Issue 325 • Special 2017

Good woodworking

THE PERFECT WOODWORKING MIX

PROJECTS, TECH, TESTS, FEATURES & MUCH MORE!

www.getwoodworking.com

The No.1 magazine for aspiring designer makers

TIMBER CONVERSION SPECIAL

IN ASSOCIATION WITH RECORD POWER ESTABLISHED 1909

- PLANER CUTTER SETTING TIPS
- TURNING: CONVERTING GREEN TIMBER
- FROM APPLE TREE TO OCCASIONAL TABLE
- MAKE A JEWELLERY BOX USING MACHINE METHODS
- EXPERT GUIDE TO BUYING & TRANSPORTING TIMBER
- PLANER WARS: WHAT ARE YOU GETTING FOR YOUR MONEY?
- WOODLAND MANAGEMENT FROM A WOODWORKER'S PERSPECTIVE

PLUS...
Easily find your nearest timber supplier with our handy directory

WIN!
A RECORD POWER PT260 PLANER/ THICKNESSER – WORTH £649.99!

mytimegroup WOODWORKING GROUP
Our Timber Conversion Special has something for every woodworker!

9 770967 000177 25

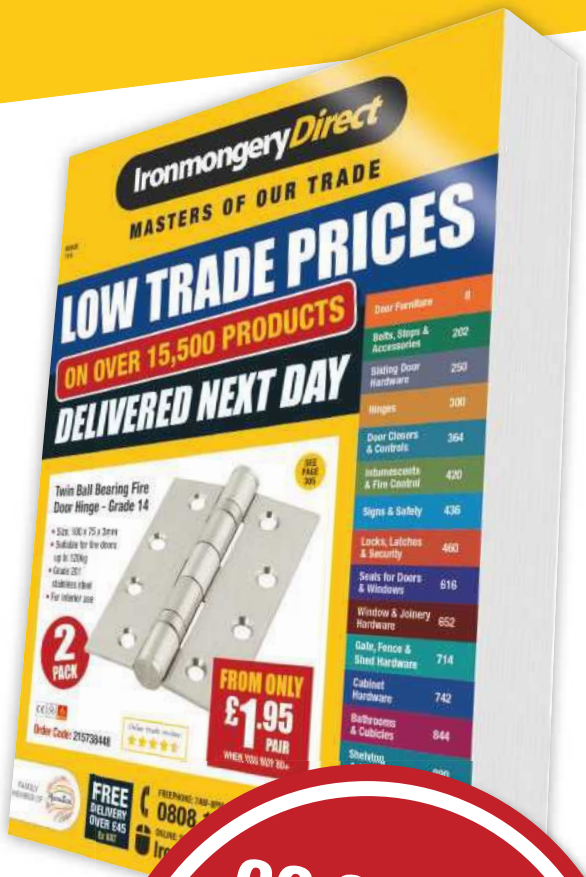
ONLY £4.75

IronmongeryDirect

MASTERS OF OUR TRADE

ORDER BY 8PM
GET IT NEXT DAY!

15,500 PRODUCTS IN STOCK FOR NEXT DAY DELIVERY



GO ONLINE TO GET YOUR FREE CATALOGUE

Rated as EXCELLENT 9.5/10 TRUSTPILOT

FREE DELIVERY OVER £45*

FREE RETURNS WITHIN 30 DAYS

MINIMUM 5 YEAR GUARANTEE

LOW TRADE PRICES

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

ONLINE Shop 24/7!
IronmongeryDirect.com

*Ex VAT

Welcome

'Wakehurst – a tree lover's dream!'

Seeing how this issue is dedicated to timber, and more specifically, trees, I thought I'd take the opportunity to show you some of the photos from my recent trip to Wakehurst – a house and botanic gardens located in West Sussex, which is owned by the National Trust but used and managed by the Royal Botanic Gardens, Kew. A feast for the senses, Wakehurst features natural woodland and lakes, formal gardens, an Elizabethan house and the 21st-century architecture of Kew's Millennium Seed Bank. The garden covers some 500 acres and includes walled and water gardens, plus a variety of woodland and wetland conservation areas – there really is a great deal to explore and marvel at. While the woodland areas play host to a wide range of exotic and native tree specimens, the highlight for me was seeing the stately giant redwoods, hemlocks and Douglas firs in all their glory. Looking at the photo above, if you squint, you can just about see me at the bottom of the trunk, which should hopefully help to give an indication as to the sheer size of this beast! These giants were certainly that, and I couldn't help but feel humble in their presence.

I could probably write a whole article about the species on show, including, to my excitement, Pacific madrone with its stunning red bark, coral bark maple with its exquisite russet-coloured leaves, and *Stewartia sinensis* with its unusual cinnamon-coloured peeling bark, but I don't have the space here, unfortunately. If you'd like to find out more for yourselves, see **www.nationaltrust.org.uk/wakehurst**.

Prizes & expert knowledge

Getting back to introducing our Timber Conversion Special, we're very excited to be giving you the chance to win a Record Power PT260 planer/thicknesser, and we've also got a fantastic array of articles for you, all looking at this specialist subject from a number of different angles. Phil Davy offers advice on how best to transport boards from the timber merchant; John Lloyd tests two differently priced planer/thicknessers and analyses the quality of the results; John Bullar shares a personal timber conversion story; John McMahon looks at woodland management from a woodworker's perspective, and in turning, Les Thorne shows how best to convert green timber into stable, usable projects, plus much more!

So, waste no time in leafing (sorry!) through this issue, learning more about how you can get the most from this fantastic raw material, while hopefully learning a trick or two along the way.

Enjoy! *Tegan*

Email tegan.foley@mytimemedia.com

Tegan Foley
Group Editor

Phil Davy
Technical &
Consultant Editor

Dave Roberts
Consultant Editor

IMPROVE YOUR FURNITURE MAKING

42

FROM TREE TO TABLE

John Bullar shares the story of how he converted an apple tree into a stunning occasional table

WIN!

A Record Power PT260 planer/ thicknesser – worth £649.99!
See pages 20-21 for further details

IN ASSOCIATION WITH
RECORD POWER
ESTABLISHED 1909®

Good woodworking

Timber Conversion Special – 325

• TOOLS • PROJECTS • TECHNIQUES • ADVICE

TECHNICAL

SOLUTIONS
24 Oliver!
A theatrical production sets Dave Roberts reviewing the situation – or at least wood's ability to transform and be transformed

AROUND THE HOUSE
28 Preparing timber for reuse: heat, sand, strip!
Phil Davy shows you how to remove old polish and varnish

30 Buying & transporting timber
Phil Davy discusses the things to look for when buying both soft- and hardwoods from a timber merchant, as well as offering some great tips on getting boards home and how best to transport sheet materials

PLANER/THICKNESSERS
49 How to dimension timber accurately using a planer/thicknesser
Most woodworkers, whether amateur or professional, will invariably at some point need to use a planer/thicknesser. We explore the reasons for this here

60 How to avoid planing peaks & troughs
Peter Bishop talks you through the process for correctly setting a planer/thicknesser and suggests reasons why you might not be getting the best possible cut

UNDERSTANDING TIMBER
72 How to select the correct grade of timber for the job in hand
Peter Bishop provides some guidance on choosing the correct grade of timber to use and suggests various ways in which this might impact on your projects

PROJECTS

MACHINERY PROJECT
64 Valentine's jewellery box
Mike McCrory uses stunning pieces of bird's eye maple and book-matched walnut to create a jewellery box complete with various interior trays

TURNING GREEN TIMBER

80 Converting green timber into functional projects
Les Thorne demonstrates the different types of turning projects that can be made using fresh, green timber

PEOPLE & PLACES

HOME TRUTHS
35 Aedicula
Edward Hopkins fashions a wooden niche – a small space inviting occupation – to mark the arrival of his grandchild

CENTREFOLD
46 Timber suppliers UK
A comprehensive alphabetical list detailing the wide range of timber suppliers across the UK, as well as the services each one of them offers

TREES
50 Reconnecting with trees as a raw material
John McMahon describes his attempts to reconnect with trees as a raw material and in the process gives an outline of the past, present and future of woodland management from a woodworker's perspective

TIMBER SUPPLIER PROFILE
76 A passion for timber
Garry and Shaun Stevenson share the story of how a passion for quality raw materials led to the development and continued growth of their business

END-GRAIN
90 Back to nature
The escapology of wood

TESTS

14 Felder AD 941 & **Record Power** PT107 planer/thicknessers

18 Bosch EasyCut 12 saw

40 Titebond Quick & Thick PVA

YOUR FAVOURITES

http://twitter.com/getwoodworking
www.getwoodworking.com
Published by MyTimeMedia Ltd.
Suite 25, Eden House Enterprise Way,
Edenbridge, Kent TN8 6HF
UK and Overseas Tel: +44 (0) 1689 869 840

SUBSCRIPTIONS
UK – New, Renewals & Enquiries
Tel: 0344 243 9023
Email: mytimemedia@subscription.co.uk
USA & CANADA – New, Renewals & Enquiries
Tel: (001) 866 647 9191
REST OF WORLD – New, Renewals & Enquiries
Tel: +44 (0) 1604 828 748
Email: help@twwsecureorder.co.uk

BACK ISSUES & BINDERS
Contact: 01733 688 964
Website: www.mags-uk.com

EDITORIAL
Group Editor: Tegan Foley
Technical & Consultant Editor: Phil Davy
Consultant Editor: Dave Roberts

CONTRIBUTORS
John Lloyd, Dave Roberts, Phil Davy, Edward Hopkins, John Bullar, John McMahon, Peter Bishop, Mike McCrory, Les Thorne

PRODUCTION
Designer: Nik Harber
Retouching Manager: Brian Vickers

ADVERTISING
Group Advertising Manager: Rhona Bolger
Email: rhona.bolger@mytimemedia.com
Tel: 01689 869 891

SUBSCRIPTIONS
Subscriptions Manager: Kate Hall

MANAGEMENT
Group Advertising Manager: Rhona Bolger
Email: rhona.bolger@mytimemedia.com
Chief Executive: Owen Davies
Chairman: Peter Harkness

mytimemedia
print & digital media publishers

D&M TOOLS

'THE' TOOL SUPERSTORE

HAND, POWER TOOLS & MACHINERY SPECIALIST

DM-TOOLS.CO.UK

When you demand Quality Tools, Trusted Service & Expert Advice...

D&M Tools has been family owned and managed since 1978. During that time we have earned a reputation with our customers as a trusted partner. Whether you are a trade professional or a DIY enthusiast, our mission is a simple one - **to supply top quality tools at the best value for money, backed up by a service you can trust.**

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 woodworking machinery all at the keenest prices.

OVER 10,000 LINES IN STOCK!

We hold massive stocks, meaning that most items are available for despatch the day you order it. Our website shows up to date stock availability, so you can order with confidence.

SHOP ON-LINE 24HRS A DAY

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, you will also find all our **latest offers and deals.**

Why not **subscribe to our regular emails** to keep up with our latest deals and offers or join our **D&M Loyalty Scheme** and earn valuable loyalty points every time you shop on-line.

More details on our website.

MASSIVE CHOICE FROM THE BIGGEST BRANDS!

Arrow, armorgard, Bahco, Bessey, Bosch, Bostitch, CamVac, DeWalt, Dickies, Draper Tools, Dremel, Empire, Estwing, Evo-Stik, Faithfull, Fein, Festool, Fisco, Freud, Irwin Tools, Karcher, Knipex, Kreg, Kuny's, Laserliner, Leatherman, Led Lenser, Leica Geosystems, Lyte Ladders & Towers, Mafell, Makita, Irwin Marples, Marshalltown, Metabo, Miller, Milwaukee, Monument Tools Ltd, Nilfisk, Nobex, nws Made in Germany, Panasonic, Premier Diamond Products, Powerbor, Proxxon, Record Power Established 1909, Reisser, Revo Magnetic Drills, RST Hand Tools, Sankyo Diamond Tools, Scan, Scheppach, Scribe-Master, Sjöbergs of Sweden, Snickers Workwear, Stabila Levels, Stanley, Starrett, Startrite, Titebond, Tormek sharpening innovation Made in Sweden, trend routing technology, triton, veritas, Irwin Vise-Grip, Vitrex, Wera, Wiss, AND MORE!

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

Why not follow us on Social Media for up-to-the-minute news and offers?

FREE DELIVERY

Delivery to UK mainland addresses is **FREE for most orders over £99,** and for orders under £99 is only £5.95.
See the carriage rates on our website for full details.

020 8892 3813
MON-SAT 8.30am-5.30pm (CLOSED BANK HOLIDAYS)

D&M TOOLS

VISIT OUR EXTENSIVE TWICKENHAM SUPERSTORE

OUR CUSTOMERS LOVE US!

We are regularly receiving 5 star reviews on the independent review site Trustpilot, as well as testimonials direct from our customers, here are just a few:

★★★★★
"D & M Tools provided fantastic customer service and we will, definitely consider ordering from them whenever we need any other items! An absolutely fabulous company - Thank you in advance of our next order!"

★★★★★
"Best service and price. Thank you. Your web site was easy to navigate with the best prices for high quality tools, ordering was simple and delivery was unbelievable quick, order received next day. Certainly will be ordering again."

★★★★★
"Most efficient company purchase was effortless and was kept informed at every stage till delivery - Great idea money off next purchase points system !"

★★★★★
"**Always a brilliant service.** Prompt response, service is the best and follow up with delivery updates, faultless. Would recommend to everyone. D & M are going to be my sole supplier in future."

★★★★★
"**Excellent service makes a refreshing change** - first time I have used this company, was quite amazed by the quality and speed of service and delivery, a fine example of what can be done with first class staff."

TRUSTPILOT ★★★★★

www.trustpilot.co.uk/review/www.dm-tools.co.uk

@DM_Tools DandMTools DMTools1 +dmtools

TIMBER CONVERSION ACCESSORIES

Roughneck Timber Lok

The Timber Lok from Roughneck lifts materials off the ground and holds tightly to ensure you can safely measure, cut, drill and finish projects at work, on site or in the home. It increases safety and productivity, instantly holding timber fast and tight. Lightweight and durable, it is very portable, easy to use and store. It features an integrated measuring rule, and the cut-outs tightly hold most materials. Priced at £25.22, see **www.axminster.co.uk**.

Roughneck Logger's Mate

The Roughneck Logger's Mate is a lightweight yet sturdy saw bench that packs flat for easier storage and transportation and can be erected and dismantled in seconds. The Logger's Mate has a vice-like grip to hold logs and timber at the perfect height for cutting by a chainsaw or bow saw. It is ideal for cutting logs, branches, timber, fence posts, beams etc. and can hold logs and timber from 50mm to 240mm in diameter and up to 4m in length. Maximum timber weight is 150kg. Priced at £78.36, see **www.axminster.co.uk**.

Roughneck Gorilla Gripper

The Roughneck Gorilla Gripper offers a safe and easy way to grip, lift and carry all types of sheet materials, doors and worktops. Made from aircraft quality aluminium with special rubber gripping pads, the soft-grip cushioned handle features three available sizes (up to 19mm, 10mm to 28mm, and 32mm to 50mm) to handle the majority of board and door thicknesses. It significantly reduces stress and potential injuries to your back, shoulder, neck, hands and fingers, and is a must-have product for those handling large cumbersome boards and doors on a daily basis. Priced at £32.08, see **www.toolstation.com**.

Keson Timber Marking Crayons

These clever crayons from US brand Keson are designed to work on any surface, including wood (wet or dry), metal, concrete, ceramics, etc. and also have the benefit of being waterproof, weather and wear resistant. The entire crayon is usable and won't crumble under use, so if you need a heavy-duty timber marker then this one won't let you down. The crayons are available in a range of four colours (blue, black, yellow and red) and are supplied in singles or packs of six. Priced from £1.38-£7.04, see **www.axminster.co.uk**.

Heavy-duty roller ball stand

The heavy-duty roller ball stand from Axminster combines several features in one unit. Constructed from a combination of 50mm diameter round and square steel tubes, you have a choice of either a 330 long × 60mm diameter roller (ball-bearing mounted) or a row of eight balls, to allow for all-round movement of sheet material. Roller height is adjustable over a range of 735mm-1,120mm and the telescopic stem locks in position with a very solid knob. A unique wedge lock ensures the roller setting will not vary, making it suitable for heavy baulks of timber. The whole unit folds flat for storage; maximum capacity is 200kg. Priced at £74.56, see **www.axminster.co.uk**.

Axminster Trade sawhorses (pair)

These unique all-steel, folding sawhorses from Axminster are immensely strong, durable and highly portable. Constructed of high-grade steel, each sawhorse can support a weight of 590kg; a pair has a capacity of 1,180kg. With their fast-open mechanism, setup is straightforward and simple. Unfolding the sawhorse reveals a material support arm at each end, which is designed to take 95mm high timber. In order to achieve a secure fit with the jaws the timber width should be trimmed to the required size. With two sawhorses, a couple of lengths of trimmed 45 × 95mm C16 grade timber and a suitable sheet of ply or OSB, you can create an instant, rock solid site worktable. The sawhorse legs are telescopic, allowing you to adjust each one individually to compensate for any unevenness on the ground. Also fitted with rubber non-marking feet, powder coating and zinc plating protect the sawhorses from corrosion and ensures a long life in a working environment. The legs fold neatly and sequentially into the top rail, forming an 84 × 150 × 895mm long package, which is easily stowed in the back of a van. The sawhorses include a carry handle for easy transportation and rolled edges mean there are no sharp corners. Priced at £89.96, see **www.axminster.co.uk**.

Guide Block set

These three very useful pressure pads are fitted with foam bases and can be used to safely guide timber through a saw bench, planer or spindle moulder, keeping the fingers well clear of the sharp parts. They can also be used as handles on jigs where moving parts pass close to the blades or cutters. Used in either way, they really help to keep fingers out of the line of fire. The set consists of two 150mm pads with different handle designs and a 300mm long version with a plane-style handle and knob. Priced at £18, see **www.axminster.co.uk**.

Please note that all prices inc VAT and may be subject to change without notice

BOSCH
Invented for life

Smart Innovations & Deals

October - November 2017

It's in your hands. Bosch Professional.

An exclusive selection of unmissable offers on the very latest technology

www.bosch-professional.com/gb/en/bosch_deals

Offer available at participating dealers. Promotions and pricing available from 01/10/2017 – 30/11/2017 or while stocks last.
RRP is for illustrative purposes only and dealers shall determine their own resale price.

Good woodworking & The Woodworker & Woodturner at The North of England Woodworking & Power Tool Show

Come and see us in action at the upcoming North of England Woodworking & Power Tool Show at the Great Yorkshire Showground in Harrogate, from 17–19 November. The Editor will be there throughout the three days to answer your questions, have a friendly chat, or, if you don't already, offer you the opportunity to subscribe to one or both of our great magazines (of course, we also have a fantastic show offer available). *The Woodworker* Editor Mark Cass' bench caddy, which he made in the September issue, will also be on display in the flesh, so you can come and see for yourselves how this useful workshop aid is made. We also have two amazing prizes up for grabs courtesy of Bosch, where we're giving you the chance to win one of their GHO 12V-20 Professional compact planers or a GKF 12 V-8 Professional compact router. Come and see us on the stand, enter your details, and at the end of the weekend we'll be announcing the two lucky winners. Also, leading up to and during the event, keep checking our Facebook page (**www.facebook.com/getwoodworking**) for regular show updates. To find out more about the show and to purchase advance tickets, see **www.skpromotions.co.uk**.

Be in with a chance of winning a Bosch GKF 12 V-8 Professional compact router...

... or one of their brand-new GHO 12V-20 Professional compact planers

Come and see Mark Cass' bench caddy in the flesh

New range of SABRE bandsaws from Record Power

The Record Power SABRE range of bandsaws are the next evolutionary step from the highly regarded and market-leading Record Power premium bandsaws. They have built on the success of their premium range by introducing some fantastic new features to the SABRE-350 to make a bandsaw that is more effective, accurate and easier to use than any other machine in its class. Featuring an 1,100W output motor coupled with the heavy-duty cast-iron band wheels, the SABRE-350 packs a real punch and can handle cuts to its full capacity with ease. The two speeds, which are slightly faster than comparable machines, make it ideal for cutting non-ferrous metals as well as wood. The cam-action fence adjustment, spring-loaded guides, cam-action blade tension release and double-sided fence mount make this a machine that is so easy to set up and use it leaves you free to concentrate fully on the project at hand. The SABRE-350 stands on a sturdy cabinet base, giving plenty of storage beneath the machine to help keep the workshop tidy. The resaw bar, which is easily attached to the fence, is included as standard. This is ideal when sizing long pieces of timber as this can be pivoted to compensate for grain variations, helping to achieve straighter cuts than would be otherwise possible. The SABRE-350 is a beautifully designed machine, boasting class-leading levels of performance and ease of use. The SABRE-350 is priced at £899.99 and the SABRE-450 at £1,399.99; see **www.recordpower.co.uk**.

Clarke Log Buster 7

The Log Buster 7 from Machine Mart is the ideal domestic log splitter for the autumn/winter months. Perfect for splitting logs up to 370mm long and 250mm wide, this handy tool is perfect for tree logs found in most domestic gardens and can be easily operated using a two-handed system and ram lock for increased safety. Don't worry about carrying this splitter around in the icy conditions either because it is fitted with two wheels and a pull handle for easy transportation, and a handy LB7S stand accessory can also be purchased exclusively for this model (priced from £35.98) to bring this splitter to working height. The ram stroke can also be shortened to perfectly split different types of logs with a new depth stop feature, and with an extra strong welded steel frame, you can guarantee that this piece of kit will serve you well for years to come. Priced from £203.98, see **www.machinemart.co.uk** to find out more about this and other available accessories.

Makita launch unique cordless & Brushless LXT router/trimmer

The Makita range includes mains and trimmers but the new DRT50 is an 18V cordless machine that combines the key elements of both tools, and it's thought that this router is unique in the marketplace.

The low energy, high performance Brushless motor runs between 10,000rpm and up to 30,000rpm with variable-speed by control dial, and features a constant speed control.

Adding to the versatility of the new DRT50 are two available collet sizes (3/8in and 1/4in), while alternative bases offer a 0-40mm plunge capacity with the trimmer base, and 0-35mm with the plunge base. Three different model options are available, with varying extras incorporated, including tilt base, offset base, straight guide and trimmer guide. A spindle lock and dust extraction nozzle are supplied as standard with all three versions.

Powered by the established Makita 18V Lithium-ion battery mounted on top of the machine for perfect balance and control, the machine housing and base are aluminium, contributing to the router's light weight at just 2.1kg and providing greater durability and accuracy. It also has a non-slip elastomer-covered body grip for increased operator comfort.

The machine fits easily into the alternative bases and is retained by a simple and efficient base lock system. The aluminium trimmer base has an enlarged opening section for exceptional bit visibility and a replaceable non-marring plastic baseplate for smooth movement. The tilt base provides tilting capacity from 30 to 45°, and the plunge base has two ergonomically contoured plunge control handles for comfort and accuracy and an easy-to-operate lock lever. The offset base enables close trimming with the bit set in the offset position to just 18.5mm to the wall or corner.

The new DRT50 18V LXT Brushless router/trimmer is available as body only with trimmer base and straight guide in a Makpac case; as a body only with trimmer base, straight guide and trimmer guide packaged in a carton box; or as body only with trimmer, plunge, tilt and offset bases, plus straight and trimmer guides, all supplied in a convenient and durable Makpac case. Priced from £225.60 (body only inc VAT), see **www.makitauk.com** for more info.

COURSE DIARY

2017 may be nearly over, but there's always time to polish up your woodworking skills

DECEMBER
1 & 1* Pen making
4–5, 7–8 & 7–8* Beginners' woodturning
4–5 Introduction to milling
5–8 Make a side table
11–15 Make a Windsor chair
13* Sharpening with Tormek Woodturning
15* Scrollsaw course

* Course held in Sittingbourne, Kent
Axminster Tools & Machinery
Unit 10 Weycroft Avenue
Axminster, Devon EX13 5PH
Tel: 08009 751 905
Web: www.axminster.co.uk

11 Green wood spoon carving
15–17 Woodturning – bowls with texture
18 & 19 Make a small turned bowl

West Dean College
West Dean, near Chichester
West Sussex PO18 0QZ
Tel: 01243 811 301
Web: www.westdean.org.uk

9–10 Dovetailing weekend
29 Half-day woodwork taster
30 Half-day marquetry taster

Chris Tribe, The Cornmill, Railway Road
Ilkley, West Yorkshire LS29 8HT
Tel: 01943 602 836
Web: www.christribefurniturecourses.com

11–15 Skills week: Sharpening & essential cabinetmaking hand skills

John Lloyd Fine Furniture, Bankside Farm
Ditchling Common, Burgess Hill
East Sussex RH15 0SJ
Tel: 01444 480 388
Web: www.johnlloydfinefurniture.co.uk

3 Intro to spoon carving

The Goodlife Centre
49/55 Great Guildford Street
London SE1 0ES
Tel: 0207 760 7613
Web: www.thegoodlifecentre.co.uk

11–15 Furniture making for beginners – fundamentals & tool sharpening
18–19 Safe operation of wood machines

Peter Sefton Furniture School
The Threshing Barn, Welland Road
Upton Upon Severn, Worcester
Worcestershire WR8 0SN
Tel: 01684 591 014
Web: www.peterseftonfurnitureschool.com

CLARKE WOODBURNING STOVES keep your workshop warm this winter

What can beat the warmth and ambiance of a real fire in your workshop throughout the cold winter months? Clarke cast-iron woodburning stoves are the ideal solution. The best selling Buckingham model (pictured here) is a classically designed multi fuel stove, which is suitable for efficiently burning wood and coal. The Buckingham has a maximum heat output of 6kW, featuring an air wash system that helps keep the glass clean, and air control to alter burn rate and heat output. Priced at £238.80, see the full range of woodburning stoves on the Machine Mart website: **www.machinemart.co.uk**.

Bosch introduce new Professional compact router

The world's first cordless compact router in the professional market and brand-new from Bosch, this exciting model features excellent ergonomics and safety, including drop detection. It also benefits from long runtime and lifetime, thanks to brushless motor technology.

In addition, optimised ergonomics allow for one-handed use, and with an extremely low size and weight it features a uniquely small grip circumference and ideal hand positioning. You can also expect safe and comfortable tool guidance, thanks to a new bit-to-tool formation and enlarged footplate contact surface, as well as perfect depth control with smooth and fast macro depth adjustment, easy fine adjustment, and lockable depth settings. Health and safety considerations have also been factored in, thanks to a drop detection sensor system that shuts off the tool if it falls, and finger barriers prevent unintentional contact with running bits.

As well as all this, there is a high-powered, highly energy-efficient brushless EC motor; spindle lock for easy tool-less bit change; compatibility with the Bosch accessories range, including 8mm, 6mm and 1/4in collets; and this tool is also fully compatible with the comprehensive Bosch 12V Li-ion power tool range.

The new GKF 12 V-8 Professional compact router is now available from specialist retailers with an RRP from £166.80; to find out more, see **www.bosch-pt.com**.

Mafell MT55 18V cordless plunge saw

The Mafell MT55 18V cordless plunge saw is a totally unique sawing system that allows you to cross-cut, mitre, compound mitre, plunge and cut panels. The MT55 can therefore be used for various jobs; it's certainly a jack of all trades.

The Mafell features a scoring function that is quickly activated in one single movement, and it can also cut visible edges as cleanly as a stationary machine. This can be achieved even when the splinter guard is worn. The MT55 can also execute clean cuts with supreme precision and without any tearing. Featuring the world's fastest blade change facility, you can expect to find dual indicators for use on or off the guide rail and the MT55 also has the benefit of being compatible with other guide rail systems. There is a fine adjuster for precise setting after blade change or resharpening as well as greater power due to its high-performance CUprex compact motor. All in all, this is a premium quality machine that is designed to last. Priced from £709; see **www.nmatools.co.uk** for more info.

NEWS IN BRIEF

Charnwood Woodworking Machinery will be appearing at Toolite's in-store show from 1–2 December at their premises in Gloucestershire, before making their way to Joe McKenna's in-store show in Limerick, Ireland on 2 December. Both events benefit from free entry and parking. More information can be found here: **www.charnwood.net/events-and-shows/upcoming-events**

A brand-new demonstrator at this year's North of England Woodworking & Power Tool Show is Chris Tribe, who will be showing attendees his techniques as well as selling copies of his book *Complete Woodworking*. If you do want to meet Chris and learn more about what he does, you'll find him on stand 154. In the meantime, further information about courses and his work can be found on his website: **www.christribefurniturecourses.com**

The Wood Furniture Design Workshop (18–19 November 2017), run by London Sculpture Workshop (Thames Side Studios, London), will explore a variety of effective construction techniques using easily available tools, materials and processes accessible by beginners, artists and craftspeople alike. Focusing on designs such as the 'Crate' or 'Sedia' chairs, learn how to make your very own piece of furniture. Instruction will be provided to complete at least one of several functional furniture items and will explore the highly inventive techniques in Enzo Mari's AutoProgettzione and Rietveld's crate series, which are adaptable to a myriad of personal projects for versatile, economic and sustainable constructions for art or design. Priced at £173 for the two days; see **www.eventbrite.co.uk**

New microsite for self-adjusting toggle clamps

BESSEY is providing an extensive range of information on self-adjusting toggle clamps on its new microsite, which can be accessed in 11 languages. Designers, craftspeople and buyers can find technical details and interesting facts about the unique range of accessories as well as exciting excerpts from the history of the range.

The microsite has been launched to mark the fifth anniversary of its STC self-adjusting toggle clamp range and is designed to inform visitors about the benefits of these special-purpose toggle clamps, which can adapt automatically and in a continuously self-adjusting manner to workpieces of varying thicknesses. What's more, the microsite provides detailed descriptions of the horizontal, push/pull and vertical toggle clamps, which are equipped with self-adjusting mechanisms, covering all relevant information. These include, for example, images of the toggle clamps in practical use, brief descriptions with references to the baseplate versions as well as technical data sheets and downloadable 3D CAD data. The variants that feature a horizontal baseplate also include links that take the user straight to matching accessories. In this way, the range of advanced application possibilities involving BESSEY toggle clamps and welding or multi-function tables is clear to everyone.

The new microsite also provides an exciting insight into the evolution of BESSEY products, as well as including additional links to a distributor search and the full BESSEY product range. You can visit the microsite here: **http://toggleclamp.bessey.de**.

New Trend Snappy Drill Countersink Rotating Depth Stop

Making consistent, controlled countersinks couldn't be easier, thanks to the new Trend Snappy Rotating Depth Stops. Designed as a retrofit to the Trend Snappy Carbon Steel 9.5mm and 12.7mm Countersinks (not suitable for TCT countersinks), they feature high quality, precision ball-bearings within the stops for a free running action that helps to minimise marring as the stops contact the surface of the workpiece. A specially designed clamping bolt secures the stop at the required depth for either countersinking or counterboring tasks while a large cavity within the stop helps reduce clogging as it cuts. The SNAP/ROT/DS is priced at £20.34 inc VAT and is available from all Trend Routing Centres and stockists across the UK; see **www.trend-uk.com**.

