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- Max. throat capacity w/fence: 12"
- Max. cutting height: 14"
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- Rip capacity: 31" R, 16 3/4" L
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Image by Patricia Crawford Bay 170

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BLOGS



Over the Workbench

Talkin' shop with former editor A.J. Hamler



This Business about Woodworking

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TAKING STOCK

with TOD RIGGIO

Jump off the fence and attend all the AWFS has to offer

I've got my plane ticket and hotel reserved for the AWFS fair, which runs July 19-22 in Las Vegas. How about you? If you're still on the fence about attending, consider the wealth of learning opportunities both on and off the show floor.

The show features a tremendous education program, called the College of Woodworking Knowledge, designed to meet the current needs of the show audience demographics. The 54 sessions will include topics to enhance business management acumen, improve skill sets and increase knowledge of the latest technologies as well as provide the latest in safety, workforce development and legislative updates.

Here are some of the offerings from the 10 tracks:

- **Business Management:** Trying to master digital marketing techniques? Don't miss the best-practices panel session, including Marc Spagnuolo ("The Wood Whisperer") and Kyle Toth, and learn how to strengthen your online and social media presence.
- **Workforce Development:** There will be three free sessions about critical efforts to strengthen the industry's workforce through the Woodwork Career Alliance and the Manufacturing Industry Learning Lab.
- **Cabinet/Millwork:** Learn from Architectural Woodwork Institute experts about the Architectural Woodwork Standards Version 2, how to increase sales through collaboration and how to improve efficiency with installation. TigerStop founder Spencer Dick will also speak on how to reduce hardwood costs by as much as 20-45 percent.
- **Furniture:** Refinishing pro Mitch Kohanek shares some of his best tips in "Touch-Up Repair to Damaged Wood and Coatings." In two separate sessions, woodworker Scott Grove will address cold-metal casting and "Curved Joinery, Edges and Inlays." Jonathan Benson,

author of "Woodworker's Guide to Veneering and Inlay," will cover "Matching Fine Veneers," and furniture design professionals from the American Society of Furniture Designers will share their insight on design and branding for furniture makers.

- **Small Shops Ten & Under:** There will be sessions on intellectual property, choosing the right spray equipment, dust collection management, and 3-D printing.

- **Industry 4.0:** New in 2017, machinery manufacturers and software experts share their knowledge on this newest phase of the manufacturing economy, how it will impact your business and the industry, and what you can do to prepare and incorporate Industry 4.0 concepts into your operation.

- **Software & Technology:** Two sessions will address software from different perspectives, CAM and CAD, what questions you need to ask yourself and how to prepare and ask the right questions of software sales representatives to make the right buying decisions.

- **Techniques & Applications:** Three sessions on plastics fabrication will be offered, plus a half-day conference on UV finishing technology.

- **Safety & Environment:** This track offers two free sessions to all attendees. "Legislation Affecting the Industry" is a panel of guest speakers from the EPA and American Forest and Paper Association to address combustible dust and formaldehyde emissions. "Developing a Written Workplace Safety Program" is an OSHA-compliant safety plan that can be applied to any sized shop. There will also be programs on dust collection and developing an effective machine guarding program.

- **Teaching:** Teachers can learn how to implement the Woodwork Career Alliance standards from peers who are conducting evaluations with their students. **W**

Working with tools and wood is inherently dangerous. We try to give our readers tips that will enhance their understanding of woodworking. But our best advice is to make safety your first priority. Always read your owner's manuals, work with properly maintained equipment and use safety devices such as blade guards, push sticks and eye protection. Don't do things you're not sure you can do safely, including the techniques described in this publication or in others. Seek proper training if you have questions about woodworking techniques or the functions of power machinery.

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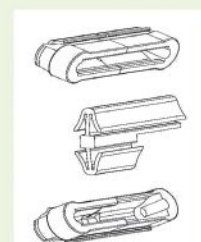
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NEWS DESK

Couple set to open Maine Coast Craft School

By Jennifer Hicks

As Drew and Louise Langsner wind down 40 years of teaching and boarding guests at their school, Country Workshops in Marshall, N.C., their friends Kenneth and Angela Kortemeier are creating a traditional woodworking school in Bristol, Maine.

The Kortemeiers have scheduled a late-July opening for the Maine Coast Craft School, specializing in hand-tool use. Most classes will have about four students.

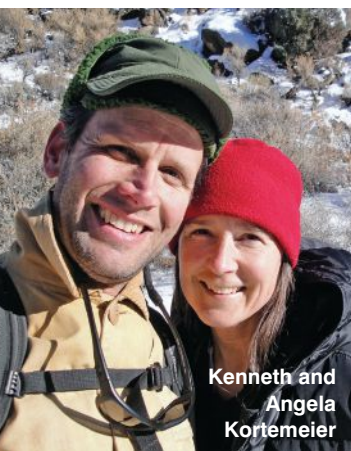
"We are modeling our school after Country Workshops in a lot of ways with both the school and the business aspect of it. Drew is just a really smart and organized person. He is a main adviser to us. We really like how he and Louise created their business and their school," Angela Kortemeier says.

