still cope only with relatively small tenons; very large ones are out of the question.

Power sawing

A more economical solution is to saw off the tenon cheeks, and there are various strategies that you can try for this. One way is to make multiple parallel cuts with a radial arm saw or a chop saw, provided it has a trenching facility. The key is getting both the shoulders perfectly aligned if the joint is to fit together properly, so you have to work very carefully.

Salvation is at hand, though. Nearly every home workshop now contains a small bandsaw, and provided you set it up properly with a good-quality blade, this is an excellent way of cutting all but the largest of tenons... and to a surprising degree of accuracy.

The right equipment

Any size of bandsaw will do as long as the all-important blade is sharp. I regularly use a very run-of-the-mill 12in machine for all my tenon cutting, **photo 1**. It's not even

essential to have a mitre guide for the machine, though a fairly substantial one that provides plenty of support does make the job a whole lot easier, **photo 2**.

Don't panic if you don't have one. Just cut a piece of thick mdf with a perfect right angle on one corner and use this as a fence to feed to work into the blade, **photo 3**. As long as you keep the side edge of the mdf tight up against the rip fence and your work is held firmly across the end, the resulting cut has to be perfectly square.

It's obviously essential that the blade cuts dead straight, without any sign of wandering. If it does, the tenon will vary in size along its length, so make a test cut just to see how your current blade performs. Try cutting a 2mm thick veneer off the length of a piece of scrap, **photo 4**. If the cut isn't even, you need to change the blade, or the way it's set up, or both.



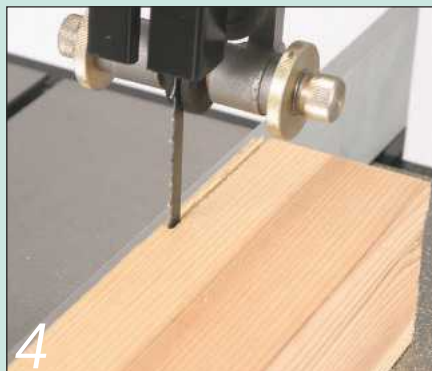
Any bandsaw will do the job of cutting tenons as long as the blade is sharp



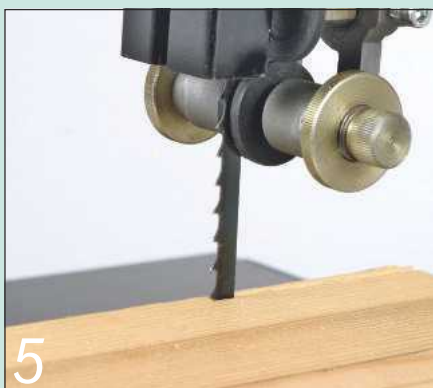
A mitre guide isn't essential, but a substantial one like this does make the job easier



3 If you don't have a mitre guide, use a right-angled piece of thick mdf as a fence



4 Check that the blade is running dead straight by cutting a thin veneer



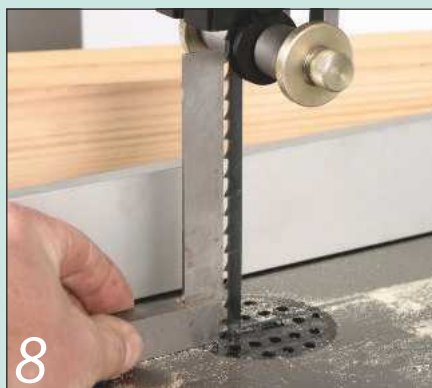
5 A skip-tooth blade with 4tpi (teeth per inch) gives perfectly good results for tenoning



6 Slacken off the fence's locking bolts so you can adjust it for any misalignment



7 Check that the table is dead square to the blade using an engineer's square



8 The cutting edge of the blade also needs to be accurately square to the table

The ideal blade

The type of blade you use is less important than its ability to cut straight. Much has been written about blade width and tooth pattern, but the theory doesn't always translate into reality and, human nature being what it is, we all tend to try to make one particular blade do all our jobs. Few of us have the time or inclination to keep swapping the blade for different applications.

I find that for the majority of work a $\frac{3}{8}$ in wide blade is more than adequate, and I'll only change to a $\frac{1}{2}$ in one if I have a lot of serious ripping to do. As regards tooth pattern, skip-tooth blades are undoubtedly the best. A 6tpi blade gives a finer and smoother cut if you're working with very hard timbers; otherwise I use 4tpi, **photo 5**. It's impossible to get a super-smooth finish on a bandsaw, whatever blade you use, but for this particular joint-cutting operation it's unnecessary anyway, so select the blade that you feel most comfortable with.

The suspect fence

If you know the blade is in good condition but it still pulls away from the rip fence, it may be that this is out of alignment and needs adjusting to compensate for the 'lead'. There are usually a couple of locking bolts or screws that join the actual fence arm to the casting that locks onto the rail, **photo 6**. Slacken these off and angle the fence slightly to compensate for the misalignment.

There's no way you can measure this; trial and error seems to be the only way, but you shouldn't have to be making huge adjustments. If you are, the blade might be at fault, even if it's a brand new one. A blade may have more set on one side than the other, which causes it to pull to one side. In theory, once the fence is set correctly there should be no need to alter it again.

All square

Next, you need to check that the table is dead square to the blade using a small engineer's square, **photo 7**. There's always a stop bolt of some sort underneath the table that allows you to reset it back at 0° after tilting it, and this may need minor adjustment to get the alignment spot on.

Less obvious is that the blade also needs to be square to the table in the other plane, **photo 8**. This becomes important where the ripping cut has to meet the shoulder cut perfectly, on both sides of the tenon. There is no real adjustment for this though; it is more down to the quality of the original engineering in the bandsaw.

Some textbooks suggest that you can alter it by moving the position of the two



9 If it's not, you can try altering its tracking position on the top wheel

bandwheels relative to each other, by shimming them out on their respective spindles. This is rather dangerous territory, and I would suggest that if the blade is out of line by this much, you need to return the saw to your supplier. You can, however, make small adjustments by altering the tracking position of the blade on the top wheel, **photo 9**. You will probably have noticed that adjusting the tracking tends to move the blade backwards and forwards more on the top wheel than it does on the bottom one, so there's some room for changing the angle slightly here.

Testing the set-up

When you have finished making all these adjustments, a good way to check that the blade is now cutting true is to push a piece of square timber into the blade and just make a very shallow cut. Then offer this cut up to the back of the blade and check to see that it will fit in the slot. By doing this you are effectively magnifying any errors, and it will be obvious if you need to make any further corrections, **photo 10**.

You're now ready to start cutting your tenons. The key factor is to get the length of the cut for each of the cheeks to be identical on either side of the tenon, and while you can do this by eye, it does require that every joint is marked out individually. A much better and quicker way is to use a repetition stop of some sort. Some machines do actually come with a dedicated tenoning stop (either as standard or as an accessory), but the majority don't and you will have to make up your own. Fortunately this is very easy, consisting of nothing more sophisticated than a small scrap of wood and a G-cramp to fix it to the fence, **photo 11**.

Stop and go

You need to mark out just the first tenon for setting purposes; after that you can make all the other cuts using just the stops. So start by cutting the first cheek, **photo 12**, cutting carefully to stop dead on the shoulder line. Leave the timber in this position and switch off the bandsaw. Slide the tenoning stop up against the end of the timber and cramp it in position on the fence, **photo 13**. Note how the end of the stop is angled away slightly, **photo 14**, so that any sawdust build-up ahead of the sliding workpiece isn't going to interfere with it engaging on the stop.

Repeat as necessary

Now the stop is set in the correct position, start up the saw again, withdraw the timber, turn it over and make a cut for the second cheek, **photo 15**. Leave the timber in



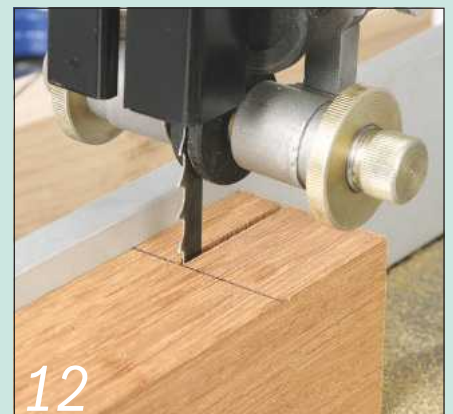
10

Test for trueness by making a shallow cut and offering it up to the back of the blade; it should fit in the slot



11

You can make a simple tenoning stop by cramping some scrap wood to the fence



12

To position the stop, cut the first cheek up to the shoulder line and turn off the saw



13

Slide the stop up against the end of the workpiece and cramp it to the fence



14

The end of the stop is angled to stop sawdust blocking the movement of the workpiece



15

Start the saw, withdraw the workpiece, turn it over and cut the second cheek



16

If you use the rip fence to guide the shoulder cut, the waste block can become jammed



17

Position the tenoning stop slightly forward of the blade as shown and make the shoulder cut



18

As the cut is completed, the waste block falls away well clear of the fence



19

The end product is a perfect tenon with parallel cheeks and perfectly aligned shoulders



20

If you ignore the setting up, the end product is a skewed tenon and miscut shoulders, as here

position for a few seconds when you reach the end of the cut to allow the blade to move slightly forward of the rear thrust bearing, or you may find that the length of cut varies slightly. It might only be a fraction, but it makes a big difference when you come to cut the shoulders. Repeat the procedure for all your workpieces; none of these will need marking, as you're working against the fence and stop every time.

The final cuts

The shoulders are cut using the mitre guide, so as before make a few trial cuts first on a piece of scrap to make sure it is actually cutting at 90° to the blade. Just because it's set at 90° doesn't necessarily mean that it will cut true. To get the shoulder cut in the same place on each tenon you can use the rip fence as the stop this time, **photo 16**. The snag with this is that as the small blocks of waste are cut free, they can become jammed between the fence and the blade and thereby distort the cutting path for subsequent cuts.

A better option is to use your block of wood and G-cramp as a spacer, but keep it well forwards of the blade, **photo 17**. This obviously gives you the correct positioning for the timber as you start, but as the cut is made the block of waste falls away well clear of the fence, **photo 18**, and there's no chance of a cut being out of line.

10/10 tenons

This procedure should produce a perfect tenon with square shoulders that are all lined up properly – essential requirements if the joint is to be strong and look neat, **photo 19**. If you don't bother with the initial setting up operation outlined at the beginning, and the blade is out of square to the table, the tenon will still end up perfectly parallel, but will be angled relative to the end of the timber, and the shoulder cuts will be too deep on one side of the tenon and incomplete on the other side, **photo 20**.

An extra step

If the tenon you're cutting is going to have shoulders all round, as shown in the main photograph on page 53, it's quite straightforward to do this while the stops are all in position, just by laying the timber horizontal for the cuts as well as vertical.

Obviously you can use this technique to cut tenons that are any size, up to the cutting capacity of your bandsaw. This may not be obvious first choice of machine for such a job, but if it's set up and used with care it will produce perfect results every time... and so easily!

The scheppach Plana 7.0 is planing perfection in one solid, heavy duty package. Perfectly planed heavy ribbed cast iron table. Three knife cutterblock with automatically seated reversible planing knives. Vulcanised in/out feed rollers eliminate all traces of indentation marks. Big 400x230mm planing / thicknessing capacity. Two electronic switchable feed speeds with separate motor: 5&10m/min. Micro adjustment of 1/10th mm to thicknessing height: perfect for super-fine finishing cut; especially on difficult cross-graining timbers. Scheppach offer a choice of six models. Whatever the size of your workshop or budget there is a scheppach planer that is ideal for you. Just "check the spec" before ordering.



Plana 7.0 - 400 x 230mm
Planer / Thicknesser in thicknessing mode.
Professional Series.



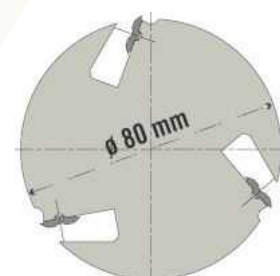
Plana 4.0c - 310 x 220mm Planer / Thicknesser
with optional mortising attachment.
Professional Series



Plana 4.0 - 320 x 180mm Planer / Thicknesser.
Professional Series



Plana 3.0 - 250 x 210mm Planer / Thicknesser.
Workshop Series



Triple reversible planing knives
with automatic seating.
Perfect set-up with minimal loss in
production time.



Large tilting planing fence with
0 to 45 degrees positive settings.



Large handwheel with digital read-out
table setting plus 1/10th mm final
dial setting for super-fine finishing cuts.

Also available: Plana 2.0c & Plana 3.0c. Both with optional mortising attachments.