FREE READER ADS

Send your adverts to: tegan.foley@mytimemedia.com

DeWalt DWS520 240V plunge saw – two tracks, pair clamps, joining rail & T-square attachment; £175
01322 526 897 (Kent)

Rema DMXA table saw; 3hp motor; 12in blade; 45° tilt; comes with extension table and 2 re-tipped TCT blades; £100 ONO
01371 870 792 (Essex)

Triton Workcentre WCA201 series 2000 & Triton TA235CSL precision power saw and blade height winder – assembled but never used; £420
07811 510950 (Dorset)

Yew logs – 5-7in dia. × 3-4ft long; £5-10 each. Mahogany, 1½ × 1½in sq. × 18-24in long; £1 each
01388 832 342 (Durham)

Multico-Pro-Mex TWL 1000 woodturning lathe – in good condition; £250
07716 994 616 (Derby)

Metabo BAS 317 precision bandsaw – in good condition; £100
07716 994 616 (Derby)

Scheppach TS 2010 table saw with side extension, sliding table, outfeed table and stand – in good condition; £350
07976 692 359 (Twickenham)

Record PT260 planer/thicknesser with dust extractor; £225. Also, Trend router table & DeWalt 625 router with various bits; £200
01444 246 922 (West Sussex)

Air-dried elm – 2in thick × 21 × 21in; £20 each for Windsor chairs, etc. collection preferred
01704 575 523 (Southport)

APTC M950 lathe – six-speed, plus many extras including two chucks and revolving centres – in very good condition; call for details; buyer collects – £499
01284 705 656 (Bury St Edmunds)

Woodturning workshop contents for sale – including lathes, bandsaw, pillar drill, plus lots of hand tools and wood for turning
01628 628 147 (Maidenhead)

For sale – various *Woodworker* magazines from 1946–2013. All are in pristine condition. A wonderful collector's item – please call to make an offer; collection only
07847 394 507 (Derbyshire)

David & Goliath

Planer wars

John Lloyd gets to grips with two differently priced planer/thicknessers and analyses the results – what do you really get for your money and is it worth the extra outlay?

I realise that this test, pitching a relatively small Record Power planer/thicknesser against a big, powerful Felder, might seem like a bit of a David & Goliath situation. But a machine with tables the length of Brighton Pier and a motor so powerful that it can make the lights dim when fitted with huge moveable tables, does come with its own set of problems, so maybe this won't be such a one-sided affair.

Combination machines, which obviously include a machine that 'planes' and 'thicknesses', might be thought of as a bit of a compromise – separates are always preferable – but where space (and money) are at a premium, a combination is often the only option, which is certainly why I have one. The compromise is often that changing from one function to another is time-consuming and inconvenient, but it can also introduce an element of inaccuracy, particularly if you're shifting big, heavy bits of cast-iron around as part of the process, and the bigger and heavier the moving bits are, the bigger the potential problem – could this be Goliath's Achilles heel?

Interesting positioning for the power cable; tucked round the back might be better

Record Power PT107

This is a compact, sturdy looking machine, which, after assembling the guard and fence and fitting the optional wheel kit, is ready to plug in, with its standard 13amp plug, then it's ready to go. I have already spent way too much of my woodworking life setting planer blades, so for my machines I have always opted for the self-setting option of either a Tersa cutterblock or, more recently, the Felder system. Slightly odd translations in instruction manuals are often part of the joy of buying imported machines, but when they're factually incorrect on important areas like setting blades, it's really not terribly helpful.

Setting the blades

According to the PT107 manual this machine has blade holders with jack screws setting the height of the blades, which is encouraging, but in practice the blades are sitting on springs and the height of the blades is set using a single, small 'cutterblock gauge', which straddles the cutterblock, and a 10mm spanner – sadly not a recipe for fool-proof, accurate, trouble-free results, although I notice that Record offer a rather more sophisticated magnetic blade setting system on their website, which could be worth looking at. Getting all three blades set accurately, so they're all sitting at exactly the same height and consequently all doing the same amount of work, is crucial if you require consistently good results from your planer, but this system, as it stands, might end up being rather time-consuming. Another vital setting on any planer is the relationship between the outfeed table and the knives. The general wisdom is that the knives should be set just a fraction above the height of the outfeed table, and this should be consistent across the width of all three blades – something that can be checked with a 'drag test'. In the manual, it states that 'the height of the outfeed table is factory set', but unfortunately the factory have set the tables rather too low, much better than being too high, but the result of this is that accurate planing isn't possible and there will always be a rather annoying deeper scoop ('snipe') at the end of every cut. But all is not lost, as the manual tells me that it is possible to adjust the outfeed table: just loosen the two lock nuts inside the plastic handle and use the handle to adjust the table height. I have a pretty comprehensive tool kit but it doesn't include anything that will reach the second nut nestling deep in the plastic handle, so actually all is lost for the moment.

Accurately setting the PT107's blades with the single 'Cutter Block Gauge' can be a bit of a challenge

It's easy and quick to change from planing to thicknessing with one hand

Nice sturdy hinges and a simple, effective adjuster for the chunky cast-iron planer tables

Thicknesser adjustment is achieved using a standard winder handle. Half a turn = 1mm

Single pillar support for the thicknesser table, which should be locked after each adjustment

The thicknesser produces a really good finish and will happily handle more than one workpiece

Changing from planing to thicknessing

How easy is it to change from planing to thicknessing? Just move the guard all the way forward and slide out the fence assembly, undo the table catches, lift each table – which despite being cast-iron are light enough to lift easily with one hand – then, flip the dust extractor hood over, set the table height, engage the feed rollers and you're away. All the tables are cast-iron, flat and nicely finished; the fence is extruded aluminium, as is usually the way these days. This material is rarely completely flat, and this one is no exception, although it is certainly acceptable.

Conclusion

So in general, within the limitations of the accuracy that you can achieve on long components with relatively short tables, and the limited width (258mm), this is a nice little machine that's solidly built, and the thicknesser produces very nice results. It just needs a little time spent setting it up, a long reach socket and a better system for setting the blades. With a Tersa cutterblock as an option, this machine could be very quickly transformed from 'not bad at all' to 'really pretty good and very user friendly'.

Felder AD 941

If you're familiar with Felder, you'll know that they are Austrian and have various levels of machinery, ranging from Hammer at the bottom end, to Format 4 at the top. The AD 941 is just one level below Format 4, so we should expect great things from it. What would I expect from this machine? Well, I've already experienced a Hammer (A3-31) and a Felder (AD 741), so I was familiar with the make and expected the sort of things that you get from a Felder planer/thicknesser: build quality, accuracy, fast no-fuss blade changing, and good support from their UK centre in Milton Keynes. For me, running a business with up to 15 people regularly wanting to use machinery, means that durability and accuracy are vital. All machines go wrong and need a bit of love occasionally, but with engineers just up the M1 and replacement parts available from Austria with next-day delivery, if things go wrong they get fixed quickly, which is a really big attraction for me.

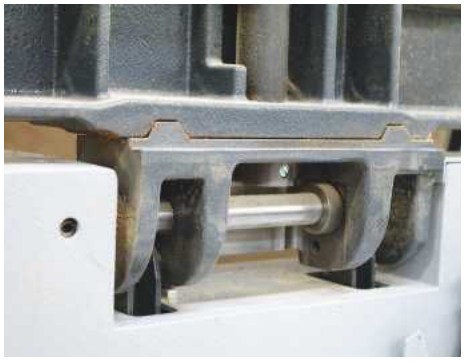
A closer look

This machine is twice the length of the Record and more than one and a half times wider, which should potentially give much greater accuracy when planing longer components. The trick here, though, as I alluded to earlier, is to ensure that the huge, heavy tables that are regularly raised and lowered by a bunch of woodworkers who always seem to be in a hurry, always go back to the same position, stay parallel to each other and remain perfectly adjusted – not an easy trick to pull off but something that it manages to do, with occasional minor adjustments, many times every day. >

The long, wide tables on the AD 941 give excellent, accurate results on long, wide pieces of timber

Lifting and lowering a pair of huge tables is surprisingly easy when big, powerful springs are helping

Everything about the AD 941 is robust and nicely engineered



Meaty hinges and Felder's 'prism' table adjusting system all help maintain planer accuracy

The spiral cutterblock is a real game changer. Changing the blades is a bit of a fiddle but accuracy is guaranteed and the quality of the cut is exceptional

'Power Drive' electronic table height adjustment is a bit of an indulgence but it guarantees repeatable accuracy to 0.1mm

The cutter guard behind the fence is a flimsy collection of bent metal and nuts and bolts – very disappointing on a machine of this quality

Specification:

RECORD POWER PT107

- **Thicknesser feed rate:** 5m/minute
- **Cutterblock knives:** Three
- **Cutterblock diameter:** 75mm
- **Maximum thicknessing height:** 190mm
- **Maximum thicknessing width:** 265mm
- **Maximum thicknesser depth of cut:** 2mm
- **Maximum planing width:** 265mm
- **Maximum planer depth of cut:** 3mm
- **Planing table length:** 1,110mm
- **Motor input P1:** 2.2W
- **Motor output P2:** 1.69kW
- **Weight:** 162kg
- **Overall plan size:** 1,100 × 480mm

- **Typical price:** £1,099.99
- **Web:** www.recordpower.co.uk

THE GW VERDICT

- **PROS:**
  Compact; accurate cast-iron tables; easy change from planing to thicknessing; very good results achieved when thicknessing with the three-blade cutterblock and slow feed rate

- **CONS:**
  Potentially tricky, time-consuming blade changing/setting; accuracy compromised on longer pieces

- **RATING:** 4 out of 5

Specification:

FELDER AD 941

- **Planing width:** 410mm
- **Planer table length:** 2,200mm (4,000mm)
- **Cutterblock:** Self-aligning blades (optional Silent-POWER spiral cutterblock)
- **Thicknessing height:** 3-254mm
- **Feed speed:** 6 + 12m/min
- **Thicknessing table control:** Power-Drive (optional)
- **Weight:** 610kg
- **Overall plan size:** 2,300 × 730mm

- **Typical price:** £8,988 (with Silent-POWER cutterblock)
- **Web:** www.felder-group.co.uk

THE GW VERDICT

- **PROS:**
  Long, wide planer tables produce accurate results for long, wide workpieces; sturdy; plenty of power; Spiral cutterblock produces an excellent finish with minimum tear-out, even on difficult timber... quietly

- **CONS:**
  Big bits of machinery are space hungry and expensive; regular maintenance and minor adjustments likely to be required for continued accuracy; for single phase, requires a separate 20amp supply

- **RATING:** 4.5 out of 5

This all requires some very substantial, accurately machined lumps of cast-iron, huge hinges and muscular springs; it's an impressive bit of engineering, and these don't come cheap. Another reason for buying this machine was to upgrade the cutterblock to 'Silent-POWER'. Although this is actually a feature available across the Felder/Hammer range, this spiral cutterblock, with its 63 four-sided tungsten carbide blades, is a real game-changer. The name is slightly misleading: if you're expecting 'Silent' you'll be disappointed, but 'quite a bit quieter power' doesn't have quite the same ring to it. In any case, the huge benefit is the quality of the cut: the shearing action from the many little blades set in a spiral formation keeps tear-out on difficult timbers to a minimum and the blade life is really impressive.

Changing blades & other features

Changing blades is not that quick: each blade has to be removed, cleaned, turned, and carefully tightened back into place with a torque screwdriver. Accurate adjustment just isn't an issue; the blade heights will be perfect, it's just that it has to be done 63 times on this machine, but thankfully not very frequently. Other features on this machine? The planer tables are lifted together, luckily with plenty of spring assistance, and the thicknesser table is raised and lowered electronically – an optional extra, which I love, but which is hardly vital. It's not that arduous to wind a handle, but having repeatability to an accuracy of 0.1mm can be really handy. The Felder's table is supported on all four corners, which means the table doesn't require locking on each adjustment, unlike the Record, which has a central post. There are two feed rates available, but we always use the slower speed for hardwoods, which is about the same as the Record's single speed. The fence, which is mounted on the end of the infeed table to save space behind the machine, is pretty sturdy and works well but the collection of bits of bent metal that guard the cutterblock when the fence is pulled forward is not, I'm afraid, Felder's finest hour on an otherwise very nicely engineered machine.

Conclusion

If you need a machine to produce large, long wooden components to very fine tolerances and in great volume, while putting up with multiple users, you are likely to need to spend quite a big chunk of money and the AD 941 will do a great job for you. But for many amateur and professional users a large machine, such as the Felder, can't even be an aspiration if there's no space or budget for it. The robust PT107 would be great for a smaller workshop and making on a smaller scale, as the thicknesser produces a very good finish, but it would really benefit from a more sophisticated cutterblock/blade setting arrangement. Ultimately, though, it's difficult to ignore the fact that spiral cutterblocks, such as Felder's 'Silent-POWER', are now available, and they produce amazing results. **GW**

Hammer®

The obvious choice!

IF IN DOUBT ...

... USE A HAMMER

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

FELDER-GROUP UK

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

www.ukhammer.co.uk

✆ Request your free catalogue now!

Panel Saws

K4 perform

K3 winner comfort

Planer-thicknessers/Planers/Thicknessers

A3 41

A3 31

A3 41 A

A3 41 D

Spindle Moulder

F3

Saw Spindle Moulder

B3 perform

B3 winner

Combination machines

C3 31 perform

C3 31

Bandsaw

N 3800
N 4400

Horizontal Mortiser

D3

Mobile Dust Extractor

S01

HAMMER,
Quality and precision from **Austria**

Freehand cuts made easy

Capable of fast and precise cutting, the EasyCut 12 is the world's first general-purpose saw complete with 'NanoBlade', a saw blade with a surrounding micro-chain

Every now and again a power tool comes along which appears quite radical. While the principle of using a chainsaw for accurate vertical cutting is not new – think of chain mortisers – a miniature version that's hand-held is quite an innovation. Bosch refer to the EasyCut as a cordless mini-saw, though it's effectively a small chainsaw, the miniature teeth rotating around a steel guide bar. It's something of an all-rounder, designed for DIY and gardening projects, but how useful is it for the woodworker?

Nano technology

As part of Bosch's Power For All 12V system, the 2.5Ah battery is interchangeable. One Li-ion pack is supplied, along with a 100 minute charger. The tool features a Syneon chip, which manages battery efficiency and adds protection.

Weighing 0.9kg, the EasyCut feels sturdy without being too heavy, with soft-grip rubber to lessen vibration. To activate the large trigger you first depress a lock-off button, accessed from either side. An LED glows red or green to indicate relevant battery level. Sawing speed is easy to control via the trigger, with a maximum of 4,100rpm.

The micro chain has 44 tiny teeth that rotate around the guide bar, which Bosch refer to as a 'NanoBlade'; this features automatic tensioning, with no adjustment or sharpening possible. In fact, the only maintenance required is to brush away sawdust regularly.

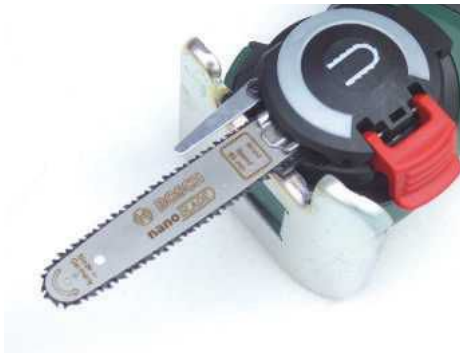
With tool-free blade change, this is as quick as you'd expect with a jigsaw. You flip up a red locking lever to release the hinged cover, lift out the blade and replace, if necessary. A plastic guard is included to slide over the blade, though you could wear lightweight gloves instead. The bar locates over a toothed steel shaft, which is driven by the motor, the chain travelling around this.

With a fixed steel baseplate, no bevel cuts are possible and, like a chainsaw, you can only make straight cuts. There's a notch at the back of the baseplate to help align the tool with a pencil mark. Maximum cutting depth is 65mm.

As part of Bosch's Power For All 12V system, the 2.5Ah battery is interchangeable

One Li-ion pack is supplied, along with a 100 minute charger

To activate the large trigger you first depress a lock-off button, accessed from either side



The micro chain has 44 tiny teeth that rotate around the guide bar, which Bosch refer to as a 'NanoBlade'

Safe sawing

You'd assume the strap attached to the handle is a wrist loop, though Bosch warn against this. Described as a 'suspension strap' it's meant for storage purposes, though I found it got in the way and simply removed it.

So, how safe is the EasyCut? While you wouldn't want to get your fingers near the moving teeth, it's no more risky than using a jigsaw. To check out the EasyCut's capabilities, I made a series of cuts in softwood, oak, OSB and plywood. Cutting was slightly ragged on the solid timber top surfaces, but that's to be expected. Cuts were square, though, leaving a clean surface underneath.

I found it tricky to follow a pencil line for precise cutting as there's a rapid build up of sawdust around the blade from the start. A batten acting as a guide fence improves accuracy on thicker material. Plunge cuts are straightforward and fairly clean in man-made boards, so you could make worktop cut-outs without first drilling holes for a jigsaw blade. Kerf width is 2mm.

Away from woodworking it's great for cutting rigid plastic pipes cleanly, which can be awkward with a hacksaw. In the garden it's pretty efficient when cutting small branches and logs. It's fairly quiet and less intimidating than a recip saw, though it's not designed for demolition work.

You flip up a red locking lever to release the hinged cover, lift out the blade and replace, if necessary

The bar locates over a toothed steel shaft which is driven by the motor, the chain travelling around this

With a fixed steel baseplate, no bevel cuts are possible and, like a chainsaw, you can only make straight cuts

Conclusion

A plastic storage case is included, plus a three year warranty when registered. The EasyCut's downside is the cost of replacement blades. Unlike a jigsaw, Nano blades are pricey at over £30 a time. And there's no real way of knowing how long teeth will remain sharp, though this depends on what you're cutting. A 44-tooth blade with 65mm depth capacity is included and gives a fairly fine cut. Other blade patterns have slightly coarser teeth and are limited to 50mm depth.

This is a unique power tool, that's perhaps better for outdoor use than for precision cutting in the workshop. Remember that the EasyCut is a DIY saw and not intended as a pro tool. It's available without a battery for around £100. **GW**

Following a pencil line for precise cutting is tricky as there's a rapid build up of sawdust around the blade from the start

Specification:

- **Battery voltage:** 12V
- **Cutting depth in wood:** 65mm
- **No-load speed:** 0-4,100rpm
- **Weight:** 0.9kg

- **Typical price:** £130
- **Web:** www.bosch-pt.com

THE GW VERDICT

- **PROS:**
  Quiet and easy to use; clean plunge cutting
- **CONS:**
  Blades are really expensive; difficult to see pencil line
- **RATING:** 3.5 **out of 5**

Plunge cuts are straightforward and fairly clean in man-made boards, so you could make worktop cut-outs without first drilling holes for a jigsaw blade

Away from woodworking it's great for cutting rigid plastic pipes cleanly, which can be awkward with a hacksaw

In the garden it's pretty efficient when cutting small branches and logs

WIN

A Record Power PT260 planer/thicknesser – worth £649.99!

5 YEAR GUARANTEE

Over 100 years
Experience • Knowledge
Support • Expertise

RECORD POWER
ESTABLISHED 1909®

The heart of any planer is the table and bed, and the PT260 from Record Power features a cast-iron thicknessing bed for strength and rigidity and boasts a 150mm thicknessing capacity. The specially hardened surfacing tables are a generous 1m in length and will plane boards up to 260mm wide.

The powerful induction motor enables the machine to remove up to 3mm in a single pass. Beware of cheap copies: they often use cheaper components (such as aluminium thicknessing tables) and poor quality motors, electrics and switches. Record Power have sold thousands of these machines over many years and have continually upgraded and improved components and features so that they can give the machine their market leading five-year guarantee with total confidence.

Thicknesser
The PT260 has a 150mm maximum thicknessing capacity and a generous 400 × 260mm working table, which is made of cast-iron for solid support.

Extraction & guard hood
This fits quickly and easily for thicknessing and engages a micro-switch to ensure it is in place before use.

Cutterblock
The PT260 features a two-knife cutterblock with re-sharpenable, reversible blades. The feed mechanism features noise reduction slots and anti-kickback teeth, which prevent the material being thrown back when thicknessing.

Fence
The fence can tilt from 0-45° on a positive stop to make re-setting an easier task.

Tables
Hardened 1m long tables are treated to reduce friction, allowing easier movement of stock.

Wheel kit
A pedal-operated wheel kit is provided as standard allowing the machine to be easily re-positioned in the workshop for cutting long lengths of timber or whenever a change of position is required.

Rise & fall
Features a large easy-to-read scale and adjustment is via four threaded support bars with brass insets that are operated by a simple handwheel.

SPECIFICATION
- **Thicknesser feed rate:** 5m/minute
- **Cutterblock knives:** 2
- **Cutterblock diameter:** 63mm
- **Maximum thicknessing height:** 150mm
- **Maximum thicknessing width:** 260mm
- **Maximum thicknesser depth of cut:** 3mm
- **Maximum planing width:** 260mm
- **Maximum planer depth of cut:** 3mm
- **Planing table length:** 1,000mm
- **Motor input P1:** 1.9kW
- **Motor output P2:** 1.5kW
- **Weight:** 80kg
- **Size:** 1,040mm high × 930mm wide × 1,100mm deep

To find out more about Record Power and the extensive range of woodworking machinery available, visit the website: **www.recordpower.co.uk**

HOW TO ENTER

To be in with a chance of winning this fantastic prize of a PT260 10 × 6in planer/thicknesser, just visit **www.getwoodworking.com/competitions** and answer this simple question:

Question: **What is the PT260's maximum thicknessing capacity?**

The winner will be randomly drawn from all correct entries. The closing date is **8 December 2017**

Only one entry per person; multiple entries will be discarded. Employees of MyTimeMedia Ltd and Record Power are not eligible to enter this competition

Machine Mart

NOW 66 SUPERSTORES NATIONWIDE

WHERE QUALITY COSTS LESS

Clarke TABLE SAWS

FROM ONLY £72.99 EXC.VAT £87.59 INC.VAT

LEG STAND KITS FOR CTS10D AND CTS11 ONLY £27.59 INC VAT

INCLUDES LEFT & RIGHT TABLE EXTENSION

CTS10D

MODEL	MOTOR	BLADE	EXC.VAT	INC.VAT
CTS800B	600W	200mm	£72.99	£87.59
CTS11	1500W	254mm	£149.98	£179.98
CTS10D	1500W	254mm	£169.98	£203.98

Clarke 4" BELT/ 6" DISC SANDER

NEW

- Dust extraction facility
- 4" x 36" belt tilts & locks 0-90°
- 225mm x 160mm table, tilts 0-90°
- 370W, 230V motor

CS4-6E

£92.99 EXC.VAT £111.59 INC.VAT

Clarke 6" BELT/ 9" DISC SANDER

- Includes stand
- 1 HP/ 230V/ 1ph motor

CS6-9C

£239.00 EXC.VAT £286.80 INC.VAT

Clarke TABLE SAW WITH EXTENSION TABLES (250mm)

CTS14

- Ideal for cross cutting, ripping, angle and mitre cutting
- Easy release/locking mechanism for table extensions
- 0-45° tilting blade
- Cutting depth: 72mm at 90° / 65mm at 45°

£129.98 EXC.VAT £155.98 INC.VAT

SHOWN WITH OPTIONAL LEG KIT CLK5 £19.98 EXC.VAT £23.98 INC.VAT

EVOLUTION FURY5-S TABLE SAW

- 1500W motor
- 0-60° mitre gauge
- Cutting depth: Steel 3mm, Wood 85mm at 90° or 58mm at 45°

£149.98 EXC.VAT £179.98 INC.VAT

3 YEAR

Clarke WOODWORKING VICES

STANLEY Record

FROM ONLY £14.99 EXC.VAT £17.99 INC.VAT

WV7

MODEL	MOUNTING	JAW (WIDTH/OPENING /DEPTH)mm	EXC.VAT	INC.VAT
Clarke CHT152	Bolted	150/152/61	£14.99	£17.99
Stanley Multi Angle	Clamped	72/60/40	£17.99	£21.59
Record TV75B	Clamped	75/50/32	£20.99	£25.19
Clarke WV7	Bolted	180/205/78	£29.98	£35.98

Clarke QUALITY CAST IRON STOVES

8kW

OVER 22 QUALITY STYLES ON DISPLAY

£219.00 EXC.VAT £262.80 INC.VAT

FLUES, COWLS & ACCESSORIES IN STOCK

BARREL II

Clarke 1" BELT/ 5" DISC SANDER

- Includes 2 tables that tilt & lock
- Quality Induction 300W motor

£69.98 EXC.VAT £83.98 INC.VAT

CBS1-5

Clarke DUST EXTRACTOR/ CHIP COLLECTORS

FROM ONLY £139.98 EXC.VAT £167.98 INC.VAT

METABO ALSO AVAILABLE

- Powerful 750W motor
- 56 litre bag capacity
- Flow rate of 850M3/h

MODEL	MOTOR	FLOW RATE	BAG CAP.	EXC.VAT	INC.VAT
CDE35B	750W	450 M3/h	56Ltrs	£139.98	£167.98
CDE7B	750W	850 M3/h	114Ltrs	£159.98	£191.98

Clarke ELECTRIC HEATERS

DEVIL 7005

FROM ONLY £74.99 EXC.VAT £89.99 INC.VAT

DEVIL 6005

MODEL	VOLTAGE	HEAT OUTPUT	EXC.VAT	INC.VAT
DEVIL 6005	400V	2.5-5kW	£74.99	£89.99
DEVIL 7005	400V	5kW	£84.99	£101.99
DEVIL 6009	400V	4.5-9kW	£119.00	£142.80
DEVIL 6015	400V	5-10-15kW	£179.00	£214.80
DEVIL 7025	400V	22kW	£299.00	£358.80
DEVIL 7030	400V	30kW	£349.00	£418.80

Clarke STAPLE/ NAIL GUNS

- All models include nail/ staple pack and tough moulded case

FROM ONLY £22.99 EXC.VAT £27.59 INC.VAT

NEW

CONSN18LIC

SPARE NAILS / STAPLES IN STOCK

ELECTRIC AND CORDLESS MODELS IN STOCK

MODEL	TYPE	STAPLE/NAIL GAUGE	EXC. VAT	INC. VAT
CC148	Cordless 4.8V Ni-MH	22/18	£29.98	£35.98
CESNG2	Electric	18/18	£39.98	£47.98
CONSN18LiC	Cordless 18V Lithium-Ion	18/18	£109.98	£131.98

NEW

Clarke MULTI FUNCTION TOOL WITH ACCESSORY KIT

- Great for sawing, cutting, sanding, polishing, chiselling & much more
- 250W motor
- Variable speed

£39.98 EXC.VAT £47.98 INC.VAT

CMFT250

Clarke 4" BELT/ 8" DISC SANDER

- Includes two tables
- 550W 230V motor

£159.98 EXC.VAT £191.98 INC.VAT

CS4-8

Clarke TURBO AIR COMPRESSORS

airmaster

FROM ONLY £89.98 EXC.VAT £107.98 INC.VAT

- Superb range ideal for DIY, hobby & semi-professional use
- 'V' Twin Pump

8/250

MODEL	MOTOR	CFM	TANK	EXC.VAT	INC.VAT
8/250	2HP	7.5	24ltr	£89.98	£107.98
7/250	2 HP	7	24ltr	£94.99	£113.99
11/250	2.5HP	9.5	24ltr	£109.98	£131.98
8/510	2HP	7.5	50ltr	£119.98	£143.98
11/510	2.5HP	9.5	50ltr	£139.98	£167.98
16/510*	3 HP	14.5	50ltr	£209.00	£250.80
16/1010*	3 HP	14.5	100ltr	£259.98	£311.98

Clarke DISC SANDER (305MM)

- Powerful, bench mounted
- 900W
- Dust extraction port

£129.98 EXC.VAT £155.98 INC.VAT

CDS300B

Clarke CROS3 450W RANDOM ORBITAL SANDER

£29.98 EXC.VAT £35.98 INC.VAT

- Adjustable front handle improves control
- 7000-14000rpm

INC DUST BAG AND SELECTION OF 125MM DIAMETER SANDING DISCS

Clarke POWER PLANERS

CEP1

BLACK & DECKER

- 82mm cutting width

FROM ONLY £28.99 EXC.VAT £34.79 INC.VAT

MODEL	MOTOR	DEPTH OF CUT	EXC.VAT	INC.VAT
Clarke CEP1	650W	2mm	£28.99	£34.79
Einhell TE-PL850	850W	3mm	£52.99	£63.59
B&D KW750K - GB	750W#	2mm	£57.99	£69.59

Clarke BELT SANDERS

makita

- Ideal for surface removal, sanding and finishing

ABRASIVE SANDING BELTS IN STOCK

BS1

FROM ONLY £36.99 EXC.VAT £44.39 INC.VAT

*was £113.99 inc.VAT

MODEL	MOTOR	M/MIN	EXC.VAT	INC.VAT
Clarke BS1	900W	380	£36.99	£44.39
Clarke CBS2	1200W	480	£79.98	£95.98
Makita 9911*	650W	75-270	£86.99	£104.39

Clarke HARDWOOD WORKBENCH

- Includes bench dogs and guide holes for variable work positioning
- 2 Heavy Duty Vices
- Large storage drawer
- Sunken tool trough
- LxWxH 1520x620x855mm

CHB1500

£144.99 EXC.VAT £173.99 INC.VAT

Clarke SHEET SANDERS

- Ergonomic design for optimum comfort

CON300

FROM ONLY £16.99 EXC.VAT £20.39 INC.VAT

MODEL	SHEET SIZE	MOTOR	EXC.VAT	INC.VAT
COS200	190X90mm	150W	£16.99	£20.39
CON300	230X115mm	330W	£34.99	£41.99

Clarke STATIC PHASE CONVERTERS

- Run big 3 phase woodworking machines from 1 phase supply
- Variable output power to match HP of motor to be run

PC60

ROTARY PHASE CONVERTERS ALSO IN STOCK

CONVERT 230V 1PH TO 400V 3PH

FROM ONLY £229.00 EXC.VAT £274.80 INC.VAT

MODEL	MAX. MOTOR HP	FUSE	EXC.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 CORDLESS DRILL/ DRIVERS

CPF13

- Variable belt speed
- Tilting head

*Black & Decker

FROM ONLY £49.98 EXC.VAT £59.98 INC.VAT

MODEL	MOTOR	BELT SIZE (mm)	EXC.VAT	INC.VAT
CPF13	400W/230V	13x457	£49.98	£59.98
KA900E*	350W/230V	13x455	£59.98	£71.98

Clarke CORDLESS DRILL/ DRIVERS

Clarke CONTRACTOR

FROM ONLY £39.98 EXC.VAT £47.98 INC.VAT

powered by Li-ion

CON18Li

MODEL	VOLTS	BATTS	EXC. VAT	INC.VAT
CON18Ni	18V	2 x Ni-Cd	£69.98	£83.98
CON18Li	18V	2 x Li-Ion	£89.98	£107.98

Clarke CIRCULAR SAWS

- Great range of DIY and professional saws
- Ideal for bevel cutting (0-45°)

CON185

FROM ONLY £41.99 EXC.VAT £50.39 INC.VAT

*Includes laser guide

MODEL	MOTOR	MAX CUT 90/45 (mm)	EXC.VAT	INC.VAT
CCS185B	1200W	65/44	£41.99	£50.39
CCS2	1300W	60/45	£59.98	£71.98
CON185*	1600W	60/40	£62.99	£75.59

VAC KING WET & DRY VACUUM CLEANERS

- Compact, high performance wet & dry vacuum cleaners for use around the home, workshop, garage etc.