Kenneth Kortemeier will be the primary instructor. His experience includes furniture making, boatbuilding and restoration carpentry. He interned at Country Workshops in the 1990s and apprenticed with Welsh chairmaker John Brown. He has also worked and taught classes at the Carpenter's Boat Shop in Pemaquid, Maine, for more than 10 years.

The Kortemeiers considered locating their school at Country Workshops, but decided on Maine for its amenities.



Kenneth Kortemeier, with a background in restoration carpentry, will be the primary instructor.



Kenneth and Angela Kortemeier



"Here it's only 10 minutes to a grocery store and not 40 minutes down a steep mountain. The first year we won't be doing lodging, but some of our neighbors are doing B&Bs for students and I'll be cooking lunch for people," Angela Kortemeier says.

The school, built with reclaimed lumber, will use solar power for lights and firewood for heat. The first project classes will cover ladderback and Welsh Windsor stick chairs, wheelbarrows and bowl carving.

For more, visit www.maine coastcraft.com. 



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AWFS adds town hall presentations to Vegas show

By Jennifer Hicks

The AWFS will highlight woodworking education in the new Higher Education Learning Pavilion and Education Town Hall presentations at the 2017 fair, scheduled for July 19-22 at the Las Vegas Convention Center.

The pavilion will showcase post-secondary and other training programs in the fair's machinery hall. The show is offering a limited number of complimentary booths at the pavilion to give program leaders a venue to network with the public.

The Education Town Hall, held on the AWFS Stage, will feature short presentations from program representatives. Schools that sign up in advance will have up to five minutes to explain their curriculum, facilities, equipment and other selling points. A moderated question-and-answer period will follow.

"AWFS strongly supports industry education programs, and these are two opportunities to showcase the great programs that are available," AWFS executive vice president Angelo Gangone said in a statement. "High school students and teachers, as well as industry professionals, can benefit from learning more about these programs and how to engage with them."

For more information, visit www.awfsfair.org. 



Stanley Black & Decker adds storage solutions group

Stanley Black & Decker recently formed Storage Solutions, which is comprised of its Vidmar, Lista and InnerSpace brands.

"This group and initiative are designed to meet the unique needs of a broad base of customers seeking specialized expertise and high-quality storage solutions that save premium floor space, manage inventory and support peak productivity," the company said in a statement.

The company also announced new Vidmar and Lista QuickShip Programs, offering offer online access to a variety of cabinets and accessories.

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THE PROFESSIONAL POCKET

Massachusetts woodworkers gain fellowship awards

By Jennifer Hicks

Two Massachusetts woodworkers — Silas Kopf of Northampton and Jack Mauch of Allston — were presented with Artist Fellowship awards from the Massachusetts Cultural Council.

The council has awarded 16 fellowships so far this year, which includes a \$12,000 cash prize. There were another 16 finalists, each receiving \$1,000.

Kopf and Allston were honored in the craft category. Kopf has been making studio furniture since 1973, decorated with traditional marquetry methods, and his work is in museums and private collections around the world. Mauch makes furniture and metalware.

Kopf says he received a similar award from the council about 25 years ago and appreciates the organization's mission to support artists.

"It's a nice acknowledgement of career achievement," Kopf says. "I think this fellowship program has been going on since the mid-70s and Massachusetts is one of the few states I know of in the country that is still actively supporting people with this kind of grant. With all of the potential cutbacks we're seeing in some similar organizations, at least we see our state stepping up to the plate wanting to encourage creativity."

The council will present more fellowships in the categories of film and video, music composition, and photography later this year.

For more, visit www.massculturalcouncil.org. [W](#)



Folding screen, Silas Kopf, "Two Blondes and a Brioche (at the Bistro)".

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Hard maple sales make recent gains

By Jennifer Hicks

Hard maple (*Acer saccharum*) is just like any other commodity in the world of domestic hardwoods, where popularity rises and falls depending on consumer interest. Lately, suppliers say they've seen an uptick in interest on the retail side, particularly with high-grade and figured stock.

"Sales have been stronger than ever before with hard maple and it means that designers and architects are looking for the premium look of hard maple, particularly because of its light color," says Rick Hearne, owner of Hearne Hardwoods in Oxford, Pa.

"Hard maple is steady for us right now, but not on fire. For us it's more of a retail item



for cabinet shops that need 100 board feet to complete an order. It's not one we specialize in as far as buying the logs and turning them into lumber. And of course an offshoot of hard maple is birds-eye maple, which we specialize in, and that has picked up over the past six months. People are using it for airplane interiors and musical instruments like guitar necks.

For the last four or five years prior to that, birds-eye has been dead in the water for us."

The natural growing range for hard maple is in the northern parts of the Eastern and Central U.S. and in southern parts of Canada. Suppliers interviewed say it's readily available in the U.S. and also coming down in price.