Model	Product Group Series	Format (Other options available according to requirements)	Max Power - HP / Volts	Thicknessing capacity mm	Price Exc VAT Plus Carriage	Price Inc VAT Plus Carriage
Plana 2.0c	Classic	Inc x2 knives cutterblock HSS	2.0 / 240v	200 x 195 mm	£662.50	£795.00
Plana 3.0 inc mortiser att	Workshop	Inc x2 Knife cutterblock HSS	3.2 / 240v or 415v	250 x 210 mm	£832.50	£999.00
Plana 3.0c	Workshop	Inc x3 Knife cutterblock HSS	3.0 / 240v or 415v	250 x 180 mm	£1150.00	£1380.00
Plana 4.0	Professional	Inc x2 Knife cutterblock HSS	5.4 / 240v or 415v	310 x 180 mm	£1,912.50	£2,295.00
Plana 4.0c inc mortiser att	Professional	Inc x4 Knife cutterblock HSS	3.0 / 240v or 415v	310 x 220 mm	£1,895.00	£2,274.00
Plana 7.0	Professional	Inc x3 Knife Reversible HSS	7.2 / 415v	400 x 230 mm	£3,820.00	£4,584.00

Plana 2.0c / 3.0 / 3.0c / 4.0c are designed by scheppach in Germany but made in China where scheppach resident engineers oversee manufacturing quality control. All scheppach planing machines carry the same warranty and have been sold and serviced in the UK by NMA since 1972. Go to nmatools.co.uk and see what users say about NMA unprecedented service.



The Rocking Horse Shop

Designers, Makers & Restorers of Excellent Wooden Rocking Horses in the best Tradition of English Hand Craftmanship since 1976

Make a unique Traditional Rocking Horse 17 Superb Designs to choose from,

all with actual size drawings, colour pictures, step-by-step instructions & cutting lists etc, and supported by our top quality DVD's, timber packs, accessories & fittings.

Carve a Rocking Horse Head

with Anthony Dew

Whether you are experienced or have never carved before in your life, you will benefit enormously from this Carve-A-Head course.

Total fee - £300

includes 3 days personal tuition with renowned Rocking Horse Maker Anthony Dew, head timber & lunches.



Students with their finished heads.

You could make a horse like this!

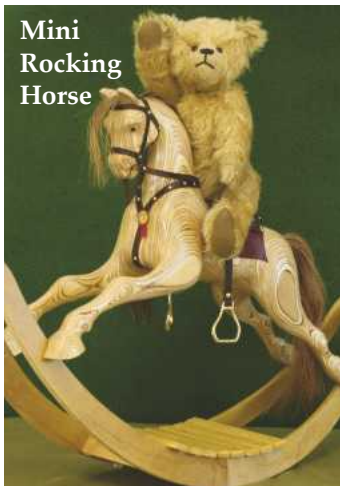
Laminated Designs

Why not make one of our laminated horses. Surprisingly straightforward to put together and make. 4 different plans available.

New Course

**Carve a Mini Rocking Horse
with Peter Berry**

Also, timber packs and high quality accessories available.



For more details, info or FREE catalogue

www.rockinghorse.co.uk or Tel: 0800 7315418

The Rocking Horse Shop, Fangfoss, York YO41 5JH, England



BY COLIN SIMPSON



2: Lathe accessories

In this continuing mini-series aimed at the complete woodturning novice, I'll look at some of the tools and accessories you'll need to make the most of your new lathe

Last month I gave you some pointers regarding what you might want to consider when buying and installing a lathe. The number and different types of accessory is infinitely greater than the choices you have when buying a lathe, and when you're starting out this can be very daunting. If you're not careful you could spend as much – or more – on the accessories as you did on the lathe itself. So I'm going to give you my opinion on the minimum level of equipment you actually need to get started. As you develop your skills you may wish to buy more, but by that time you'll be better informed as to what you need or want... and why.

The basic toolkit

My beginner's set of woodturning tools is shown in **photos 1** and **2**, and includes (from left to right):

- a 1in (25mm) rolled-edge skew chisel (this has a rectangular cross-section but with the corners rounded over);
- a $\frac{3}{8}$ in (10mm) spindle gouge;
- a 1in spindle roughing gouge;
- a $\frac{1}{4}$ in (6mm) parting tool;
- a $\frac{1}{2}$ in (12mm) bowl gouge;
- a 1in round-nosed scraper.

You'll notice that I've given the blade widths in inches, with the metric equivalent in brackets alongside; that's because most turning tools are still sold in imperial sizes.

Horses for courses

Some more experienced turners might argue that the round-nosed scraper is not essential and, if you're skilful with a bowl gouge, then I would agree. However, as a beginner I'm assuming that your bowl gouge skills might need some improvement and that you still want to make bowls. At

this stage in your new hobby, a round-nosed scraper will make it easier for you to achieve a smooth finish on the inside of a bowl. Why don't I need a square scraper, you may well ask? Well, a skew chisel used as a scraper will suffice.

I recommend good-quality high-speed steel tools. They are more expensive than the carbon steel tools you'll see on sale, but their quality is vastly superior. You're also less likely to damage them by overheating the blades when sharpening them.

Learn to use these tools – particularly the first five – well, and they'll do the vast majority of your turning. As you progress you may well want to buy other more specialist tools, particularly if you want to do hollow forms.

The importance of sharpening

Whatever tools you have, they're of no use unless they're sharp. A standard bench



1

A basic toolkit should include a skew chisel, a spindle gouge, a roughing gouge, a parting tool, a bowl gouge and a scraper



2

Each tool has a different blade cross-section and a different cutting edge profile



3

A two-wheel bench grinder is essential for keeping your turning tools sharp

grinder, **photo 3**, is still the most common machine for sharpening turning tools, but I would recommend you to replace the supplied grey carborundum wheels with aluminium oxide ones. These come in various colours, each having different attributes. I've used the ruby, pink and blue coloured ones in the past, but I've recently returned to the white wheels. These serve me very well.

My grinder runs at 3000rpm, but you can buy models that run at about half this speed. Slow grinders will generate far less heat when sharpening, which may be an issue if you're too heavy-handed. You will also need a wheel dresser, **photo 4**, to keep the grinding wheel clean and flat.

A helping hand

Sharpening your tools freehand is the cheapest way, but is probably the most difficult to master... although like all things, the more you practise the better you become. Once you're skilled at it, freehand sharpening is also the quickest method, but it can be slow work while you're learning.

If you're having difficulty mastering the art, then it might be worth investing in a jig to hold the tool at the correct angle against the grinding wheel. There's a huge range on the market nowadays, and they're great at replicating exactly the same grinding angle you have on your tool, but you still need to master the jig itself. **Photo 5** shows my Wolverine sharpening jig in use on a fingernail profile gouge.

There are other methods for sharpening your tools. Wetstone grinders like my Tormek, **photo 6**, are becoming more popular, although they cost more than a standard bench grinder. Robert Sorby also make a superb sharpening machine. Based on a linisher or belt sander, it's called the ProEdge System.

Holding tight

If you're going to do spindle turning, you'll need two centres to hold the workpieces. These are normally threaded with a so-called Morse taper – in woodturning terms usually MT1, 2 or 3 – and you'll need to buy the correct size to fit your lathe. You'll need a drive centre that fits in the spindle of the headstock and a supporting centre for the tailstock.

I recommend a revolving or live centre for the tailstock. These centres contain bearings that allow the point to revolve with the work. You can still buy dead centres, but as these don't revolve there's a great deal of friction and therefore heat build-up between the centre and the wood. **Photo 7** shows a



4

You'll need a wheel dresser (left) and a devil stone (centre) to keep the grinder wheel clean and flat



5

Jigs are essential aids to replicating the correct grinding angle on your turning tools



6

Wetstone grinders are becoming popular, but are more expensive than dry grinders

number of different types of live centre. If you want only one live centre, my preference would be the 60° standard one (third from left)

Driving carefully

There are a number of different drive centres on the market, **photo 8**, and they all do more or less the same thing. They're usually used for spindle turning, and allow the work to be held and revolved securely.

If you want to buy only one drive centre, I suggest you go for a four-prong drive. This will hold the work securely as long as the end of the stock is cut at 90°, allowing all four prongs to bite into the wood, **photo 9**. If the end of the wood is not cut square you may only get one prong to bite, **photo 10**. In this situation a two-prong drive is better, as you'll always be able to get both prongs to bite into the wood.

The Steb centre from Robert Sorby is a nice accessory. It still holds and drives the work securely, but should you have a dig in the work will stop revolving. This is great for beginners, but it also stops revolving when the more experienced turner takes heavy, aggressive cuts.

Getting a grip

Some modern four-jaw self-centring chucks can cost as much as – or more than – a budget lathe. The good news is that they're not essential. You can turn bowls and similar items without owning an expensive chuck. Simple jam chucks can be made from a scrap piece of mdf or plywood, **photo 11**. I'm also using hot-melt glue to hold this bowl in place. However, if you're even moderately serious about your turning, you'll soon feel that a good quality chuck is almost an essential piece of kit.

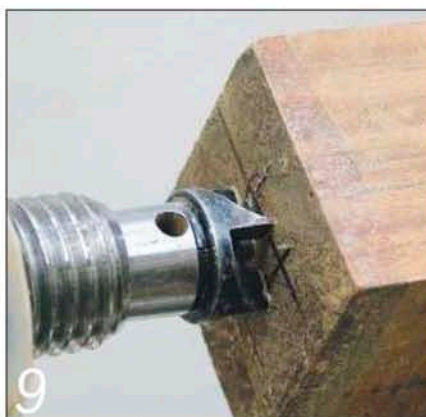
Modern four-jaw self-centring scroll chucks are great, **photo 12**, and will allow you to turn bowls, eggcups, goblets and the like far more easily and quickly. These chucks are designed to screw onto the headstock spindle, so you'll need to ensure that your chuck has the corresponding thread. Most scroll chucks have a range of optional jaws that will increase the chuck's versatility still further, **photo 13**. Dovetail jaws are probably the most common and these are made to clamp down onto a spigot, **photo 14**, or else to expand into a recess, **photo 15**.

If your budget doesn't stretch to a scroll chuck, a collet chuck is an alternative, but

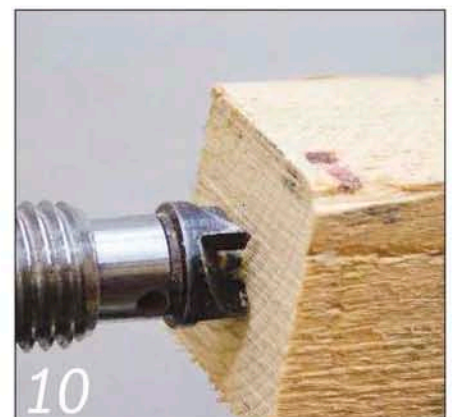


7 There are many types of live centre, shown above. A good all-rounder is the one third from the left

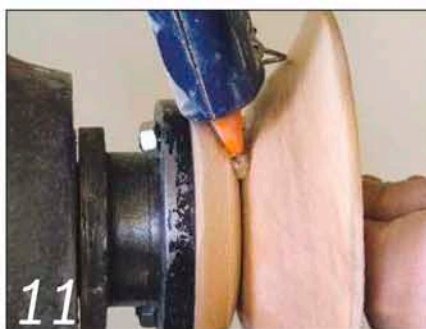
8 Drive centres (left) hold work securely for spindle turning. Four-prong types are best...



...because all four prongs can bite deep into the end of the turning blank...



...unless the end isn't square, in which case a two-prong drive centre works better



Simple jam chucks work by 'jamming' a round spigot into a matching recess. Hot-melt glue improves security and is easily removed later



Four-jaw self-centring scroll chucks will allow you to turn bowls, eggcups, goblets and the like. They can be very expensive!

13

Most scroll chucks have a range of jaws to increase their versatility still further





14 Dovetail jaws are the most common, and can clamp down onto a matching spigot...



15 ...or can expand into a dovetail recess or other internal opening in the workpiece

these have become less popular in recent years, probably because the cost of scroll chucks has at last come down. Take a look at the Multistar Duplex chuck, which is an extremely well made collet chuck.

Screw-on options

Screw chucks are another way of holding wood on the lathe, **photo 16**. They are more secure when screwed into side grain (for example, when holding a bowl blank) than in end grain (holding a goblet). The chuck on the left in **photo 16** is designed to screw onto the headstock spindle. The screw chuck held in a scroll chuck, like my two home-made wooden ones, has become more popular in recent years, and many turners now use this method of holding a bowl blank instead of a faceplate.

If you don't have a chuck or screw chuck, then a faceplate is essential. It screws onto the headstock spindle, so buy one that is compatible with your lathe. They are mainly used as a first holding to turn the outside of a bowl, **photo 17**. Faceplates are useful for other purposes as well. Take another look at **photo 11**. Here I'm using the faceplate to hold the scrap wood for the jam chuck.

Suction or adhesion

There are all sorts of other ways to hold work on a lathe, including vacuum chucks, the Longworth chuck, coil chucks, sticky chucks (basically double-sided sticky tape), and glue chucks. When I first started turning, many years ago, I couldn't afford any type of commercial chuck, but I got as much enjoyment trying to work out the best way to hold a piece of work as I did actually making the piece. I still have a number of homemade chucks that I use occasionally for special projects. Each one tells a story...