FROM ONLY £49.98 EXC.VAT £59.98 INC.VAT

* SS = Stainless Steel

MODEL	MOTOR	CAPACITY DRY/WET	EXC. VAT	INC. VAT
CVAC20P	1250W	16/12ltr	£49.98	£59.98
CVAC20SS*	1400W	16/12ltr	£59.98	£71.98
CVAC20PR2	1400W	16/12ltr	£64.99	£77.99
CVAC25SS*	1400W	19/17ltr	£67.99	£81.59
CVAC30SSR*	1400W	24/21ltr	£99.98	£119.98

Clarke PORTABLE THICKNESSER

- Max thickness cap. 125mm and 250mm wide
- Planing depths adjustable from 0-2.5mm
- Powerful 1250W motor

£219.00 EXC.VAT £262.80 INC.VAT

CPT250

Clarke OSCILLATING BOBBIN SANDER

- Provides exceptional finishes for deep & wide work pieces, front edges & narrow inner curves
- Dust collection port
- Inc. 6 sanding sleeves/ bobbins

£139.98 EXC.VAT £167.98 INC.VAT

COBS1

Clarke BOLTLESS SHELVING/BENCHES

- Simple fast assembly in minutes using only a hammer

SAVE 10%

WHEN YOU BUY ANY MIX OF 4 FROM THIS RANGE SAVE AT LEAST £23.99 INC.VAT

FROM ONLY £29.98 EXC.VAT £35.98 INC.VAT

150 KG PER SHELF (evenly distributed) Strong 9mm fibreboard shelves

350 KG PER SHELF (evenly distributed) Strong 12 mm fibreboard shelves

CHOICE OF 5 COLOURS

RED, BLUE, GREY, SILVER & GALVANISED STEEL

MODEL	DIMS WxDxH(mm)	EXC.VAT	INC.VAT
150kg	800x300x1500	£29.98	£35.98
350kg	900x400x1800	£49.98	£59.98

Clarke WHETSTONE SHARPENER (200MM)

- Produces razor sharp cutting edges on chisels, planes, etc.
- Inc. 3 tool holding jigs, workpiece clamp & support frame, polishing paste & water trough

ONLY £119.98 EXC.VAT £143.98 INC.VAT

Clarke PLANERS & THICKNESSERS

CPT800

- Ideal for DIY & Hobby use
- Dual purpose, for both finishing & sizing of timber

FROM ONLY £184.99 EXC.VAT £221.99 INC.VAT

MODEL	PLANING WIDTH	MAX THICK. CAPACITY	EXC. VAT	INC. VAT
CPT600	6"	120mm	£184.99	£221.99
CPT800	8"	120mm	£209.98	£251.98
CPT1000	10"	120mm	£289.00	£346.80

Clarke OSCILLATING BELT & BOBBIN SANDER

- Can sand concave, convex, straight or multi-curved work pieces
- Dust collection port
- Inc. sleeves, drum & belt

£179.98 EXC.VAT £215.98 INC.VAT

COEBS1

FAST, EASY FINANCE ONLINE/INSTORE

NEW BUY NOW SPREAD THE COST

- Over 12, 18 or 24 Months
- Purchases over £300
- 12.9% APR, 10% Deposit*

EASY TO USE WEBSITE

NOW OVER 21,000 PRODUCTS ONLINE!

For hard-to-find, specialist items visit the Xtra section on machinemart.co.uk

NEW 500 PAGE CATALOGUE

Over 500 PRICE CUTS & NEW PRODUCTS

GET YOUR FREE COPY NOW!

- IN-STORE
- ONLINE
- PHONE

0844 880 1265

Clarke SLIDING COMPOUND MITRE SAW

BEST SELLER

- For fast, accurate cross, bevel & mitre cutting in most hard & soft woods
- 1800W motor
- Laser guide

£139.98 EXC.VAT
£167.98 INC.VAT

CMS10S2

MODEL	BLADE DIA/BORE (mm)	MAX CUT DEPTH/CROSS	EXC.VAT	INC.VAT
CMS210	210/30	60/120	£59.98	£71.98
CMS10S2	254/30	78/340	£139.98	£167.98

MITRE SAWS TC-SM2131

FROM ONLY £59.98 EXC.VAT £71.98 INC.VAT

Laser Guide
‡ Sliding Compound

- Quality Range of Mitre saws and blades in stock

MODEL	BLADE DIA/BORE (mm)	MAX CUT DEPTH/CROSS	EXC. VAT	INC. VAT
Einhell TC-MS 2112	210/30	55/120mm	£59.98	£71.98
Einhell TC-SM2131#	210/30	62/310mm	£129.98	£155.98
Einhell SM2534‡	250/30	75/340mm	£159.98	£191.98

Clarke FOLDING MITRESAW STAND

CFMSS1

- Suitable for most sizes/makes of saw
- Inc. outriggers & rollers

ONLY £66.99 EXC.VAT £80.39 INC.VAT

Clarke DRILL PRESSES

- Range of precision bench & floor presses for enthusiast, engineering & industrial applications

FROM ONLY £66.99 EXC.VAT £80.39 INC.VAT

CDP152B

B = Bench mounted
F = Floor standing

MODEL	MOTOR (W) SPEEDS	EXC. VAT	INC. VAT
CDP5EB	350 / 5	£66.99	£80.39
CDP102B	350 / 5	£79.98	£95.98
CDP152B	450 / 12	£139.98	£167.98
CDP202B	450 / 16	£185.00	£222.00
CDP10B	370 / 12	£198.99	£238.79
CDP352F	550 / 16	£229.00	£274.80
CDP502F1100	1100 / 12	£499.00	£598.80

Clarke CONTRACTOR BOSCH JIGSAWS

BEST SELLER

CON750

*DIY #Professional

FROM ONLY £15.99 EXC.VAT £19.19 INC.VAT

MODEL	POWER (W)	DEPTH OF CUT (WOOD/STEEL)	EXC. VAT	INC VAT
Clarke CJS380*	420W	55/6mm	£15.99	£19.19
Clarke CON750#‡	750W	80/10mm	£27.99	£33.59
Bosch PST700E*	500W	70/4mm	£44.99	£53.99

‡ was £34.79 inc.VAT

Clarke BISCUIT JOINTER

- 11000rpm Operating Speed
- 860W motor • 14mm Cutting Depth • Inc. dust bag, storage case and face spanner for cutter change

NEW

2 YEAR GUARANTEE

£49.98 EXC.VAT £59.98 INC.VAT

TC-BJ900

Clarke SCROLL SAWS

FROM ONLY £82.99 EXC.VAT £99.59 INC.VAT

CSS400C

BEST SELLER

- 50mm max cut thickness
- Air-blower removes dust from cutting area
- Table tilts 0-45°

MODEL	MOTOR	SPEED RPM	EXC. VAT	INC. VAT
CSS400B	85W	1450	£82.99	£99.59
CSS16VB	90W	550-1600	£94.99	£113.99
CSS400C	90W	550-1600	£114.99	£137.99

Clarke 13" MINI WOOD LATHE

£149.98 EXC.VAT £179.98 INC.VAT

CWL325V

- Ideal for enthusiasts/ hobbyists with small workshops
- 325mm distance between centres • 200mm max. turning capacity (dia) • 0.2HP motor

Clarke DETAIL SANDERS

- Perfect for smooth and fine finishing along with hard to reach areas or curved surfaces

CDS-1V

FROM ONLY £19.98 EXC.VAT £23.98 INC.VAT

MODEL	WATTS	EXC.VAT	INC.VAT
PS105	105W	£19.98	£23.98
CDS-1V	280W	£29.98	£35.98

ALL MODELS INC. SANDING SHEETS

Clarke BENCH BANDSAW

- Produces fast, precise mitre & longitudinal cuts • Cuts in all types of wood

£129.98 EXC.VAT £155.98 INC.VAT

CBS190B

MODEL	MOTOR	THROAT SIZE	EXC.VAT	INC.VAT
CBS190B	350W	7.5"	£129.98	£155.98

Clarke MORTISING MACHINE

£174.99 EXC.VAT £209.99 INC.VAT

CBM1B

- Accurately creates deep square recesses • Table size 150 x 340mm • Max. chisel stroke 76mm
- Robust cast iron base & column ensures stability & accuracy
- 95mm depth of cut

CHISELS AVAILABLE FROM £8.39 INC VAT

"..fast and accurate with a good solid feel...Excellent value for money." See www.machinemart.co.uk

Clarke WORK TABLE SUPPORTS (PAIR)

- Ideal if you have your own work top or want to build a steel or wood workbench
- Inc. mounting holes for worktop, shelf and floor

SIMPLY ADD YOUR OWN TOP

CWTS1

ONLY £28.99 EXC.VAT £34.79 INC.VAT

BEST SELLER

Clarke 12" DOVETAIL JIG

- 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

£57.99 EXC.VAT £69.59 INC.VAT

CDTJ12

Clarke PROFESSIONAL BANDSAWS

Top Quality Bandsaws - ideal for professional workshop use. Strong steel body with solid cast iron table

- Table tilts 45° • Adjustable blade guide
- Supplied with stand, 4TPI wood cutting blade, rip fence, mitre guide, mitre gauge and push stick • Induction motors
- Includes stand

MAGNIFIED MITRE GUIDE
QUICK RELEASE FENCE
DRIVE-BELT TENSIONING
SOLID GROUND CAST IRON TABLE

CBS300

FROM ONLY £399.00 EXC.VAT £478.80 INC.VAT

MODELS ALSO FEATURE:
MULTI-STEP DUST EXTRACTION OUTLET
FLEXIBLE LED WORKLIGHT
REMOVABLE DUST TRAY
BLADE TENSIONING CONTROL

MODEL	THROAT DEPTH	MAX CUT 90°	MAX CUT 45°	EXC. VAT	INC. VAT
CBS300	305mm/12"	165mm	115mm	£399.00	£478.80
CBS350	340mm/14"	225mm	160mm	£498.00	£597.60

Clarke ROUTER TABLE CRT-1

Router not included

BEST SELLER

- Converts your router into a stationary router table • Suitable for most routers (up to 155mm dia. Base plate)

£69.98 EXC.VAT £83.98 INC.VAT

Clarke CONTRACTOR BOSCH ROUTERS

- Powerful heavy duty machines ideal for trade and DIY use

CR2 INCLUDES 15 PIECE KIT WORTH OVER £20

FROM ONLY £46.99 EXC.VAT £56.39 INC.VAT

CR1C

*DIY

MODEL	MOTOR (W)	PLUNGE (mm)	EXC.VAT	INC.VAT
CR1C*	1200	0-50	£46.99	£56.39
Bosch POF1400ACE	1400	0-55	£86.99	£104.39
CR2‡	2100	0-60	£119.98	£143.98

‡ was £149.99 inc.VAT

Clarke GRINDERS & STANDS

- Stands come complete with bolt mountings and feet anchor holes

6" & 8" AVAILABLE WITH LIGHT

FROM ONLY £32.99 EXC.VAT £39.59 INC.VAT

STANDS FROM ONLY £47.98 INC.VAT

POLISHING KITS 4" TO 8" FROM ONLY £27.59 INC VAT

With sanding belt
*8" whetstone & 6" drystone

MODEL	DUTY	WHEEL DIA.	EXC.VAT	INC.VAT
CBG6RP	DIY	150mm	£32.99	£39.59
CBG6RZ	PRO	150mm	£42.99	£51.59
CBG6RSC	HD	150mm	£54.99	£65.99
CBG6SB#	PRO	150mm	£54.99	£65.99
CBG6RWC	HD	150mm	£59.98	£71.98
CBG8W* (wet)	HD	150/200mm	£56.99	£68.39

Machine Mart Xtra

Professional woodworking tools and machinery from Record, Sheppach, SIP and more!

Visit www.machinemart.co.uk for more information

VISIT YOUR LOCAL SUPERSTORE

OPEN MON-FRI 8.30-6.00, SAT 8.30-5.30, SUN 10.00-4.00

BARNSLEY Pontefract Rd, Barnsley, S71 1EZ	01226 732297	**EDINBURGH** 163-171 Piersfield Terrace	0131 659 5919
B'HAM GREAT BARR 4 Birmingham Rd.	0121 358 7977	**EXETER** 16 Trusham Rd. EX2 8QG	01392 256 744
B'HAM HAY MILLS 1152 Coventry Rd, Hay Mills	0121 7713433	**GATESHEAD** 50 Lobley Hill Rd. NE8 4YJ	0191 493 2520
BLACKPOOL 380-382 Talbot Road	01253 205 170	**GLASGOW** 280 Gt Western Rd. G4 9EJ	0141 332 9231
BOLTON 1 Thynne St. BL3 6BD	01204 365799	**GLOUCESTER** 221A Barton St. GL1 4HY	01452 417 948
BRADFORD 105-107 Manningham Lane. BD1 3BN	01274 390962	**GRIMSBY ELLIS WAY,** DN32 9BD	01472 354435
BRIGHTON 123 Lewes Rd, BN2 3QB	01273 915999	**HULL** 8-10 Holderness Rd. HU9 1EG	01482 223161
BRISTOL 1-3 Church Rd, Lawrence Hill. BS5 9JJ	0117 935 1060	**ILFORD** 746-748 Eastern Ave. IG2 7HU	0208 518 4286
BURTON UPON TRENT 12a Lichfield St. DE14 3QZ	01283 564 708	**IPSWICH** Unit 1 Ipswich Trade Centre, Commercial Road	01473 221253
CAMBRIDGE 181-183 Histon Road, Cambridge. CB4 3HL	01223 322675	**LEEDS** 227-229 Kirkstall Rd. LS4 2AS	0113 231 0400
CARDIFF 44-46 City Rd. CF24 3DN	029 2046 5424	**LEICESTER** 69 Melton Rd. LE4 6PN	0116 261 0688
CARLISLE 85 London Rd. CA1 2LG	01228 591666	**LINCOLN** Unit 5. The Pelham Centre. LN5 8HG	01522 543 036
CHELTENHAM 84 Fairview Road. GL52 2EH	01242 514 402	**LIVERPOOL** 80-88 London Rd. L3 5NF	0151 709 4484
CHESTER 43-45 St. James Street. CH1 3EY	01244 311258	**LONDON CATFORD** 289/291 Southend Lane SE6 3RS	0208 695 5684
COLCHESTER 4 North Station Rd. CO1 1RE	01206 762831	**LONDON** 6 Kendal Parade, Edmonton N18	020 8803 0861
COVENTRY Bishop St. CV1 1HT	024 7622 4227	**LONDON** 503-507 Lea Bridge Rd. Leyton, E10	020 8558 8284
CROYDON 423-427 Brighton Rd, Sth Croydon	020 8763 0640	**LONDON** 100 The Highway, Docklands	020 7488 2129
DARLINGTON 214 Northgate. DL1 1RB	01325 380 841	**LUTON** Unit 1, 326 Dunstable Rd, Luton LU4 8JS	01582 728 063
DEAL (KENT) 182-186 High St. CT14 6BQ	01304 373 434	**MAIDSTONE** 57 Upper Stone St. ME15 6HE	01622 769 572
DERBY Derwent St. DE1 2ED	01332 290 931	**MANCHESTER ALTRINCHAM** 71 Manchester Rd. Altrincham	0161 9412 666
DONCASTER Wheatley Hall Road	01302 245 999	**MANCHESTER CENTRAL** 209 Bury New Road M8 8DU	0161 241 1851
DUNDEE 24-26 Trades Lane. DD1 3ET	01382 225 140	**MANCHESTER OPENSHAW** Unit 5, Tower Mill, Ashton Old Rd	0161 223 8376
MANSFIELD 169 Chesterfield Rd. South	01623 622160		
MIDDLESBROUGH Mandale Triangle, Thornaby	01642 677881		
NORWICH 282a Heigham St. NR2 4LZ	01603 766402		
NOTTINGHAM 211 Lower Parliament St.	0115 956 1811		
PETERBOROUGH 417 Lincoln Rd. Millfield	01733 311770		
PLYMOUTH 58-64 Embankment Rd. PL4 9HY	01752 254050		
POOLE 137-139 Bournemouth Rd. Parkstone	01202 717913		
PORTSMOUTH 277-283 Copnor Rd. Copnor	023 9265 4777		
PRESTON 53 Blackpool Rd. PR2 6BU	01772 703263		
SHEFFIELD 453 London Rd. Heeley. S2 4HJ	0114 258 0831		
SIDCUP 13 Blackfen Parade, Blackfen Rd	0208 3042069		
SOUTHAMPTON 516-518 Portswood Rd.	023 8055 7788		
SOUTHEND 1139-1141 London Rd. Leigh on Sea	01702 483 742		
STOKE-ON-TRENT 382-396 Waterloo Rd. Hanley	01782 287321		
SUNDERLAND 13-15 Ryhope Rd. Grangetown	0191 510 8773		
SWANSEA 7 Samlet Rd. Llansamlet. SA7 9AG	01792 792969		
SWINDON 21 Victoria Rd. SN1 3AW	01793 491717		
TWICKENHAM 83-85 Heath Rd.TW1 4AW	020 8892 9117		
WARRINGTON Unit 3, Hawley's Trade Pk.	01925 630 937		
WIGAN 2 Harrison Street, WN5 9AU	01942 323 785		
WOLVERHAMPTON Parkfield Rd. Bilston	01902 494186		
WORCESTER 48a Upper Tything. WR1 1JZ	01905 723451		

5 EASY WAYS TO BUY...

SUPERSTORES NATIONWIDE

ONLINE www.machinemart.co.uk

TELESALES 0115 956 5555

CLICK & COLLECT OVER 10,000 LOCATIONS

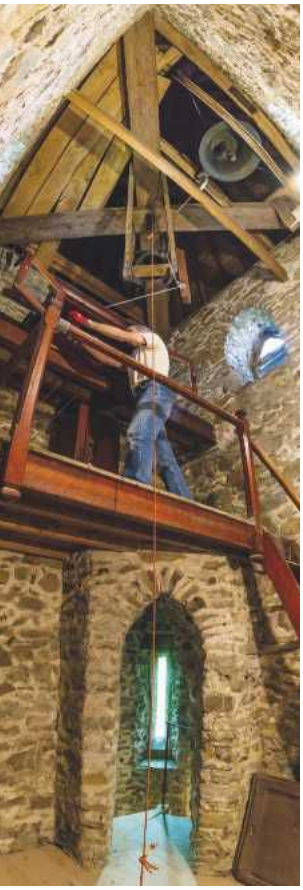
CALL & COLLECT AT STORES TODAY

OLIVER!

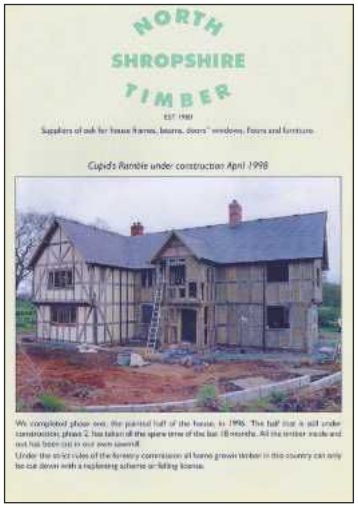
A theatrical production sets **Dave Roberts** reviewing the situation – or at least wood's ability to transform and be transformed

Altered states: the audience sees a character calling to his wife upstairs; backstage, the cast sees an actor speaking into a darkness that contains no stairs at all

Artifice: the stage flats, with their picture rails, architrave, and skirting, showed a vicarage sitting room



PIC 1. Even as the timbers in this spire were being assembled, Britain was converting to Railway Time



PIC 2. Dave Hinton's house really is the catalogue of North Shropshire Timber's stock-in-trade

Until recently, visitors to the Old Vic' enjoyed the sound of the church clock striking Village Time: while the hands maintained the sober appearance of British Summer Time or Greenwich Mean Time, the chime was 'adjusted' (as we liked to pretend when it caused people to check their watches) to allow for the village's position in relation to Greenwich. Our spot in the valley is 3° 21' west of the prime meridian, which equates to 13 minutes of 'temporal separation' – coincidentally, the interval after the hour that the clock would strike. Now, alas, we have been converted: the church warden has ministered to the mechanism, and (to re-arrange the old Zen riddle) hand and clapper sound as one (**Pic.1**).

The idea of Village Time isn't altogether fanciful, of course. Only a handful of years after the serialisation of Dickens' *Oliver Twist*, Britain experienced another of the effects of the railway network's growing reach – Railway Time. The sun was superseded by the telegraph so that, when The Old Vic' first opened its doors, clocks that had been set using a sundial's shadow were being regulated by Greenwich's time signal.

Except on the prime meridian, then, what we call noon is no longer high, though of course the nature of the sun's transit is altered not at all. Having a lily-pad sort of mind, it seemed a short leap from this duality to wood's versatility: it can either be used to show its natural face, or be used to create illusions through artifice. And can there be any more literal illustration of the material's ability to be both natural and artificial while still being, well… 'wood', than the framework of a stage flat?

During a recent theatrical production (**see main images above**), I was struck by the fact that the stage-lit flats, with their picture rails, architrave, and skirting, showed to the audience a vicarage sitting room with a French window (sounds familiar…); at the same time, for the cast off-stage the flats' bare plywood and rough-sawn timber construction provided the concealment behind which work essential to the play's illusion was done – all of which rather set me thinking…

On the face of it…

Of the 'natural' case – letting wood appear as wood, as Frank Lloyd Wright would have it – I came across a remarkable example when my search for a helpful timber merchant led me to Oswestry's North Shropshire Timber (**01691 610 570**), over which Dave Hinton presides like the Welsh Marches' equivalent of Pop Larkin. I'll be returning to his yard soon, but for the moment what's of interest is the fact that it wasn't his sawmill that Dave showed me first, but his house: timber-framed and jettied, it is a living compendium of his stock-in-trade (**Pic.2**). Framed in oak, its floors

PIC 3. Teak veneers conceal the work of the marine ply core of William Garvey's bath; those mitred corners hold back half a ton of water

PIC 4. Natural goodness: the stability of teak, and its natural oils that make it water-resistant and durable

PIC 6. Tired drains, raised ground levels, and blocked-off air vents have all contributed to damp at The Old Vic'

PIC 5. Ink black: Richard Warmisham's Mont Blanc pen case was stained with squid ink

PIC 7. The root of the problem: addressing the causes of damp may mean serious digging...

are of several varieties including ash and chestnut; there are doors of pippy oak, worktops of beech, a clock case of cherry, and panelling of burr poplar. Perhaps the most striking entry in this catalogue, though, is the floor of elm, whose boards were laid so that they'll cup in the same direction, before being coarsely flattened to add extra facets, and then softened by sanding and polishing. The result is a surface alive with light, figure, and colour.

The main beams in the house are 18ft lengths of 10 × 10in green oak, which were sawn at Dave's mill, where he also proved their strength to building inspectors by loading them with a five-ton digger, under whose weight they deflected not one whit. Talking of Frank Lloyd Wright, I gather he used a similarly empirical method to demonstrate the strength of the concrete pillars he used in his design for the Johnson Wax headquarters.

... and beneath the surface

For an instance of 'artifice', meanwhile, or wood concealing essential work behind the scenes, I'm looking back to a visit I made a while ago to William Garvey (**www.williamgarvey.co.uk**), the Devon-based furniture-maker who has a particular talent for combining wood and water in its bespoke baths and basins. Tom Cornish, who at the time was the firm's chief draughtsman, explained that the company had experimented with a variety of the woods considered suitable for use in wet conditions, but most ultimately proved unsuitable for its designs: iroko's relative instability, for example, made it unreliable given the changes in temperature and the long, mitred joints used at the baths' corners; afrormosia proved to be porous to the extent that it sweated beads of moisture; oak, meanwhile, has a tendency to blacken on contact with water, which isn't attractive in a bathroom. Eventually, the furniture-maker settled on teak, whose largely straight grain remains stable despite temperature changes, and is heavy with natural oils that make it water-resistant and durable.

While solid teak continues to be used in some of its basins, William Garvey's baths now use teak constructional veneers, whose grain conceals a core of marine-grade ply (**Pic.3**) that works to eliminate any movement in the bath's walls, allowing the mitred corners to be joined only with a two-part epoxy resin that has its origins in the marine industry (but is not, was all Tom would tell me, the West System epoxy); the loose tongues incorporated in these joints are there, I understood, only to help align the mitres during assembly. The base of the bath, meanwhile – which is gently dished to encourage the water to run down to the central plughole (**Pic.4**) – is simply housed in the bath's sides. Initially, the firm finished its teak baths and basins with OS wax and teak oils, on the basis that these provide a flexible seal; however, it later adopted TimberTect, a polyurethane finish that also comes to us by way of the marine industry.

A quick, paper-clipped note on veneers: two useful bookmarks are Timberline (**www.exotichardwoods.co.uk**), or for constructional veneers, The Wood Veneer Hub (**www.thewoodveneerhub.co.uk**).

From William Garvey's Japanese-style baths it's a short segue to Japan, which, around the time that The Old Vic' was built, was widening its trade connections with the rest of the world. Oriental lacquerwork had already given rise to the imitative finish called 'japanning': in *Oliver Twist*, the Artful Dodger talks of 'japanning his trotter-cases', a phrase which, Dickens explains: "Rendered into plain English, signifieth cleaning his boots." With the increased importation of goods from Japan came a heightened fascination for many things Japanese, and a vogue for ebonising, which Stephen Simmons once described >

The rings forming the blanks for William Garvey's round, teak baths are built up brick-fashion, glued together, and then turned to shape – no mean feat

TURNING WITH AN UNUSUAL TWIST

Long ago in the morning of *GW*, (August '83 to be exact) Tobias Kaye, who was then the magazine's resident turner, recounted his adventures when turning two of William Garvey's round baths. The sloping walls of the baths were built up brick-fashion, using stacked rings of teak, each ring being made up from spindle-moulded arcs that were glued together. While the rings of the first bath each used nine arcs, this was later increased to 12 to reduce the curvature in each arc, and thereby the amount of exposed end-grain in the finished surface.

Bolting a 1.7m-diameter blank weighing about 1,800lbs to the faceplate of his VB36 lathe wasn't the easiest of manoeuvres, Tobias recalled: "But once it was all up and running," he discovered, "it was so smooth that I could turn up the speed to 150rpm without a murmur. Once some turning [had been] done, I wound it up to 220rpm. This was still silky smooth, but the peripheral speed" – the rim of the bath would've been moving at about 40mph by then – "and centrifugal force was beginning to bother me!"

PIC 8. Wet: the timber edging on the steps down to the cellar have rotted, thanks to extreme damp

as either up-market fakery or environmentally sound stewardship, depending on your point of view.

It might also be another example of nature and artifice combined, though it's one that works best on fruit woods, and timbers like sycamore and beech, whose naturally close grain can be filled, and their figure obscured to provide a good base for the artifice – the dark, dense colouring, which is characteristic of ebony.

The trick to ebonising – and here I'm going back to Stephen's advice – is to first stabilise the surface by wetting the wood to raise the grain, and sanding it back with 240 grit abrasive, repeating the process until the surface remains smooth when dampened. The wood can then be coloured with a black stain (squid ink, used in Richard Warmisham's pen case (**Pic.5**), is a deep, blue-black dye that's becoming increasingly popular) before sealing it with either a sanding sealer, or with French polish (shellac) diluted with methylated spirits. You can build on this base by applying ebony shellac polish, though for a little extra magic, Stephen suggested supplementing the shellac with a pigment such as Liberon's vegetable black earth pigment. A pigment, of course, is not only opaque but also acts as another grain-filler, properties that will both help to obscure further any figure in the wood. Once dry, the shellac can be de-nibbed with wire wool or Webrax, and built up to the final finish by applying layers of ebony shellac (whistling all the while "And tho' I'd be the first one to say that I wasn't a saint/I'm finding it hard to be really as black as they paint,") and allowing each coat to dry before applying the next.

PIC 9. ... and drying: tackling the rainwater problem has meant the cellar floor has begun to dry

Showing its age: K2Cr2O7

Lying somewhere between what's natural and artificial, perhaps, come the effects upon wood of potassium bichromate (also known as K2Cr2O7 or potassium dichromate), which can be used to age timber. Whereas the dye or pigment in a conventional stain will tend to darken the soft earlywood more than it does the harder latewood, potassium bichromate is an oxidising agent that reacts with the tannins in a timber, and so works upon both woods equally to give an even finish that mimics the darkening effect of time, and exposure to air and light.

The effect of K2Cr2O7 will vary with species, so experimentation with different concentrations is necessary to determine the result: one source I referred to suggested starting with one teaspoon of powder per pint of water; another suggested as much as about eight teaspoons per pint for really deep colouration. Whatever the dilution, the application is the same: raise and flatten the grain, and then wash the wood with the potassium solution, working quickly to avoid tidemarks. After removing any excess, leave the piece to dry; exposing it to natural light hastens the 'ageing' process.

You'll find a thorough, illustrated account of K2Cr2O7 at work in Bruce Wedlock's paper 'Chemical staining' on the Eastern Massachusetts Guild of Woodworkers' website (**www.emgw.org**), where it's filed under Resources/Papers and Articles. In the meantime, I should point out that, although K2Cr2O7 is available in conveniently small quantities from suppliers such as ReAgent, it is a hazardous substance to be handled with care; gloves, eye and breathing protection are a must, which is probably why I've so often relied, despite the drawbacks of pigments, on a simple solution of van Dyke crystals, whose effect can be modified with nothing more dangerous than a damp cloth. That said, water brings its own hazards...

Wet & dry

"The first peal of distant thunder reverberated in the air, and the rain commenced pouring violently down." Dickens' *Oliver Twist* is full of downpours, Carol Reed's film *Oliver!* opens in rain, and 'liquid sunshine' isn't unknown at The Old Vic' either, where it seems that the aged drains have, for years, been failing to carry away the rainwater collected by the slates and gutters (**Pics. 6 & 7**). The result has been that too much has been finding its way down to the river via the cellar, and while cool and damp might be fine for storing wine, it also leads to 'cellar rot' – wet rot in timbers; the problem has compounded by the blocking up of some of the vents in the stone walls, restricting air flow through the cellar (**Pics.8 & 9**). Luckily, wet rot remains local to the source of water, and – unlike dry rot, whose spores will infest sound timber if left unchecked – it doesn't spread to dry wood, so the joists spanning the cellar are unaffected. If wet rot is caught early, it may be enough to address the source of the water and allow the timber to dry; at The Old Vic', however, there'll be no choice but to replace the timber framing these cellar steps... **GW**

NEXT MONTH

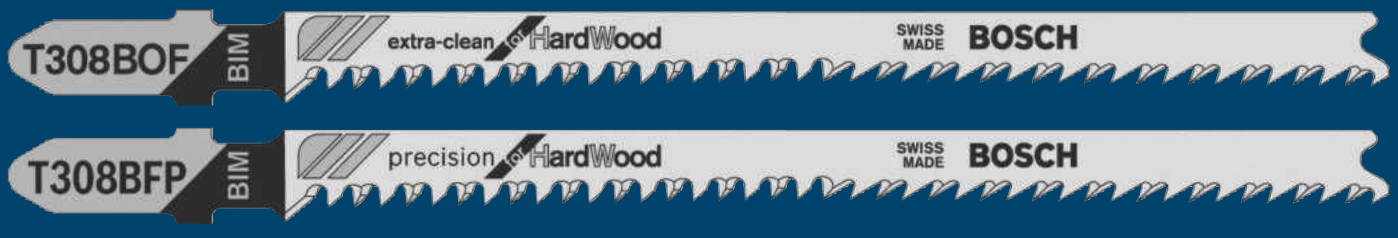
Winter's drawing on, and work on The Old Vic' starts to move indoors, and back to the workbench, I hope. In the meantime, I'm taking the marvellous Ron Moody's advice: "Shut up and drink your gin!" – damson gin, that is

BOSCH
Invented for life

Tear-free cuts on both sides

It's in your hands. Bosch Professional.