Bruce Stevens of Highland Hardwoods, a retailer and wholesaler in Brentwood, N.H., says hard maples sales have been dwarfed by a demand for soft maple in the last couple of years and that has affected its pricing.

"Hard maple has always been about \$20 more per board foot than soft maple, but the prices have been reduced from what they were six months ago because the demand is lower. But lowering the price hasn't had a great influence on demand because soft maple is what's in vogue right now, specifically because it's easy to work with and paint," Stevens says.

"There will always be a demand for naturally finished hard maple. Hard maple is also consistently brighter and whiter than soft maple. The soft has a yellower tinge to it, which people don't want."

Skip Kise of Good Hope Hardwoods in Landenberg, Pa., offers specialty hard maple, such as figured thick slabs.

"The 16/4 hard maple is impossible to keep in stock; there are only a select few people in the country doing it. And very good hard curly maple, like tiger, is also very hard to keep in stock because there are not as many good logs out there. I see steady sales for people making specialty things and custom furniture," Kise says.

Retail prices for No. 1 common and better 4/4 hard maple were quoted at \$4.50 to \$4.80/bf. Bird's-eye maple starts at about \$5/bf and costs considerably more for highly figured and thick cuts. [W](#)

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TOOLS & TECHNIQUES

Grizzly debuts new benchtop wood lathe

By Jennifer Hicks

Grizzly Industrial offers a new 10" cast-iron benchtop wood lathe, model G0624Z, a sturdier and more powerful version of the model G0624 that it replaces, according to the company.

The lathe weighs in at about 91 lbs. Product manager Todd Ransom says the extra heft helps reduce vibration for smoother operation.

The lathe has the capacity to turn plates, bowls and vases up to 10" in diameter and spindles up to 15-1/2" long. A bed extension

provides 38" between centers.

It also features an upgraded .7-hp motor, compared to the 1/1-hp motor on the previous model.

"The higher horsepower gives you more torque for cutting [harder] woods and making bigger cuts. It's especially helpful for roughing material before getting to the detailed work," Ransom says.

The lathe has the widest speed range of all of Grizzly's benchtop models. It has six speed settings, ranging from 480 to 4,023 rpm, ac-



cording to the company.

The lathe is sold with a MT2 spindle and tailstock taper, 3" faceplate, live rolling center, spur center and 6-5/16" tool rest. It sells for \$295. The optional bed extension costs \$74.

For more, visit www.grizzly.com. 

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Amana Tool router bits coated for longer life

By Jennifer Hicks

Amana Tool, a producer of specialized solid-carbide and carbide-tipped cutting tools, has a new line of CNC router bits with a special coating for extended tool life. The Spektra bits feature a nanocomposite coating, giving them extreme

nano-hardness and heat resistance, according to the company.

The coating, which Amana refers to as “nACo” by registered trademark, is a micro-thin ceramic material that has a multicolor tint and provides improvements in several critical aspects of router tooling, product manager Frank Misiti says. One highlight is that it enables the tool’s cutting edge to retain crucial sharpness and lubricity for longevity and enhanced cutting quality.

“Some of the early coatings that target the wood industry had a tendency to be thick and woodworkers in particular like their tools to be super sharp; they can’t afford to be ‘blunted down’ in some manner,” Misiti says.

The Spektra coating also provides longevity by preventing high heat and oxidation to the tool, which can be harmful to tool life and performance.

“While other coating options are an upgrade in overall surface hardness versus an uncoated tool, one also needs a coating that acts as a heat barrier. At the end of the day it’s heat, pure and simple, that ruins the highest quality of cutting tools.

“Spektra easily approaches a hardness of 4,500 Vickers when uncoated carbide measures perhaps 1,700 Vickers. These numbers mean little to anyone except the fellow looking for maximum production out of his compression router bit. These are the individuals that appreciate up to 2.5 to 3 times or more tool life, with perhaps the possibility of achieving another .001” or .002” chip load per tooth,” Misiti says.

The Spektra line includes solid-carbide compression bits for use on MDF and laminates and solid-carbide “O” flute tools for use on acrylic materials, other plastics and wood. The multicolored hues will dissipate upon use, but the coating will remain fully effective, according to the company.

Spektra solid-carbide spiral and compression bits are available in a variety of sizes for under \$40 each. They are also available in a five-piece kit (item No. AMS-182-K).

For more, visit www.amanatool.com. 



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Festool Airstream battery line reduces charging times

By Jennifer Hicks

Festool introduced its Airstream battery technology in April, which it says can reduce charging times by up to 60 percent. The charging system pulls cooled air through the battery's cells and exhausts hot air.

The Airstream system features a new charger (model SCA 8) and 18-volt batteries, available in 5.2 Ah and 6.2 Ah capacities. The new charger is compatible with Festool's previous 18-volt lithium-ion batteries.