Sizing tools

So what else do you need to get started? A set of inside and outside callipers are useful, as is a pair of dividers or Vernier calipers, **photo 18**. I say useful, but they aren't essential as very often a steel rule and a pencil will suffice. Lastly, if you own a set of open-ended spanners, these can be used to size turned tenons very accurately, **photo 19**.

NEXT MONTH...

There are several other topics that need to be considered, but the editor will get cross with me if I write more than will fit in the pages he has allocated to me this month! It really would be remiss of me not to discuss some health and safety issues in this series of articles. These, along with some finishing techniques and finishes, will be covered in next month's article. Don't miss it.



16

Screw chucks hold the work on a single screw, which is more secure if driven into side grain



17

A faceplate is screwed to the workpiece – for example, as a way of holding this bowl blank for its initial shaping



18

Callipers are useful for measuring wall thicknesses, while dividers can check workpiece diameters



19

Open-ended spanners can come in handy for checking the diameter of turned tenons

Stuck for the Perfect Gift?

Treat them (or yourself!) to a magazine subscription and you'll be in their good books for months to come!

£19.99*
for any of these titles...

*UK ONLY OFFER

Congratulations!
You have been given a gift magazine subscription



- ★ CHOOSE FROM A RANGE OF HOBBY MAGAZINES
- ★ GREAT SAVINGS
- ★ FREE GREETINGS CARD



SUBSCRIBE SECURELY ONLINE: www.getwoodworking.com/xmascorp13

CALL: 0844 543 8200 and Quote X202

BY POST: Please complete the form and return it to the address provided below. Quote Ref: X202

YOUR DETAILS: (This section must be completed)

Mr/Mrs/Miss/Ms..... Name.....

Surname.....

Address.....

Postcode..... Country.....

Tel/Mob.....

Email.....

D.O.B.....

(Complete if the subscription is for yourself)

Magazine..... Price.....

GIFT RECIPIENT (Complete "Your details first")

Mr/Mrs/Miss/Ms..... Name.....

Surname.....

Address.....

Postcode..... Country.....

Tel/Mob.....

Email.....

D.O.B.....

(Complete if gift recipient is under 18)

Magazine..... Price.....

PAYMENT DETAILS

Please make cheques payable to MyTimeMedia Ltd and write code **X202** and magazine title on the back.

☐ Postal Order/Cheque ☐ Visa/Mastercard ☐ Maestro

Card no: (Maestro)

Cardholder's name:.....

Valid from..... Expiry date..... Maestro issue no.....

Signature..... Date.....

SEND TO: MYTIMEMEDIA SUBSCRIPTIONS, Tower House, Sovereign Park, Market Harborough, Leics LE16 9EF

TERMS & CONDITIONS: Offer ends 31st December 2013. *UK offer only. Gift subscriptions will begin with the first available issue of 2014 and personal subscriptions with the next available issue when order is placed. For full terms & conditions visit www.getwoodworking.com/terms. From time to time, your chosen magazine & MyTimeMedia Ltd may contact you regarding your subscription, or with details of its products and services. Your details will be processed in full accordance with all relevant UK and EU data protection legislation. If you DO NOT wish to be contacted by MyTimeMedia Ltd & your magazine please tick here: ☐ Email ☐ Post ☐ Phone. If you DO NOT wish to be contacted by carefully chosen 3rd parties, please tick here: ☐ Post ☐ Phone. If you DO wish to be contacted by carefully chosen 3rd parties, please tick here: ☐ Email

A free greetings card will be supplied with all gift subscriptions;

please note that this will be sent to payer's address in December 2013, separate to the order confirmation.



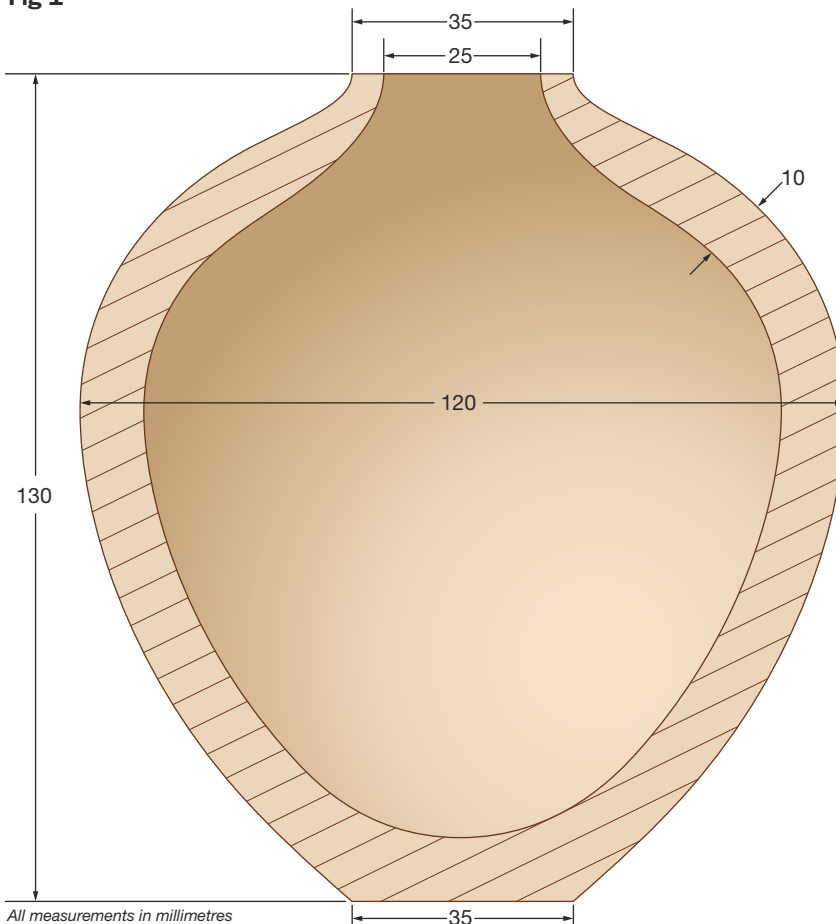
BY BOB CHAPMAN

Over the rainbow

In this project I'm taking the opportunity to use up a few plywood offcuts and also to experiment with some colouring techniques. I think you'll agree that the end result is eye-catching, to say the least!

I don't actually do much colouring of the pieces I make. This is not because I've got anything against colouring wood, although I know there are many turners who think it's sacrilege. No, it's simply because I don't feel I'm very good at it. When I said this to a friend recently, his response was very sensible and really quite predictable: 'Well, practise!'

Fig 1



Preparing the blank

I began by sawing the 18mm thick offcuts into rectangles measuring about 170 x 150mm, and stuck eight of them together with PVA glue, **photo 1**. One of the pieces was about 20mm shorter than the others, so I placed this on the outside. I'll make this the end that is eventually held in the chuck, so the missing section won't matter. Put a thin, even layer of glue on all the mating surfaces and leave the block cramped tightly overnight for the glue to set hard.

Making a start

Find the centres of both ends and draw a 120mm diameter circle on each one. Then reduce the square blank to a rough cylinder on the bandsaw, **photo 2**. Cut 2 to 3mm outside the marked circle, leaving a small amount of waste to be removed on the lathe.

Mount the block between centres and turn it to a smooth cylinder using a spindle roughing gouge, **photo 3**. The final diameter isn't critical, but you can use the pencilled circles as a guide. The surface quality is also unimportant, since most of it will be removed when the form is shaped.

Initial shaping

Use a skew chisel on its side to cut a dovetail spigot on one end of the blank, **photo 4**. The missing section of the blank shows clearly as a ghost image in this photo, but the spigot is small enough to





1 Glue the plywood offcuts together, cramp the block securely and leave it to set overnight



2 Reduce the blank to a rough cylinder by trimming it on the bandsaw



3 Turn it down to a smooth cylinder using a spindle roughing gouge



4 Use a skew chisel to cut a dovetail spigot on one end of the blank



5 Begin shaping the outside of the blank with a small bowl gouge



6 Start the hollowing by boring a hole using a large Forstner bit



7 Enlarge the hole using a round-nosed scraper; mine is home-made



8 Remove the debris regularly; I do it with a puff of compressed air

consist entirely of solid wood. The actual size of the spigot depends on the size of your chuck. I rarely measure them, and almost always make them a bit bigger than is actually needed. In this case they were left deliberately large to avoid weakening the glued-up block.

Using a 6mm ($\frac{1}{4}$ in) bowl gouge, take the block a little way towards its final shape, **photo 5**. Curve the top down towards the middle and cut in at the end which will be held in the chuck. Don't remove too much wood here, because the blank has yet to be hollowed and it needs to be strong enough to withstand the forces involved.

Starting hollowing

Begin the next stage by boring a hole down the centre of the blank, going to about 20mm from the bottom. I use a long 30mm diameter Forstner bit for this, **photo 6**, but if you don't have one, start with the biggest drill you have and then enlarge the hole as you hollow out the form.

Whatever the shape I'm hollowing, the first tool I use is a 6mm square-shanked round-nosed scraper. I made this from a Crown parting and beading tool that I re-ground to the shape I wanted. I think Ashley Iles now make a 6mm scraper like this. The tool is ideal for enlarging the central hole, **photo 7**, and it's surprising how much material it can remove.

Reaching the depths

As debris builds up inside the form, you must clear it out regularly or it may cause the tool to bind and catch. I use a blast of compressed air to do this, **photo 8**, but if you don't have a compressor simply take the chuck off the lathe and turn it upside down to empty it. Don't take the workpiece out of the chuck, though; it may not turn true when you replace it.

Next, I switched to my articulated Rolly Munro deep hollowing tool to cut into the shoulder region of the form, **photo 9**. Being able to alter the position of the cutting tip relative to the shaft is a great advantage, but I find that the tip clogs up fairly quickly. It can remove wood very rapidly when cutting at its best, so be careful not to make deep grooves on the inside of the form.

Inside and out

With much of the hollowing done, I turned the outside down to nearer its final size with the small bowl gouge, **photo 10**. Working like this – taking some from the inside, some from the outside – ensures that the

wall thickness remains reasonably even and the shape stays right. Use callipers to check the thickness regularly, and try to avoid creating any thin areas.

I carried on with the hollowing using a swan-necked scraper, **photo 11**. This tool is manufactured so that the cutting tip is in line with the straight part of the tool's shaft. When using one, it's essential that the straight portion of the shaft is on the toolrest. Putting the curved part on the rest will result in the tip being forced sharply downwards as soon as it makes contact with the wood, and the tool will become uncontrollable.

Smoothing the ridges

The final part of the hollowing is to smooth out the internal surface with a broad-bladed scraper, **photo 12**. This spans the ridges and levels them out. The tip can be removed and attached to a swan-necked shaft if needed. I've added a white Tipp-Ex mark on the top of the shaft so I know the orientation of the tool when it's inside the hollow form. Unfortunately it's too big to pass through holes smaller than this one.

Checking the walls

As the hollowing proceeds, use callipers to measure the wall thickness frequently, **photo 13**. How thin to make the walls is a matter of pride for some turners. The thinner the walls are, the greater the chance of going right through and the more skill it takes to complete the piece successfully. In this instance I'm conscious of the fact that with a plywood blank, the thinner the walls, the less glue there is holding them together. That's why I'm leaving them around 10mm thick. The finished form will be a bit heavy, but only another turner will notice that!

Sanding and staining

Surface preparation begins with 80-grit paper, **photo 14**. This is followed by staining the entire surface of the form black. Use a good-quality stain that won't fade in daylight. I'm using Behlen aniline dyes, which come in powder form and are dissolved in an alcohol/water mixture, and are said to be light-fast. The dye solution is applied with a brush, **photo 15**, and allowed to dry.

The whole surface is then power-sanded with 120-grit paper, **photo 16**, to remove as much of the black stained surface as possible. Next, the staining was repeated using a red dye. This was also allowed to dry and then power-sanded with 180-grit paper, again until almost all the colour was removed, **photo 17**.



A Rolly Munro hollowing tool is ideal for reaching into the shoulders of the form



Shape the outside down towards its final thickness with a bowl gouge



A swan-necked scraper will smooth out the inside of the shoulders...