NEW! Extra-Clean and Precision Jigsaw Blades for Hard Wood.



PREPARING TIMBER FOR REUSE

Heat, sand, strip!

Phil Davy shows you how to remove old polish and varnish

At some time we've probably all had to strip back a finish, whether it's to refinish a piece of furniture, salvage some timber in order to reuse it, strip painted doors, stairs and so on. Or maybe we're unhappy with our previous attempts at polishing or varnishing and need to start again. But what's the best approach?

It's important to assess each job individually. You don't want to make a pig's ear of what may actually be a fine piece of period furniture. With old furniture it's usually important not to lose its patina. That lovely old mahogany chair or table may simply need its finish reviving rather than stripping. Whatever method chosen you'll need the correct tools, though these can be quite basic. And if you're not sure whether the item you're about to attack with paint stripper could be a valuable antique, get advice from an expert first.

Sometimes it makes sense to combine tools and methods. Stripping a wide, flat surface back to bare wood is easy enough with a big sander, though attached mouldings and decoration can be easier with a chemical stripper. Some products are quite nasty to use, especially chemicals. Always wear protective gloves and work outdoors if possible, especially when sanding. If this is not possible, hook up a vacuum extractor to the tool if there's no dustbag fitted.

Sanding & scraping

Perhaps the most obvious way to remove a finish is to sand the wood, either by hand or using an electric sander. It really depends on the surface as some tools are more brutal than others. For removing layers of paint a belt sander is pretty effective, but don't be tempted to use this tool on veneered surfaces as it's far too aggressive.

For flat areas a random orbit sander will leave fewer swirls than an orbital or palm sander. It's better to start with a relatively fine abrasive (say 180 grit) and move to 120 grit if the finish is stubborn. Start with a coarser grit and you may find the sander is livelier than you expect, making it harder to remove the scratches with subsequent grades. Then you can switch to hand sanding, working in the direction of the grain and using increasingly finer grits.

A detail sander will get into those awkward corners and is ideal for localised sanding. For outdoor work a cordless sander makes life easier and safer, with no extension cables to worry about. The downside is battery life, so have a spare fully charged, if possible. On moulded edges it can be just as quick to sand by hand, using a length of dowelling or block shaped to fit. Just wrap abrasive around the matching piece of wood.

In some situations it's hard to beat the good old cabinet scraper. Correctly sharpened, this will cut through lacquer or varnish nicely. Use a convex or concave scraper to get into mouldings.

Chemical strippers

Probably the messiest to use, chemical strippers are pretty effective. Simply brushed on to a surface, the gel eats its way through the varnish, paint or whatever finish you want to strip. You'll probably need to apply this a couple of times at least, depending on how many layers you have to penetrate. The surface will start to bubble after a few minutes, but you may need to leave this for an hour or so for it to really work.

Scrape the paint or varnish or use a scouring pad or nailbrush on intricate surfaces. After you've finished brushing on the gel, wash off the residue with a damp cloth. When dry, sand the surface. Chemical strippers can be nasty should the gel come into contact with your skin, although there are now safer alternatives, which thankfully won't burn. Make sure there's good ventilation as some fumes can be quite unpleasant.

Chemical stripper is great for jobs such as stripping stair balusters, as the

A random orbit sander should be your tool of choice for flat areas

A detail sander, such as this Ryobi version, handles awkward areas with precision

You can't beat hand sanding for moulded edges

Cabinet scrapers are aptly named...

... but you'll need a suitably curved one for mouldings

You'll need at least two applications of chemical stripper

Less vicious chemical strippers are now available

gel clings to vertical surfaces and won't end up all over the floor. On the downside it's probably the most expensive method, especially where large areas need stripping.

Feel the heat

Nothing beats an electric heat gun for stripping paint or varnish rapidly. Once switched on the heat is virtually instant, so take great care using this tool. With two or three temperature settings, the typical range is from 50 to 600°C. If you suspect lead is present in old paintwork it's safer to work at no higher than 400° (level II on the Bosch gun). The lowest setting on this tool blows cold air and can actually be used to dry paint. Fitted with interchangeable nozzles, a heat gun can be used equally effectively on mouldings and in tight corners. Always start at the lowest setting and increase temperature as necessary.

Grand revival

Sometimes a finish won't need stripping back but simply reviving with an appropriate cleaner. This can often be the case with antique furniture, which may simply have acquired decades of grime. Handy products to use here are Rustin's Surface Cleaner and Finish Reviver (**www.rustins.co.uk**). Surface Cleaner will remove a wax finish and is best applied with fine steel wool, while Finish Reviver is a fine abrasive cream that's excellent for removing heat and water marks and restoring a gloss.

Garden furniture

Outdoor furniture is often neglected and rarely inspected before storing for the winter. If the finish is generally OK but showing signs of algae or lichen, treating with a suitable restorer should bring it back to life. Then you can apply a suitable exterior oil or varnish.

If the furniture needs stripping, any of the above methods can be used. Once stripped and sanded it's a good idea to apply a clear preservative, which will help to prevent rot and decay, though this will depend on how vigilant you are at maintenance. It's pointless reviving tired outdoor timber if it's not regularly maintained. For oil finishes, for example, it's worth checking every six months, particularly if items will be uncovered throughout the winter. **GW**

For quick results go for an electric heat gun

Of course, these Rustin's products could be all you need

Garden furniture will be grateful for a regular dose of Cuprinol

METRIC OR IMPERIAL?
When buying hardwoods you'll need to s tep back in time. Most timber suppliers still use the imperial system, so be prepared for cubic feet rather than cubic metres (unless it's softwood). Hardwood board thicknesses are generally described in inches and priced per cubic foot, though softwood may still be sold this way, too. If you're uncertain, it's a good idea to take a calculator

Buying & transporting timber

Phil Davy discusses the things to look for when buying both soft and hardwoods from a timber merchant as well as offering some great tips on getting boards home and how best to transport sheet materials

Buying timber can be a slightly daunting experience if you're new to the game. Not only is there a certain amount of jargon involved, but when arriving at the timber yard how do you know what to look for? And how on earth do you get the stuff home when you've only got a car? Then there are sheet materials. Perhaps easier to buy, but moving a full board can be a challenge, especially if you work alone. Here are a few guidelines that will hopefully help.

BUYING TIMBER

Buying softwoods

If you need PAR (Planed All Round) softwood for a project there are several options. The easiest way is to buy it from a DIY warehouse, though timber tends to be expensive and you may well be disappointed with the quality. Some of the big stores sell softwood pre-packed, depending on dimensions and length. When it's wrapped in plastic the poorer quality wood is invariably hidden on the inside, so avoid this. The only advantage of buying this way is convenience. Stores open seven days a week, most evenings included.

A better source for softwood is often a local builder's merchant. If looking for architrave, skirting or simply PAR timber you may be allowed to sort through the stock to find clean boards, though this will depend on their policy. When sifting through boards always make sure you leave them tidy when you've finished. Again, avoid busy times such as early mornings when builders tend to congregate. Saturday mornings are usually quieter.

As softwood sold this way is almost always PAR it's more expensive than rough-sawn stock. Although all four surfaces will be planed, don't rely on edges being square, though, and always sight down boards to check for bowing and cupping.

Specialist suppliers

If you have a planer/thicknesser and portable circular saw (or table saw), probably the best option is to visit a specialist timber merchant. Of course, not every woodworker has the luxury of having a supplier nearby, but if you're in that happy place, make the most of it! The downside is that most timber merchants are not open at weekends.

Most hardwood merchants will also stock two or three softwoods and may even have an offcuts area where you can pick up a bargain. My local supplier (Oscar Windebank, near Bath) stocks yellow pine, Douglas fir, unsorted redwood and western red cedar. Board thicknesses range from 25mm to 75mm, or 100mm in certain species. The quality is much higher than you find at DIY sheds, with larger board widths and greater choice. Timber here is generally rough-sawn, so you'll need to think about sawing it to size before planing and thicknessing.

Buying hardwoods

You need to be sure whether you want air-dried or kiln-dried timber when buying hardwoods. For an explanation of the differences, refer to Peter Bishop's article on drying and moisture content in *GW*323. As a very rough guide, timber stacked outside and open to the elements will be in stick and air drying. Sawmills process the timber on site and these are usually native hardwoods such as oak, ash or elm, where green timber is sold for timber framing and construction work. Kiln-dried timber should be stacked under cover in a building, not just

If you need PAR softwood for a project there are several options

If timber is imported, ends are usually painted to limit shrinkage

You may be allowed to sort through the stock to find clean boards, though this will depend on retailer policy

protected with a tarpaulin thrown over it. If timber is imported, ends are usually painted to limit shrinkage. If the supplier seems a bit vague about the drying process, the simplest way to check is to use a moisture meter.

Unless they're very busy, most specialist suppliers will move stacks for you with a forklift. Don't expect to be able to sort through a whole stack, though, unless you take a friend along to help you lift boards manually.

Machining timber

Most timber specialists offer a machining service, though this may be basic. They should cut boards to length so you can get the stuff in your vehicle, though again you may have to wait. For planing and thicknessing, there's likely to be an hourly rate and a guaranteed wait of a few days. Don't expect a pristine finish, unless planer knives have recently been changed.

Tools to take

Whether buying soft or hardwoods it pays to take a handsaw if you need to cut timber to length. Builder's merchants usually have saws available, though these may not be sharp. A cordless jigsaw can be useful if you have a quantity of boards to cut. Don't forget a pencil and tape measure.

When grain and figuring is important for a project it's worth taking a block plane, particularly for grubby hardwood boards. A few strokes will reveal what's underneath. If you're looking for quartersawn boards, run the plane across an end to reveal the growth rings. A calculator is also handy and most smart phones will include one. A pair of sturdy work gloves is recommended if you're handling heavy, rough-sawn boards. It's all too easy to get a nasty splinter...

Sheet materials

Both builder's merchants and DIY warehouses sell a variety of sheet materials, with MDF probably the most popular. No matter what the thickness, you're not going to get an 8 × 4ft sheet in the car, though. Most DIY stores sell smaller pieces of ply or MDF for convenience, though this is by far the most expensive way to buy man-made boards. It's far more economical to buy a full sheet if you have space to store the offcuts.

Wall saws

Most bigger DIY warehouses will have a wall saw for cutting plywood, MDF, chipboard or hardboard. Not only are these machines very accurate but cuts will be dead square and straight. Some stores offer up to 15 cuts for free, then charge 50p per cut thereafter.

If you know exact sizes for a project then it pays to take along a cutting list. You may want to do a simple sketch to plan cuts efficiently, though don't forget the saw kerf if dimensions are tight. This way you can save an awful lot of time and effort, reducing the amount of cutting and unpleasant >

Unless they're very busy, most specialist suppliers will move stacks for you with a forklift

When grain and figuring is important for a project, it's worth taking a block plane

The highest quality plywood, birch ply, is also the most expensive

Some timber stores offer up to 15 cuts for free, then charge 50p per cut thereafter

With seats folded down it's possible to get panels up to 1,500 × 1,000mm flat in the back, with longer, narrow boards resting on the armrest between the front seats

Often the most convenient method of transporting materials is to rent a van for 24 hours

A sliding side door can be convenient, depending on what you need to load and where you can park

A medium size van can be an economical way to deliver those bigger projects

dust when you get home. If you're uncertain of finished sizes, just getting the sheet cut into three or four manageable pieces means you can stash the material in the back of the car. It's surprising how much you can squeeze into a medium-sized hatchback. You'll need to plan your visit, though, as you can be queuing for some time at weekends or lunch times.

TRANSPORTING TIMBER

Home delivery

Getting your timber or sheet of MDF home can be tricky unless you've planned ahead. If you can't get the materials inside a car, there are a few other solutions to the problem. Most timber merchants will deliver to the door, though you'll probably have to pay for this service unless it's a large order. Obviously somebody will need to be at home when the truck is scheduled to arrive – few drivers these days seem to have a mate to help unload.

Car carry

Although not necessarily ideal, I manage to get most of my timber inside the car (Ford Focus).. With seats folded down it's possible to get panels up to 1,500 × 1,000mm flat in the back, with longer, narrow boards resting on the armrest between the front seats. Make sure board ends are padded well if you do this, though. Unless you drive an old banger you'll need an old blanket or towels to protect upholstery as well.

For regular visits to the sawmill it may be worth investing in a pair of roof bars to suit your car. Depending on vehicle size, these typically cost from about £55 upwards for a basic kit. Although they can be left fitted to the roof, remember that they will affect fuel consumption. A small trailer is another consideration for transporting timber, though you'll obviously need somewhere to store it. I've never tried towing one as my car has to be parked on the road.

Van rental

Often the most convenient method of transporting materials is to rent a van. Again, plan ahead and they can be surprisingly economical. If possible, try to avoid renting at weekends as the cost can almost triple, compared with mid week. Even returning the vehicle on a Friday increases the price considerably. It pays to shop around, but with Enterprise I pay less than £30 for a medium-sized van (short wheelbase Vauxhall Vivaro or similar) for a 24-hour period. Although you can't get an 8 × 4ft sheet flat in the back, these will fit if loaded diagonally. Internal length is typically 2.8 metres.

If you're buying veneered MDF boards or similar which are important to protect and stack flat, you'll need a slightly longer van (Renault Master or similar). Length here increases to around 3.2 metres.

If in doubt about the internal loading capacity, ask your local hire depot if you can measure a van for length and width, although some will give dimensions on their website. Don't forget to take into account protruding wheel arches, although spacing usually allows a full sheet to fit between them. For transporting extra long boards a long wheelbase Mercedes Sprinter, or similar, is the answer. Internal length of this particular model is around 4.3 metres.

A sliding side door can be convenient, depending on what you need to load and where you can park. If you've never driven a van before, taking someone with you to act as an extra pair of eyes can be useful when reversing or where turning space is tight. Vans may be petrol or diesel, so check before filling the tank!

USEFUL KIT/PRODUCT:
Brennenstuhl MD moisture detector

A moisture meter is a handy device if you're buying air-dried timber or even kiln-dried timber that may have been stored for some time in an unheated shed or workshop. This resistance meter from Brennenstuhl is inexpensive and will give a good indication of moisture levels within about 6mm of a surface. For precise readings in thicker timber you'll need a more expensive professional model, such as those from Protimeter or Tramex. These generally include calibration for specific species as well as longer pin probes (up to 50mm) for driving more deeply into the wood.

Powered by a 9V battery (not included), this is housed in a compartment at the back. Remove a protective cap to expose the two steel probes and the meter can then be activated via the on/off button. This fires up a clear LCD window, displaying percentage, wood/construction material, acoustic signal, battery level and moisture guide (three raindrop symbols). A second button gives choice of measurement in wood or construction materials (brickwork, plasterboard, wallpaper and so on).

In use

When you take a reading an audible bleep will sound, between one and three raindrop symbols appearing in the display. The higher the moisture level the faster the bleep, giving an approximate idea if you're trying to pinpoint damp patches. Holding a third button down for one second locks and holds the actual percentage display, while depressing this for three seconds mutes the bleep. After three minutes of inactivity the display shuts down automatically to conserve battery life.

For checking moisture level in wood you simply press the tapered probes into the surface, parallel with the grain, rather than across it. Depending on the hardness of the timber these may only go in about 2mm, while on softer material it could be more, though the resulting holes will be larger. Depending on board thickness it's best to do this at several points to obtain an average reading. Where light levels are poor or when you're struggling round the back of a timber stack, the 'hold' function is particularly handy.

Moisture levels from 5 to 50% can be measured, while for construction materials the range is from 1.5 to 33%. Resolution is 0.1%, while accuracy is stated as plus or minus 3%.

As well as checking timber destined for projects in the house (especially when centrally heated), the MD is useful where foraged logs or offcuts need to be dry enough for a woodturner or carver. At a more basic level, it can be handy for checking the firewood pile, especially for a woodburner that should only be fed drier logs.

Conclusion

It may be more limited than more expensive meters, but the Brennenstuhl is good value if you want a rough idea before working on timber that may actually need further drying.

For checking moisture levels in wood you simply press the tapered probes into the surface, parallel with the grain

At a more basic level, it can be handy for checking the firewood pile

Specification:

- **Measurement range for wood:** Between 5 to 50%
- **Typical price:** £19.85
- **Web:** www.brennenstuhl.com

THE GW VERDICT

- **PROS:** Simple to use with large display; audible bleep and hold functions
- **CONS:** Not designed for thicker timber; probes not replaceable
- **RATING:** 4 out of 5

USEFUL KIT/PRODUCT: Panel carrier

Moving sheet materials around on your own is not ideal, with most of us having probably struggled with an 8 × 4ft sheet. Not so bad when it's 6mm MDF, but 19mm-thick material can be pretty weighty. Not only could you damage your back, but it's too easy to bash the edge of a board, too.

This simple gadget from Axminster could save your fingers as well. It consists of a sturdy steel handle screwed rigidly to a U-shaped channel, 334mm in length. The channel is 25mm wide, so you won't be able to carry anything thicker. Veneered 25mm MDF actually finishes at almost 27mm, meaning you may still need another pair of hands to unload, depending on board thickness. Thankfully the comfortable PVC grip is offset, so your knuckles are not trapped against a panel sitting in the channel. Use your other hand to grip the top edge and lift away. As expected, moving a board now becomes a piece of cake! GW

The channel is 25mm wide, so you won't be able to carry anything thicker

The comfortable PVC grip is offset, so your knuckles are not trapped against a panel sitting in the channel

Specification:

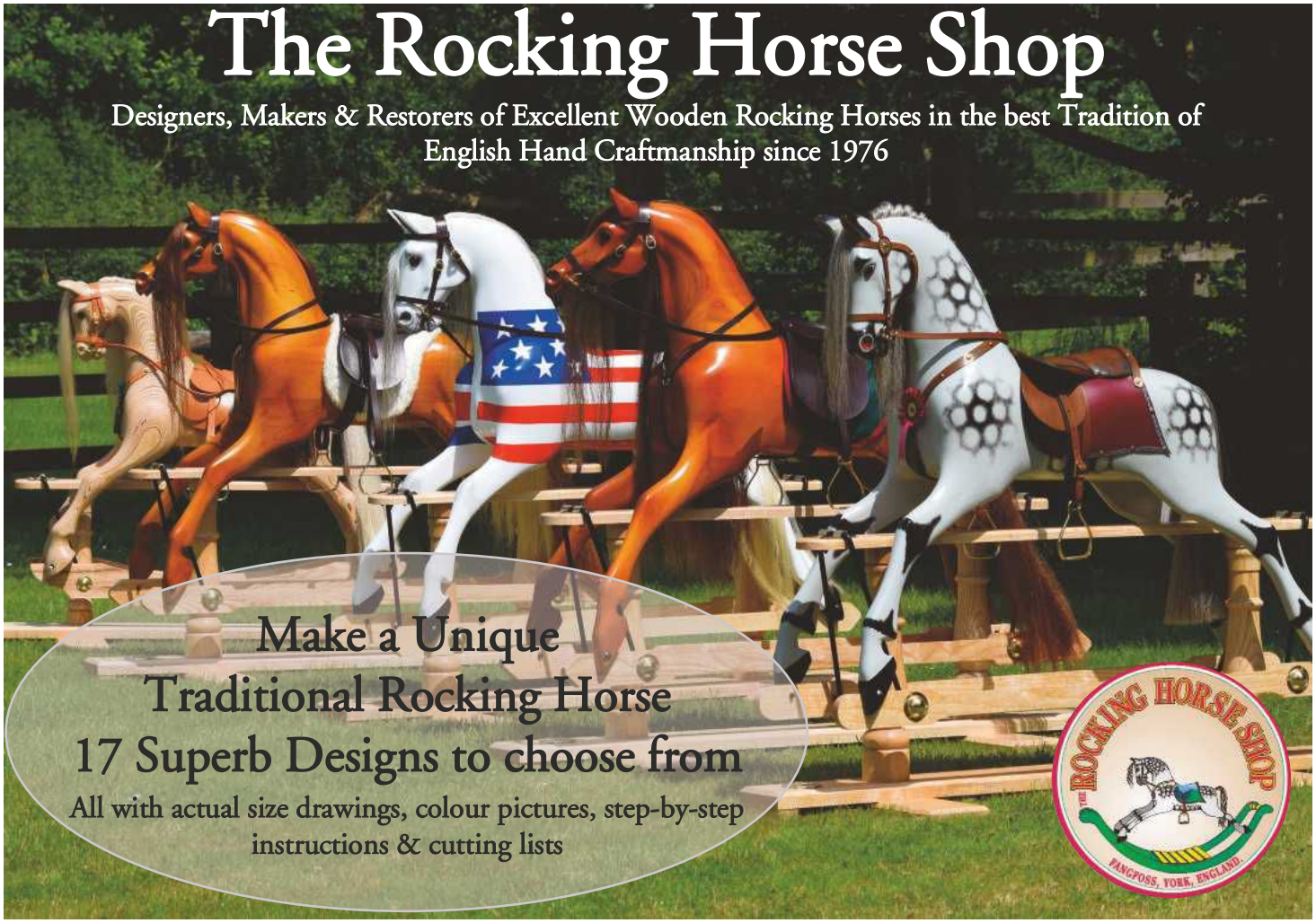
- **Typical price:** £11.05
- **Web:** www.axminster.co.uk

THE GW VERDICT

- **PROS:** Heavy steel construction; excellent value
- **CONS:** Restricted to 25mm-thick boards
- **RATING:** 4 out of 5

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

Call or go online for our FREE full colour catalogue

Also suppliers of top quality timber packs, accessories & fittings all made in our workshops.

Carving Courses

Whether you are an experienced carver or have never carved before, you will benefit enormously from one of our courses.

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

Fangfoss, YORK YO41 5JH

Aedicula*

* 'Originally in Roman architecture: a niche (for a statue), especially one framed by two columns supporting a pediment or an entabla' (OED)

Edward Hopkins fashions a wooden niche – a small space inviting occupation – to mark the arrival of his grandchild

Guan Yin, a Buddhist image associated with compassion, is commonly known as the 'Goddess of Mercy'
Photograph by Lara Clarke-Ward

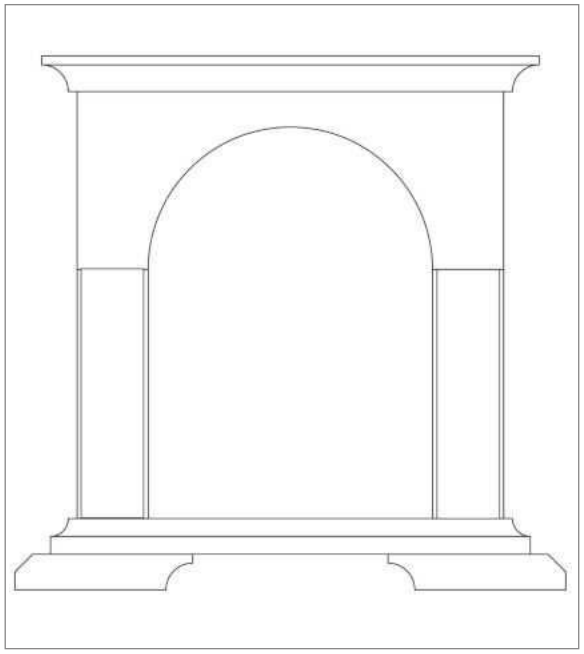
PIC 1. My original cast concrete niche. Behind it is another 'spirit house' for the garden

PIC 2. A pile of oak has been sitting upstairs in the garage burning a hole in the floor. Any minute now it's going to land on my bench

A stack of wood is a tank of fuel: all that is needed now is a destination and a map. My destination is another person's arrival: James and Katie are about to perpetuate the species. It's a good excuse to give a gift.

I don't like repeating myself. To give the same gifts I've given to Jaya, my first grandchild, somehow would diminish them both. I want to do new things anyway, so what, I wondered, would be suitable for my second grandchild whom I, along with everybody else including its parents, haven't yet met? Something timeless, obviously; versatile and adaptable, universal.

So I did: I did repeat myself. Years ago I cast two concrete house-shrines: arched enclosures, residences



PIC 3A. I hastily constructed a mock-up...

PIC 4. The prototype capital arrangement made no sense. The oak version was to have full cylindrical pillars and an equally thick arch

for the non-existent spirits of the garden – ornaments perhaps. The first casting came out poorly and now serves as a vibration damper underneath a domestic water pump. The second sits on my terrace along with another spirit-house (**Pic.1**). Though successful in design (I thought) the concrete version was too heavy to have any commercial future. A wooden version, however, might have legs.

Constructing the niche

A niche is a small space inviting occupation. The word is said to come from the Old French 'niche' meaning a nest. Its inhabitants can be anything: a photograph of Aunt Agatha; a pot of flowers; a beautiful vase – whatever rewards being a centre of attention, for this is what the niche does: it puts a frame around a three-dimensional object, drawing in the eye and focusing the mind. If every time you see the picture of Aunt Agatha you remember her lumbago and send a pulse of goodwill towards her, it might, just might, make a difference to her. It'll certainly make a difference to you.

My favourite inhabitant is nothing at all. I keep my concrete niche empty. No one thing is of over-riding importance. None of my concerns outweighs the others. When I look at the empty niche, I almost look through it, like Alice, at everything. Anyway, this is not my business. If I make an empty space and >

PIC 3B. ... to test construction and proportions. I considered this a little dumpy

PIC 5. Component blanks full of promise; satisfying in their own right. Notice the quadrant grooves in the pillars. I'd intended to complete these cuts later to form a 3/4in cylinder pillar to clip round a square board, but this didn't happen. The grooving did, however, come in useful

PIC 6. The grooves were put into the square pillar blank on the table saw, then the blank was sawn to a three-quarter octagon. The next move was to set the table at 22.5° and cut the octagon into a partial hexadecagon (16-sided polygon). It was not practical to saw it further into a triacontadigon (32-sided polygon) or, if you prefer, a triacontakaidigon, and if it had been I wouldn't have known I'd done it because I'd never heard the word before. Instead I rotated the faceted pillar on a belt sander reckoning that if I maintained a constant speed, it would circularise itself

give it to someone, it's not my responsibility what they put in it. My gift is the opportunity and the invitation.

I drew out a façade to get the proportions right, then I made a mock-up in pine (**Pic.3**). The wooden version seemed to require capitals on the pillars. Without them it looked too plain. I had drawn a concave moulding on the pediment but was not prepared to set up a router to cut it.

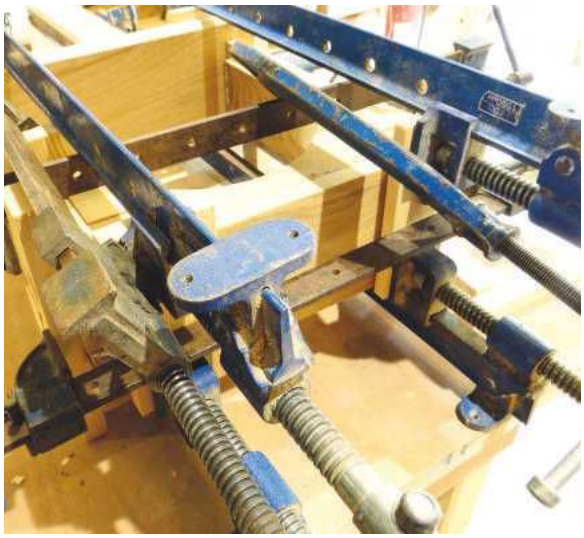
The pine prototype showed that the pillar/capital/arch assembly (**Pic.4**) didn't work. If you use architectural language, you have to make architectural sense, demonstrating flow and form, bulk, weight and tensile strength. To express the mass of the arch and the power of the pillar, they had to be double thickness. The column could then appear fully cylindrical, and the arched superstructure monumental (this is to be a shrine after all). The style is Romanesque (Norman) but simpler still like some preexistent archetype.

When I came to translate the pine version into oak, my calculations flew away. It wasn't what was on my piece of paper that had supremacy, but what was upstairs in my workshop. When you've invested in a stack of timber, you treasure it. When it comes to being used, none should be wasted. Field oak planks are not perfect. Mine had a few large knots, and some areas had distorted as they'd further dried. Firstly I looked through the 2in pile for the pillars. One piece whistled at me. I sawed and planed it all into far more blanks than I needed because more pillars would surely come in useful at a later date?

It is not so much more work to make three items as it is to make one. If they turn out well I'll have two spare to go into stock. If I hit snags, I can presumably salvage one that is fit for purpose. I cut three blanks for the arched top, planed them up and bandsawed the curve, smoothing it on the end of a bench sander. The pillars were smoothed by rotating them steadily on the flat of the belt. I stacked all the blanks in the house for a long weekend, hopefully to dry out that touch more (**Pic.5**).

I decided to box joint the corners of the 'case', keeping the case rigid by a back frame. The back frame could, like a photo frame, be fitted with a removable panel. I didn't want to see oak on the back wall. I feared it would be too abrupt, stopping vision short. I fancied a square of blue shot silk like the sky beyond. Or maybe a little sheet of perfect white plastic or glass. If it didn't work, I could revert to wood and make an oak panel, perhaps bevelled. All options would be open.

The box corners fitted pretty well. I cramped a case together and set up the arch and pillars to judge the look. It was different. They were now inside the case rather than on the façade as in the pine model. Oops! Along the way from pine to oak I must have forgotten what I was doing. I blame the long weekend. Dammit! Hence swiftly to Damage Limitation. Could I put it right? Hang on a minute! Do I want to put it right? Isn't it better this way round? What effect will it have on the rest of the niche? Within a few minutes I'd convinced myself that my error was no error at all but an instinctive reaction to an emerging design. I felt better then.



PIC 7. Boxes take a lot of cramping. Here the arched entablature needed a snug fit up into the case – located by tongues in grooves. It helped to keep the case square. The Titebond Quick & Thick PVA promised a firm grab in 15 minutes. I gave it longer than that, but not so long that I couldn't check the joints while the glue was still soft, and cramp them again (and more directly) if needed

PIC 8. The tongue gave the pillar a precise location and a more secure glue joint. The less you have to think about, the better. The tongue runs along the top of the entablature too. The groove at the back of the pillar became redundant as my plans changed. I filled it in with tonguing just in case a mirror was ever put in the niche, thus revealing it

It didn't stop there. The pine version had boots and a hat. How would I do this in oak, especially now that the lines had changed? The simplest pediment would be a concave moulding but I don't have a router cutter big enough. Besides, wouldn't it look as though it had just been plonked on top? I wouldn't lap it over the corner because half-obscuring the box corners would look like the miscalculation it was. I didn't want to apply mouldings to the top (completely obscuring the joints) because there would be a conflict of grain direction that might result in the moulding detaching itself (or at least standing proud while the sides further shrank). It took me a little while fiddling with the cutters I have before I dropped the hat and boots idea entirely. Was I just being lazy? Or would the bare rectilinear case add elemental simplicity to the niche? Am I talking myself into an inferior product, or am I failing to recognise a superior one. It was only when I recalled that my concrete niche has neither feet nor pediment that I relaxed. Its stark, almost brutal solidity was exactly the quality I wanted in the wooden one. Phew!