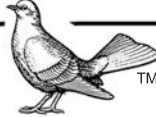
"Whether you are using existing Festool batteries or are looking to get into the new Airstream design, any user can benefit from the new charger," product manager Rick Bush says. "It charges our lithium-ion batteries much faster than our previous charger. We did this by increasing the charging current from three amps to eight amps and adding the cooling effect for Airstream batteries."

"As battery capacities have increased tremendously in recent years, so has charging time, and charging time is downtime. With the Airstream, the recharge time is significantly reduced. Users of a high-draw tool, such as [Festool's] TSC cordless track saw, will appreciate the difference."

The charger also features a countdown timer to indicate remaining charge time and a battery level indicator.

Festool is also introducing an Airstream 6-amp charger, model TLC 6, for the company's 18-volt, 3.1-Ah batteries.

For more, visit www.festoolusa.com or www.festoolcanada.com. **W**

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Benz rolls out Flex 5 series machining heads

By Jennifer Hicks

Benz Inc., a producer of machining heads for wood and other industries, presents its new Flex 5 and Flex 5 Plus adjustable angle head systems for CNC routers.

"These aggregates simply make CNC routers more versatile in milling, drilling and sawing operations. They allow a machine to do things it normally wouldn't be able to do without requiring the purchase of a new machine," sales manager Paul Roza says.

Compatible with any machine brand, the heads were an exclusive from Homag, but are now available from OEMs.

"These are well-proven heads that we have been building for many years. What makes the Benz Flex 5 and Flex 5 Plus unique is their ability to change the output angles using the C axis," Roza says.

The heads have a sawing swivel range of 0 to 90 degrees and a routing swivel range of 0 to 100 degrees. The maximum blade diameter is 240mm and maximum rotation is 15,000 rpm, according to Benz. An optional automatic tool changer is available.

"In a nutshell, the Flex 5 Plus allows you to do an automatic tool change to the aggregate tool itself through the machine's computer. Normally, an aggregate is picked out of a tool carousel, but here with the Flex 5 Plus you put a second carousel in and it holds smaller connectors that only fit into the end of the Flex 5," Roza says.

The Benz Flex 5 and Flex 5 Plus cannot be retrofitted. Customers interested in outfitting a CNC router with the Benz Flex 5 or Flex 5 Plus should contact their OEM machine builder to ask for additional details and pricing.

For more, visit www.benztooling.com. 

Hidden hardware has given shops a leg up

By John English

In the woodshop, hidden fasteners have traditionally had two very distinct identities. They have been either a mode for cabinetmakers to speed up assembly or a way for end users to assemble knockdown (KD) furniture in their homes and offices.

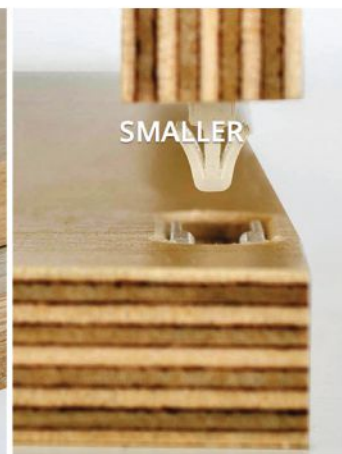
In the last couple of decades, companies such as Ikea have made an art form of requiring consumers to assemble their own furniture and cab-

inets. With the concurrent growth of outsourcing in the cabinet industry, where factories build components and ship them flat-packed to small custom shops, the two worlds are beginning to overlap. Those suppliers are borrowing some of the big-box philosophy and delegating assembly duties. Thankfully, the cabinet shops have access to superior hidden hardware.

Recent additions

Take, for example, the award-winning Irish

company Ovvo (ovvotech.com), which won the Best of the Best at Interzum 2017 and is just beginning to enter the North American market. Ovvo's new V-range connector can be used in sheet stock and solid boards that are thicker than 12mm (1/2") and it takes advantage of the company's patented Push-Click-Connect locking mechanism. The design is a dovetail-shaped plastic male that pops into an embedded female: simply mill the holes with a special router bit, insert the halves



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The SmartShop LD4 from Laguna Tools.



LockDowel's fasteners.

and click them together. The V-range and a larger fastener are both available for CNC machining or the pockets can be milled with either the company's stand-alone machine or a handheld tool.

One of the most talked-about innovations in hidden fasteners of late has been the SmartShop LD4 from Laguna Tools (laguna-tools.com). With automatic boring and insertion, this machine inserts LockDowel brand EClip hidden fasteners (lockdowel.com/eclips) in assemblies such as cabinets, drawer boxes, closets, desks, solid-wood furniture and other applications. If you're not familiar with

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FastenLink's plastic dowels.



Festool's Domino KD hardware.

the LockDowel clip, it's a U-shaped, completely hidden fastener system that is available in either metal or plastic dowels and it locks into particleboard, MDF, plywood and solid hardwood. The barbed tines come in a variety of lengths for different stock thicknesses and materials. LockDowel fasteners are fully integrated in popular woodworking software such as Cabinet Vision, Mozaik, Top Solid, Solid Works, Microvellum, Imos and others. There's a really well-done four-minute video on the website that shows how cabinets can be assembled without tools in the shop or on the job site.