...and this broad-bladed scraper will help to smooth the rest of the interior



Use double callipers to check the wall thickness regularly as you work



Sand the outside of the hollow form smooth with 80-grit abrasive paper



With the lathe stationary, brush on a coat of light-fast black dye



Power-sand the surface with 120-grit paper to remove excess stain



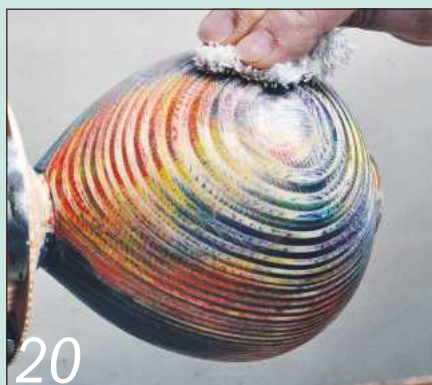
17 Apply red dye next, allow it to dry and power-sand it with 180-grit paper



18 Brush on overlapping random patches of blue and yellow dye



19 Sand and seal the form, then apply several coats of acrylic lacquer



20 Rub over the lacquer with burnishing cream and buff it to a shine



21 Turn the base down to a narrow section and cut it off with a fine-toothed saw



22 Sand off the stub and make the underside of the form slightly concave



23 Paint the inside of the form with matt paint to create a 'black hole' effect

Rainbow colours

At this point I stained the hollow form in random patches with yellow and blue dyes, sanding with 240-grit paper until most of the colour was removed and finishing off with 400-grit paper to improve the surface. Where the colours overlap, areas of orange, green and purple also appear in almost pastel shades, **photo 18**.

Obviously this staining sequence is extremely flexible, and this is where experimentation comes into the process. You can change colours and try different sequences of application, but the basic principle of sanding most of the stain away again at each stage remains the same.

Sealed and polished

I finished off the hollow form with cellulose sanding sealer, and then sprayed on four or five thin coats of Mylands gloss acrylic spray, **photo 19**. Allow adequate time for drying between coats, and leave the final coat overnight to harden thoroughly.

When the acrylic lacquer is properly hardened, rub it down gently with 0000-grade steel wool to level the surface. Use a slow speed and don't apply too much pressure or you risk melting the lacquer. If you do so, you'll have to sand it all off and start again.

Next, turn the lathe off and use a soft cloth to rub burnishing cream all over the surface, **photo 20**. Rub it in well and use plenty of it. Finish by switching on the lathe at a slow speed and burnishing the surface with the same cloth. At first the surface will look dull, but it will soon start to gleam. Polish it gently with a clean cloth until there's no longer any trace of a brown residue on the cloth.

The final cut

The hollow form can now be parted off. Rather than risk damaging it, I prefer to part down to a narrow section and then cut through this with a hacksaw, **photo 21**. I then remove the remaining small stub by holding it to a sanding disc rotating in the lathe, **photo 22**.

People will inevitably put their fingers into the hole of any hollow form. How smooth the interior surface feels depends on how good you were with the final scraping. It's almost impossible to sand the interior, and you should never put your fingers inside with the lathe switched on. You can, however, stop anyone looking inside by painting the interior matt black, **photo 23**. This black acrylic primer reflects hardly any light. The result is like looking into a black hole: you see absolutely nothing!

Hammer®

The obvious choice!

Your complete workshop for £ 6,999!*

Incl. VAT. / Incl. UK mainland delivery.

Visit us online to view our Christmas promotions on a wide range of machine, accessories and tooling.

www.ukhammer.co.uk

HAMMER - A range of over 20 machines for the keen and professional woodworker.

FELDER-GROUP UK

Unit 2, Sovereign Business Park, Joplin Court
Crown Hill, MK8 0JP MILTON KEYNES
Tel. 01908 635 000, Fax 01908 307000
info@ukfelder.co.uk

www.ukhammer.co.uk

 Request your free catalogue now!



HAMMER
Quality and
precision from
AUSTRIA

*Package includes: A3 26, B3 basic, N3800
Call for details!



A3 26
Planer-Thicknesser



B3 basic
Saw/Spindle Moulder



N3800
Bandsaw

This is the tale of the editor's ongoing discoveries of the joy of planing with a fine-quality planing and thicknessing machine – to wit, the Hammer A3²⁶ from Austria. The story began in our August issue...

Hammer A3²⁶ planer thicknesser

I know it's ridiculous, but the amount of pleasure I've had recently from using my new Hammer planer thicknesser is bordering on the fantastic. Why is this? I hear you ask. Well, I'm sure I'm not alone in having spent many a workshop year operating with basic equipment at best, and now, having finally started to appreciate the hugely satisfying benefits of accurate machinery, I'm kicking myself for not making more of an effort to upgrade long ago.

The bad old days

In previous times – darker times – when the light of planing precision was little more than a dull gleam in the corner of my last workshop, the thought of machining up long items such as door stiles arrived like a formal challenge to a duel. I'd brace myself, go and buy the straightest timber in the yard, and then – after some laborious preparations – settle down to a lengthy and uncertain bout of planer top machining.

My old planer combo, little more than a tinplate toy, nonetheless managed to struggle gamely through the years to produce sufficient straight stock with which to manufacture a steady stream of doors and similar. Wherever possible I'd machine up an extra piece or two, a precaution I would recommend to anyone. Many of my doors are still swinging and, in the case of some of the double ones, still meeting each other neatly on the close.

New procedures

Despite the generally satisfactory – if hard-won – results of my old machine, I eventually changed my door-making procedures. Faced with making a couple of front doors recently, I bought in some straight lengths of prepared hardwood (meranti or something similar) that I painstakingly selected at my friendly local timber yard, instead of spending hopeful hours eking out the waning accuracy and level of the old machine.

The latest batch was not entirely up to the straightline mark, but I was able to improve a couple of the stiles for my most recent door

£1530



project (a 2.2 x 1m monster) with relatively little fuss. In lieu of a pair of rollers (note to self: must buy some soon) I enlisted my reliable Workmate as a temporary support to effectively extend the length of the outfeed table. Because of the accuracy and build quality of the machine, I was able to produce a bang-straight 2.3 metre stile on the planer. I recently learnt that bolt-on extension tables are available, but if it's only occasional long stuff you machine, roller supports will be fine.

On the edge

One of the most immediate benefits of using this machine, and one which I used previously to only dream about, is its ability to perform a quick, easy and – most importantly – accurate edge joint. I've

A roller stand would be preferable to this for extending the table length



Frequent sharpening with a diamond hone has kept all three blades in really good condition



The final verdict on the fence is that it's light in weight but perfectly true



The end results are just as accurate when you're machining thin stock



This Hammer machine brings total accuracy to every job

always prided myself on shooting the edges of two or more boards by hand (prior to joining them to make a much wider piece), but there are always times when things don't go entirely smoothly and the job can often take a lot longer than it should.

I needed a couple of tops for a pair of tables a short while back, and, for the first time, I didn't reach for my jointing plane. Instead I just checked that the fence was square on the Hammer, and gave each edge a thickish pass across the planing tables. It was hugely pleasing to see that each board could be set precisely on the edge of the previous one, and it was with a satisfied smile that I was able to glue and cramp them up straightaway.

Stay sharp

Despite fairly heavy usage over the last few weeks, I've yet found the need to change the blades, preferring instead to give them a regular sharpen up with an Axminster diamond hone. It's possible that purists may object to this, but I've done it for years on various machines and have yet to encounter a problem.

On the square

Many a woodworker and potential planer purchaser will direct much of their interest towards the fence. I can say here and now that I'm entirely pleased with its accuracy. Compared to the solid steel fences of yesteryear some might think it's a bit on the light side, but simple design and careful manufacture means that the fence doesn't move under the pressure of normal use – and what more do you really need than that?

After much checking in the early days, my confidence in its ability to stay set at square increased to full, even after the tables have been lifted up and replaced after its change into thickening mode. At the maximum width limit you need to be careful tightening it up, but you'd have to be planing a massive lump of timber for this ever to be a problem.

All change

When it comes to converting the machine into thickening mode, it's much less of a fag than you might think. The tables unlock in a positive manner before the whole spring-assisted assembly swings up and locks into place. Once your extraction hose is off, you flip the shroud/cover-guard over so that it locks into place (safety cutout switch here), reconnect the extraction and you're almost good to go. The only irksome bit is releasing

SPECIFICATION

MOTOR	1600W
FEED SPEED	6m/min
PLANER TABLE	1120 x 260mm
PLANER FENCE LENGTH	750mm
PLANER FENCE TILT	90° to 45°
MAX PLANING WIDTH	260mm
MAX PLANING CUT	4mm
THICKNESSER TABLE	540 x 260mm
MAX THICKENING WIDTH	254mm
MAX THICKENING HEIGHT	225mm
WEIGHT	245kg

VERDICT

VALUE FOR MONEY	■■■■■
PERFORMANCE	■■■■■

FURTHER INFORMATION

- Felder UK Ltd
- 01908 635000
- www.ukhammer.co.uk

the friction drive controller lever. You must do this to ensure that the infeed and outfeed rollers are turning, and it needs to be reset at the end of the job to avoid lumpy wear – something that the forgetful amongst us may well have a problem with.

Once you've cranked the table to your desired thickness, there's a locking handle option available but, even when I neglected to use it, the results were still top-class. Although it's sensible to lock off on a batch run, I still encountered no snipe and have achieved a consistent thickness output.

Summing up

Although I'm clearly not an engineer, I really appreciate the level of design and manufacture that has gone into the A3²⁶, and the build quality ensures that everything keeps working as it should do. It's hard to put a price on reliability, but when that means you don't have to spend every machining session worrying about the results – or sorting out problems – it's a price well worth paying. **MC**



The tables are spring-assisted and lock into place with the minimum of effort



The extractor hood and guard covers the cutter block in thickening mode



The thickening table is raised and lowered in the customary handle turning way. Note lock

A cordless drill that can also become a jigsaw, a sander, an impact driver, a hammer drill and a multi-tool sounds like an interesting prospect. But can the MultiEvo really do it all?

£56.25
(starter set)



Black & Decker MT143K MultiEvo multi-tool

Back in the 1960s, when domestic power tools were becoming popular, the idea was that you would buy a power drill and then add attachments to it as needed. There weren't that many attachments, but amongst other things, you could make a lathe, a circular saw, an orbital sander and a jigsaw. Electric motors were far more expensive in real terms than they are now, so the thinking was: buy one motor that can drive a variety of attachments to save money.

Black & Decker have now returned to this theme, albeit in a much more sophisticated way, with the MultiEvo. The system is centred on a cordless drill with a removable front end which can be replaced with a selection of attachments. It's well designed, and the functions can be changed in seconds without the need for any tools.

Basic features

The MultiEvo looks much like any other cordless drill. It has a small battery that slides onto the base of the handle; a double-ended screwdriver bit is stored above it. The main body is covered with soft-grip rubber. It has a 10mm capacity two-handed chuck and a

ten-position torque ring. The trigger is variable speed. To change attachments a button is pressed on the top and the attachment slides off the front. In its standard form the MultiEvo is a good screwdriver but rather a slow drill.

Slow charging

An intelligent charger is supplied but unfortunately it's very slow, taking between five and seven hours to charge a dead battery. Unless you like very extended coffee breaks, a second battery is an absolute necessity.

Jigsaw attachment £24.98

The jigsaw is rather impressive. It has a quick-release blade holder and will take both plain-ended and the Bosch-type T-ended blades. It has a good-sized baseplate and feels robust. It cuts well, is comfortable to use and easy to manoeuvre. It has no pendulum control, as on normal jigsaws, so it does cut fairly slowly, but nonetheless it's an effective and useful attachment.



Press the button on the top to release and replace the accessories

The standard set-up operates as a basic variable-speed drill/driver



The jigsaw attachment takes both plain and Bosch T-ended blades



The hammer drill attachment has two speeds, and drills concrete well



Sander attachment £24.98

This attachment converts the MultiEvo into an orbital sander with a large delta-shaped sanding pad. It's supplied with abrasive sheets that have separately replaceable tips. A dust extraction adapter is also included. This is a perfectly efficient sander, although it's rather unpleasant to use due to a high level of vibration. The dust extraction adapter also falls off a lot, though this could be glued in place.

Impact driver attachment £49.98

For serious and repetitive screwdriving the only tool to use is an impact driver. It transforms a tedious task into an effortless and speedy process. This attachment is supplied with a set of three driver bits, two drill bits and three sockets. It has a locking bit holder which secures the bit safely. Performance is excellent – as good as a stand-alone tool.

Hammer drill attachment £24.98

This attachment greatly enhances the MultiEvo's drilling capabilities. Not only does it incorporate a hammer function; it also has two speeds so can be used for high-speed non-hammer drilling. It's fitted with the same chuck as the standard drill attachment. It comes with a pair of masonry drill bits and will drill into concrete without difficulty.

Multi-tool attachment £49.98

This converts the tool into an oscillating multi-cutter or multi-tool. It's supplied with a detail sanding head, a scraper blade and a selection of cutting blades. The accessories are easy to change as there's a simple sprung clamping mechanism that holds them securely in place. The cutting performance was a bit variable with a lot of vibration, but the sander was good. It's also equipped with a useful dust extraction pipe; this one stays in position!

Summing up

The MultiEvo is pretty impressive. It isn't 100 per cent perfect, but it's good. All the attachments are robustly made and well-designed. The attachment system is fast and foolproof, and overall performance is more than adequate. The only disappointments are the slow charging rate and the rather small and fiddly chuck. However, considering the prices, you're getting a lot for your money. **AS**

SPECIFICATION

BATTERY	14.4V 1.3Ah Li-Ion
DRILLING SPEED	0-700rpm
CHUCK CAPACITY	10mm
WEIGHT	1.3kg
ACCESSORIES	storage case, battery, charger, bag for accessories

VERDICT

An old idea has been brought right up to date with impressive results. Well designed and executed, the MultiEvo builds into a useful and versatile tool system.