The backdrop too took a change. I don't have any blue silk so that went west. What I do have, though, is a remnant of shower wall board left over from James' bathroom. He gave it to me because he has nowhere to store it, but he gave it a little sadly because he likes it so much. Whichever of us found a use for it first could have it, he said, obviously hoping it would be him. It wasn't. Here where clear associations with vinyl were absent, there was a chance it would carry an impression of beaten bronze. The random patterning of the vinyl accords well with the spasmodic burrs in the oak, and it gives the niche richness, depth and weight. And, of course, in this way James does have his wallboard returned, at least in part.

Aedicula debrief

The aediculae took the normal circuitous route to arrive. In hindsight, the pine prototype was almost irrelevant for the finished article had different proportions and neither pediment nor feet. Yet, of course, it was essential (for me) to the development of the design.

In the transition from thought to thing, I was, as usual, not in complete control, though I did pay close attention to accurate woodwork. Whereas I had thought (for instance) that the top box corner joint might be obscured by a moulding, when I decided it wouldn't be, it needed to be good enough to appear bare (I've confessed that this was not a given).

The finished niche, then, is something of a surprise. Thankfully, on first glance, a pleasant surprise. While it is fresh in my eyes, I should take the chance to criticise it. View it as objectively as I can so as to learn from my mistakes.

To do this I watch my own eyes. Where do they travel when they look at the niche? Pillars… arch… frame… capitals… round the chamfers of the capitals… back to pillars…. Are there any uncomfortable not-quite-right areas where my eye is snagged and loiters unhappily, or do I look round and round, bouncing from side to side, up and down, not finding any area that detracts from the others? Is the piece in harmony with itself or does anything stand out?

If the first scan comes up with nothing, I take more scans from other angles. I keep looking for something wrong. The little infills are obviously wrong but I have to not worry about them, and most end users might never notice them. So yes, I must take yet more care over the technicalities of joinery.

The other lesson, I suppose, is to stick to my vision. The difference between the pine and the oak niche is that the pine one has a further level of decoration and is therefore softer, more luxurious and weaker. But what is most appealing to me about the concrete niche is its brutal lack of decoration. The weight of the arch and the strength of the pillars make the empty space within all the more powerful. I'm glad this has survived, reincarnated in oak. **GW** >

PIC 9. Two mistakes. The groove I set in so as to locate the pillars and the entablature showed through the case. The joint on the right was simply inaccurate, but the rest of the box corner is a reasonable fit

PIC 10. One remedy. A fiddly but simple matter of cutting infill pieces, chiselling a slight taper, smearing with glue and tapping home. It is worth getting the grain to match as well as you can. If the match is perfect, the mend will be invisible

PIC 11. So too with the inaccurate joint. Saw the waste off proud; allow the glue to set, then sand the infill flush. I would never use filler here. Filler has a bland eye-catching colour, and, whatever it says on the label, it tends to sink

Make way for PVA

Titebond adhesives are manufactured by Franklin International, of Columbus, Ohio, USA. I asked Bob Behnke, the Technical Service Manager, to explain the constitution of PVA glues:

"All water-based PVAs, which make up the majority of wood glues, are microscopic balls of plastic that are suspended in water. The technical term for this adhesive is Polyvinyl alcohol stabilised polyvinyl acetate. The polyvinyl acetate is where the term PVA is derived. The polyvinyl alcohol, which surrounds and stabilises each particle, is the actual chemical that allows for such good adhesion to wood (actually the cellulose that makes up a large portion of wood). As compared to all other PVAs, ours would fit the same chemical makeup. But the differences from there is in how the formulations are compounded. We add ingredients to give the adhesive faster set in some cases and longer working time in others. Since we also produce the PVA resins, we can tailor some of the polymer chemistry to enhance the properties available to our formulators."

Q: What makes 'Quick & Thick' special, and why would you recommend it to woodworkers?

A: "Titebond Quick and Thick is a high solids PVA Adhesive. The product also contains additives that soften the polymer slightly to allow for better adhesion to multiple surfaces. The high solids are designed to allow for faster set, and the high viscosity is designed to keep the adhesive from being absorbed into end-grain, giving stronger butt and mitre joints. No accelerators are added, and the final strength is 3,000psi, which is slightly less than straight PVAs but high enough to be stronger than most northern grown hardwoods. Recommendations for this product are for moulding and trim, fast set for hard to clamp joints and end-grain gluing."

In use & conclusion

I used this PVA in the Aedicula project. It allowed for quick assembly of the pine prototype. Being thick it bonded imprecise joints. And I used it throughout the construction of the three oak niches. Would I use it again?

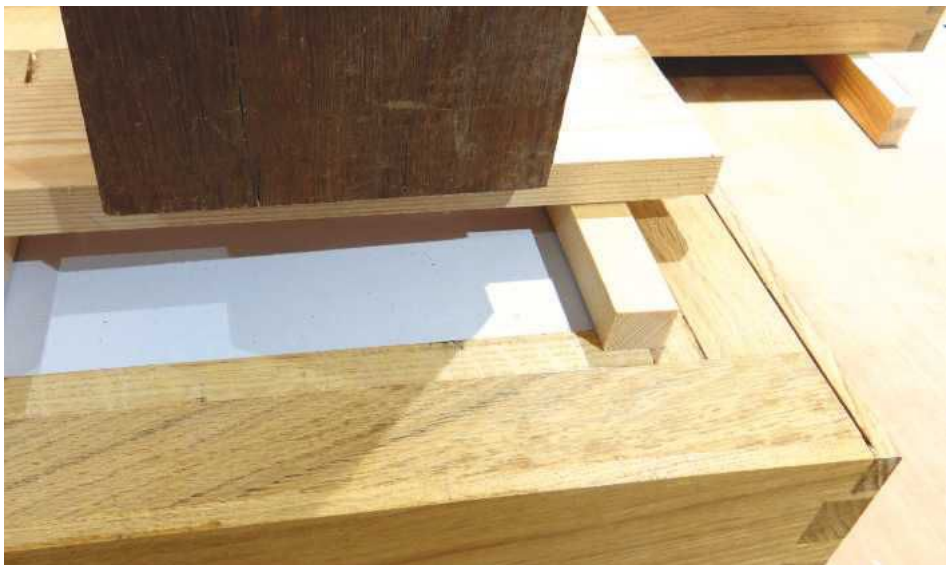
On an accurate construction any PVA has a faster grab time than one might imagine. A rubbed joint can be difficult to prise apart after just a few minutes. And this is it: it depends on the accuracy of the joint. The best cut joints grip through friction alone. The glue is just to make sure they stay that way. Excess pressure should never be required in cramping – this just shows that something is out of line – and glue should not be relied upon to correct this. Nevertheless in the real world we sometimes are especially grateful for a strong adhesive. In these cases Titebond Quick & Thick is probably good to have around.

I would not use it on a regular basis for two reasons. One: money. It is many times more expensive than other PVAs, which most serious woodworkers surely buy in 4 or 5 litre containers and decant into a dispenser as required. (I would not recommend the cheapest of these (low solids) PVAs, which are formulated for building use such as sealing).

The other reason is its very selling point – its thickness. There is something satisfying about laying a definite convincing trail of glue (and the Titebond dispenser does have a good spreading nozzle), but if your joints are good, you simply do not want thick glue, which at worst will aquaplane components apart (aka squidge) and at best will ooze out and need cleaning up. Having said that, Titebond Quick & Thick dries to a rubbery consistency that can easily be pared away.

It also began to worry me that a fast drying PVA might dry too fast. My aediculae were tricky things to cramp (as is often the way), and I did not want an added panic of time-restraint. But again, as with other PVAs, the grab was soft enough that if on releasing the cramps after half an hour or so, some joints were not tight, there was enough flexibility to remind them of where they were meant to be.

The irony of this then is that a powerfully formulated and expensive adhesive might be most useful on poor quality approximate work such as the prototype pine niche. I used about half this little bottle on the aediculae. I'm very happy to have the other half sitting on the shelf. I'm sure that one day I'll be very grateful for its added potency. Just not every day. And, fair's fair, I didn't put it to its stated favoured use, which is end-grain gluing. But here's another thing: how often in good woodworking is end-grain glued? Except when mitring, never. **GW**



P.S. I'd left myself very little opportunity to fix the vinyl panel. I bandsawed thin strips of oak, fitted them snugly within the frame then used the Titebond to glue them in place, suddenly being grateful for a thicker, stronger glue!

Specification:

- 2X faster and 3X thicker than traditional PVA glues
- Dries clear – paintable
- Ideal for the workshop, home and craft projects
- Fills small cracks and gaps
- Unaffected by finishes
- Excellent sandability on wood
- Designed for interior projects
- Water cleanup & non-toxic
- Nonflammable – no offensive odour

- **Typical price:** £5.36 (for a 237ml bottle)
- **Web:** www.brimarc.com

UNITING MAKERS CENTRAL CREATIVITY

COME & JOIN US

AT THE BIGGEST MAKERS SHOW OF 2018 // AT THE NEC IN BIRMINGHAM
SATURDAY 5TH MAY – SUNDAY 6TH MAY

- MEET VIRAL YOUTUBE MAKERS
- WATCH LIVE DEMONSTRATIONS
- LIVE Q&A's WITH MAKERS
- MEET INVENTORS
- KIDS WORKSHOPS
- PRIZE DRAWS

BUY YOUR TICKETS ONLINE NOW AT WWW.MAKERSCENTRAL.CO.UK

INTERESTED IN EXHIBITING AT THIS MAKERS SHOW? CHECK OUT THE WEBSITE FOR MORE INFO

HEADLINE SPONSORS TOOL MASTERS ASSOCIATION save build learn · RECORD POWER ESTABLISHED 1909 · Robert Sorby SHEFFIELD ENGLAND · DREMEL BIG ON DETAIL · triton

---

Experience **SJÖBERGS** Nordic Workbench

The total package with ***added value!***

With a Scandinavian pine frame and a Nordic birch top, this bench is made to last a lifetime of normal use.

- Double row of dog holes from each vice location
- Steel vice spindles, up to 1300kp force
- 4 vice mounting locations
- Suitable for right-handed or left-handed people
- Supplied with 4 bench dogs and 2 vices

10 YEAR WARRANTY

The **Nordic Plus 1450 package** comes with a **sliding double door cupboard and four-drawer storage module** which slots underneath the bench and an accessory kit containing **holdfast, jaw cushions (aluminium and cork) and universal anvil**.

Nordic Plus 1450 Workbench, Cabinet & FREE **Accessory Kit** – Worth **£80**

Special Price **£429.96** Inc.vat Code **474087**

Normally £465.50 Inc.vat Saving over **£35** – Offer valid until 31st December 2017 while stocks last

BriMarc TOOLS & MACHINERY

Available from BriMarc Tools & Machinery at ***brimarc.com*** *or call* ***03332 406967***

FSC

SJÖBERGS workbenches – made in sweden

From tree to table

John Bullar shares the story of how he converted an apple tree into a stunning occasional table

This is a short story of how I converted a tree in my client's garden into an occasional table for their living room. Here I will concentrate on how I went about preparing the timber, as opposed to techniques of furniture making, which are covered elsewhere in the series.

Normally, like most makers, I would buy in dried timber rather than chop down a tree for conversion, which is a lengthy and expensive process when considering the cost of labour. However, this was a special commission and it also provides a good tale to illustrate the process of preparing to make furniture from timber, which otherwise might be bought at any stage of conversion.

Fruit tree wood

Fruit tree woods are well liked for furniture making because of their attractive colour and fine, even grain that can be crisply cut into detailed shapes. Apple wood was historically used for some furniture although, being more dense and harder than most, it was preferred for engineering parts, such as the gear teeth on windmills. It is rare to find commercially converted apple wood nowadays.

Only the trunk of a tree produces boards for furniture making (**Pic.1**). Branches are generally not used for timber conversion, though turners often use them for spindles, handles, bowls, etc.

One of the first things that strikes you about a freshly felled tree trunk, even a small one, is how extremely heavy it is. A dense hardwood like this has a moisture content of over 100% – in other words, the water trapped in the wood weighs more than the dry wood itself **(Pic.2)**.

As soon as a trunk is felled the log starts to naturally dry out from the exposed surfaces at the ends, and as it dries it shrinks. This shrinkage causes tension that will quickly lead to splits or 'checks', making it useless. The best way to relieve the tension is to saw the log down the middle, which I did using a chainsaw (**Pic.3**). Of course, chainsaw teeth are designed for cutting across the grain, not along the direction of the fibres, so this was a slow job.

Quartersawn boards

When you buy good quality converted timber there is sometimes an option of 'quartersawn boards', which have been cut as close as possible to a line that passes through the very centre of the trunk.

The main advantage is that the wood is much more stable and it also has better figuring. From the supplier's point of view, quartersawn takes more work and there is more wastage, so of course it is more expensive, but still worthwhile for making good furniture.

I used a large bandsaw to first rip the half trunks into quarters, then sliced 25mm-thick boards alternately from each side of the quarter, flipping the wood over between each cut to produce quartersawn boards (**Pic.4**).

It is not uncommon for garden or farm trees to have metal such as barbed wire trapped inside, and I hit a couple of nails, which unfortunately shortened the life of the bandsaw blade (**Pic.5**).

Wood drying

Timber conversion companies normally sell boards as either 'air-dried', where they are stacked with spacers under cover and allowed to dry naturally, or 'kiln-dried', where hot air is forced between the boards. Kiln-dried timber is cheaper because it only takes a week or two to process, whereas air-dried takes a year or two and occupies a lot more space, the old rule of thumb being 'one year per inch' (25mm).

Air-dried wood is nicer to work with, especially using hand tools, and it also has better colouration. However, air-dried boards may not be dry enough for furniture making until they have been

PIC 1. With its fruiting days over, I stripped this old Bramley apple tree of its branches ready for felling

PIC 2. With roots and branches chopped back, we loaded the main trunk onto a trailer

PIC 3. I used a chainsaw to rip longways down the centreline of the trunk, revealing the dark heartwood

PIC 4. On the bandsaw table I ripped the half trunk into quarters before 'quartersawing' boards from alternate sides

PIC 5. Nails hidden in wood were not visible through the bark but blunted the bandsaw teeth

PIC 6. I stacked the 'green' boards with 'stickers' to separate them in the warm workshop loft, initially helped along by a dehumidifier

PIC 7. The dried boards are laid out in sequence to check for straightness, twisting or cupping

stored indoors for a while to get the moisture content down to about 10%, which can be measured using a wood moisture meter.

I often store air-dried wood for a month or so in the warm roof space above my workshop where there is a dehumidifier to ensure no damp accumulates (**Pic.6**). On this occasion, with the apple wood being un-dried or 'green', I stored it for more than a year with the boards spaced out so air could flow through.

Wood faults

At some timber yards the wood, especially if it is imported, all conforms to standard widths with straight edges, as this helps accountancy and avoids the cost of transporting waste material. Native wood is often sold with waney edges, giving the furniture maker more flexibility in the shapes and sizes they use (**Pic.8**).

At some stage (preferably before agreeing to buy it), you need to lay out each board so you can check it is not cupped across its width and not bowed or twisted along its length. Ensure there are no long splits or large loose knots and that the colour is consistent between boards.

Cutting over-size

Before planing and thicknessing, the boards need to be cut down to a size that is just slightly longer and wider than the finished dimensions; this avoids planing large areas that are not needed, which can result in the boards ending up too thin. I find a jigsaw >

PIC 8. A waney edge on each board can be ripped off with a handsaw or on the bandsaw or saw table

PIC 9. I find the hand-held jigsaw versatile for roughly cutting larger boards down to size

PIC 10. After sawing slightly over-size, the boards' best face is flattened using a medium length broad plane

PIC 11. Using the face as a reference surface, I hold a try-square against it to check if the edge needs adjusting to a right angle

PIC 12. The longest plane you have is best for levelling and straightening edges

PIC 13. With one face and both edges planed, I use a marking gauge to score a line ready to plane the second face down to final thickness

PIC 14. I lay the planed boards edge-to-edge so as to match them up, then I use a string and pencil to roughly mark out the circular tabletop edge

PIC 15. After gluing the boards together, I use a small trimming router to cut the top as a true circle

PIC 16. The finished table made from pale Bramley apple wood, trimmed with a contrasting tropical wood

NEXT MONTH

In *GW*326, John looks at planer and thicknesser machines

(not the most accurate of tools) is quite convenient for this rough work (**Pic.9**).

Face & edge

Precision-made furniture starts with precision planed wood, by which I mean flat, parallel surfaces at right angles to straight, parallel edges. Choose the best side first as the reference face and plane this with a sharp hand plane or machine it on a surface planer. Once you are happy this face has no pits or sawmill marks, check the edges are at right angles to it using a try-square. Plane the edges using either a long hand plane or surface planer while re-checking with the square before you reach final dimensions.

If you use a machine thicknesser, take the thickness down to half a millimetre more than needed, ensuring the whole surface has been planed, then remove half a millimetre (no less) in the final pass so as not to leave surface marks.

For hand planing, mark a line for the final thickness around the edges with a marking gauge pressed against the reference face, then plane the opposite face down to the line (**Pic.13**).

Building up width

When making furniture from solid wood, it is very likely you will have to join boards edge-to-edge to achieve the widths required for tops and panels (**Pic.14**). Accurately planed edges are particularly important here to avoid gaps or weakness in these joints (**Pic.15**).

Even when the timber supplier has extra-wide boards, they can often be cupped or unstable. It may be better and more cost effective to build up the width needed from narrower boards.

Before gluing boards together, check the edges meet snugly and the patterning or 'figuring' of the surface fits together as an attractive picture.

Conclusions

Generally, due to the amount of extra work, time and wear on machinery, converting even a small tree trunk is best left to those with the equipment to handle it. However, it does provide an opportunity to make use of unusual woods or trees that have sentimental value, and turn them into fine furniture (**Pic.16**). I hope you will find that this article also helps to explain the complete procedure of timber conversion and relate it to the different conditions in which converted wood is sold. **GW**

The UK's Largest
Joinery & Woodworking Centre

A vast range of specialist hardwoods, from Ash to Zebrano!

- Bowl Blanks
- Carving Blocks
- Squares
- Rare & exotic species

- Distinctive table tops
- Clearances
- Sale Packs
- Cash & Carry
- Free Coffee!!

WE ARE OPEN
OPEN NOW
WE ARE OPEN

Tel: 01765 640564

Duffield TIMBER

www.duffieldtimber.com

Duffield Timber, Green Lane, Melmerby, Ripon HG4 5JB

Cast Iron Stoves

22 *Great Looking Styles*

Selling Top Quality Stoves for over 20 years

Fit Now Ready For Winter!

All Stoves conform to EN13240

Clarke

Burn Wood or Coal
Big Stocks of Flue Pipes & Accessories in-store

CHECK WEBSITE FOR SPECIAL OFFERS

BUCKINGHAM £238.80

APPROVED FOR SMOKELESS ZONES

WENTWORTH £358.80

APPROVED FOR SMOKELESS ZONES

REGAL III £479.98

BARREL II £262.80

SEE THE FULL RANGE IN STORES NATIONWIDE

machinemart.co.uk MAIL ORDER: 0115 956 5555

Machine Mart

Quality Tools to match our Service

The Ultimate Woodturning Lathe
hapfo
Made in Germany

Mouldings

Certified Hardwoods

Top quality Hand Tools

Toishi-Ohishi Japanese Waterstones

Drilling Tools made to the highest standard

COLT PROFESSIONAL TOOLS

G&S Specialist Timber
TOOLS AND MACHINERY

www.toolsandtimber.co.uk
you can order online now

STAINLESS BOTTLE STOPPERS

Bottle Stoppers made from food safe stainless steel, **FREE Blank included**

Flexcut CARVING TOOLS

pfeil

WE ARE EASY TO FIND:
1½ miles from the M6, J40.
Take the A66 towards Keswick, turn left at first roundabout, follow the Brown Signs to The Alpaca Centre.

Open 8am to 5pm daily.
10am to 5pm Saturday.
Closed Sunday.

G&S SPECIALIST TIMBER
The Alpaca Centre, Snuff Mill Lane, Stainton, Penrith, Cumbria CA11 0ES.
Tel: 01768 891445. Fax: 01768 891443. email: info@toolsandtimber.co.uk

Timber suppliers UK

A comprehensive alphabetical list detailing the wide range of timber suppliers across the UK, as well as the services each one of them offers

David Simmons of Interesting Timbers with a huge sequoia log prior to milling

Adhectic Ltd (Berkshire)

Tel: 01235 520 738
Web: www.adhectic.co.uk
(**Services:** Committed to providing an excellent backup to both trade and DIY and offer an 'in-house' joinery facility, producing special sized skirting/architraves, door linings/frames, windows, etc.)

A Harrison (Northants)

Tel: 01536 725 192
Web: www.aharrisonwoodturning.co.uk
(**Services:** Specialises in supplying high grade native British hardwoods; provides high quality machining and turning services; holds a very large supply of seasoned and unseasoned timber)

Bennetts Timber (Lincolnshire)

Tel: 01472 350 151
Web: www.bennettstimber.co.uk
(**Services:** Fully equipped modern milling facility, which can be set up to machine standard and bespoke patterns; timber treatment including stains and finishes; a well stocked retail area and delivery capacity)

Brodies Timber (Perthshire)

Tel: 01350 727 723
Web: www.brodiestimber.co.uk
(**Services:** Tropical and exotic hardwoods – blanks, planks and spindles; native timbers, plus joinery grade softwoods and hardwoods; also offer a cut to size service)

Brooks Brothers Timber (Essex)

Tel: 01621 877 400
Web: www.brookstimber.co.uk
(**Services:** Offer 50 of today's most popular timber species, all hand-picked to the customers' requirements; state-of-the-art milling facilities are equipped with a range of 23 moulders)

C&G Barrett Ltd, Cilfiegan Sawmill (S. Wales)

Tel: 01291 672 805
Web: www.cilfiegansawmill.com
(**Services:** Offer a comprehensive bespoke service; majority of timber is specifically selected and cut for each order; locally sourced timber; sells beams, kiln-dried and air-dried oak)

English Woodlands Timber (West Sussex)

Tel: 01730 816 941
Web: www.englishwoodlandstimber.co.uk
(**Services:** Sell a variety of boards, including waney-edge and square-edge oak; waney-edge stocks include ash, beech, cedar of Lebanon, cherry, chestnut and many more)

EO Burton, Thorndon Sawmills (Essex)

Tel: 01277 260 810
Web: www.eoburton.com
(**Services:** Specialise in machining hardwoods and softwoods; supply quality hardwood and softwood; have a state-of-the-art machining department; also sell flooring, doors, oak posts and sawn timber)

Eynsham Park Sawmill (Oxfordshire)

Tel: 01993 881 391
Web: www.eynshamparksawmill.co.uk
(**Services:** Primarily a sawmill cutting fresh sawn green oak and softwood to order; are able to undertake machining of timbers and also offer planing, chamfering and shaping)

FH Ives (Essex)

Tel: 01268 732 373
Web: www.fhives.com
(**Services:** Offer both traditional and modern day timber products; sell an extensive range of timber, decking and building materials; the on-site mill ensures a speedy turnaround of sawn timber)

Fulham Timber (London)

Tel: 0208 685 5340
Web: www.fulhamtimber.co.uk
(**Services:** Specialists in timber and building supplies; stock a varied range of timbers and sheets in various sizes and lengths; have their own sawmill in Colliers Wood, London)

G&S Specialist Timber (Cumbria)

Tel: 01768 891 445
Web: www.toolsandtimber.co.uk
(**Services:** Specialist hardwood timber merchants and saw millers offering huge stocks of kiln-dried native, temperate and tropical hardwoods from around the world, plus beams, cladding, etc.)

Good Timber (Northamptonshire)

Tel: 01327 344 550
Web: www.goodtimber.com
(**Services:** Hardwood timber merchants supplying timber for woodcarving, woodturning, woodworking and furniture making; browse through their timber stores either online or in person)

Interesting Timbers (Somerset)

Tel: 01761 241 333
Web: www.interestingtimbers.co.uk
(**Services:** Specialise in sawmilling, drying and selling quality native hardwoods and softwoods; most of the trees bought are locally grown and very often felled because they have outgrown their position)

ISCA Woodcrafts (South Wales)

Tel: 01633 810 148/07854 349 045
Web: www.iscawoodcrafts.co.uk
(**Services:** Stockists of a diverse range of native and international hardwoods, woodworking materials, accessories and wooden crafts; carry a large selection of air- and kiln-dried boards in a range of sizes)

Joyce Timber (London)

Tel: 0208 883 1610
Web: www.joycetimber.co.uk
(**Services:** Specialist supplier and can machine any of the timber they sell (softwood and hardwood) to any dimensions; particularly specialise in machining hardwoods; also cut various sheet materials)

Lincolnshire Woodcraft (Lincolnshire)

Tel: 01780 757 825
Web: www.lincolnshirewoodcraft.co.uk
(**Services:** Stock a broad range of English and exotic tropical hardwoods as well as a range of woodturning tools and accessories; each blank is individually machined, labelled then end-grain waxed)

Nottage Timber (South Wales)

Tel: 01656 745 959
Web: www.nottagetimber.co.uk
(**Services:** One of South Wales' leading timber importers, processors and distributors; stock a wide range of softwoods and hardwoods; on-site sawmill can undertake a wide range of sawing operations)

Ockenden Timber (Powys)

Tel: 01588 620 884
Web: www.ockenden-timber.co.uk
(**Services:** Stock thousands of woodturning and carving blanks, which are available in over 20 different species of native/exotic timbers; blanks are processed on-site to the highest standards)

Olivers Woodturning (Kent)

Tel: 01622 370 280
Web: www.oliverswoodturning.co.uk
(**Services:** Sell a wide range of woodturning blanks in a variety of shapes and sizes offering the ideal solution for bowl, spindle and pen turners; also sell a wide range of woodturning tools and supplies)

Oscar Windebank & Son (Wiltshire)

Tel: 01225 742 929
Web: www.oscarwindebank.co.uk
(**Services:** Supplier of hard and softwoods; a small timber yard offering a friendly and bespoke service; can machine to required size and can usually deliver within two days of confirmed order)

Oxford Wood Recycling (Oxfordshire)

Tel: 01235 861 228
Web: www.oxfordwoodrecycling.org.uk
(**Services:** Sell a range of recycled wood including good quality second-hand scaffolding boards, cut to size and delivered, as well as kindling wood, wooden shelving and natural-edge timber)

Stiles & Bates (Kent)

Tel: 01304 366 360
Web: www.stilesandbates.co.uk
(**Services:** Mainly woodturning suppliers but also offer a limited amount of hardwoods in planks of various lengths; machinery service, cutting lists and a 'destination' retail shop)

Scadding Timber (Avon)

Tel: 01179 556 032
Web: www.scadding-son-ltd.co.uk
(**Services:** Supplier of softwoods, hardwoods, plywood, building boards, mouldings, doors and also offer a bespoke machining service; good stock of timber in a variety of hardwoods and softwoods)

Scawton Sawmill (North Yorkshire)

Tel: 01845 597 733
Web: www.scawtonsawmill.co.uk
(**Services:** Specialise in all sales of timber, including prime air- and kiln-dried oak; green oak beams in many lengths and different sections; and also stock various thicknesses of ash, beech and cherry)

S.L. Hardwoods (Croydon)

Tel: 020 3051 4794
Web: www.slhardwoods.co.uk
(**Services:** Supply a wide selection of PAR solid timber; products including decking boards, teak planks, decorative panels and stair components; sheet material such as MDF and white melamine birch)

Snainton Woodworking Supplies (N. Yorks)

Tel: 01723 859 545
Web: www.snaintonwoodworking.com
(**Services:** The woodstore contains a vast range of British and exotic turning and carving timbers; an on-site sawmill prepares the timber for the woodstore; also a large selection of pen and elm seat blanks)

St. Andrews Timber & Building Supplies (Scotland)

Tel: 01316 611 333
Web: www.standrewstimbersupplies.co.uk
(**Services:** Stock over 100,000 timber and building products including quality sawn and machined redwood and whitewood, CLS graded whitewood, as well as both imported and British softwoods)

Surrey Timbers Ltd (Guildford)

Tel: 01483 457 826
Web: www.surreytimbers.co.uk
(**Services:** Stock one of the widest ranges of local and exotic hardwoods in the UK; also stock live-edge slabs; have a simple racking system that allows people to come in and select their own boards)

Sykes Timber (Warwickshire)

Tel: 01827 718 951
Web: www.sykestimber.co.uk
(**Services:** Specialise in quality hardwood and softwood; stock over 40 species of hardwoods including some exotics; have a machining mill for planing and moulding and a well equipped log mill for conversion)

The Wood Recycling Store (East Sussex)

Tel: 01273 570 500
Web: www.woodrecycling.org.uk
(**Services:** A social enterprise with a massive range of construction timber and sheet materials available at great prices; also includes vintage reclaimed timber and firewood)

Thorogood Timber Ltd (Essex)

Tel: 01206 233 100
Web: www.thorogood.co.uk
(**Services:** Simply offer top quality timber, expert advice, exemplary machining facilities and a truly personal service to all their customers; have a fully equipped on-site mill; sell top quality hard- and softwoods)

Timberline (Kent)

Tel: 01732 355 626
Web: www.exotichardwoods.co.uk
(**Services:** Tonewoods for guitar makers; fine hand tools, veneers, inlays and wood finishing products for the craftsman in wood; stock a complete timber range as board stock, veneers and inlays)

Timberman (Carmarthenshire)

Tel: 01267 232 621
Web: www.timberman.co.uk
(**Services:** Supply a comprehensive range of woodworking machinery, power tools, woodturning lathes and accessories, routing cutters and accessories, plus much more)

Tree Station (Lancashire)

Tel: 01612 313 333
Web: www.treestation.co.uk
(**Services:** An ethical supplier with a strong commitment to the community; sells various PAR hardwood, bespoke and ready-made planks from local trees, plus premium firewood and Swedish fire logs)

UK Timber Ltd (Northamptonshire)

Tel: 01536 267 107
Web: www.uk-timber.co.uk
(**Services:** Nationwide supplier and producer of a vast range of domestic and European timber products; sell a wide range of structural, indoor and outdoor timber; offer a custom cutting service)

Waterloo Timber Ltd (Lancashire)

Tel: 01200 423 263
Web: No website
(**Services:** Plenty of timber in stock – call for details)

Wenban Smith (West Sussex)

Tel: 01903 230 311
Web: www.wenbans.com
(**Services:** Sell timber, boards, doors, worktops and bespoke mouldings; committed to supplying the best quality products; also offer a vast range of timber and timber-related products)

Wentwood Timber Centre (South Wales)

Tel: 01633 400720
Web: www.wentwoodtimbercentre.co.uk
(**Services:** Have extensive hardwood showrooms; expect to find hundreds of hardwood boards on display, all priced up, and easy to pick; all timber is locally grown – no tropical hardwoods)

WL West & Sons Ltd (Surrey)

Tel: 01798 861 611
Web: www.wlwest.co.uk
(**Services:** Sell a wide range of timber species; also able to offer an extensive range of workshop services for machined timbers; stock turning blanks, DIY hardwoods, exotic and Australian timbers)

Yandle & Sons Ltd (Somerset)

Tel: 01935 822 207
Web: www.yandles.co.uk
(**Services:** On-site sawmill supplying hardwoods to both trade and the general public; stock fresh sawn green oak and can cut any size up to 6m long × 300mm square on site; there is also a self-selection area)

How to dimension timber accurately using a planer/thicknesser

IN ASSOCIATION WITH RECORD POWER ESTABLISHED 1909

Most woodworkers, whether amateur or professional, will invariably at some point need to use a planer/thicknesser. We explore the reasons for this here

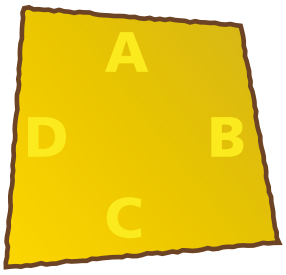
1. Cost – rough-sawn timber can be bought at a lower price than pre-planed and can then be dimensioned to the exact size required for the project. Even when paying a premium for pre-planed timber, it is often irregularly sized or warped and so needs further preparation.