FastenLink (fastenlink.com) also makes a hidden fastener, a plastic dowel with a patent pending shape: a groove is cut into the tip of the dowel, creating a shoulder that slides into a tapered groove cut into the wood. The action guides the dowel until it clicks into the locked position, seamlessly connecting the adjoining pieces. FastenLink received the Challengers Distinguished Achievement Award at IWF in Atlanta.

Festool (festoolusa.com) entered the hidden fastener market a few years ago with its Domino system that essentially replaces dowels with wooden loose tenons. One of the biggest

advantages to Domino is that it's portable, so mortises can be milled in seconds out on the job site or at the workbench. Now Festool has taken the concept to the next level with Domino KD hardware. A woodworker can design, build and finish furniture or even millwork such as stair parts and then quickly disassemble them, take them to the job and reassemble with only a hex wrench. The new fasteners work with the Domino XL (DF 700) joiner to create either flat or corner joints and the connectors require no templates or complex measuring. They are not completely hidden, as access is required on the blind side for



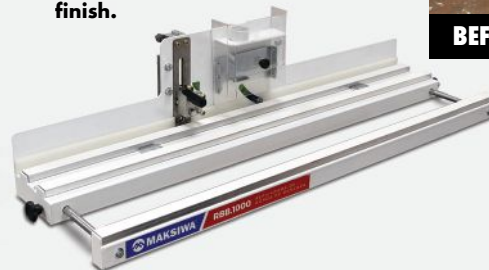
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Kreg's plug-cutting kit.



Striplox connectors from Joinlox.



Lamello's Mx2 kit for Invis fasteners.



the hex wrench. To disguise that, the company provides snap-in caps.

Something old, something new

Another supplier with a strong history in hidden fasteners is Kreg Tool (kregtool.com). The company has been a leader in pocket-hole joinery for face frames and other assemblies for a long time and continues to innovate. The latest offering is a family of custom pocket-hole plug-cutting bits that let a woodworker hide screw heads. Different-sized cutters are made to fit in any Kreg jig and create custom plugs from any wood species. The plugs can then be glued into the hole above the screw

and sanded flush. The bit shears the wood fibers to deliver a smooth, consistent plug that completely hides the fastener.

The Australian company Joinlox (joinlox.com) has been building hidden fasteners for about a decade and has won numerous industry awards including the Visionary New Product Award at AWFS 2015. In February, the company's Striplox division released three new products. The 180D is a pair of interlocking discs and the bottom one is in two halves. One half is screwed to each of the two parts to be joined (for example, laminate counter-tops). Then the second disc fits over that and screws on like a jam jar lid, drawing the joint

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together. Joinlox's new No. 20 biscuit is a nylon biscuit with built-in barbs that is just hammered in place — no glue required. And the company's Megalox is a pair of interlocking nylon strips that are mortised into grooves, glued or screwed in place, and then slid together to create a mechanical lock. The grooves can be milled with a standard straight bit.

Zipbolt (zipbolt.com.au) makes a number of hidden fastener solutions for projects from stairs to worktops, furniture and joinery, available from Lee Valley (leevalley.com) and Richelieu Hardware (richelieu.com/us/en) and others.

Magnets and more

The Invis line of fasteners from Lamello (swissinvis.com) uses magnets to tighten steel components after they have been encased in wood parts. A new system (called the Mx2) was released recently: it's a complete package that includes everything a woodshop needs to get started: 20 fasteners, spacers, tools, bushings and even a drill bit. Projects assembled with Invis can be taken apart just as easily.

A family of aluminum Z Clips from Monarch Metal Fabrication (monarchmetal.com) is a fast and easy solution to installing wall panels, signs and artwork. These hidden fasteners work the same way a traditional French cleat works: one part goes on the wall

and the other goes on the back of the panel. Then the panel is slipped down onto the wall cleat. They avoid screwing into the face of a panel and Z Clips offer a couple of big advantages over wooden versions: they have a thinner profile and they wedge together, locking the panel in place. However, they also provide for easy and fast future removal or dismantling of panels, so they're ideal for restaur-



Senco's composite fasteners.

rant décor, art galleries, elevators and the like. So decorative panels, framed mirrors in hotels, medicine cabinets and similar installations can all be hung without having to fill nail holes on site. Z Clips come in 3/8" or 5/8" depths and in lengths from 1-1/2" to 12", with or without pre-drilled holes.

Senco (senco.com) has recently introduced a line of polymer resin and fiberglass nails that can be sanded, shaped and cut without damage to router bits or blades, which makes them ideal for CNC fixturing. They can replace clamps in many assembly situations, holding parts while the glue cures — and they're sanding-belt safe after it dries. Plus, there's no rust or corrosion and the plastic ones can be painted or stained. **W**

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FINISHING

with GREG WILLIAMS

The heat is on: charring can be a cool finish

When my oldest son was in the 11th grade he took a short shop course as part of an agricultural program. A beginning project was to construct a magazine rack out of white pine. The finish was accomplished by scorching the wood with a propane

torch to create a warm amber tone and darker toasted pattern. It might have been topcoated with a polyurethane varnish. I suspect that the teacher had the students finish this way to save time and money on materials and make it fun.