PROS

- Good design
- Easy operation
- Good performance
- Good value

CONS

- Slow charging
- Small capacity chuck

VALUE FOR MONEY

PERFORMANCE

FURTHER INFORMATION

- Black & Decker
- 01753 511234
- www.blackanddecker.co.uk



The multi-tool attachment features a tool-free accessory clamping system

The jigsaw cuts well, if fairly slowly, and is very easy to manoeuvre on tight curves



The sander attachment features delta-shaped pads with replaceable tips

The impact driver attachment comes with a useful selection of fittings



A machine that combines the operations of belt and fixed disc sanding within a single footprint is a great spacesaver in any workshop. This versatile sander comes with an optional floor stand

Axminster AWEBDS610 belt/disc sander



£277.96

This is a new product from Axminster, and although classed as having a hobby rating, it's a real contender for serious work. It fills a gap between the smaller and lighter bench-top models, which have a 100mm wide belt and a 150mm diameter disc, and the big floor-standing models which have longer sander beds.

Multiple roles

These dual-purpose sanders are not simply confined to smoothing work. The belt can be used for levelling, while the open roller at the end can be brought into use for concave work. In the vertical position, the belt provides an ideal method of refining convex edges.

The disc can be employed for similar shaping of convex work, and for preparing and repeating mitre and compound cuts at the ends of material.

Standard features

The machine is built on a cast-iron base with provision for bolting down, or mounting on the floor stand which is available as an optional extra costing £39.70. The motor is tucked away in the lower part of the machine, and drives the rear roller. The bed over which the sanding belt moves is a steel fabrication, with the front roller being adjustable for tracking purposes. The work stop is of a generous size, and is used as a work support table when the belt sander is raised to the vertical. A single anchor point locks this as required, operated by a hexagon key.

The body incorporates a handle at each end for lifting purposes, and there is a dust outlet conveniently positioned. This is an essential feature as, by their very nature, sanders generate a lot of fine dust.

Sanding set-up

There are two pads which support the upper part of the machine when this is lowered to its normal working position, and a lever on the side of the body is operated to release the tension on the belt. However, before the belt can be slid off and replaced, the stop also has to be removed.



The front roller on the belt sander is adjustable for tracking purposes

The work stop is used as a small support table when the belt is vertical



The disc sander table is a generous size. The NVR switch is sited next to it

This small Proxxon chop saw will cut both wood and metal, but we've reviewed it only in its woodworking mode. It's not a totally new design, but now has several safety improvements

Proxxon KGS 80 chop saw

This is a well-made small machine with an accurate vice and setting system, and a mains motor that's rated for trade use. The base needs to be bolted down to a bench when in use. It's constructed from machined, die-cast aluminium with a polyamide case enclosing the motor. Basically it consists of two main parts: a base plate and a head.

The calibrated circular baseplate rotates through 45° to left and right. It's notched in 15° steps, but can be locked in any position. A precision steel vice is fixed to the baseplate and the jaws are adjusted by means of a long, knurled knob. You can see the length stop assembly at the front of the main photo.

Safety improvements

The head has two spring-loaded hinges that enable the blade to be lowered down onto the work; when it's not cutting it's in the up position. These hinges are now covered by a plate – a distinct improvement on earlier models.

The blade is fitted on a 10mm shaft and is totally enclosed within a stout, see-through plastic guard.

On earlier models the guard didn't encase the blade completely, so this is another good safety improvement. The guard hinges out of the way automatically as the head is lowered, to expose only the part of the blade which comes into contact with the wood.

The TCT blade supplied with the saw has 24 teeth; a blade with 36 teeth is available at £20.99 which should give a slightly smoother cut.

Starting orders

On the front of the body, to the right of the blade guard, a stout handle incorporates an on/off switch and a lever which unlocks the head so that it can be lowered down onto the work. This machine is designed to be used with only one hand to start and lower the head; the other hand must be kept well away from the operation for safety!

A table in the instruction book shows the maximum capacities the machine will cut when set at 90° or 45°. For example, a 65mm wide x 10mm thick strip of wood can be cut at 90°; this is reduced to 36mm wide x 5mm thick at 45°. It would be sensible to photocopy this table and hang it near the machine for future reference.

£189.95



The circular baseplate rotates through 45° to the left or right



The precision vice jaws are adjusted using a long knurled knob



The spring-loaded hinges beneath the head are now shielded by a plate

The calibrated scale on the machine has been improved so accurate settings can be made with confidence, and this will be of particular interest to model wheelwrights, for example, when making repetitive segments for wheels. It could also be of interest to those woodturners who like to turn segmented work, although it would not be possible to cut tapered wedges as the table doesn't tilt.

Setting-up tricks

When setting up the machine, the aim of the exercise is to ensure that the inboard ends of the vice are as close to the blade as possible to increase stability and reduce any chatter. However, for cutting mitres it's important to ensure that when the blade is lowered it doesn't come into contact with the end of the vice. The whole head can be moved from left to right and vice versa by means of a knurled knob so this can be avoided. It's wise to do a dry run first with the machine unplugged to check the clearance.

Using the length stop

This stop is particularly useful for repetitive work, but it can be removed completely if it's not required. It can be used only for cutting pieces of wood from 150mm up to a maximum of 250mm long. The piece of wood to be cut is placed in the vice and moved over to the right until it comes into contact with the stop.

The vice is then tightened to secure the wood and the end of the stop is swung down out of the way before cutting takes place. If it's not moved, the piece of wood being cut can jam between the blade and the face of the stop when the cut is completed, and the result is an unpleasant 'clunk' which can be alarming.

Summing up

As with all woodworking, the secret of success lies in the preparation of the wood you're going to use. If the wood is accurately prepared then the jaws will grasp it firmly; if not, the wood may well move in the vice and the results will be poor and disappointing. There are no short-cuts!

If you need a small chop saw this one is well made, accurate and simple to set up, and does the job it's been designed for very well. However, it is expensive and may have limited appeal to most woodworkers. *IW*

SPECIFICATION

MOTOR	200W
BLADE DIAMETER	80mm
NO-LOAD SPEED	6000rpm
TABLE SIZE	230 x 230mm
MAX CUTTING CAPACITY	at 90° 65 x 10mm
	at 45° 36 x 5mm
MITRE RANGE	± 45°
WEIGHT	6kg

VERDICT

This small chop saw is well made, simple to set up and accurate to use... but it's on the expensive side.

PROS

- Accurate vice and setting system
- Good blade guard
- Precision vice

CONS

- None
- Just the price!

VALUE FOR MONEY 

PERFORMANCE 

FURTHER INFORMATION

- Brimarc
- 03332 406967
- www.brimarc.com

The length stop should be swung down out of the way once the work has been secured



The 80mm blade is totally enclosed by a stout see-through plastic guard



The saw is designed for one-handed operation; keep the other one safely out of the way



The length stop can only cater for work between 150 and 250mm long

GET YOUR **FREE** ISSUE!



www.bestofbritishmag.co.uk

HOW WOULD YOU LIKE A MONTHLY MAGAZINE THAT...

- Lives & breathes the 40s, 50s and 60s in 100 colourful pages
- Evokes our fondest childhood memories & looks at what inspires us today
- Is packed full of vintage collectables, antiques, and fashion
- Publishes more than 16 pages of readers' letters and articles each issue

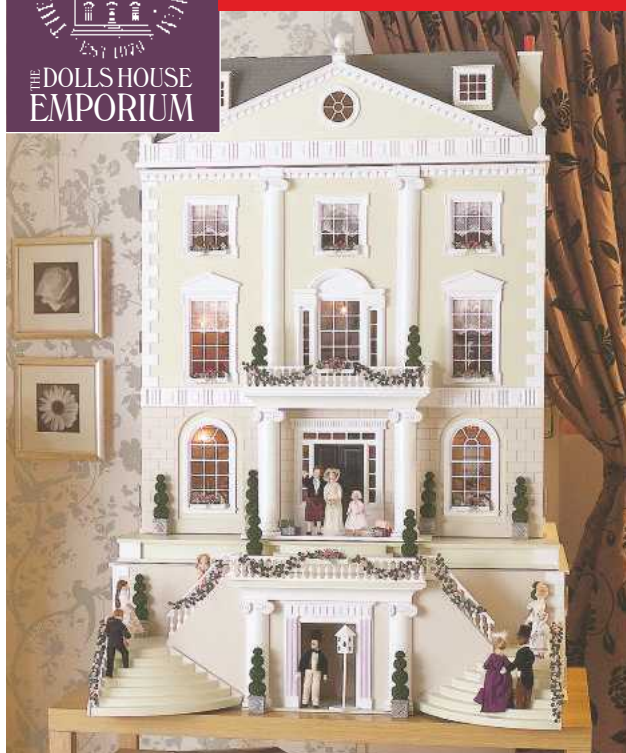
DON'T MISS OUT ON YOUR FREE ISSUE! OFFER ENDS CHRISTMAS DAY

GET YOUR FREE TRIAL ISSUE* BY TELEPHONING:
0208 752 8125 or email jennifer.bissell@metropolis.co.uk
quoting code BOB WW1

*1 issue per household, subject to availability. Offer ends 25.12.13



Over 1,200 prices reduced with up to 84% off
Available on-line, by phone, and in store



View these treats and 1000s more online!



pinterest.com/dollshouses



facebook.com/dollshouseemporium



twitter.com/dollshouse



We're very proud of our high ratings from independent review service Feefo



dollshouseforum.co.uk

dollshouseblog.co.uk

Good to know: We share our customers' enthusiasm for their hobby – regularly posting pictures of their projects online on our company blog. Quite simply, it's something we enjoy!

Price reductions are updated weekly on our website,
visit www.dollhouse.co.uk/WDW3 and sign up to be kept informed

A router cutter with a replaceable tip can be a time-saver when you're making a lot of repeat cuts. This version from Trend is particularly useful for jig work

£79.43
(one cutter)

Trend RT/11/PK1 replaceable-tip cutter

Being able to touch up and sharpen a TCT router cutter is handy, but when you're working to specific templates such as a worktop joint, taking a fraction off the diameter of a straight cutter can affect the fit of the joint. Trend's range of replaceable-tip cutters includes this particular one that's suitable for use with worktop or stair housing jigs using a 30mm guide bush.

Design features

Although it has replaceable tips just 30mm deep, the shank has a tapered design to allow it to plunge and continue to cut beyond this depth. It will tackle a 40mm deep worktop with ease, and will cut to a maximum depth of 50mm. The tips have two cutting edges, so if you buy the version with three extra cutters (priced at £93.90) you get eight edges for less than £12 each. The carbide is designed for extended use in

both natural timber and abrasive stock such as chipboard or mdf.

Using the cutter

Fitting and swapping tips is simple. A Torx wrench with a flag-style handle is supplied for loosening and tightening the two screws that hold the cutter to the shank.

When using this cutter, the feed rate needs to be considered as it only has one cutting edge. This does affect the cutting performance if you work at a similar feed rate to a two-tipped standard equivalent. There's a maximum speed marked on the shank of 28,000rpm.

When testing the cutter by making a joint on a solid oak worktop, the end-grain cut certainly required more effort than with a standard two-tip cutter. The hardness and end-grain caused some chatter if the cutter was pushed through the work too quickly, or



if too deep a cut per pass was attempted. A reduced feed speed combined with a couple more passes than usual ensured that the resulting joint was perfect.

Trying the same joint in a chipboard top was far easier, and the cutter progressed in much the same way as a standard type as there's less resistance than in a dense hardwood. **AK**

SPECIFICATION

DIAMETER	12.7mm
SHANK	1/2in
LENGTH	100mm
MAX CUTTING DEPTH	50mm
ACCESSORIES	spare cutters

VERDICT

If you constantly need a 1/2in cutter for jig work, this cutter comes up trumps, offering a sharp edge every time.

PROS

- Replaceable tips
- Easy fitting
- Self setting

CONS

- High initial cost
- Single cutter needs slower feed rate for good results

VALUE FOR MONEY

PERFORMANCE

FURTHER INFORMATION

- Trend
- 01923 249911
- www.trend-uk.com



The twin-edged blade slides into a slot in the shank of the cutter...



...and is held securely in place by two small Torx-head screws



This oak top took a little longer than usual with a single cutting edge



Taking a few extra slower passes than usual gave excellent results

DeWalt DWS778 sliding mitre saw

DeWalt have continued to see that there's value in an old but well-established mitre saw design, and have given it a tweak or two to bring it up to date and ensure that its value is retained



Seeing this mitre saw at its launch a while back was certainly a bit of surprise, as it's based on an old design that has been around for some years. With so many pullover saws on the market at all price levels, the introduction of this particular model could be seen by many as a step backwards, especially considering there's no trenching function. If you're on the hunt for that specific function then this saw isn't for you, but it more than makes up for it in other areas.