2. Most projects require timbers to have adjacent edges at 90°, particularly when jointing is required.

3. Often pieces must be exactly the same size as each other when used for jointing.

A question Record Power professionals are often asked, particularly at woodworking shows and demonstrations, is why we need to use a planer as well as a thicknesser to achieve what we've just discussed.

Many woodworkers decide they can make do with a standalone thicknesser. These machines have a great deal of appeal to those relatively new to woodworking as they are less costly than a planer/thicknesser and can be bench-mounted if desired. However, as can be seen in the diagrams below, a standalone thicknesser is simply not capable of dimensioning all four sides of a piece of timber accurately. The diagram below shows an exaggerated cross-section of a typical rough-sawn piece of timber, which will be used to illustrate the different results that can be achieved using both a standalone thicknesser and a planer/thicknesser.



How a thicknesser works

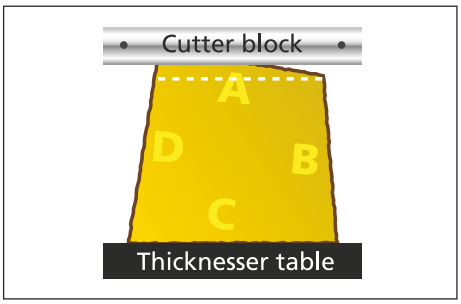


FIG 1. Firstly, surface '**A**' will be cut to be parallel with surface '**C**'. To achieve a planed finish to surface '**C**', the workpiece is rotated 180° and passed through the thicknesser again

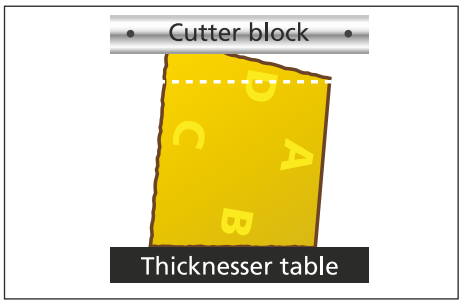


FIG 2. Now these opposite faces are parallel, we can see by turning either surface '**B**' or '**D**' face down on the table that we are only able to plane them parallel to each other but never at 90° to surfaces '**A**' or '**C**'

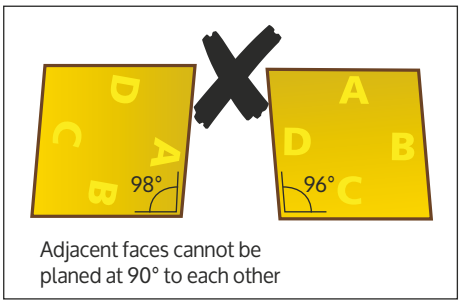


FIG 3. It can now be seen that no matter which way the timber is turned, only a parallelogram profile can be achieved

How a planer/thicknesser works

The key to understanding how a planer/thicknesser works is that in order to plane all four sides at 90° to each other, we must first plane two adjacent sides to 90°. Only a planer/thicknesser is capable of this.

Using the below method, any number of pieces can be planed and dimensioned to exact sizes by adjusting the position of the thicknesser bed. This preparation gives you the best base possible for carrying out the rest of your projects successfully. If, for example, you are to make a window frame, using a planer/thicknesser allows for all four sides to be planed and dimensioned to the exact same size, making jointing much easier and also ensuring all surfaces are flush on completion. **GW**

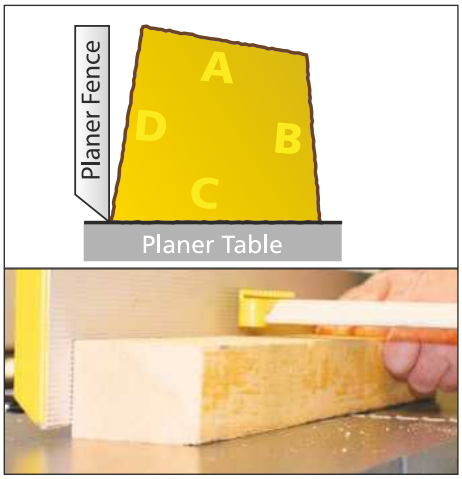


FIG 1. Plane surface '**C**' to be flat using the machine in planing mode

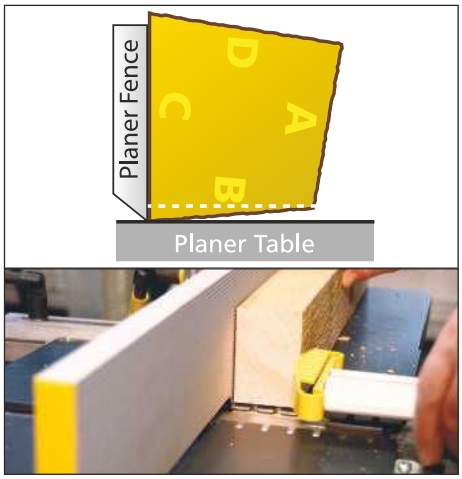


FIG 2. Place surface '**C**' against the fence, which is set to 90°, and plane surface '**B**' until it is at 90° to surface '**C**'

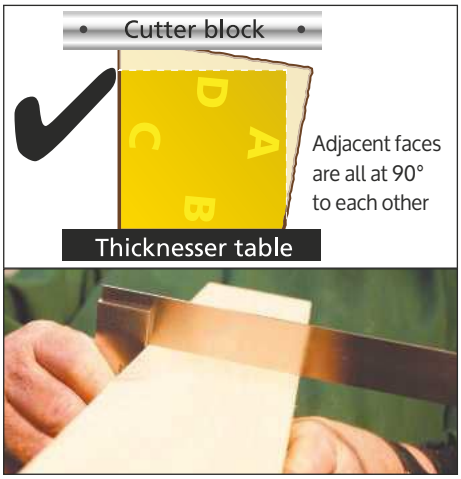


FIG 3. Once we have two adjacent faces at 90° to each other, the remaining opposite faces can be thicknessed parallel by using them as a reference

Cricket bat willow

Reconnecting with trees as a raw material

John McMahon describes his attempts to reconnect with trees as a raw material and in the process gives an outline of the past, present and future of woodland management from a woodworker's perspective

Woodworkers are a happy band; our raw materials are trees, our waste product is fire, and the bit in between is full of the smells, sights and sounds of the workshop. But how well do we know the forests and woods that surround us and how aware are we of the work that goes into keeping our timber racks stocked?

An embarrassing admission

I use a lot of traditional tools and techniques but I am a modern woodworker and it wasn't until I read Walter Rose's *The Village Carpenter* that I started to think about how disconnected I am from the trees and woodlands I rely upon for my livelihood. Walter describes growing up in the late 1800s in and around his Grandfather's timber yard. He knew the difference between boards of oak, ash, elm, pine and sycamore so early in life that he couldn't recall how or when he acquired that knowledge. To be fair, I took a little longer but I think I could match that level of expertise with sawn timber. Where the five-year-old Walter could beat me hands down, however, would be in his understanding of the woodland that yields these sawn boards and of the processes that turns trees into usable, seasoned timber. The picture that develops as you read his story is of a boy who grows up with trees and timber so much a part of his life that working wood is woven into his very being and that understanding wood is his inheritance. I admit it: I'm a bit jealous.

Does it matter?

To draw a parallel, I feel like a gourmet chef who's a trifle vague about where his ingredients come from. Does it matter? Well, who would you rather have cook for you: the chef who is best mates with the local farmers, or the one you just spotted filling his van in the supermarket car park?

I am not saying this out of false modesty; I am a good woodworker and I am sure you are too. The point is that we are always striving to be better at our craft and I am convinced that we do better work and enjoy the process much more when we remember that the stuff on our bench used to be trees and didn't just turn up on a truck. Added to this, awareness of local sources becomes increasingly important as shipping timber from overseas becomes more and more expensive. So, it might be helpful to have at least a basic grasp of the past, present and future of our native species and how they are managed if we, as professional woodworkers, are to adapt, improve and survive.

PIC 1. Discovering the woodland around me

PIC 2. Welcome to Hodsock

PIC 3. Managing coppiced oak

What is woodland?

Left to its own devices, almost all of our country would be wild-woodland; trees are happy to invade any neglected areas and they really like the conditions here in Britain. Early human settlers changed the status-quo and by the late Roman period, farmland and moorland dominated the landscape. However, we have always needed a lot of timber and so we have had to manage our woods. By Tudor times three traditions of woodland management were firmly established: strictly speaking, 'woodland' is existing wild-wood set aside for cultivation of timber and underwood; 'wood-pasture' is a combination of trees and grassland used for grazing domestic livestock; and 'non-woodland' trees are those which grow in hedgerows and fields.

By the 17th century a fourth method, the practice of growing trees in plantations, was becoming increasingly common. Plantation growing is now the most widely used method of timber production in the UK.

A journey of discovery

Now that I have shared the fruits of my exhaustive research (The Readers' Digest *Our Ever-Changing Woodlands* – thanks, mum), I feel ready to embark on my own personal voyage of discovery. I decided to explore the local woodlands and, to be honest, it wasn't that difficult; I rent a house on a farm with 120 acres of woods and my commute to work takes me through some of the best managed forestry in the country – it's pretty shameful that I didn't do this years ago (**Pic.1**).

Step one was to take a guided tour of my home for the last 17 years, Hodsock Priory Estate (**Pic.2**). The Buchanan family have owned the estate since 1765 and, with occasional lapses due to war and economic downturns (not just a modern phenomenon), the woods here have been carefully managed as a commercial crop for the last 250 years. Sir Andrew Buchanan took over the management in 1966 and he showed me around.

So how does a 21st century landowner maintain commercially viable forestry? Of 120 acres of woods here, about 100 are cultivated, mostly in small parcels. Some are productive, some are not, but all need looking after so the productive areas need to support the less productive. "The easiest thing to do with forestry is to do nothing," and this is often the only option for those who need to make money from their land. Sir Andrew explained that the only way he can maintain commercial forestry is with the farm and woods working together. This means that he has flexible access to skilled workers and essential machinery. Making a living from woodland also takes long range strategic planning and a knowledge of both the land and the market.

The first stop on my tour of Hodsock's woodland was the stream running along the edge of Pond Field. This stream is planted all along its banks with cricket bat willow (see main photo). This species thrives with its roots in running water, grows to maturity in around 12 years and has a ready market in the UK. Growing cricket bat willow is a big part of the estate's current planning and anyone who mentions aluminium bats here is liable to be hit with one.

So far so good, but unless you are making cricket bats, you probably won't be much affected by willow production levels, or will you?

The thing is, we are consumers and as such we need our suppliers, so if growing willow enables local landowners to make a go of commercial production and stay afloat then we may well benefit from the other trees that they grow. Modern forestry is no longer about massive single species plantations; resilience and diversity are the watchwords. So, for example, the landowner growing willow in boggy lowland may well be able to grow beech or oak elsewhere on the same estate.

Speaking of which, our next stop is Forest Plantation. This 35-acre wood is the largest single plot on the estate and is mostly made up of oak, beech, Spanish chestnut and Corsican pine with a smattering of silver birch. Now I am in my element. Oak is my second favourite timber (after walnut) and the beech is my favourite tree. When you walk through woods like these you can see why there is so much romance attached to woodland. Not only do they look like dormant giants, these trees are future boats, castle doors and treasure chests.

Walter Rose got it right when he said: "Every right-minded person deplores the ruthless felling of trees," but, "the once noble oak, felled at the right time might [be] transformed by the hand of man… and then its usefulness and beauty… continued for centuries as a delight and inspiration to the beholder." >

From small acorns

Like skinning cats, there's more than one way to plant a tree. The cricket bat willows at Hodsock are planted as saplings as are some of the oaks and pines; however, some of the oaks in Forest Plantation are coppiced. I had heard the term before but associated it more with Thomas Hardy's Wessex than with modern forestry. Coppicing relies on the stubborn refusal of healthy trees to die when you cut them down. The forester cuts down the tree and sells the timber, the stump produces shoots (now you can call the stump a stool) and one of these shoots is chosen as the major. The others are removed and the major will grow into another full-sized tree (**Pic.3**).

Other commercial woods are self-seeded and we saw a great example of this in Low Wood. The tree in the centre of **Pic.4** is the parent of the surrounding circle of trees. There must have been a really good year for acorns followed by several good growing years because a whole generation of new oaks has formed in almost a perfect concentric ring around the parent tree.

The challenges of growing timber

Growing broadleaf timber commercially is not for the fainthearted; what thrives in one spot may struggle only a few yards away. Five minutes' walk from the oak family was a mixed section of Spanish chestnut, beech and oak. The chestnut tolerates shade and is doing well, as is the beech. The oak, however, is crowded out and not doing well; it probably won't ever make timber. Add to that the very slow growing-rate and it can be difficult to justify growing oak unless you happen to like them, which, as it happens, Sir Andrew does.

There are plenty of challenges facing small-scale forestry: new pests and diseases, changes in the market and climate are just the start of a long list. So, what makes one farmer persevere with forestry when so many others give up? The answer here is not a stubborn refusal to move with the times; this estate has been in the charge of one family for 250 years and much has changed over that time. It is the responsible, harmonious management of that change with an eye on the future that underpins the woodland strategy at Hodsock.

If you would like to visit the Hodsock Estate and see small-scale modern forestry in practice, the gardens and woods around the main house are open for visitors during snowdrop and bluebell season (**Pic.5**). You can walk through Forest Plantation at any time of the year; I might even see you there.

A change of scene & scale

Hodsock is an exception; most landowners don't grow timber anymore. Now, the vast majority of UK timber production is under the auspices of Forest Enterprise, which together with Forest Services form what we know as the Forestry Commission. The Forestry Commission was set up in 1919 to maintain a strategic reserve of timber; World War I had depleted stock to critical levels and individual landowners couldn't afford to re-plant the vast areas of clear-felled woodland and so the government stepped in.

Carolyn Marshall and Andrew Powers, who both work for Forestry Commission Central England, were kind enough to help me with my exploration of Britain's commercial woodlands by showing me around their patch (about 75,000 acres acres) so that I could see what modern, large-scale forestry looks like.

I may have been expecting endless swathes of Corsican pine, but **Pics.9-12** paint quite a different picture, as you can see.

Suitably chastened and impressed, I start asking questions, and I most definitely have an agenda. I am not especially interested in the stands of Corsican pine, destined to be construction timber or chippings, I am really wondering how I can get my hands on great slabs of oak and ash.

However, reeling myself in and listening for once, it gradually dawns on me that one is inextricably linked

PIC 4. An almost perfect circle of new oak, surrounding the parent tree

PIC 5. Snowdrops surround Hodsock Estate

PIC 6. The mighty beech

PIC 7. 100-year-old pine in Forest Plantation

PIC 8. Much of the mixed woodland on the estate is run through with bridalways

with the other. This relationship is both commercial and ecological; mixed forestry creates the resilience that trees and the people that make their living from them need to survive.

The large single species forests that were essential for regeneration after World War I are gradually being replaced with more diverse woodlands. This isn't a panicky jump from one fad to another; previous ways of working have left a landscape that today's foresters must build upon.

I am beginning to realise that, to get the timber I need to work, I need financially healthy forestry as much as I need physically healthy trees and so I have to trust that people like Carolyn and Andrew know what they're doing. I'm glad it's not my responsibility, because the complexity and scale of what they have to do is pretty scary.

Big woods, big challenges

After World War I, our grandparents were looking out over a pretty treeless landscape: the war had demanded our trees along with a generation of young men. They needed to repopulate our woodlands and be quick about it, so, they used 'pioneer' species that could cope with bare plots and would grow and multiply quickly. Self-seeding birch, willow and pine established a bridgehead and were followed by less hardy but more valuable species. How do you decide what to plant when you need to make a forest from nothing? "Look at what grows on abandoned ground and use that" – sounds like a good plan.

The challenges facing modern forestry have changed since 1919, and so the landscape has too. Let's start with squirrels: these furry fiends decimate saplings and currently we have no practical method of controlling them. Deer are also a problem but you can keep them out with a fence. Squirrels look at your fences and laugh out loud. What's to be done? "It seems that red oak is not on your average grey squirrels' menu, so we are currently planting more of these." Imagine the *Antiques Roadshow* in 300 years' time; some member of the public brings in a red oak chair from way back in 2095. He asks the expert: "Why so much red oak from this period?" The ebb and flow of history is driven by large and small things, like trees and squirrels.

The forest of the future

The sheer diversity of trees I can see as I walk through these commercially managed woods is also, to some degree, a reaction to environmental challenges. New diseases crop up so often that single species plantations pose a financial risk. Today's silviculture would surprise a forester from a couple of decades ago; it definitely surprised me. I have seen the plantation of the future, Carolyn and Andrew showed it to me and it had birch and oak living alongside cypress, Scots pine and cherry in what looked, to my untrained eye, like natural woodland. Within, there was a badger sett and dead trees left standing as habitat for insects and other wildlife. I even saw my first raven outside of the Tower of London.

I know this all sounds a bit too bucolic and jolly to be true, but I am just telling you what I saw and, to be honest, it was a lot better than I had expected. I have not been bribed! Carolyn and Andrew are nice people (notwithstanding their murderous tendency toward squirrels), but that's not why I feel so much more positive about our woodlands either. I used to walk or drive past miles of trees every day and see beauty, definitely, raw materials, certainly; but since spending a couple of days with people who manage our woodland, I feel a connection that wasn't there before; it's to do with past and future, romance and practicality, tradition and change, and I am glad to be a part of it.

I have always taught my students that if you cut down a tree, you had better make something worthwhile out of it. Thinking back, it was a bit of a glib statement… but not anymore. **GW**

START YOUR OWN JOURNEY

Visit a forest – **www.forestry.gov.uk/englandsforests**

Search for the Forestry Commission Woods and Forest page on YouTube – www.youtube.com – to see Andrew, Carolyn and Brian Blessed talking about sustainable forest management

Walk through Hodsock woodland – **www.hodsockpriory.com**

Read Walter Rose's *The village Carpenter* – IBSN 978-0-85442-065-0 – **www.amazon.co.uk**

Talk to John about timber and woodwork – **www.schoolofwoodworking.co.uk**

PIC 9. Surveying the harvest

PIC 10. This area will spend the next few years as 'heath-like habitat' while still producing timber

PIC 11. Planting cherry by the roadways means that this valuable crop can be monitored and maintained

PIC 12. Mixed ages and species, creating a more resilient forestry

Letters & Makers

Letter of the month

High gloss solutions

Hi Tegan,
I read Phil Davy's article on the making of a vanity unit with interest (*GW*323), but I do have a question I hope he, or somebody else in your team, can answer.

I was thinking of building a similar item from MDF, colouring it with a gloss paint, then completing it with a high gloss finish. The sort of thing you'd find in a bathroom showroom, which are generally foil wrapped. I'm a member of a couple of forums, and I've put this question out there, but all I'm getting is conflicting answers.

Is there a product out there that will give a high gloss, waterproof finish that is reasonably easy for the householder to maintain, without me having to go down the high output, commercial route?

I have been asked on a number of occasions to make bathroom/kitchen units with a high gloss finish, although I've refused as I'm very wary of moisture ingress to the panelling, and the consequent swelling and de-laminating of the panelling I would like to use – primarily MRMDF or oak-veneered MDF/ply.

Bathroom and kitchen furniture is not something I do, but I feel I am missing out on some decent trading opportunities, especially if there is an accessible solution out there. I look forward to hearing what you guys have to say on this. Thank you in advance.
Warm regards, **Paul Reynolds**

Hi Paul, sorry for the delay in responding to you, though I'm not sure I can be a great deal of help...

You can buy a specialist MDF (Valchromat) in a range of 10 colours. It's coloured all the way through and can be machined in the same way as standard MDF.

Valchromat – a specialist MDF – is available in a range of 10 colours, and would be a suitable material to use for creating a high gloss finish on a vanity unit, or similar bathroom furniture

Thicknesses ranges from 8 to 30mm, in standard sheet sizes. It's also moisture resistant, so suitable for bathrooms. A specialist sheet materials supplier should let you have a small sample, which you could experiment with regarding finishing.

*The easiest way of achieving a really high gloss finish on MDF (without spraying) that I know of is to apply two or three coats of Rustins' Plastic Coating (**www.rustins.co.uk**). This is a two-part clear lacquer that's particularly tough and can be burnished to a mirror finish. It will need very fine sanding between coats (600 grit or more) to get the best results.*
Hope this gives you some food for thought.
Regards, **Phil Davy**

Shed of the Year 2017

Hello Tegan, I am disappointed that *Good Woodworking* didn't cover the 2017 Shed of the Year competition. I hope it is still to come.
Best wishes, **Gordon Cook**

Hi Gordon, thanks for getting in touch. Yes, we were disappointed too as we've really enjoyed covering it over the last two years, but unfortunately it seems that this year we were missed off the PR agency's distribution list. I have since got in touch and have brought this to their attention, and they assure me they will contact me in March once plans are underway for SOTY 2018. The winners were announced in May, with the overall winner being Ben Swanborough's 'The Mushroom House', which is full of quirky touches, including its own trap door, a hidden treat shelf and glass floor overlooking a stream at the bottom of the garden. You can see the full list of winners at **www.readersheds.co.uk**.

We will be covering the 2018 competition in detail, so look out for some fantastic features next year.
Best wishes, **Tegan**

Ben Swanborough and his winning shed – 'The Mushroom House'

Most of the wood used in the shed build is red western cedar, including cedar shingles on the roof

Magazine indexing

Hi, can I ask why there is no index for articles in *Good Woodworking* when there is one for *The Woodworker*? This query was spoken of in 2010–2012 but nothing seems to have happened – why is that? It would save a lot of inconvenience for readers. Please may we have one or explain why not?
John

Hello John, and thanks for your email. That is indeed a good question and I wish I could give you a more definitive answer, but the truth is that I'm honestly not sure why an index has been compiled for one magazine and not the other. This is something I have been doing, however, since I started, which I know isn't particularly useful now, but hopefully will be in a few years' time. Unfortunately, due to the magazine operating on such a small staff scale, I don't have any free time to go through every copy and catalogue the contents, but if there are any readers out there who may wish to help, then please let me know – we may be able to reimburse you in some small way!

In the meantime, if you're looking for a specific article, project, technique, etc. then let me know and I will do my best to locate it for you using my back issues.

Apologies again for this omission, but it's something I'm doing my best to rectify. Thank you for getting in touch and we hope to one day have a fully searchable GW *online index for readers, as with* WW.
Best wishes, **Tegan Foley**

One day, we hope to be able to compile a fully searchable online index for *GW*, as with *WW*

WRITE & WIN!

We always love hearing about your projects, ideas, hints and tips, and/or like to receive feedback about *GW*'s features, so do drop us a line – you never know, you might win our great 'Letter of the Month' prize, currently the new Trend 1/4in 30-piece Router Cutter Set, worth over £100. Simply email **tegan.foley@mytimemedia.com** for a chance to get your hands on this fantastic prize – good luck!

TIMBER CONVERSION ON INSTAGRAM

This month, we're doing things a little differently, so thought we'd show you some of the most exciting online timber conversion images, courtesy of one of our favourite social media tools: Instagram – enjoy!

Now that's what I call timber conversion! Photo courtesy of @woodwork_art

@blakebespokefurniture with a beautiful felled oak that he's due to plank up

Inside a Japanese sawmill – courtesy of @yamaguchi.mokuzai

@oldsiamchiangmai wants everyone to know that acacia wood slabs are now available

@sailcargo with his huge collection of Spanish cedar

@woodmill_firewood – more orders = more supplies!

@baldhillshouse with his collection of Oregon logs

@woodmizer shows off one of its industrial milling machines

STARTRITE®

The Startrite **SD31** is a compact yet extremely accurate, powerful and easy to use industrial Planer Thicknesser. It has been designed to offer serious home users and smaller professional workshops a high performance solution for accurate dimensioning of timber.

Thicknesser feed rate: 7 Metres / Minute
Cutter block knives: 3
Cutter block diameter: 70 mm
Maximum thicknessing height: 230 mm
Maximum thicknessing width: 310 mm
Maximum thicknesser depth of cut: 3 mm
Maximum planing width: 310 mm

Maximum planer depth of cut: 3 mm
Planing table length: 1407 mm
Motor input P1: 2.75 kW
Motor output P2: 2.2 kW
Weight: 175 kg
Size: W1407 mm x D745 mm x H1005 mm

Fence tilts to 45°
The fence can be quickly tilted to 45° with the simple to use fence mount system.

3 Knife Cutter Block
A proven industrial design, the 3 knives of the cutter block ensure a smooth finish.

Parallel Table Lift
Fast and easy changeover for improved work flow.

Dust Hood Retention Catch for Safety
This catch eliminates the risk of the dust hood being accidentally removed and therefore exposing the blades.

Prices valid until 28.02.2018.

PRICE HELD

ONLY

£1699.99

Easy to Use Cam Action Table Lock
The tables are locked in place in seconds with the easily accessible lock levers.

SD31-PK/A

12" x 8" Heavy Duty Planer Thicknesser Package

Special Package Deal

Includes:

- Wheel Kit
- Digital Readout

SD31-W Jockey Bar Wheel Kit
For easy movement of the SD31 around the workshop.

SD31-DR Digital Readout
Easy to upgrade digital readout accurately shows position of the thicknessing table.

16 AMP REQUIRED

SD31 AVAILABLE AS SINGLE OR 3 PHASE

RECORD POWER
ESTABLISHED 1909®

www.recordpower.co.uk Tel: 01246 571 020

Over 100 years
Experience • Knowledge
Support • Expertise

RECORD POWER ESTABLISHED 1909
STARTRITE CORONET
BURGESS CamVac

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.

Good woodworking SUBSCRIPTION ORDER FORM

DIRECT DEBIT SUBSCRIPTIONS UK ONLY

Yes, I would like to subscribe to *Good Woodworking*

☐ Print + Digital: £11.99 every 3 months
☐ Print: £9.99 every 3 months

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

DIRECT Debit

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 *Good Woodworking*, for 1 year (13 issues) with a one-off payment

UK ONLY:
☐ Print + Digital: £51.00
☐ Print: £43.00

EUROPE & ROW:
☐ EU Print + Digital: £70.00
☐ EU Print: £62.00
☐ ROW Print + Digital: £70.00
☐ ROW Print: £62.00

PAYMENT DETAILS

☐ Postal Order/Cheque ☐ Visa/MasterCard ☐ Maestro
Please make cheques payable to MyTimeMedia Ltd and write code V1236 on the back

Cardholder's name.....

Card no: (Maestro)

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

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

TERMS & CONDITIONS: Offer ends 8th December 2017. MyTimeMedia Ltd & Good Woodworking may contact you with information about our other products and services. If you DO NOT wish to be contacted by MyTimeMedia Ltd & Good Woodworking 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

HURRY OFFER CLOSES 8TH DECEMBER 2017

PRINT + DIGITAL SUBSCRIPTION

- 13 Issues ***delivered to your door***
- ***Great savings*** on the shop price
- ***Download*** each new issue to your device
- A ***73% discount*** on your Digital subscription
- Access your subscription on ***multiple devices***

PRINT SUBSCRIPTION

- 13 Issues ***delivered to your door***
- ***Great savings*** on the shop price
- Never miss an issue

POST THIS FORM TO: GOOD WOODWORKING SUBSCRIPTIONS, MY TIME MEDIA LTD, 3 QUEENSBRIDGE, THE LAKES, NORTHAMPTON, NN4 7BF

SUBSCRIBE SECURELY ONLINE
tww.secureorder.co.uk/GWW/V1236

CALL OUR ORDER LINE Quote ref: V1236
0344 243 9023
Lines open Mon - Fri - 8am – 8.00pm GMT & Sat - 9.30am – 3.30pm GMT

Calls are charged at the same rate as standard UK landlines and are included as part of any inclusive or free minutes allowances. There are no additional charges with this number. Overseas calls will cost more.

Little Sister

Big on Performance

Little Sister is a mini hollowing tool based upon the highly successful Brother System 2 range

Talk with your Hamlet Stockist today

Compact fixing screw
Hollow through 13mm
openings with ease!

Proudly
Made in the UK

DVD VIDEO
Free DVD
included

3 configerations available

hamlet
CRAFT TOOLS

sales@hamletcrafttools.com
www.hamletcrafttools.com
+44(0)1142321338

Ask about the interchangeable scraper - Ref HS187B

Saw Blades

It's what we do... for over forty years!

- Band Saw Blades
- Circular Saw Blades
- Multimaster & Multitool blades
- Planer Blades
- TCT Circs
- Router Cutters
- Power Tools
- Abrasives
- Turning Tools
- Servicing

• Made to order bandsaw blades, welded to any length • With a range of TPI to suite any application

10% OFF
5 or more blades

FREE UK Delivery
on orders over £50 (excl. VAT)

VISA · VISA Electron · MasterCard · Maestro · JCB

Founder Member of the Saw Doctor Association

hamilton beverstock

CNC sharpening & metal cutting specialists

Hamilton Beverstock Ltd. Grange Industrial Estate, Llanfrechfa Way, Cwmbran, Torfaen NP44 8HQ.
Tel: (01633) 838900 • Fax: (01633) 873803
email: sales@hamiltonbeverstock.com
www.hamiltonbeverstock.com

How to avoid planing peaks & troughs

Peter Bishop talks you through the process for correctly setting a planer/thicknesser and suggests reasons why you might not be getting the best possible cut

Over the top, surface planing is the first operation that should be carried out to square up your material; just like you'd do by hand. But sometimes these machines can be ornery beasts creating dips and troughs in your finished surface as you pass your workpiece over the in- and outfeed tables. There will be two main reasons for this malady: the first might be that the tables are not set up correctly, and, secondly, the cutters are positioned in the wrong place within their block.