Years later, I had customers in Texas who used a similar technique on other woods. They were striving for an even char and a rustic appearance. The charred wood was wire-brushed to remove some of the softer or more burned portions (cellulose) and leaving the harder and less consumed parts (lignin) that altered the texture as well as the color of the wood. Other coloring processes such as stains, glazes and crackle lacquer were often used in conjunction with the charring to give a more complex look.

Making a comeback

I'm seeing new furniture, especially occasional tables, stools, benches and dining tables, similarly treated. The look ranges from a subtle toasting to a more drastic charring, often with chunks of the char scraped or pulled away.

There are a number of terms for variations of the processes used to treat wood with heat. One of the more interesting versions is called shou-sugi-ban or yakisugi.

One history of these techniques, beginning in Japan as a result of wood shortages and a desire for a durable and decorative finish or surface treatment, describes charring of cedar wood to simulate age and wear. Sugi is the name for Japan's national tree, Japanese cedar (*Cryptomeria japonica*). Charred cedar has been in use in Japan since the 1700s and possibly earlier. The techniques have recently been revived in Japan, attracting attention from architects and designers worldwide.

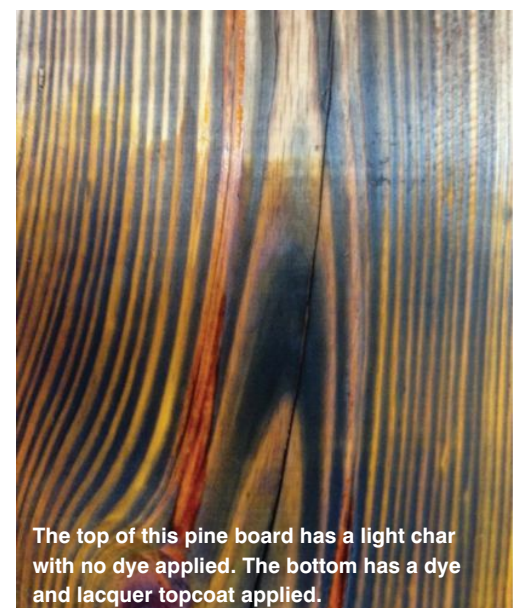
The process changes many of the wood's characteristics. The surface color begins to

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The top of this pine board has a light char with no dye applied. The bottom has a dye and lacquer topcoat applied.



Pine with a light char, dye and lacquer topcoat applied.

change after heat is applied for only a short time. And as the moisture is driven off, the wood cells begin to shrink. Cellulose at the surface of the wood is softer and easier to ignite at lower temperatures and vaporizes and burns before the harder, less reactive lignin is greatly affected. This usually heightens the contrast between the two.

Insects and other life forms that feed on wood don't care for the charred technique. The char makes it difficult for them to get to the nutrients available in the untreated wood and I can only imagine it doesn't taste that great. This feature is especially important in outdoor uses, such as shingles, siding, decking and fences. Claims of charred woods lasting 80 years without coatings are common.

Fire resistance is hard to quantify. It could refer to a length of time that

a substance can experience a particular temperature, under certain conditions, without igniting or continuing to support combustion. The char and ash on the surface serve as a thermal insulator, helping to prevent the lignin from reaching the temperature necessary for ignition. This char layer also acts to keep oxygen from the combustible wood below.

Feel the burn

A traditional method for producing shou sugi ban, suitable for shingles, fencing, flooring or wall panels, is to bind three Japanese cedar boards – preferably of equal length, thickness and width – with wire to form a long triangle. Start a fire at the base. Flames will rise through the chimney created by the triangle and char the boards. This is best done outside in a wind-protected area. Douse burning boards with water to control the amount of char.

After letting the boards dry completely, brush off excess char with a stiff bristle brush. A clear coating, either a film finish such as varnish or a penetrating oil finish, can be applied. Uncoated char will transfer color to hands or clothing.

The goal is to char the top 1/8th of each board. Deeper charring could cause severe checking and cracking, especially with the grain.

An alternative is to use a butane burner or electric heat gun. Be careful if you're charring structural components as the heat might degrade physical characteristics such as load-bearing capacity.

With its recent rise in popularity, charring is well worth adding to your repertoire. [W](#)

Greg Williams, formerly senior touchup and finishing instructor for Mohawk Finishing Products, is now a freelance instructor and consultant.

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**Trying to be too many things to too many different kinds
of customers can lead to an identity crisis**

Years ago I worked on a 3,000-sq.-ft. remodeling project in a well-established waterside neighborhood of Seattle. Although it was a large project spanning a four-month period, it still only involved half the main level of a two-story home. Eight years prior, we completely rebuilt the lower level, turning it into a self-sustaining commercial-grade flat. Needless to say, the savvy homeowner knows what she likes and gets what she wants.