An old favourite

The original versions of the saw were based around a 200mm blade, but this new version has a 250mm blade, giving it the capability to cut stock up to 85mm deep at 90°. However, to keep it compact the design makes it pretty limited on the tilt side of things. DeWalt specifies a maximum cut of only 45mm in depth at 45° on the website, but this is contradicted by the manual which states 58mm. Putting it to the test, this larger dimension is about right; so any mitre work in standard 50mm thickness is easily within the remit of this saw.

Preventing a deeper cut is down to the design. With the pullover function incorporating integral internal bars, the casing has to accommodate them, and this limits the tilt capacity. However, it's perfectly adequate for the majority of general woodworking tasks. The design makes for a very compact tool as well; this saw will easily sit on a 600mm deep worktop.

Sound and light

Many mitre saws with brush-driven motors crash into life. The DWS778 is no different in having a brushed motor, but the blade is belt-driven and this



The head is locked with this Bristol lever and can be tilted to 48°



The guarding on the 250mm diameter blade is all metal and very robust



The internal forward-facing bars mean there are no rear projection problems



A good solid hold-down is supplied to secure the workpiece

gives it a whisper-quiet operation as well as keeping to a minimum the jerky start-up that's often associated with direct-driven versions.

The old version of this saw used to have a laser as an accessory. It was an absolute pain to set up and keep accurate, so it's a great asset to see the new DeWalt Shadowline technology featured on this model. It works superbly well, showing up both sides of the kerf line so you can work to either side of the blade with ease. However, it does need the saw head to be close to the work to cast a crisp shadow, and really bright workshop lighting can fade the shadow out.

Using the saw

Cutting is exceptionally clean, even with the relatively coarse 40-tooth TCT blade provided. This is negatively raked for a less 'grabby' cut. If you're used to a free-running pullover action, this saw has springs that keep the saw head retracted so you feel some resistance as you pull against them to make a cut.

The turntable has a smooth, sweet action, with a steel index plate on the outside with indexing holes at the usual common angles. It's a bit limited in its range – only 50° in each direction – but for general first- and second-fix applications that's good enough. It's only on certain compound cuts that it will be found wanting. As there's only a single tilt to the left, you have to be prepared to operate from both sides of the work for some cuts.

The fence slides back to allow the tilt function; there are no indented settings here apart from positive stops at 90° and 45°, but you can override the angle to 48° if needed.

Summing up

Good cutting capacities are one thing, but some of the bigger mitre saws around today are getting beyond the realms of portability and are better off being workshop-based. Yes, this particular model lacks the trenching function, but that downside is maybe not overly important for the majority who will be looking for a saw that has accuracy and capacity in crosscut and mitre functions, as well as being compact and portable. It ticks all those boxes with ease. **AK**

SPECIFICATION

MOTOR	1850W
BLADE DIAMETER	210mm
NO-LOAD SPEED	4300rpm
MAX CUTTING CAPACITY	at 90° 305 x 85mm
	at 90° x 45° 305 x 58mm
	at 45° x 90° 215 x 85mm
	at 45° x 45° 215 x 58mm
MITRE RANGE	± 50°
WEIGHT	17.2kg

VERDICT

It may be a little basic in some areas, but this saw still surpasses many for its ease of use and compact size.

PROS

- Compact
- Lightweight
- Good cutting capacities
- Quiet operation

CONS

- No trench function
- Single compound tilt

VALUE FOR MONEY

PERFORMANCE

FURTHER INFORMATION

■ DeWalt
■ 0700 339258
■ www.dewalt.co.uk

The saw copes easily with heavier work such as this 225 x 50mm joist



The steel turntable plate has several common index positions and locks firmly in place



The guard has to be raised with the black paddle before the switch can be pulled



The left fence retracts to allow the head to tilt for making compound cuts

Dust extraction is an important part of woodworking and with new legislation on the horizon, the fine filtration levels offered by the 'M' class extractors look like becoming the new industry standard

Bosch GAS 35 M AFC extractor

The portable extractor has come a long way from the basic vacuum-style cleaner, but still retains that same principle of keeping the working environment clean and less hazardous. However, with new legislation coming into the workplace, these extractors have now to hit certain specifications to achieve their function for certification.

Filtration categories

Dust extractors now have Low, Medium and High (L, M and H) specifications, with these letters designating the filtration level they achieve. Whereas the old filtration levels were graded by the micron size they filtered down to, now performance is measured by the amount of waste a machine releases back to the atmosphere. An 'M' class model has to ensure that no pollution greater than 0.1 milligrams per cubic metre of air is released.

Collection and filters

The GAS 35 M AFC extractor has a standard collection drum made from polypropylene for durability, and it can be used as a standard extractor, collecting the debris directly into this. Alternatively an open-topped polythene collection sack can be used. The extractor comes supplied with one of these, and when it's full you simply use the double-sided tape on the bag to seal it up for easy disposal.

Any liquid spills are contained directly within the drum, and the extractor is supplied with a baffle filter that's suitable for both dry and wet situations. The filter simply unclips and can be rinsed under running water to clean it, ready to re-use once it's dry.

There are three different filters available; a cheaper dry-only paper-based baffle, the PES wet/dry polyester filter supplied as standard, or an ultra-durable PTFE filter, again for wet/dry work.

Constant power

Filtration levels have to be maintained to meet the EU regulations as the extractor does its job, and with finer particles especially, the filter can quickly become overwhelmed by the dust, so reducing the effectiveness of the extractor.

There's an audio signal that indicates when suction power drops



Set this three-position dial to match the hose diameter and ensure correct airflow



The automatic baffle filter cleaner is engaged with this power button



Power tools rated at up to 1800 watts can be used with the on-board socket



The Bosch 'L-Boxx' system containers clip directly to the extractor for transport

below a certain level, so to help keep the efficiency at its peak it's best to engage the AFC (Automatic Filter Cleaning) system. This is activated by a small button on the front of the extractor and kicks in every fifteen seconds. It blasts air through the baffle filter, dislodging the finer particles that can choke it, thereby keeping the filter working efficiently for far longer.

If you're using paper filter bags you have to switch the AFC function off and use the extractor without it, relying on the audio signal to let you know when it's in need of cleaning or emptying as the pressure drops.

Machine settings

The audio signal is also emitted if you set the extractor up incorrectly. Dials at the front are used to set the correct suction power to suit the hose diameter, with 15, 22 and 35mm positions available. Alongside is a further airflow power dial to increase the suction on the selected hose diameter to increase the efficiency if this is needed.

A power take off socket linked to the third dial allows the power tool to control the extractor as well as running on for around 15 seconds after the tool is switched off to ensure residual dust is picked up.

Anti-static hose

With finer dust often associated with potential explosive situations from static build-ups, the Bosch extractor comes with a 35mm bore 5-metre anti-static hose. It's a twist-lock fit into the body and comes with a full kit of tools for general vacuum work as well as extracting from power tools.

Using the machine

It's all but impossible to determine if an extractor is filtering to its design parameters when the filtration levels are so fine, but it certainly dealt with router and sander waste with no problem as well as clearing up workshop waste quickly and efficiently.

This particular machine has other virtues too. It has on-board storage for the tools, hose and flex. It's also very manoeuvrable thanks to the small front locking castors, so it can be pulled around the workshop or workplace to capture the dust from any hand-held power tool that generates it, whether it's wood or masonry based stuff. It's an expensive machine, but it's very good! **AK**

SPECIFICATION

MOTOR	1380W
FILTRATION CLASS	M (see text)
CONTAINER CAPACITY	
	gross 35 litres
	net 23 litres
	fluid 19.2 litres
MAXIMUM AIRFLOW	74 litres/sec
WEIGHT	12.4kg

VERDICT

This extractor is a superb performer, and will satisfy the future requirements of workshop dust control legislation.

PROS

- Automatic filter cleaning
- Remote automatic switching
- On-board tool storage
- L-BOXX containers clip to top

CONS

- Expensive
- Extra costs for disposable bags

VALUE FOR MONEY

PERFORMANCE

FURTHER INFORMATION

- Bosch
- 01895 838743
- www.bosch.co.uk



TIMBER SUPPLIES & SPECIALIST EQUIPMENT

Ashley Iles
woodworking & turning tools

Fine quality chisels, carving and turning tools made in England

Free catalogue available online

100% satisfaction guarantee

www.ashleyilestoolstore.com

Log-Loc®

Tim Fogden

Meadow Farm, Coney Weston Road,
Sapiston, Bury St. Edmunds, Suffolk IP31 1RX

Tel/Fax 01359 268923

Email log_loc@btinternet.com

Web: www.log-loc.co.uk

SURREY TIMBERS Ltd

Your One-Stop Wood Shop

Hardwood Timber Merchant
stocking local & Imported Timber



Buy one
piece or one
pack!

Please come & select from our range:

**OAK, YEW, WALNUT, SAPELE, APPLE, MAPLE,
SYCAMORE & More!**

All welcome

- Woodturners • Joiners,
- Cabinetmakers

Call in and see

our huge range at: Loseley
Park, Guildford GU3 1HS

01483 457826 or 07795 663792

www.surreytimbers.co.uk



See us at:
SCOTLAND'S
NATIONAL
WOODWORKING
SHOW 25th & 26th
OCTOBER 2013
EDINBURGH
On the Record
Power stand

Now Open! BRODIES TIMBER

Brodies Timber is a small family run business, grown on the site which was formerly the workshop of the acclaimed furniture maker Jean Burhouse.

We are proud to be supplying products for all woodworking needs, from wood turners to joiners, DIY enthusiasts to model makers.

Open to public and trade

We stock a large selection of hardwoods, softwoods and sheet materials including:

MDF & plywoods (Far Eastern ply, Malaysian ply, marine ply and birch ply) and a large range of tools, hardware and wood finishes. And if you are needing something cut or shaped, we have a machine workshop to cater for your needs.

Opening Hours:

Mon - Fri: 8am - 5pm • Sat: 9am - 4pm

The Old Sawmill, Inver, Dunkeld, Nr Perth, Perthshire,
Scotland PH8 OJR.

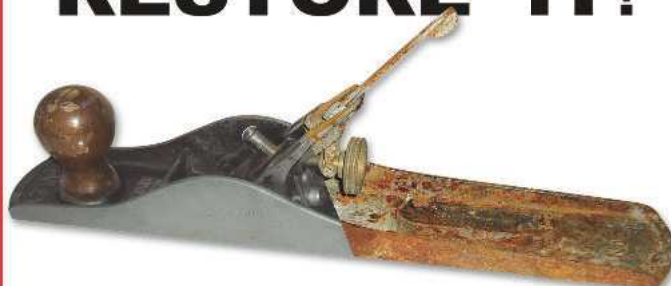
Tel: 01350 727723 • E-mail: mail@brodiestimber.co.uk

NEW TIMBER JUST IN...

Apple, Steamed Pear, Smoked Oak and Plum

www.brodiestimber.co.uk

Unloved?
Unuseable?
RESTORE IT!



Stanley No.5 'before & after' photo courtesy Peter Hemsley - The ToolPost

Restore Rust Remover & Restore Rust Remover Gel

Remove only the rust leaving sound metal unaffected. Cleans and brightens brass and nickel plating. See more stunning 'before & after' examples on our website photo galleries. Find local and international stockists on the website.

Shield Technology Limited.
Unit 69, Grimsby Business Centre
King Edward Street,
Grimsby, DN31 3JH

Tel: +44 (0)1472 360699
Fax: +44 (0)1472 324685
Email: info@shieldtechnology.co.uk
www.shieldtechnology.co.uk

Distributor enquiries welcome

SHIELD TECHNOLOGY
Guarding Against Corrosion

WOOD SUPPLIES, COURSES & SPECIALIST EQUIPMENT

ADD A NEW DIMENSION TO YOUR WORK WITH

Visit our
Online Store
Today!

(web address at bottom
of this advert)

metalcraft

Easy to use tools that do
not require heat or power



Ideal wherever wood and steel can combine to make stylish...

- Furniture
- Clocks
- Signs
- Frames & Decorative Panels
- and so much more

Call today for our free Catalogue and if you quote the promo code "MTW13"
we will send you our new demo DVD free of charge

J & C R Wood, Dept MTW13, FREEPOST NEA15848, Hull HU5 1BR
01482 345067 | info@janderwood.co.uk

www.metal-craft.co.uk



Uk Suppliers of Olive Wood Planks for Woodworkers

At Wood and Stuff I supply kiln dried 25mm & 30mm olive wood planks in a range of widths from 20cm to 40cm (widths subject to availability). These planks can be supplied and delivered to your door at up to two meters long for very reasonable prices. We supply to both professional and hobby wood workers as well as woodworking supply shops

As with all kiln dried wood these planks can be prone to splitting in the heads but I do my best at all times to supply sound, split free boards. All the wood comes rough cut and most has a waney edge.