Planing terminology

Firstly, let's clarify some of the planing terminology because the machines may come in various guises and names. A surface planer is a machine that you pass your workpiece over to plane the initial flat surface. When this is the only facility, the planer is often called a 'surfacer' or, possibly, a 'jacker' or even 'jack plane'. Most machines that we come across will have dual functionality so that when you have planed the initial face you'll be able to finish your wood to thickness by passing it back under the machine. These machines are then commonly known as 'over and unders' or 'planer/thicknessers'. Larger, single-function machines are available whereby you simply pass your workpiece through to plane it to thickness. These are aimed at finishing wider boards and are often called 'panel' planers.

Surface planing setup

To keep things simple we'll take a look at the surface planing setup of tables and cutters. New or second-hand, your planer/thicknesser should already have the top infeed and outfeed tables set up correctly. The in- and outfeed tables should be parallel and level across their width. They should also be in true alignment in the length, but with a means to raise or lower both. If one of these settings is not correct, then some fine adjustment needs to be carried out. It is possible to check: across the width use 'winding' sticks placed on each table. To check laterally, use a long straightedge placed down the length of both tables without the cutters set in the block. You'll need to check out the machine's manual to see how any adjustments can be made. If 'way out' you may have to resort to engineering help! When you're having trouble with the surface finish, it's always a good idea to check the table alignment before blaming the cutters.

Surface planing problems

Let's assume that the two tables are aligned correctly but the surface planing is still not right. Therefore it would be safe to suggest

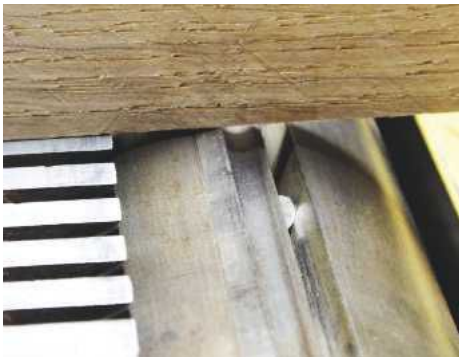
PIC 1. The kit required to change my cutters

PIC 2. Take the old ones out and clean up all the wedges, springs and housings

PIC 3. Using the setting jig, each new, sharp cutter is fixed in place

that the cutters are not set parallel in the block or are not set correctly. If they are not parallel, then you've probably fixed the cutter blades into the block on the skew. Check it out and reset. If you've fixed the cutters incorrectly into the block and tried a piece, you might find two problems: the first occurs when the cutters are set too low. In this case, the workpiece won't pass onto the outfeed table at all; it stops when it comes into contact with it. Lifting the leading edge onto the outfeed table will not solve the problem! If the cutters are set too high, you'll get onto the outfeed table OK, but what happens now is that the workpiece has too much taken off it to run smoothly onto the outfeed table and rocks on the cutters. At some point you will get at least one trench appearing across the width of your piece of wood – not good. So it's imperative that the top, leading edge of your cutter blades, when set in the block, plane your workpiece so that it glides smoothly straight onto the outfeed table. >

PIC 4. The assembly looks like this



PIC 5. With a wooden straightedge, off the outfeed table, the cutter height is checked

PIC 6. On my machine this knurled winder adjusts the height of the outfeed table

Check the leading edge of the blades is set correctly before you start by using a simple, wooden straightedge. Place this down the length of the outfeed table overhanging the cutterblock one side at a time. Rotate the block by hand so that the leading edge of the blades pass under this straightedge. They should touch it but not raise it, or, if they do, only by the smallest of fractions. If you can visibly see the edge rising, then the cutters are incorrectly set, so start again!

Correct setup = good surface finish

Having sharp cutter blades set correctly in their block will produce good surface finishes. My machine, a MiniMax FS31, has a 305mm wide block with three cutters set into it. Each cutter is held in its slot by five small bolts that tighten a wedge against it. I have a simple, light alloy jig, supplied with the machine, that you use to set the cutting edges in line with the outfeed table. In its block slot, below each cutter, there are springs that lightly push the blade up against the jig. To get the cutting edge in its correct position, you place the jig on the blade in the block and gently force it down. The bolts are then tightened and, if all has gone to plan, the blade you're working on will be set fair. The middle bolt should be tightened first and then the others, working out from the middle. It's a bit of a fiddle but once you've got the hang of it, it doesn't take long. I suspect that most machines will have a similar system for setting the cutters in the block.

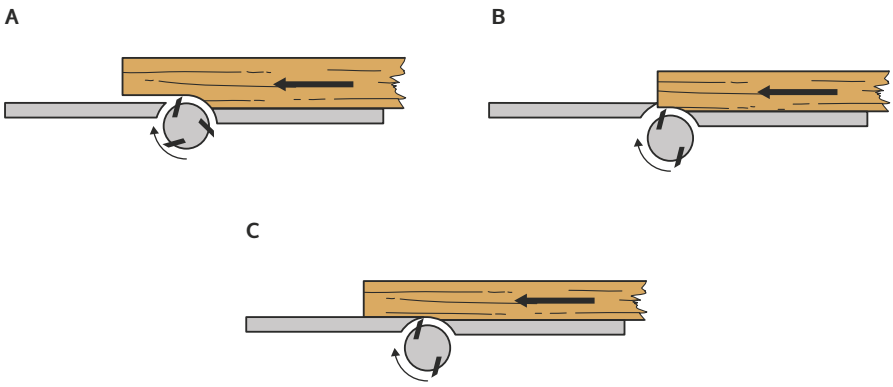
PIC 7. A cut partly made. You can clearly see that both bottom edges of the workpiece are in contact with their respective tables

Using the planer successfully

Now with the planer set up correctly we're ready to rock and roll! Set your fence square on to the surface of your tables and away you go. The amount of waste planed off with each pass can be varied. The outfeed bed should be left well alone and lined up with the top cutting edge of the cutter blades. Variations in cut depth are then achieved by raising or lowering the infeed table. Higher less, lower more. If you want to 'ball off' lots of timber, you'll only be restricted by how low the infeed table will go, the type of wood being planed and avoiding blocking the machine up with waste chippings.

Please do try to use the guards and keep your 'pinkies' away from the cutter blades – always use a push stick. Many happy hours of planing should follow as long as you avoid any odd bit of grit or shrapnel!

I could now bat on about peripheral speed, feed speed and cuts per inch/cm etc., but let's leave that for another day... **GW**

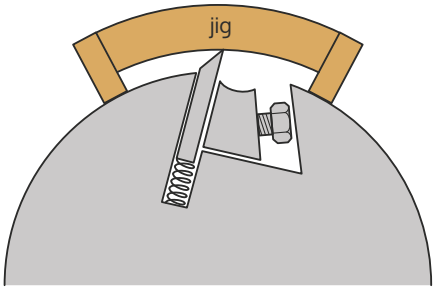


A The cutters are set too high, you'll never get a flat surface like this

B The cutters are set too low, the front end of the work piece won't pass the outfeed table

C The cutters are set correctly, there will be a smooth passage for the work piece

FIG 1. Diagram showing correct and incorrect cutter positioning



A typical clamping assembly probably about 5 bolts force the wedge clamps against the cutter to hold it secure or are loosened to remove the cutter

A jig aligns each cutter in the correct position whilst the bolts are tightened

FIG 2. Diagram showing the side view of a typical cutterblock assembly

mafell

Quality • Innovation • Performance

Beyond all expectation

NEW

Li HD® TECHNOLOGY ready

BRUSHLESS MOTOR

5.5 AH Li-HD BATTERY

AIR COOLED CHARGER

MT55 18M bl

Cordless Plunge Saw System

- The powerful 18V Li-HD battery technology allows extremely high cutting quality
- Compatible with other guide rail systems
- Fastest blade change in the world
- Patented Scoring function for splinter free cuts
- Includes 2 x 5.5ah Li-HD batteries & 1 x air cooled charger

Scoring function

World's fastest blade change

Dual indicator for precise cutting on & off rail

2 x 5.5ah Li-HD batteries included

NMA AGENCIES LTD

NMATOOLS.CO.UK

Email: info@nmauk.com Tel: 01484 400488

Unit 1, Brookfoot Biz Park, Brighouse, W Yorks, HD6 2SD

Valentine's jewellery box

Mike McCrory uses stunning pieces of bird's eye maple and book-matched walnut to create a jewellery box complete with various interior trays

About a year ago I had a short piece of walnut with a big knot in it that I had almost discarded, but out of curiosity I decided to re-saw it with my bandsaw to see how it would look when book-matched (**Pic.1**). It ended up looking quite impressive and I thought it would make the perfect top for a jewellery box. I decided to glue it up and then set it aside for a few months to wait until we got closer to Valentine's Day.

Box sides

I decided to use a highly figured piece of bird's eye maple for the sides of the box, and another piece of book-matched walnut for the bottom. For the proportions of the project, I used the Golden Ratio to help determine the appropriate length and width of the sides. Computed as 1.618, the Golden Ratio is the ratio of the length to the width of the box (**Pic.2**). Based on the size of the walnut top I had, I chose a length of 370mm and a width of 229mm. I wasn't sure of the exact height at this point, but I was targeting one of approximately 125mm.

The bird's eye maple had some twist in it, so I rough cut the timber until it was long enough to form one length and one width of the box (**Pic.3**). That way, it would reduce the amount of jointing that I'd need to do in order to remove the twist.

I then jointed the maple (**Pic.4**) so that it would be flat on one side, and then ran it through the drum sander to make it flat and parallel on the other (**Pic.5**). For different types of wood, you could do this with a planer/thicknesser, but bird's eye maple tends to tear-out easily, so it's preferable to use a drum sander if you have one at your disposal. Next, I used the bandsaw to re-saw the board in half down the middle so it was approximately 15mm-thick (**Pic.6**). This is just the rough dimension that I would sand down with the drum sander; the final dimension after sanding was 12mm.

Box bottom & glue-up

Then, I followed a similar process with the walnut to be used for the bottom of the box. I cut this on the table saw, jointed one face and one edge, then used the bandsaw to re-saw the wood (**Pic.7**). In this case, I was aiming for a final dimension of 6mm, so I

PIC 1. The initial board of walnut

PIC 2. Calculations for working out the Golden Ratio, or Golden Rectangle

PIC 3. Cutting the maple sides

PIC 4. Jointing the maple face

PIC 5. Using a drum sander to sand the maple flat

PIC 6. Re-sawing the box sides

PIC 7. Re-sawing the walnut bottom

PIC 8. Sanding the pieces for the bottom

re-sawed the wood to be about 10mm, which allowed me to remove the saw tooth marks with the drum sander. When sanding the pieces for the bottom, I didn't sand all the way to the final thickness (**Pic.8**); I would do this after the book-matched glue-up. After testing the book-matched fit and alignment, I applied glue to the edge of the bottom pieces (**Pic.9**) and then clamped them together.

I used two large rubber bands to clamp the edges together, and then clamped boards on the top and bottom to help ensure the board would glue up flat (**Pic.10**). Once dry, I passed the bottom through the drum sander to remove any excess glue, to flatten the board, and to arrive at the final 6mm thickness (**Pic.11**).

Box joints

I cut the bird's eye maple pieces into the correct lengths for the sides of the boxes (370mm and 229mm) by using a stop block attached to the mitre gauge to ensure that the lengths of the cuts were repeatable. I then used some scrap pieces to set up my box joint jig so that I would have a tightly fitting box joint (**Pic.12**). Prior to using the jig, I marked the top edge >

PIC 9. Applying glue to the edge of the bottom pieces

PIC 10. Gluing and clamping the box bottom

of each side piece (**Pic.13**). This is important so you know which way to orientate the boards when cutting the box joint. In my case, I always have the top edge of the piece facing towards the centre of the jig (i.e. facing to the left).

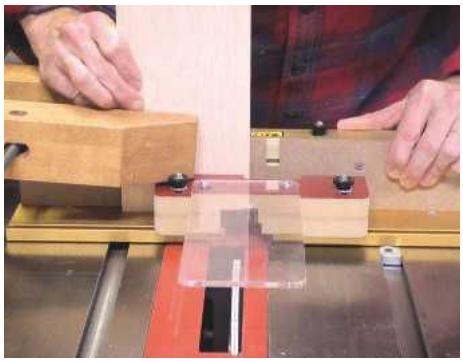
I then cut the joint with the jig and blade set up for 6mm cuts (**Pic.14**). It is not difficult to cut a box joint; it's just important to keep track of the orientation of each board, and to position the adjoining boards (i.e. the end pieces) to be in the correct position so that the joints line up properly. For more information on how to set up and use the INCRA iBox jig, you can find my video on YouTube. After cutting the joints, I tested the fit and everything was nice and tight (**Pic.15**), just the way I like it to be.

Prior to gluing up the sides of the box, I routed a 6mm dado to fit the bottom panel. If this box were made with mitre joints, I would be able to rout the dado all the way through, but with a box joint, I have to start and stop before the end. I did this by having stop blocks set up on my router table, and then proceeding carefully in order to maintain control of the piece. I then sanded the interior faces of the board prior to gluing them up, before applying tape along the edge of the joint on the interior face, which would prevent any squeeze-out from sticking to the wood (**Pic.17**). After applying the glue on the fingers of the box joint, I inserted the bottom panel into the dado slots (**Pic.18**). I did not apply any glue to the dado slots or to the panel, which would allow the panel to freely expand and contract. Next, I clamped up the box, being sure to check that everything was square (**Pic.19**), and after the glue had cured, I used the belt sander to clean up the joints in order to remove any excess material (**Pic.20**). I decided to chamfer the bottom edge to give the box a modern look

PIC 11. Passing the bottom through the drum sander to remove any excess glue

PIC 12. Box joint test fit

PIC 13. Marking the top edge of each side piece



PIC 14. Cutting the box joint

PIC 15. Box joint test fit revealed – nice and tight, which is what we're looking for

PIC 16. Routing a 6mm dado to fit the bottom panel

PIC 17. Applying tape to prevent any squeeze-out from sticking to the wood

PIC 18. Inserting the bottom panel into the dado slots

(**Pic.21**); this would also eliminate the need to add feet or some kind of base, then I used a 6mm roundover bit on the corners of the box, which helps to give it a softer look.

The lid

It was then time to start working on the lid. I began by cutting a 6mm wide rebate along the top edge that was 5mm deep (**Pic.22**). The book-matched top panel would sit inside this rebate so that it was flush with the top of the edge. I then cleaned up the ends of the rebate using a chisel in order to achieve square corners (**Pic.23**). Next, I cut the top panel to the correct size in order to fit into the rebate (**Pic.24**). I didn't want to glue the top panel into the recess to allow for the expansion and contraction of the wood, so I decided to use rare earth magnets. The rebate in the top was only 6mm wide, so I used magnets that were 3mm in diameter (**Pic.25**).

Using the drill press, I drilled recesses into the rebate along the top to hold the magnets, then I drilled recesses in the same locations in the top panel (**Pic.26**). This required careful measurement and drilling: the magnets were so small that any deviation would cause them to not line up. The next step was to cut the box on the bandsaw to create the portion that would serve as the lid (**Pic.27**). I made the cut on the bandsaw rather than a table saw, which would help to minimise the amount of waste and ensure the grain pattern would match. I inserted the magnets into the top and top panel, ensuring to keep track of the polarity so that the magnets would attract each other rather than repel. I then glued the magnets into place using epoxy.

Next, it was time to work on the hinges for the top, and I used a sharp knife to mark their positions >

PIC 19. Clamping up the box and checking for square

PIC 20. Sanding the joints in order to remove any excess material

PIC 21. The chamfered box bottom

PIC 22. Cutting a 6mm wide rebate along the top edge that is 5mm deep

PIC 23. Cleaning up the ends of the rebate using a chisel

PIC 24. Cutting the top panel to the correct size in order to fit into the rebate

PIC 25. One of the 3mm wide rare earth magnets

PIC 26. Drilling the recesses for the magnets

PIC 27. Cutting the lid using a bandsaw

(**Pic.29**). A knife blade is much more precise for marking a small hinge rather than using a pencil, and it also creates an initial cut to help position the chisel. I only had two hinge mortises to cut, so I made these by hand using a sharp chisel. I tested the fit frequently to ensure that I would have a tight fit around the hinge, and to ensure that the top of the hinge was flush with the wood. I used high quality hinges with brass screws. Since the brass screws are quite soft, there is a good chance that the head will shear off when screwing into hardwood, so if this happens, refer to my article on extracting broken screws (*GW*322). When using this type of screw, it is good practice to use a gimlet to create a threaded hole for it (**Pic.30**). After creating the holes with the gimlet, coat each screw with a bit of paste wax so that they will enter effortlessly into the wood (**Pic.31**). After attaching the hinges, you can drop the top panel into the rebated top, where it will be held in place by the rare earth magnets (**Pic.32**).

Interior trays

Next, it was time to build the interior trays for the jewellery box. For the bottom of the trays, I followed a similar method to that used for the bottom of the jewellery box, but this time I used bird's eye maple. I milled the wood down to a 6mm thickness and then used rubber bands to glue up the book-matched pieces, with cauls clamped to the top and bottom to ensure the piece would be flat (**Pic.33**). For the sides of the trays, I cut the 6mm wood with the table saw into 35mm strips (**Pic.34**). I cut the lengths that I'd need to have a single tray in the bottom sized to the interior dimensions of the jewellery box, and two trays in the top. I then mitred the ends of the strips with the blade set at 45° and with the help of a stop block on my mitre gauge to ensure that the lengths were cut consistently to result in a tray with 90° joints.

An easy way to glue up a box with mitred joints is to line up all of the pieces in a straight line and attach them together using masking tape (**Pic.35**). Then, it's just a matter of flipping it over, applying the glue, and folding it up into a rectangle while the tape holds everything in place. I then added tape on the outside, which would apply light clamping pressure while the glue cured, and after the glue had cured, I cleaned up the joints on the belt sander (**Pic.37**).

To create interior sections inside the trays, I cut a slot into the centre of each of the cross-pieces using a 6mm blade and then assembled them together with a little glue (**Pic.38**).

The last thing to do with the trays was to insert splines into the corners to give the mitred joints a little more strength. I used a spline cutting jig on my table saw to hold the tray at a 45° angle while I made the cuts using a 3mm blade. It is important to use a blade that has teeth with flat tops in order to achieve the appropriate slot cut. Then, I inserted the walnut splines into the slots using some glue and left it to cure overnight (**Pic.40**), and once ready, I trimmed the excess spline material with a

PIC 28. Inserting the magnets into the top and top panel

PIC 29. Marking hinge positions

PIC 30. Using a gimlet to create a threaded hole for the screw

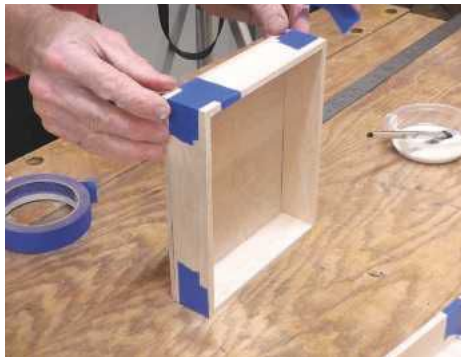
PIC 31. Coating the screws with paste wax

PIC 32. Dropping the top panel into the rebated top

PIC 33. Gluing and clamping the tray pieces

PIC 34. Cutting the sides of the tray **(PLEASE NOTE BLADE GUARD HAS BEEN REMOVED FOR CLARITY)**

PIC 35. Taping the tray pieces together using masking tape



PIC 36. Adding tape to the outside of the tray

flush cut saw (**Pic.41**), then cleaned up the remaining excess on the belt sander.

Finger lift

The final thing to do with the box prior to applying the finish was to add a finger lift. I cut out a portion of the middle of the front edge of the box, using the router with a bit that was set to cut 6mm deep (**Pic.42**). I used a stop block to control the end points, before using a chisel to square up the corners (**Pic.43**).

For the finger lift, I inserted a small strip of walnut that was 6mm-thick and clamped it in place while the glue cured (**Pic.44**), then, I hand sanded the box using 320 grit abrasive prior to applying the finish. I chose to apply the finish in two stages: first, I applied a coat of dewaxed shellac to seal the wood, then after the shellac had dried, I sanded the box lightly with 320 grit abrasive, removed all of the dust, and then sprayed everything with four coats of a satin finish lacquer; this gave the final piece a very professional-looking finish. **GW**

PIC 37. Cleaning up the joints on the belt sander

PIC 38. Assembling the cross-pieces once cut

PIC 39. Cutting splines into the corners of the trays

PIC 40. Inserting the walnut splines into the slots using wood glue

PIC 41. Trimming the splines using a flush cut saw

PIC 42. Routing the finger lift

PIC 43. Using a chisel to square up the corners

PIC 44. Clamping the finger lift

PIC 45. Applying shellac to the top of the box

FURTHER INFO

You can find out more about Mike McCrory and some of his other work by visiting his website: **www.woodumakeit.com**

And to see a video of the making of this project, visit Mike's YouTube channel: **www.youtube.com/woodumakeit**

HAPPY HOBBY

From schep

HD2P 3 IN 1 EXTRACTOR VAC

£79.99 inc vat

2 X EXTRA BLADES SAVE £31.46

HBS250 10" BANDSAW

£259.99 inc vat

BTS800 BELT & DISC SANDER

£159.99 inc vat

250 X 60 MM GRINDING STONE
VARIABLE SPEED

TIGER 3000VS SHARPENER

£199.99 inc vat

EXTRA TCT 160T BLADES VALUE £49.99

HS105 10" TABLE SAW

£269.99 inc vat

64 X PIECE TOOL KIT

SD1600F SCROLL SAW

£149.99 inc vat

HC08 8L COMPRESSOR

£99.99 inc vat

HG34 3" GRINDER-POLISHER

£59.99 inc vat

WSE860 INVERTER WELDER

£139.99 inc vat

4 T

HL450 LOG SPLITTER

£219.99 inc vat

KS1000 CHAIN SHARPENER

£34.99 inc vat

OSM100 BOBBIN SANDER

£159.99 inc vat

EXTRA TCT 24T BLADE VALUE £29.10

HS80 8" SAWBENCH

£109.99 inc vat

NMA AGENCIES LTD

Find us @ nmatools

Tel: 01484 400488
Email: sales@nmauk.com
Site: www.nmatools.co.uk

DAYS 2017

pach

DECO XL VARIO SCROLL SAW

£169.99 inc vat

HBS 20 8" BANDSAW

£119.99 inc vat

TIGER 2000S SHARPENER

£129.99 inc vat

BASA 1 8" BANDSAW

£189.99 inc vat

C/W
2 X 700 mm
GUIDE TRACKS

PL55 PLUNGE SAW SET

£239.00 inc vat

HS410 16" LOG SAW

£299.99 inc vat

BTS700 BELT SANDER

£99.00 inc vat

SD1600V SCROOL SAW

£129.99 inc vat

HS100S SAWBENCH

£149.99 inc vat

AIRFORCE COMPRESSOR

£79.99 inc vat

HA1000 DUST EXTRACTOR

£119.99 inc vat

DM460T HOBBY LATHE

£329.99 inc vat

HMS2000 8" X 5" PLANER

£329.99 inc vat

Unit 1, Brookfoot Business Park
Brighouse, W. Yorkshire, HD6 2SD

ALL PRICES CARRIAGE PAID
UK MAINLAND ONLY.

FREE
144 PAGE CATALOGUE ON REQUEST!

Some students on TRADA Technology's grading courses

How to select the correct grade of timber for the job in hand

Peter Bishop provides some guidance on choosing the correct grade of timber to use and suggests various ways in which this might impact on your projects

Working with wood can be challenging at times. If, at the outset, we don't select the correct grade and quality of wood for the job or jobs in hand, we can often end up having to make another component, make a repair, or simply produce too much waste. Hopefully most suppliers will be knowledgeable enough to help us avoid issues like this. However, sometimes we need to make a decision when faced with a choice of what grade to use and how that might impact on the project we're working on.

Here, I'm aiming to provide some guidance when options are being offered to you. The following information refers to visually graded, sometimes called appearance or commercial grades. These mainly apply to hardwoods and quality softwoods. Visual grading should not be confused with mechanically stress-graded material, which is used for constructional purposes. This is a bit of a 'dry' subject, so bear with me and I'll try not to bore you too much!

Back to basics

Let's not forget that timber is a natural product so therefore each tree, plank and piece of wood is quite individual; that's what makes it so attractive to us. Some of these variations are seen as defects by one person and features by another. But one thing for sure is that 'grades' of timber should be used as a guide to the general quality likely to prevail but, in the final selection, the end use will determine exactly what is required.

As our timber resources diminish, for whatever reason, we should all make the effort to utilise what could be called the 'lower grades'. This might mean correctly selecting the best timber for the 'faces' of a project and using the poorer quality, or cheaper substitutes, for the sub-framing and hidden work.

Efficient use of wood resources

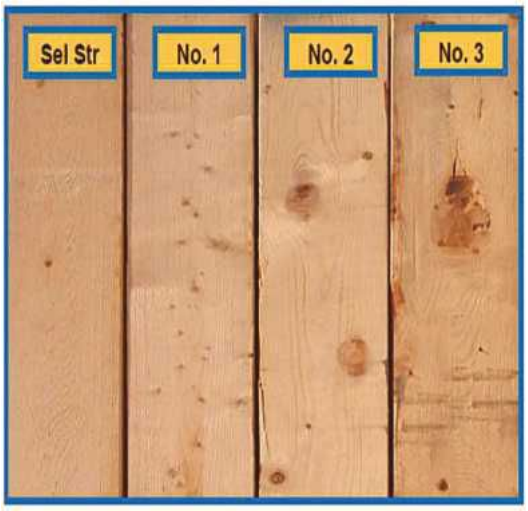
In recent years, a number of organisations have partly succeeded in promoting lower grades of timber. For example, American and European oak, with a greater preponderance of knots, is being marketed as 'character' oak. Also, in some countries, there has been a concerted effort to laminate hardwoods, in length and width, to better utilise the yield from smaller trees. Lately we have also seen a greater use of man-made boards, such as MDF. Once faced with a thin veneer, of the timber of choice, MDF provides a number of advantages over solid wood. We should, where we can, consider a substitute material that utilises our wood resources more efficiently, or that which has an economical benefit to the country of origin.

Softwood grading

Generally softwood grading is based on a 'defects' system. This means that the grading rules, as set out, define the maximum allowable size of the defect for each of the grades in relation to the size of the piece of timber. Phew, I hope you got that! Therefore, one large defect in a wide board may be as acceptable as a small one in a narrow board with both qualifying for the same grade. In other words, the percentage of affected face of a board is the critical element. Defects taken into account when grading are: knots, splits, twist, cup, bow, ring width, wane, sap-stain, pitch pockets and rot.

Fig.1 below shows a fairly simple way of comparing different classifications of grades from different sources. The rule of thumb is that 'clears' should be virtually defect-free and suitable for those special jobs; 'unsorted' will contain a fair amount of good material and be suitable for most joinery projects, and the rest gets progressively poorer in quality with the increasing numbers.

Another broadly based rule of thumb would be to look at material from North America, (clears), for the best quality, Scandinavia and Russia for the next, (unsorted), and whatever is left, tongue in cheek, probably drops into the 'knotty pine' bracket!



Some typical wood grades

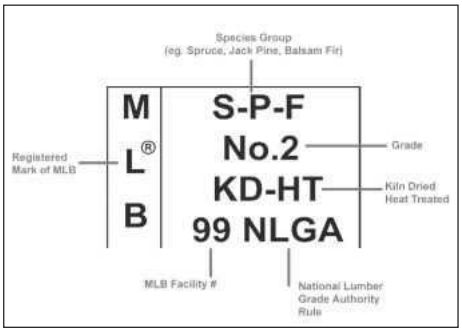
Source	Grades Highest...		... Lowest
UK/Europe	I clear	I, II III	IIII
Scandinavia Poland & Eastern Canada		I, II, III, IV (unsorted) V	VI
Russia & the Eastern European region		I, II, III (unsorted) IV	V
British Columbia & Pacific Coast of North America	No.1 clear No.2 clear No.3 clear	Select merchantable No.1 merchantable No.2 merchantable	No.3 common

FIG 1. A fairly simple way of comparing different classifications of grades from different sources

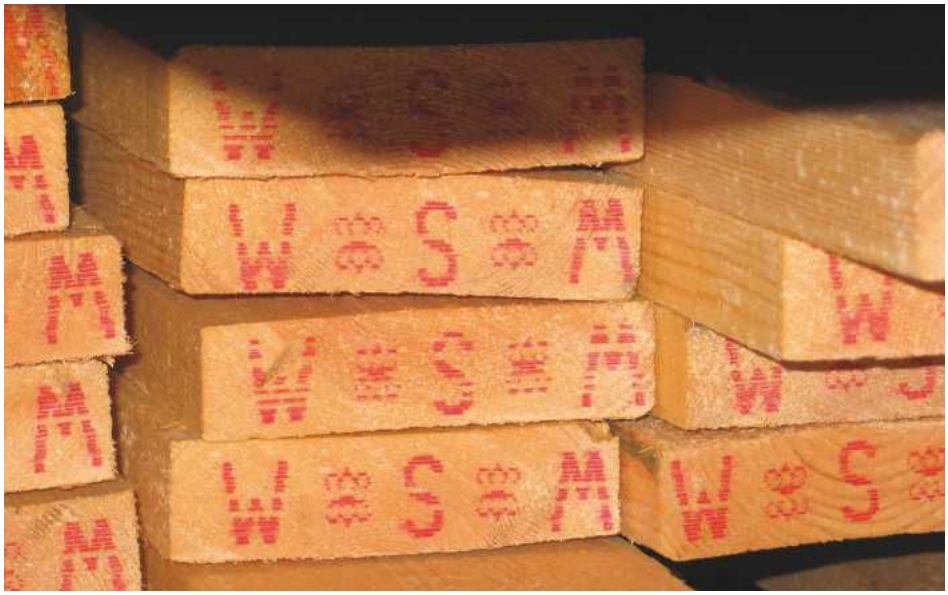
Shipping marks

It's worth noting at this point that many primary lumber production mills end mark every piece of timber with a shipping mark defining their grading interpretation. These often take the form of 'stars', 'crowns' and capital letters stamped onto the ends of each board. These shipping marks provide a mine of information to those in the know. They can provide the country of origin, the mill from which that particular production was produced, the shipper, grade and specie. Although grades tended to be very consistent in the past, from a certain mill's production, today, as various different sources are combined, this may not be the case.

As a rough guide when looking at shipping marks, 'clear' is stamped on the faces of boards from North America, and 'crowns' or 'stars' on the ends from Scandinavia and Russia respectively. There will be other letters or numbers stamped on the ends and faces as well. The more stars and crowns you can find on each plank, the better the quality should be. >



Typical examples of grading stamps


Various softwood end marks

Jointing short lengths

Utilisation was mentioned earlier. Due to the pressure on resources and increasing costs of raw materials, some softwood used in joinery has been jointed, in the length, with a simple 'finger' joint. This type of utilisation is excellent as it uses up a lot of short lengths that would otherwise be wasted. If the project in hand is to be painted, then it makes no difference. In fact, probably, the pieces of wood will be more stable overall. The practice of jointing short lengths has also extended to hardwoods.

Hardwood grading

There is a confusing number of hardwood grading systems – some similar to those applied to softwoods, some not. The most popular form is based on the 'cutting system'. The object with this system is to assess the amount of usable/defect-free timber in relation to the whole board. Assessment is usually made through a notional rectangle of 300mm.sq. Definition of the grades follows the establishment of minimum areas of cutting acceptable as a fraction of this whole, notional piece.