Managing a job like this is not rocket science, but it does require a keen sense of the trades involved, attention to detail and, most of all, a tenacity to stay on top of every task, every day. One of the things I have to guard against on multiphased projects like this is how far to extend my own company. Just because we can do certain things does not mean that we should.

Understanding the identity of what you provide and who you are will not only give confidence to your clientele, but your business will grow and you'll sleep better at night not having to suffer through an identity crisis.

Enter the 'window guy'

Included in the scope of work for the project was to replace several large custom wood windows situated on the second story. I've installed many windows through the years, but not all windows and situations are the same. Having a firm grip on the identity of our firm's function led me to the decision this was a job much better suited to a specialist. And, taking it one step further, a specialist who not only makes it their business to

install windows, but one who is familiar with the specific manufacturer's process.

I talked to the local sales rep for the manufacturer and was given the name of a contractor who was certified through the manufacturer's install program and came highly recommended. I set up a meeting with the contractor who was more interested in talking about his truck that got keyed by an angry customer than he was fine-tuning the specifics of a complex installation. Not feeling very confident in his ability, it wasn't until he was getting ready to leave that I realized his company was suffering from an identity crisis.

In the back of his truck was a full kitchen's worth of cabinet doors haphazardly arranged like they had been chucked in rather than stacked. With my curiosity piqued, I asked if he was taking a trip to the dump. My comment got him riled up as he went on for another 30 minutes about a dissatisfied customer who complained about the joints on the doors opening up. Because he was the "window guy," I asked why that was his problem. He told me he was expanding the business into kitchen remodeling, bought a biscuit jointer and built the doors himself.

"Cabinet doors are nothing more than a few pieces of wood glued together. Why should I pay money to have someone else do it when I can easily do it myself," he said. He wasn't seeing the folly of his argument. Not only had he lost my confidence, he didn't even know who he was. Like a drowning man grasping at anything to save himself, he was blaming others for the problem he had created.

A little know-how

There are basic guidelines we can follow to ensure we are made aware of when identity-crisis symptoms arise. We'll never have complete control over life's circumstances, but when those storms come we at least want to have a fighting chance against the rocks with a working rudder.

Know your boundaries: Focus on your strengths and what you enjoy doing. Being something you're not is a recipe for disaster.

Know your product and process: A surefire way to kill an identity is to do and say things about something you know nothing about. Boasting about skills you do not possess is the same as building a house without a foundation. It not only leads to the demise of the building, but ultimately the self-confidence of the person making the claims. Two words are all you need to know when it comes to becoming an expert without an identity crisis: hard work.

Learn to be content, not complacent: We've all heard stories about the successful person

who broke barriers imposed by others. Their story unfolds with the fruit of their success being a direct result of having pressed the envelope of what they were told they could and could not do. There is some definite truth behind this principle, providing you hold true to what your abilities are. Just because you work hard at something does not mean you're guaranteed a certain result. Work hard, yes, but learn to be content in what your abilities are. Too many people lay everything on the table expecting a preconceived reward. This too can lead to an identity crisis by the self-esteem erosion that occurs when expectations do not materialize. Being content is very underrated.

Learn its power and apply it to your life.

My theory is you should always focus on the whole man. Make choices that reap results in all facets of life. Generally speaking, those who have an identity crisis in work-related positions usually always suffer from similar crisis in their personal life. And those businesses that don't have an identity crisis usually have owners without a personal crisis as well. It's two sides to the same coin, so as you work on yourself, the natural outcome will reap rich rewards in your professional life as well. **W**

David Getts is a certified kitchen designer and owner of David Getts Designer Builder Inc. in Seattle.