Multi-Buys available to save on postage costs

If you have no internet please phone or write to the address below to receive a product list and order form in the post

WWW.WOOD-AND-STUFF.CO.UK

TEL: 07714 204060

EMAIL: JAMES@WOOD-AND-STUFF.CO.UK

Unit 10 Lidun Park, Boundary Road, Lytham, Lancs FY8 5HU

SPINDLE BLANKS

BOWL BLANKS

PEN BLANKS

OLIVE WOOD PLANKS

OLIVE WOOD BURR

MULTI BUYS



The Wood Veneer Hub

www.thewoodveneerhub.co.uk

We provide the highest quality:

- Decorative, Exotic & Burr Veneers
- Coloured & Smoked Veneers
- Constructional Veneers
- Peel & Stick Veneers
- Tools & Accessories

Visit Us: Unit 4 Eden Court, Eden Way
Leighton Buzzard, Bedfordshire, LU7 4FY

+44 (0) 1525 851166
sales@thewoodveneerhub.co.uk

Antique Restoration Courses

Comprehensive week long courses

All aspects of finishing and restoration tailored to
your requirements

The real workshop experience with **Alex Webster**

From Discovery/Quest Global TV show

'SALVAGE HUNTERS'

info@frenchpolishingemporium.co.uk
www.frenchpolishingemporium.co.uk



WOOD SUPPLIES, COURSES & SPECIALIST EQUIPMENT

TREND COURSES & ROUTING DEMONSTRATIONS

ROUTING COURSES
For details of our one or two day sponsored routing courses with full instruction on a wide range of routing applications visit...
www.trend-uk.com/courses

ROUTING DEMONSTRATIONS
For details of our routing demonstrations around the UK visit...
www.trend-uk.com/shows

or call: 01923 249911
email: enquiry@trendm.co.uk

trend
routing technology

AD/12/03

House of Brass
CLASSIC TO CONTEMPORARY
ARCHITECTURAL FITTINGS SPECIALISTS



SHOWROOM: NOTTINGHAM NG1 3NA
Tel: 0115 947 5430 (24 HRS)
Web: www.houseofbrass.co.uk
FREE CATALOGUE OR VIEW ONLINE

Visit our website at www.hobbyuk.com

HOBBY'S The Modelmaker's Yearbook
Annual 2014 • No.44 • 316 Pages
£3.25 P&P FREE

- NEW 12TH SCALE BATTERY-POWERED LED LIGHTING
- MODELLERS WORKSTATION
- AMATI MODEL KITS MUSEUM QUALITY
- NEW BRICK & TILE CONSTRUCTION KITS

DOLLS HOUSE SPECIALISTS

MATCHMODELLER
STEPHENSON'S ROCKET KIT
LORD OF THE RINGS - NEW RANGE 3D PUZZLES
NEW PRECISION SCALE MODELS (PAPER) QuickBuild
pre-coloured, push fit, no glue, age 5+

FREE PLAN - BIG BEN MATCHSTICK MODEL

Hobby's (Dept WW)
Knight's Hill Square
London SE27 0HH
020 8761 4244
mail@hobbyuk.com
www.hobbyuk.com

Available from WH Smith & leading newsagents or direct

BRITISH HARDWOODS

- Planned & Rough Sawn Hardwoods
- Ash, Beech, Cherry, Elm, Maple Oak, Walnut & Yew
- Kiln Dried Hobby Packs
- Classic Woodworking Tools
- Professional Wood Finishes

Buy Online or Call Us
Tel: 01535 637755 | www.britishhardwoods.co.uk

W.L. West & Sons Ltd
Selling Petworth, West Sussex, GU28 0PJ
t: 01798 861611 f: 01798 861633

- Hardwoods Temperate & Tropical
- Wood finishes
- Australian Burrs
- Exotic Timbers
- Woodturning Blanks 15+ Species available
- Woodworking Machinery
- Woodworking Tools
- Fencing, Gate & Decking Products
- Bespoke Garden Furniture

RECORD POWER
SHEFFIELD - ENGLAND

Timber & Tools for D.I.Y. • Carving Woodturning • Furniture Projects
shop@wlwest.co.uk

Open: Mon-Fri 8-5 & Sat 9.00-4.00pm
www.wlwest.co.uk

Allan Calder's Ltd
Sandpaper Supplies

Unit 2B, Churnet Works, James Brindley Road, Leek, Staffordshire ST13 8YH.



We are supplying top quality brands of sanding abrasives for all types of Wood Turners, Joiners & Cabinet Makers.

Web: www.sandpapersupplies.co.uk
email: sandpapersupplies@yahoo.co.uk
Tel: 01538 387738

TopOil
For wooden kitchen work tops and general interior joinery



VOC compliant 2010

- Osmo TopOil is a special oil and wax combination made with natural plant oils and waxes
- Offers highest coverage of any oil on the market (1 litre covers approx 12m² with 2 coats)

OSMO UK
Unit 24 Anglo Business Park
Smeaton Close, Aylesbury
Buckinghamshire HP19 8UP
Tel: 01296 481 220
Fax: 01296 424 090
www.osmouk.com
info@osmouk.com

osmo

SHOP GUIDES

**MAIL ORDER
NARROW BANDSAW
BLADES
MANUFACTURED TO
ANY LENGTH
PHONE NOW FOR QUOTATION
OR PRICE LIST**

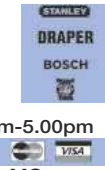
TRUCUT
Spurside Saw Works, The Downs,
Ross-On-Wye, Herefordshire HR9 7TJ
www.trucutbandsaws.co.uk
Tel: 01989 769371
Fax: 01989 567360

**TOP QUALITY - LOW PRICES
VSM - VITEX ABRASIVES**
KK532F Starter Pack (4 Metres) £12.95
inc. VAT and UK post. 1/2 metre each of grits
80, 120, 150, 180, 240 320, 400, 600
Also the NEW *GRIP - A - DISC*
Power Sanding/Finishing System
Plus lots of Belts, Discs, Stars, Low cost KK114
We also stock WOODTURNERS SUPPLIES
Timber/Bowl Blanks/Tools/Waxes/Finishes
Glues/Chucks/Glassware/Cutlery/Sundries.
SAE FOR CATALOGUE
Jill Piers Woodturning Supplies
2 Kimberley Villas, Southmill Road,
BISHOPS STORTFORD, HERTS CM2 3JDW
Tel/Fax: 01279 653760

**BERKSHIRE
WOKINGHAM TOOL
COMPANY LTD**
97-99 Wokingham Road
Reading, Berkshire RG6 1LH
Tel: 0118 966 1511
www.wokinghamtools.co.uk
H. P. W. CS. BS. A. D. MO.

**KENT
Sidcup**

George Higgins Ltd
83 - 85 Station Road
Sidcup, Kent, DA15 7DH
TEL: 0208 300 3161 FAX: 0208 302 7606
Open: Monday - Friday 8.30am-5.30pm
Open: Saturday - 9.00am-3.00pm


**LEEDS
GEO SPENCE & SONS LTD**
105 Wellington Road
Leeds, Yorkshire
LS12 1DX
Tel: (0113) 279 0507
Fax: (0113) 263 6817
Open: Mon-Fri 8.00am-5.00pm
Sat 8.00am-12pm

H. P. W. CS. MF. A. D. MO.

**LEEDS
D.B. KEIGHLEY
MACHINERY LTD**
Vickers Pleace, Stanningley,
Leeds, LS28 6LZ
Tel: (0113) 257 4736
Fax: (0113) 257 4293
www.dbkeighley.co.uk
P. A. CS. BC. MO.


SCAWTON SAWMILL

- Kiln Dried Oak
- Delivered Nationwide
- All thicknesses 20mm-100mm
- Phone or Buy online

Compare our prices at:
www.scawtonsawmill.co.uk
01845 597733

DIAMOND SHARPENING & CHAINSAW DISCS

www.StarkieSharp.com
The Diamond Sharpening Specialists

- Better Prices
- More Information
- Visit us at 40+ Shows



DMT
Diamond Sharpening Perfection!

Much safer, smoother carving
with up to 44 Teeth cutting
fast at 10,000+ RPM.

KATS
Chainsaw Discs
**The Ultimate
Power Carving
Experience!**

Cut, Carve, Shape, Notch,
Trench & Groove in Seconds!
Massively increases productivity!

Quote Code
SSTWW6 at
checkout
for FREE
Universal Nut
worth £6.95

Shown Lancelot
& Squire in Tandem
Richard Starkie Associates,
Timber Cottage, Wistow, Leicester, LE8 0QF Email: sales@starkies.com
www.StarkieSharp.com

WEB GUIDE


**Router cutters
Spindle tooling
Bandsaw, jigsaw &
circular sawblades**
Online catalogue & ordering
www.wealdentool.com


MUSICAL INSTRUMENT MAKERS

Musical Instrument Makers' & Repairers' Supplies


Largest selection of tonewoods, tools & parts in the country.
Visit our website or order our catalogue. Callers welcome

Touchstone Tonewoods, Albert Road North, Reigate, RH2 9EZ
Tel: 01737 221064 Fax: 01737 242748
www.touchstonetonewoods.co.uk

CLOCKS

Christopher Milner Woodworking Supplies
1,000+ product lines in stock
**Clock & Accessories (Quartz & Mechanical),
Barometers, Thermometers, Cabinet Furniture,
Screws, Plans, Kits, Polishes, Adhesives,
Abrasives etc.**
FREE catalogue available
(Dept WW), Beresford Lane, Woolley Moor,
Nr. Alfreton, Derbys DE55 6FH
Tel/Fax: 01246 590062
milnerwoodwork@aol.com

**HERMLE / KIENINGER MECHANICAL
CLOCK WORKS. DELIVERED EX STOCK**
Also available. • Dials • Quartz • Brassware
Martin H Dunn Ltd
The Clock Gallery Clarks Road,
North Killingholme, North Lincolnshire DN40 3JD
www.martinhdunn.co.uk
FREE PRINTED CATALOGUE
Showroom Open Mon-Fri 10am-5pm. Sat 10am-4pm
Tel: 01469 540901

**To advertise
here...**

Call David on
01993 709545

MARKETPLACE

Our **FREE** classified advertisement service

Send
or email a
photograph of
your item and
we'll include it
with your ad for
FREE!

FOR SALE



Metabo BAS 317 bandsaw with fence, mitre fence, three new blades and handbook, in very good condition; £170. Buyer collects.
01760 721033 (Norfolk)

Stanley ratchet brace, 8in swing two-jaw model in excellent condition, with selection of auger and flat bits; £45.
01189 712472 (West Berkshire)

Veneer edging – ash, beech, cherry, elm, maple and oak – in 50m rolls, 40-60mm wide. Call for prices.
01366 381074 (Norfolk)

Stanley Bailey No 4 smoothing plane in excellent condition; £20.
01189 712472 (West Berkshire)

Burgess bench bandsaw; £35. For five spare blades and Axminster fence, add £15. Buyer collects.
0116 289 7936 (Leicestershire)

Multico chisel mortiser, Wadkin Bursgreen 10in crosscut saw and 6in planer, all 3-phase machines; £150 for the lot. Buyer collects.
01684 772020 (Gloucestershire)

Bosch belt sander, 550W, 400 x 60mm belt, in excellent boxed condition with 15 spare belts; £50.
0118 971 2472 (Berkshire)

Arundel K450 lathe, 36in bed, bowl and faceplate turning, all attached to a purpose-built metal stand with shelving; £250.
01582 881310 (Hertfordshire)

Black & Decker Workmate; £35. Bench belt sander; £20. Black & Decker hand planer; £10. Bosch orbital sander; £10.
01509 646586 (Leicestershire)



Elektra Beckum planer thicknesser, model hc260m, new blades fitted; £320. Surplus to requirements following recent upgrade to Sedgwick machine.
07889 082852 (Herefordshire)

Elektra Beckum planer thicknesser; £350. Lurem saw bench; £150. DeWalt 250mm radial arm saw; £150. Warco 1/2in 12-speed drill; £140. Dust extractor; £175. Wooden joiner's bench vice; £25. All items in good working order; will accept near offers.
01225 712269 (North Somerset)

Black & Decker sander, 1/3-sheet orbital finishing model, 135W, in good boxed condition with dust extraction kit; £15.
0118 971 2472 (Berkshire)

Lurem combination machine. It planes, thicknesses, mortises, moulds, saws and tenons, and has made harpsichords; £350.
01326 341459 (Cornwall)

Poolewood 15-90 lathe with metal stand, two chucks, 18 tools and much more; £185. Buyer collects.
01295 402902 (North Oxon)

Lorch toolmakers' lathe, German precision model, also suitable for woodturning; £300. Please call for details and photos.
01189 712472 (West Berkshire)

Complete joiner's workshop, Startrite K210 Universal, DeWalt pullover saw, bandsaw, belt/disc sander, grinders, sash cramps and much more; offers please.
07541 409835 (South Yorkshire)

Axminster dial gauge, cat no 310453, 50mm diameter; £10. Axminster electronic digital calliper, cat no 388005; £10. Both boxed and in good condition.
01983 551416 (Isle of Wight)

Woodworker magazines for 2011 and 2012; free for recipient to collect.
01306 640110 (Surrey)

WANTED

Radial arm saw in good working order.
01623 471974 (Nottinghamshire)

Stationary jigsaw blades (69.9mm) for Dremel Moto-Shop 15in scrollsaw.
01952 881301 (Norfolk)

Spiers / Norris / Henley planes wanted by private collector; any quote beaten. Ring Ron Lowe on
01530 834581 (Leics)

Woodworking hand tools, especially old wood and metal planes, wanted by collector. Write to Mr B Jackson, 10 Ayr Close, Stamford PE9 2TS or call
01780 751768 (Lincs)

Woodworking tools: planes by Norris, Spiers, Mathieson, Preston, Slater etc, brass braces, interesting rules and spirit levels; top prices paid, auction prices beaten.
01647 432841 (Devon)

USE THIS FORM TO BOOK YOUR **FREE** AD

The Woodworker
MARKETPLACE

- This space is available only to private individuals wishing to buy or sell woodworking machinery and tools.
- The maximum value of any item for sale must not exceed £500. A small fee is payable for items offered at over £500; please ring 01689 869852 for details.
- Each coupon is valid for one free insertion in the next available issue.
- The publisher accepts no responsibility for errors or omissions in this section.