As a result, it's assumed that a perfect piece of lumber would be defect-free for $^{12}/_{12}$ths of its surface, the total area of the notional piece. As the grade of each plank is assessed it may be $^{12}/_{12}$ths, $^{11}/_{12}$ths, $^{10}/_{12}$ths and so on.

It's best to ask your supplier which grade of timber to use if you're not sure. There are so many that you may be able to buy a substitute at a cheaper price! Durability is not too much of a problem for timber used inside but requires careful thought for external applications, so therefore also take advice here when necessary.

Similar to the crown and star marks found on some softwoods, you might also find end marks on hardwoods. Generally marked with two or three different colours in patches on the ends, maybe with some contrasting spots over-painted or even simple crosses.

Producers also tend to stencil names and grades right across the side of each stack of banded lumber, especially from America. Alternatively, you may find a simple 'prime', top quality, or 'FAS', a combination of first and second grades, stamp on the face of each board.

It's always best to look carefully at what you are buying. Understanding how the different grades interact with each other is useful as is knowledge of where each board might have been cut from the log.

Visual grading, be it for hardwoods or softwoods, can vary slightly from producer to producer. It's often not a fine art but more of a 'black' art! I guess the key issue from a maker's point of view is to ensure we use the best stuff as show wood and the worst for the carcassing, etc. Nothing has changed, really – this is what all our predecessors have done. Just take a look at how an antique piece of furniture has been made. **GW**

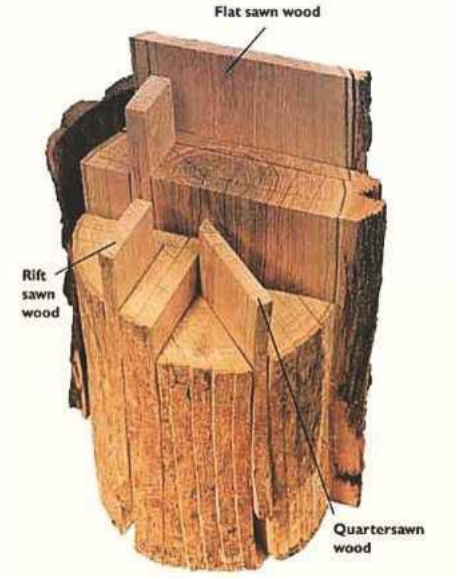
Sources	Grades Highest...			... Lowest
UK/Europe Square edged Unedged	1 10/12 11/12	2 8/12 10/12	3 6/12 9/12	4 3/12 8/12
America/Africa/ Australia South East Asia	Firsts 11/12 Prime 10/12	Seconds 10/12 Selects 9/12	Selects 6/12 Standard 8/12	No.1 common 8/12

FIG 2. This table outlines the most likely grades and clear cutting units to qualify with the associated common source

Learning how to grade under NHLA lumber rules

End marks on African hardwood

Producers' pack marks



A visual guide to show how different cuts are made

NEXT MONTH

In the next part of this series, Peter asks 'what is a timber defect' before identifying the range of common defects that woodworkers should look out for

The North of England Woodworking & Power Tool Show

Gt Yorkshire Showground
Harrogate (HG2 8QZ)

17 November 2017 10am - 5pm
18 November 2017 10am - 5pm
19 November 2017 10am - 4pm

Nelton Exhibitions
www.skpromotions.co.uk T: 01474 536535

Make life easy and pre-book your tickets,
Telephone **01749 813899** or write to Nelton Exhibitions, The Old Sun, Crete Hall Road, Northfleet Kent, DA11 9AA

Name: .....

Address: .....

.....

Post Code: .....

No of adult tickets ~~£11.00~~ @ £9.00 .....

No of concession tickets ~~£10.00~~ @ £8.00 .....

Cheque to Nelton Exhibitions £ .....

PLEASE ENCLOSE A STAMPED ADDRESSED ENVELOPE.
For show details either visit **www.skpromotions.co.uk** or phone 01474 536535.
Should you not wish to receive further information on our woodworking shows please tick ☐

Protect and enhance the natural beauty of wood with Treatex Hardwax Oil

treatex®
Naturally superior wood finishes

Treatex Hardwax Oil
protects and enhances the appearance of all types of internal wood surfaces including floors, stairs, doors, furniture and worktops. Treatex Hardwax Oil is manufactured on a base of natural sustainable raw materials: jojoba oil, linseed oil, sunflower oil, beeswax, candelilla wax and carnauba wax.

- Brings out the timber grain
- Adds warmth to wood
- Easy to apply
- Quick drying
- No sanding required between coats
- Low odour
- Resistant to spills of water, wine, beer, coffee, tea and fizzy drinks
- Withstands high temperatures
- Very durable
- Easy to clean and maintain
- Spot repairable
- Safe for use on children's toys

tel: 01844 260416
www.treatex.co.uk

A passion for timber

Garry and **Shaun Stevenson** share the story of how a passion for quality raw materials led to the development and continued growth of their business

TOP: A small selection of the many tools on sale in the G&S shop

ABOVE RIGHT: Inside the timber warehouse

ABOVE: An oak stack being loaded into the heat vent kiln

Back in 2002, Father and Son team, Garry and Shaun Stevenson, decided to make a career change in order to pursue an interest in woodturning and crafts. They set up their workshop in a converted barn in Stainton, a village nestled just outside Penrith, in Cumbria. The workshop was also located on the same site as the Alpaca Centre, a high-quality clothing store owned by Garry and wife, Joy.

Quite a workshop

The workshop measured 9 × 9m and included a Harrison Graduate lathe, a big Wadkin lathe – and all-important dust extraction – a bandsaw, and all the necessary accessories to produce woodturnings for the home. It all seemed to be going well for them as they sold their wares in the Alpaca Centre next door, with the exception of the hardwood blanks they were buying in for the turnings. They found the blanks had not been kiln-dried properly, which resulted in cracks on completion. This was proving to be costly – both in the purchase of the blanks and on wasted time. As such, they came up with the idea of converting their own timber for turning and selling the surplus blanks to other woodturners.

The arrival

They purchased a tractor and forestry trailer to pick up locally felled logs and travelled all over Cumbria… at 30 miles per hour. A wide variety of species were picked up and taken to a local softwood sawmill for conversion, and once back in the yard, the timbers were stacked for air-drying. It was decided that there would be no compromises on the quality of the wood, so slow drying was the order of the day, followed by kilning in a high-tech, fully-computerised kiln that had been installed at the back of the workshop.

Once they had some dry timber, they partitioned off half of the workshop – a 4.6 × 9m space kitted out with basic shelving – in order to display the blanks. With some minimal advertising (and fingers crossed) they waited for customers to arrive while turning in the now-diminished workshop, but arrive they did and G&S Specialist Timber was born.

Heavy work for two

One year on, and it was clear that the sawmill they were using was too small to cope with large hardwood logs, meaning they were left with the challenge of finding and installing a suitable sawmill in the G&S premises. They found a Stenner 60 sawmill – a massive bit of kit with a 9.8m saw blade – which took 10 weeks, 11 loads of concrete, one huge crane, and many man hours to install.

The first time they switched the saw on was a nerve racking experience, but all the machinery worked well and soon they were milling logs up to more than 1.2m in diameter. Garry and Shaun were now selling the blanks and dry hardwood boards in the shop and converting the logs ready for air-drying in between customers; quite a task, and heavy work for two.

As more customers were arriving for wood,

LEFT: An oak log being processed

LEFT: This tractor with Botex forestry trailer is capable of lifting 2.5 tons

BELOW: The G&S reception area

they often asked why Garry and Shaun didn't sell tools for woodturners. This seemed to be a great idea, so they began with Robert Sorby, Hamlet Craft Tools, Chestnut finishes, and gradually increased the brands, year on year. This meant that they now had to employ staff; the first person who joined them, John Lake, was an ex-engineer who had some woodworking experience. John was a great addition to the crew: very hard working, eager to help take the business forward, and very capable with the woodworking machinery. He was also a great laugh to work with and, even though he has now been retired for some three years, the Stevenson family still misses him.

Top tools & brands

As the stocks of tools increased, so did the floor space of the shop, gradually diminishing Garry and Shaun's workshop space until there was none left for them at all. In 2008, a 464sq.m warehouse was erected on site for timber storage and this extra room gave the opportunity to develop a machining workshop; this led to sales nationwide and even the supply to some films, such as *Hercules*.

A joinery department was developed in the new warehouse that produced bespoke stairs, windows, doors, trusses, and built-in furniture, among other items. They were keen to stock top quality tools, and successfully secured supplies of brands including Lie-Nielsen Toolworks, Pfeil Tools, Robert Sorby, Colt, Jet Machinery, and many more. In 2016, they secured the dealership of top quality woodturning lathes by German manufacturer Hapfo, which makes both hand turning lathes and CNC copy lathes. Finishes include Osmo, Treatex and Chestnut products, and earlier this year, they secured the dealership of paint and paper company, The Little Greene.

Their website has greatly assisted in securing work all over the UK and beyond, and there are now over 14,000 products to choose from. G&S has also increased staff levels year on year and now employ 18 people. Due to the increased workload, they have again run out of space and are planning an extension to the warehouse for the joiners; this will provide the option of increasing the joinery alongside with extra space for the timber stocks – watch this space! **GW**

LEFT: The Stenner 60 bandmill has a 229mm × 10m blade. When in use it has 10 tons of tension and the motor requires 150Kva to start the saw blade – certainly an impressive machine!

FURTHER INFO

G&S Specialist Timber are specialist hardwood timber merchants who provide high quality woodworking tools and machinery. They are certified by both the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC). To find out more, see their website: **www.toolsandtimber.co.uk**

Early bird CHRISTMAS SAVINGS

Limited Availability

SAVE UP TO 41%

Check out our full range online at
www.mytimemedia.co.uk/XMAS17P1

SAVE 35%

13 issues for £39.90
~~Full price £61.75~~

SAVE 34%

13 issues for £43.65
~~Full price £66.63~~

SAVE 37%

13 issues for £43.55
~~Full price £68.99~~

SAVE 41%

26 issues for £60.80
~~Full price £103.74~~

SAVE 31%

13 issues for £44.75
~~Full price £64.87~~

SAVE 31%

13 issues for £45.70
~~Full price £66.19~~

SAVE 31%

13 issues for £39.15
~~Full price £56.55~~

SAVE 27%

12 issues for £39.30
~~Full price £54.00~~

SAVE 30%

12 issues for £42.00
~~Full price £59.88~~

SAVE 30%

12 issues for £42.00
~~Full price £59.88~~

SAVE 22%

12 issues for £47.00
~~Full price £59.88~~

SAVE 33%

12 issues for £40.00
~~Full price £59.88~~

Great savings **Delivered to your door** **Greetings card supplied with gift subscriptions**

SUBSCRIBE TODAY

Online
visit
www.mytimemedia.co.uk/XMAS17P1

By Phone
Call
0344 243 9023*

By Post
Complete the form and
return it to the address provided

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 the subscription is for a gift recipient)
Magazine.....
Price .....

PAYMENT DETAILS

Please make cheques payable to MyTimeMedia Ltd and write code XMAS17P1 and magazine title on the back

Postal Order/Cheque | Visa/Mastercard | Maestro (Maestro)

Card no:

Cardholder's name: .....

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

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

SEND TO: MYTIMEMEDIA LTD. SUBSCRIPTIONS, 3 Queensbridge, The Lakes, Northampton, NN4 7BF

Converting timber into functional projects

Les Thorne demonstrates the different types of turning projects that can be made using fresh, green timber

As a production turner specialising in the architectural, I always seem to be working with dried timber. Invariably nowadays that means kiln-dried wood as opposed to air-dried stock. Those of you lucky enough to work with air-dried will know that this type of drying leaves the wood with some flexibility in it whereas kilning tends to make the wood brittle and dusty. If I had to describe the difference between the two I would liken them to cheeses: the kilned crumbly stilton to the flexible edam. The issue with air-drying comes with the stability of the wood, especially in our centrally heated world where you can experience all sorts of problems with splitting. 100mm oak has been an issue for me for a number of years as it's difficult to air-dry and great care has to be taken when kilning to ensure you don't end up creating checking in the timber. Getting stable oak in that size usually requires you to pay a premium or have the stock laminated up out of smaller sections. As turners, we often get the call from tree surgeons asking whether we would like to take some timber they've felled. I'd normally say no, but I couldn't resist putting some ash and sycamore in stock when I was offered some recently. I thought that it would be useful to show what can be made from fresh timber, either roughing out or straight to the end of the project. **GW**

Roughing out a bowl

STEP 1. I'm lucky to have a small local sawmill that does my timber conversion for me by cutting it into the required plank sizes. The ash is fine stacked horizontally, but ideally, the sycamore should be dried on end to prevent it going grey

STEP 2. The 120mm-thick sycamore is going to be used for big bowls, so I'm going to make some projects from the slabs. The ash is a little drier already and this is evident from the splits in the ends of the logs

STEP 3. The piece that I have cut off has given me two bowl blanks. The one for the rough-out has had the majority of the bark removed and is cut round after marking out with a compass

STEP 4. The one with the natural-edge is difficult to draw a circle on, so I have a series of discs that I screw to the top and then cut around. I would like to have kept the bark on this piece but the tree had been cut down for too long and unfortunately it had all fallen off

STEP 5. Cutting green timber on a bandsaw requires a good coarse blade with no more than a 4TPI blade and ideally one with only 3TPI. You can see the build-up of resin on the inside of the blade; if you let this get too bad then the saw will cease to cut accurately

STEP 6. This is the amount of timber I ended up with from the small section of slab that I cut off: two bowl blanks, a 75mm square, and a 50mm square section. The squares will have their ends sealed and be put in the wood store for use on future projects

STEP 7. When roughing out, I like to get the timber removed quickly and there is no better tool than the 13mm bowl gouge with a freshly sharpened long-grind. You can really hog the timber off with this tool

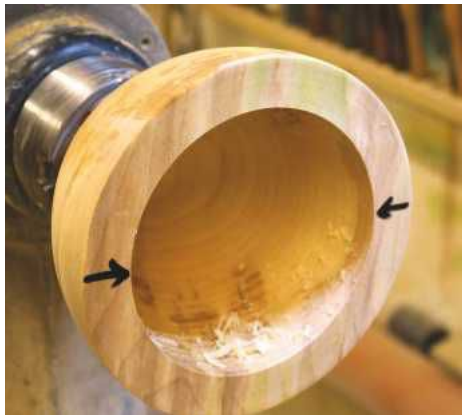
STEP 8. The spigot that you use will shrink, so you need to allow a little more diameter than you would normally. The step to the left of the spigot will add strength and accuracy to the fixing and allow quicker removal of wood from the inside

STEP 9. The versatility of the gouge allows me to make my preferred push cut to true up the blank. When you have done this, it's worth checking for any small splits in the end-grain

STEP 10. When the outside is completed, put the spigot in the chuck and true up the top surface. This is a great opportunity to practise your tooling techniques; I often try out a texture on a rough-out, because if it looks awful, I just turn it off

STEP 11. I need to quickly remove the wood from the middle. As I have to dry this bowl I will not get paid for ages, so I want to waste the minimum amount of time on it now. I get a real buzz from making these shavings!

STEP 12. To give the bowl every chance of drying without splitting, you need to get the wall thickness pretty even, so use callipers to measure, which will ensure you get it right. The photo shows the moisture that's coming out from the end-grain when the wood is spinning



STEP 13. These two arrows show the way the bowl will shrink while drying: the side-grain will move towards the middle, thus making the bowl oval. You need to have enough wall thickness to allow for this; about 25mm is about right on a bowl of this size

STEP 14. As we saw in the other photo, the moisture wants to come out from the end-grain much quicker than the side-grain, so for this reason I seal the end-grain with a product called End Seal, which will slow the process down and hopefully stop the splitting that can occur when you dry timber quickly

STEP 15. Here's a few I made earlier and they will be put in my drying room. Drying these bowls seems to be an art rather than a science and you can still have a few split on you for no reason, but by following my tips you are stacking the odds in your favour

Natural- or live-edge bowl

STEP 1. I like my natural-edge bowls to have an even top, so I mount the blank between centres as this allows me to adjust the wood in order to get the best shape. The large Steb centre is fine for using on wet wood, as long as it's not too soft

STEP 2. As I'm going to use as small a spigot as possible, I need to make it accurate. In this position, the jaws make a perfect circle so I transfer the measurement to the bottom of the bowl using dividers

STEP 3. If I had retained the bark on the bowl then the last cuts here would be made from the left to try and keep the bark intact. To allow for the intermittent cut, make sure you don't feed the tool too quickly

STEP 4. Bert Marsh, the greatest British natural-edge bowl turner, always said that shape was everything and I'm pretty pleased with the curve I've achieved here. Don't sand at this stage as it's more effective to do it once the bowl has been hollowed

STEP 5. I like to hollow the bowl with the toolrest across the front. I find that if you put the rest inside it starts to get in the way, making it more difficult to follow the outside curve. The 13mm gouge should be strong enough to work the whole bowl like this

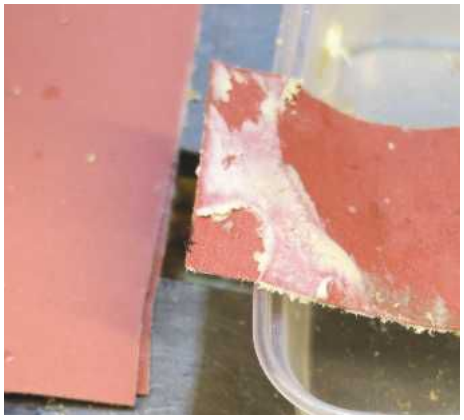
STEP 6. Light is a great indicator of wall thickness. I am aiming for a thickness of about 5mm as this should allow the bowl to dry without splitting. The light method will only work on the light-coloured timbers, however

STEP 7. As I sweep the tool across the bottom, you can see that the light is pretty even now. The handle of the tool will need to be lowered as you go through the bottom curve, to ensure the bevel remains in contact with the surface

STEP 8. If you need to have a break while working on a project like this, you will need to prevent the timber from drying out so stuff the bowl with wet shavings or put a plastic bag over it. Sometimes I even spray the work with water from an atomiser bottle

STEP 9. Now's the time to sand the piece. I sand the work using the abrasive with water; this will keep the timber from drying out. Remember to keep the water away from any electric boxes or switches on the machine

STEP 10. To keep the pressure on the work even, I hold a piece of abrasive on both the inside and outside. If the timber starts to dry out, the walls will begin to go uneven and the whole process becomes more difficult



STEP 11. You don't get clouds of dust, which is obviously a good thing, and it's still sanding as you can see here. The bowl just needs to have the foot removed before applying a couple of coats of lemon oil when the wood is dry

STEP 12. The completed natural-edge ash bowl

Goblet

STEP 1. I love making goblets and it's a shame that I don't get the chance very often nowadays. The 200mm length of sycamore is mounted up and roughed to a cylinder

STEP 2. With one end held in a chuck, hollow out the bowl with a gouge. The end-grain can be scraped to a fine finish using a small-tipped scraper such as this one from Robert Sorby

STEP 3. While turning the outside down to the inside shape, stop the lathe regularly and check the wall thickness. If you make it too thick, the end-grain is likely to crack and ruin the finished work

STEP 4. Once the bowl part is completed, you'll need to sand it using the same wet sanding process as before. The detail at the top is important as it punctuates the change in direction of the curves

STEP 5. I prefer not to use tailstock support if I can help it, so I need to work the stem down to size in small increments and supporting the stem with your fingers will be necessary when the stem's diameter gets thin

STEP 6. You'll find it difficult to sand the stem unless you do it in stages during the turning. Any small lumps and bumps left from the tool can be smoothed down using a piece of 120 grit – obviously I didn't need to do this!

STEP 7. I couldn't resist putting this small gun barrel bead in the stem; I could have added a captive ring but it's the spindle turner coming out in me! The rest of the piece needs to be sanded before being parted off

STEP 8. Usually I don't leave enough wood at the chuck end to part off easily, but I did this time. The 10mm skew will part off and shear scrape the underside of the base. Like the bowl section, the base will need to be thin, but be careful as you don't want to break it at this stage

STEP 9. Wow, look at all the great shavings; my workshop looks like it's covered in tagliatelle! You will need to clean the wet shavings off the lathe as they make everything go rusty very quickly

STEP 10. The completed sycamore goblet

SPECIALIST TOOLS & WOOD FINISHES

Good woodworking CLASSIFIEDS

To advertise in Britain's biggest selling woodworking magazine call Rhona Bolger on 01689 869 891 or email rhona.bolger@mytimemedia.com

COURSES, FINISHES & SPECIALIST EQUIPMENT

Good woodworking CLASSIFIEDS

To advertise in Britain's biggest selling woodworking magazine call Rhona Bolger on 01689 869 891 or email rhona.bolger@mytimemedia.com

TOOLS WANTED

Top Prices Paid For Quality Hand Tools

carving tools, chisels, turning tools
norris planes (and similar), metal planes
green tools, any nice old hand tools...

email photos to: info@oldtools.co.uk
or bring tools to: Bexhill - 01424 217893

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.

LEEDS

D.B. KEIGHLEY MACHINERY LTD
Vickers Place, Stanningley,
Leeds LS28 6LZ
Tel: (0113) 257 4736
www.dbkeighley.co.uk
charnwood
JET RECORD POWER SEDGWICK

David Charlesworth

Tool tuning and fine furniture making courses

Revolutionise your hand tool skills with David's five day Tool Tuning course; ultimate plane tuning, chisel preparation and planing skills. Subsequent courses cover Dovetailing and Drawer Making/Fitting.

NEW Sharpening weekends!

David is a legend of the UK woodworking scene and has a wonderful teaching workshop in an idyllic location in Hartland, North Devon.

See website for full course details & release date of David's New DVDs

Contact David on:
01237 441288 or email: **davidcharl@aol.com**
www.davidcharlesworth.co.uk

WEALDEN TOOL COMPANY

Router cutters
Spindle tooling
Bandsaw, jigsaw & circular sawblades
Online catalogue & ordering
www.wealdentool.com

TO ADVERTISE IN

Good Woodworking | The Woodworker & Woodturner

call
Rhona Bolger
01689 869 891
rhona.bolger@mytimemedia.com

Dowelmax

Tables, chairs, stools, kitchens, bedrooms, desks, bookcases, sideboards, beds, benches, doors, windows, steps, cabinets,
make them all and more with the
Dowelmax Doweling Jig

Dowelmax Doweling Jig -
No need for biscuit jointers, tenoners, morticers, screws, loose tenons etc,
make joints faster, more accurately and stronger with
Dowelmax
The ultimate doweling jig for woodworkers!

See us on YouTube and visit:
www.dowelmax.co.uk
for more info, video and ordering.

Dowelmax
Tel: **01352 781168** or **07773 718758**

Musical Instrument Makers' & Repairers' Supplies

TOUCHSTONE TONEWOODS

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

Woodworking Materials

Large selection of products!

✔ Clocks & Accessories (Quartz and Mechanical) ✔ Barometers ✔ Thermometers ✔ Cabinet furniture ✔ Screws ✔ Plans ✔ Kits ✔ Polishes ✔ Adhesives ✔ Abrasives etc.

*For **FREE** catalogue please contact:*

Chris Milner Woodworking Supplies
(Dept.TW) Beresford Lane, Woolley Moor, Nr. Alfreton Derbyshire DE55 6FH
Tel/fax: **(01246) 590 062**
Email: **milnerwoodwork@aol.com**

Flexidisc Sander/Grinder

The Flexidisc sander gives a superb finish on wood, metal, fibreglass, car body filler and all hard materials.

Its fast rotation speed achieves sensational results in a fraction of the time normally taken by conventional sanders.

This versatile tool also sharpens chisels, plane blades, lathe tools, axes and garden tools without the rapid overheating of normal abrasive wheels. This is the ideal tool to prepare your timber prior to varnishing with Le Tonkinois varnish.

www.flexidiscsander.co.uk

Tel: **01628 548840**

Le Tonkinois Varnish

Le Tonkinois is a natural oil based yacht varnish.
Perfect for outdoor, indoor and marine use. With Le Tonkinois varnish the options really are endless.

Combining unrivalled protection on materials including cork flooring, stone, metal and wood and brilliant permanent penetration, Le Tonkinois varnish leaves absolutely no brush marks and will restore the natural beauty of timber whilst removing your brush marks.

Flexible enough to move with the timber and able to withstand abrasion and impact, Le Tonkinois varnish is resistant to boiling water, UV, petrol, diesel and sea water. It won't crack, chip or peel off, making it perfect for all outside purposes as well as indoor.

www.letonkinoisvarnish.co.uk

Tel: **01628 548840**

---

hand tools and wood chisels specialist

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

Tool Nut .co.uk

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

Multi-Profile Japanese Sharpening Stones

280g: £15.00
1000g: £15.00
3000g: £17.00

Kevlar Gloves (pair)

for only £5.00

Henry Taylor 'Diamic' brand woodturning tools have been produced in Sheffield by skilled craftsmen, from the finest steel for more than one hundred and fifty years.

sharpening Tormek T4's & T8's

chisels

plane blades

measuring and marking

See Our NEW Improved Website
www.toolnut.co.uk

tool storage

punches

Next month

*GW*326 on sale 8 December

WIN!

A two- or five-night woodworking activity break for two at Gartmore House, worth over **£500!** This fantastic prize includes accommodation, all food, plus expert advice from tutors and guides

CHRISTMAS PROJECTS

TURNED WOODEN SNOWCOUPLE

Carl Jacobson shows you how to turn this lovely showcouple duo using leftover pieces of timber, which will make the perfect festive addition to any home

EASY WOODEN RIBBON BOX

Perfect for Christmas, Tristan Dare takes us through the steps for creating this wonderful wooden box complete with handmade ribbon

SKI-MAKING IN THE MOUNTAINS

Jamie Kunka of Lonely Mountain Skis is making a name for himself as one of the most exciting new hand-crafted wooden ski-makers around. Operating from his Perthshire workshop, we discover more about the fascinating steam-bending process

PLUS: MARC FISH FURNITURE DESIGN & MAKING SCHOOL → JOHN BULLAR ON PLANERS & THICKNESSERS DEFINING TIMBER DEFECTS → SIMPLE SCANDI TABLE → DAVE ROBERTS' 'WHAT THE DICKENS'

BACK TO NATURE

The escapology of wood

'Conversion' is a funny term to use when talking of timber. It suggests an about-turn, a volte-face; a change of nature and disposition – or in a religious context, a change of heart and even identity. It might describe rocks becoming metal, sand becoming glass, or sheep becoming sweaters and stews, but in the transition from tree to usable timber, wood remains very much the same. It dries out, distorts and toughens up, but its character, its structural nature, remains the same, unlike cast-iron that loses tensile strength; pottery that loses malleability, and sheep that lose everything.

Perhaps the term is used for fundamental reasons. What is the difference between a tree and a plank of wood (this is not a joke)? Answer: a tree is vertical and a plank (with any respect for health and safety) is horizontal. Another difference? Trees are round and planks are square. And again; trees are not immediately useful to humans (treehouses excepted) but the whole raison-d'etre of a plank is to be fit and ready for action building and furnishing our homes.

Good plank: bad plank

The biggest difference between a tree and a plank is more elemental yet. It is that when we see a tree, we see the outside of a tree but when we see a plank, we see the inside of a tree. The inside is nothing like the outside. The bark is fissured, knobbly and grey, whereas straight from the saw the wood is flat, patterned and golden. One of the most exciting parts of woodwork is opening a log. You don't know what you will find. It could be wonderful: it could be disappointing, but what it definitely will be is hitherto unseen by anyone in the history of the world except you. It hasn't existed until now: you have brought it into being. This might sound self-important or grandiose, but the skill of the sawyer, especially when converting an individual field-grown tree, makes the difference between a good plank and a bad one.

The reluctant convert

Conversion is not a happy process. A trunk sawn into planks stacked in stick still looks like a tree albeit a thin-sliced, Matisse-like exploded one. When those planks are taken, ripped down, shorn of bark and sapwood, squared up and cut to length, they seem to deny their origin. What was once their strength – the knot, which allows a branch of several tons to sway effortlessly in the breeze – becomes their weakness because it won't plane well and, structurally, ironically and perversely, now cannot be relied upon. The tree has been emasculated. Cut and dried. Standardised. Neutralised; for it used to support a myriad of associated life forms. Now any remaining life is dehydrated and chemically eliminated.

Let's not get too romantic. Some trees are cabbages. They are grown as a crop more efficiently than any vegetable, and they are (gratefully) harvested accordingly. Constructional timber as plain and straight as you like is an indispensable part of modern life. Even this can be used with sensitivity, but I'm really talking about denser timber that takes detail and finish.

Art Nouveau: woodwork for a dining room by Alexandre Charpentier, 1900–1901

Fine furniture often reinstates the curves that milling has so efficiently destroyed. With curves come movement, grace and tension – in other words, life. The rustic, haphazard and perfect balance of the tree is revived. No style of furniture does this better than Art Nouveau. Free-flowing forms emulate and celebrate nature. The skill involved is breath-taking. Timber, first robbed of its fluid lines has them returned as if the trauma of conversion has never taken place. Or rather, it has turned full circle. The living, breathing tree, straight-jacketed by straight lines, like spring shoots bursts its bonds. **GW**

GET A GRIP

triton
Precision Power Tools

NEW

SUPERJAWS PORTABLE CLAMPING SYSTEM

The iconic SuperJaws can be easily transported right to the job, whether indoors, outdoors or to the workshop floor. SuperJaws provides fast, hands-free clamping of material up to 955mm, and a massive clamping force of up to 1000kg. Constructed from tough, powder-coated steel, SuperJaws will hold anything - from car parts and bicycles to timber and tubing. Features include a lock / release switch for fast release of the workpiece, and reversible jaws for extra-wide clamping capacity.

Engineered Precision

tritontools.com

PT107 10" x 7" Heavy Duty Planer Thicknesser

The PT107 is perfectly suited to the discerning woodworker who expects professional and reliable performance from a solid, durable and compact machine. Whilst compact enough for smaller workshops and ideal for serious home or trade users, this machine boasts some impressive industrial features and is exceptionally smooth and accurate in operation.

5 YEAR GUARANTEE

Only

£1099.99

Sturdy Fence System
The fence can tilt up to 45° and is supported by a strong mounting system.

Central Column
The thicknessing table is supported by a sturdy central column for superior stability and easy rise and fall adjustment.

What They Say...

"The PT107 is extremely well built, with heavy cast iron tables polished to a fine finish.

This machine feels more like a proper industrial model in use. The sheer weight minimises any vibration."

The Woodworker

"**Top Quality** - This is a very well made machine with full adjustment of both infeed and outfeed tables. This is unusual in a home workshop machine and allows very fine adjustment to eliminate any gouging at the end (snipe)…Results are excellent, chip clearance is good and the changeover from planing to thicknessing is quick and easy."

DesmondW, Online Review

Price valid until 28.2.2018. E&OE.

RECORD POWER
ESTABLISHED 1909®

Over 100 years
Experience • Knowledge
Support • Expertise

RECORD POWER ESTABLISHED 1909
STARTRITE CORONET
BURGESS CamVac

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.

www.recordpower.co.uk Tel: 01246 571 020