Please publish this advertisement in the next available edition of *The Woodworker*. I am a private advertiser and have no trade connections.

PLEASE TICK: FOR SALE ☐ WANTED ☐

My advertisement (max 20 words please) reads as follows:

Name _____

Address _____

Postcode _____ Daytime tel no. _____

Signature _____

Please write your advertisement in **BLOCK CAPITALS** and send it to: The Woodworker Marketplace, MyTimeMedia Ltd, Hadlow House, 9 High Street, Green Street Green, Orpington, Kent BR6 6BG. You can also email your free ad to: thewoodworker@mytimemedia.com **Send/email a photograph of your item and we'll include it with your ad for FREE**



You're hired!

BY TOBY SCARBOROUGH

With work piling up, I began last week with a helping hand from my employer in the form of an apprentice. I'm used to working on my own, hauling cupboards and grappling with wardrobes, so an extra pair of hands on site sounded good. Having only graduated a year or so ago and still requiring technical guidance myself, I wondered how much knowledge I could pass on at this stage. Would this fresh-faced young lad uncover my fraudulent stance as a professional? Or could a sidekick help take some of the workload?

The full works

The project consisted of a row of low-level lounge cupboards, enclosed by solid doors and with a birds-eye maple veneered top, all topped off with some mdf shelving which reached to the ceiling. This unit was to be painted once it was complete. Following a two-hour client meeting, I had a very specific brief as each aperture was

designed to fit a different element of the client's hi-fi equipment. I'd spent a week in the workshop and anticipated two or three days for the installation.

A bad start

Monday morning began badly. My new apprentice Matt missed half the day's work I had planned for him – loading the van. Fortunately he was in time to leave for the site, and once there he was able and enthusiastic with the unloading. Having someone with so much energy is great when there are eight storeys and items too big for the lift! While I began setting out the pre-made base units, Matt was left to sweat and strain up the stairs.

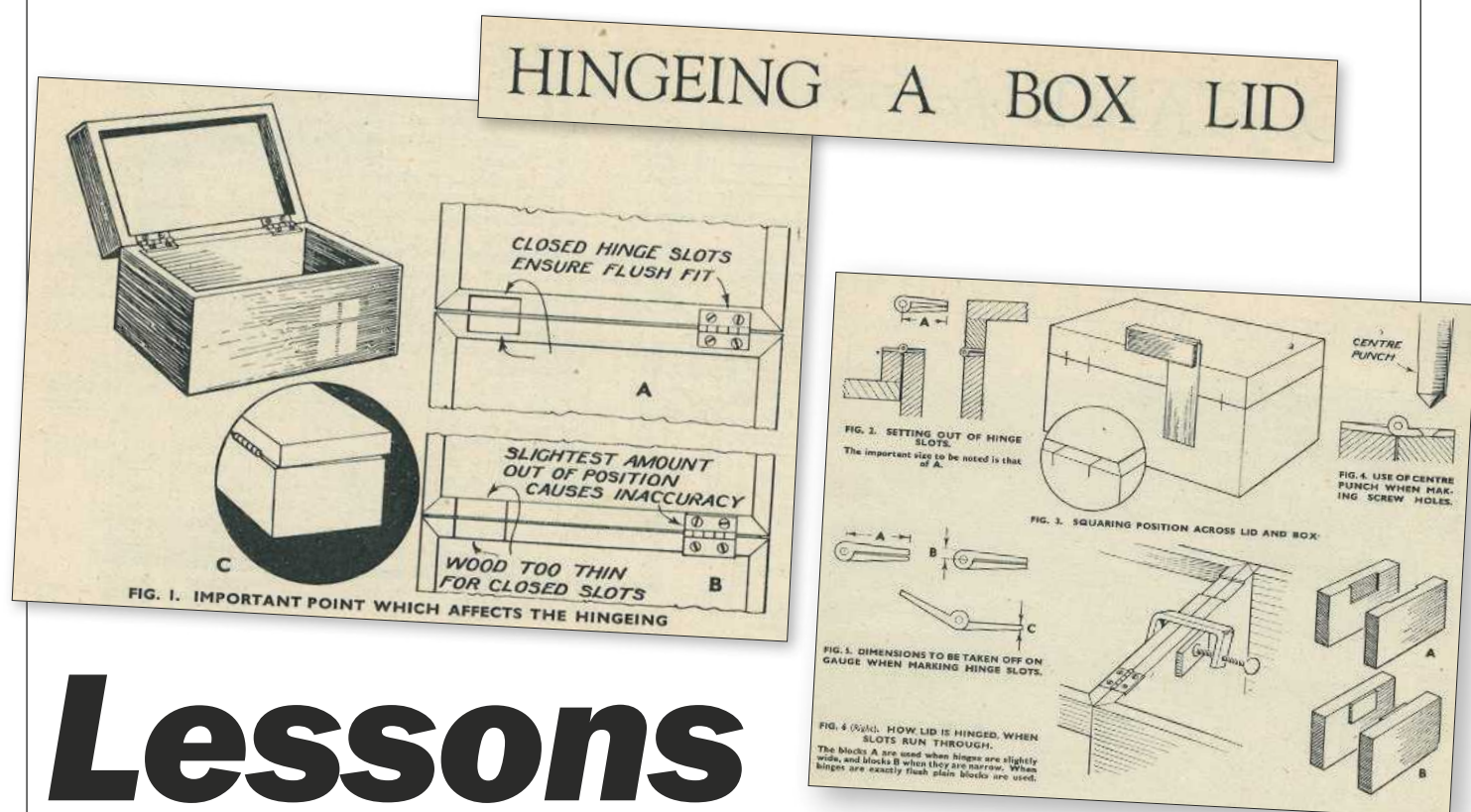
Finding his feet

My inexperience was then exposed as I laboured (and cursed) for an hour and a half just trying to level the units as Matt looked on, texting friends and offering

unhelpful snippets of advice. Once I'd suffered the indignity of looking like I didn't know what I was doing, I opted to turn the tables and put my apprentice to task. After giving him some basic safety instructions, I introduced him to my Festool TS55 rail saw. Once he'd experienced its power and accuracy his enthusiasm was unbounded, and my 21-year-old tardy texter quickly became a very productive team member.

Twice as fast

Following a few days' hard work the project was eventually complete. I found that although I had to take time away from what I was doing to instruct my apprentice, between us we got the job done quicker than if I had been on my own. The more he can learn now, the more helpful he'll be in future. The transition from student to teacher has come rather swiftly for me, but it does help reinforce what I've learnt and show me how far I've come.



Lessons in learning

Even the most commonplace and oft-repeated tasks can always be improved still further

At the risk of turning a customary light-hearted page into a slightly more serious and instructional one, this month we're going to look at a small but relevant part from the October 1946 issue of *The Woodworker*. Leafing through this particular volume – wavering between 'saw tips for the beginner' and 'an ingenious cabinet workbench for kitchen or workshop' – I chanced upon this collection of hinge-fitting tips for the budding box-builder.

A spot of déjà vu

Following on from my recent experiences in making and hingeing a case (not overly dissimilar to a box, after all), I couldn't shake off a wistful feeling of wishing I'd read this article first. Despite plenty of experience in fitting hinges, I'll be the first to admit that there's always something new to be learnt, even if it's just a shade of a variation in a technique.

In woodworking, as in life, there are many things that are intuitively deduced (or worked out the hard way through trial and error), but often it takes the reinforcement of watching or hearing about another person's experiences with the same problem, or even, as is the case for the magazine reader, just seeing a drawing or reading a description of it. Somehow the solution is instantly crystallised and often the reasons why seem obvious, profound and laughably simple.

Open or closed

From this article I've learned that it is undesirable to have open or through slots for my hinges (ie, the width of the hinge is the same as the thickness of the timber), closed slots being a much more attractive proposition. Sigh, and here's me thinking that it was a desirable feature; true in my eyes, but sadly more technically demanding. No wonder I had a slightly hard time with this aspect of an otherwise straightforward job.

Perfect centres

Also worth noting – and this will come as a pleasant surprise for woodworkers on a budget – is the simple way illustrated of ensuring your screws remain perfectly centred in their respective hinge holes. Simply borrow a tool from the metalworking box – to wit, a centre punch. Its tapering point fits snugly into the screw hole and thus increases your chance of pulling off an accurate job; something that's very important if your hinge slots are of the open variety!

Mark

More from *The Woodworker* archive next month...

woodworks

Carving, Craft, Pyrography and Toy Making all in one place

Always wanted a micro motor to do the detail work,
but couldn't justify the cost?

Well now you can!

With the all new Woodworks Super Detailer Range!

With prices starting at £135.00 complete

The Super Detailer NP3(S)

An operating speed of 35,000 rpm

Dial speed control.

Forward and Reverse.

Quick change twist to lock/unlock burr exchange.

Specially sealed bearing to prevent dust and dirt getting in.

Comes complete with either a 3/32" or 1/8" collet fitted as standard. (Spare collets available separately)

A Full One Year Warranty

All this for £135.00

(Which includes VAT and Delivery)



The Super Detailer NP5

An operating speed of 40,000 rpm

Dial speed control.

Foot speed control.

Dual Handpiece Capability

Forward and Reverse.

Quick change twist to lock/unlock burr exchange.

Specially sealed bearing to prevent dust and dirt getting in.

Comes complete with either a 3/32" or 1/8" collet fitted as standard. (Spare collets available separately)

Handpiece Rest.

A Full One Year Warranty

All this for £295.00

with 1 Handpiece

(Which includes VAT and Delivery)

Get an extra handpiece for the NP5 for only
£75

(If purchased at the same time. Normal price £105)



A Family business, giving family service and family values

Order online at

www.woodworkscraftsupplies.co.uk

or phone on

01633 400847

Woodworks Craft Supplies, P.O.Box 102, Caldicot NP26 9AG

The Best Value 12" Bandsaw on the Market



The BS12 is built to offer exceptional performance and value for money. Our brief was to create a machine that could compete in the entry level market

whilst offering better features and performance than most of the competition and apply our 5 year guarantee with absolute confidence.



ONLY
£399.99
Inc. VAT

The BS12 at a Glance...

In addition to offering unbeatable value for money, the BS12 12" Bandsaw boasts numerous features not often seen on machines in this price bracket.

BS12

Easy Access Handles



The doors can be opened easily without the need for tools.

Easy-Adjust Guides



A superior design, similar to our premium bandsaw range.

Improved Access



The large table insert makes access and adjustment very easy.

Steel Rack & Pinion Trunnion



This type of trunnion allows one-handed operation, giving excellent support and accuracy.

Other Bandsaws

Tool Required



A far less convenient solution.

Standard Guides



Provide less support and require tools to adjust.

Limited Access



Most bandsaws feature smaller table inserts, restricting access.

Cast Alloy Trunnion



More difficult to adjust accurately, requiring two-handed operation.

Winter 2013/14
Brochure now
available.

32 pages of projects, tips
and great deals.

Call us or go online to request
a free copy.



Prices valid until 28.02.2014. E&OE.

RECORD POWER
ESTABLISHED 1909®

www.recordpower.co.uk Tel: 01246 561 520

Over
100
years

Experience • Knowledge
Support • Expertise

RECORD POWER

STARTRITE

CORONET

ELCRESS

Incorporating some of the most famous brands in woodworking, Record Power have been manufacturing fine tools & machinery for over 100 years. Built to last we provide support for thousands of machines well over 50 years old, which are still in daily use. Testimony to the sound engineering principles and service support that comes with a Record Power product.