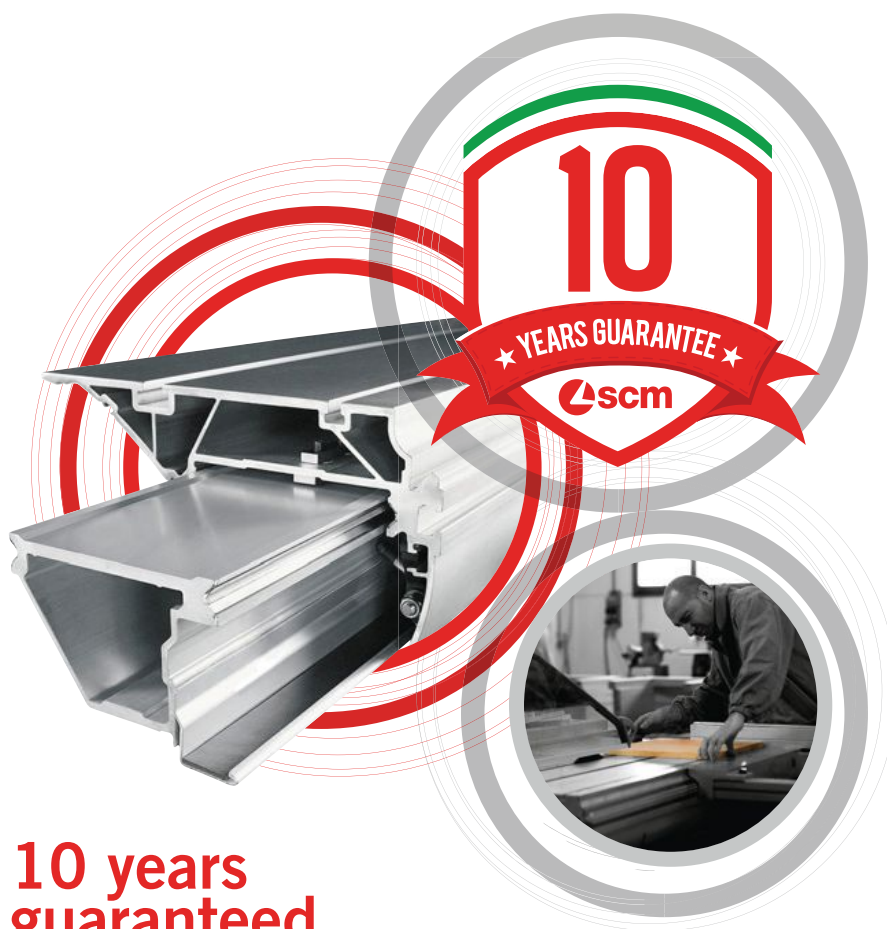
Remodeling market may slow a bit

Strong gains in home remodeling and repair activity are expected to ease moving into next year, according to the Leading Indicator of Remodeling Activity by the Remodeling Futures Program at the Joint Center for Housing Studies of Harvard University.

The LIRA projects that annual growth in home improvement and repair expenditure this year will remain above its long-term trend of 5 percent, but will decline steadily from 7.3 percent in the first quarter to 6.1 percent by the first quarter of 2018.

"Homeowners are continuing to spend more on improvements as house prices strengthen in most parts of the country," Chris Herbert, the center's managing director, said in a statement. "Yet, recent slowdowns in home sales activity and remodeling permitting suggests improvement spending gains will lose some steam over the course of the year."

"The remodeling market is approaching a cyclical slowdown after several years of steady recovery," added Abbe Will, research analyst for the center. "While the rate of growth is starting to trend down, national remodeling expenditures by homeowners are projected to reach almost \$320 billion by early next year."



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THE CUTTING EDGE

with R.W. LEE

SketchUp makes CAD learning comfortable

When @Last Software released SketchUp in 2000, woodworkers found an alternative to the high price and learning obstacles of CAD programs.

SketchUp remains a relatively inexpensive option and still has the feel of drawing with pencil and paper. Google acquired SketchUp in 2006, followed by Trimble in 2013. Trimble applies technology to a wide variety of mature industries, such as Building Information Mod-

eling to plan, design and construct buildings and infrastructure.

Part of SketchUp's appeal is its versatility. Third-party software developers can easily write plugins and extensions that increase the program's speed and capabilities to complete a given specialized task. And nowhere is that more evident than in the cabinet design. SketchUp can enhance the capabilities and efficiency of any cabinet shop — large or small — and with a mini-

mal outlay of time and money.

There are basically two ways to use SketchUp to design cabinets. The first is the draw-it-yourself method. The second is to buy a plugin or extension to do the work for you.

If you are comfortable with the many features of SketchUp, then by all means take the plunge and begin designing and drawing cabinets. The way to think about designing and drawing the cabinet is to use the same thinking and steps you would as if you were cutting the sheet goods and solid wood.

The first step is to draw a rectangle to represent the depth and width of your cabinet. Then add the cabinet's components. You'll quickly learn how to use the Component Tool, which essentially creates a copy of a cabinet design that can be saved for future use. If you need to modify a component, the tool automatically adds the change to all of the similar cabinets in your design. Jay Bates provides an excellent demonstration of the Component Tool in Episode 168 on his YouTube channel.

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Another tool — Dynamic Components — lets the user reconfigure a design with a dedicated menu to a specific piece. You can use shared Dynamic Components — designs created by other users and manufacturers in the SketchUp 3-D Warehouse — or pull from a personal library. This is a real time-saver, particularly if you're designing an entire kitchen with upper and lower cabinets, hardware, countertops and appliances.

Dynamic Components can be used in any version of SketchUp, but they can only be created in the fee-based Pro version.

There's also an Extension Warehouse, which contains the plugins developed by third-party firms. You can either purchase or subscribe to an extension. A purchase lets you download the extension and get future upgrades at no additional cost.

The beauty of SketchUp is its simplicity, but there's still a steep learning curve. My best advice is to consult the SketchUp Help Center. Other helpful resources include YouTube and Bob Lang's book, "SketchUp for Kitchen Design", from readwatchdo.com. **W**

Coral and Atlantic Machinery renew distribution deal

Coral S.p.A. of Italy and Atlantic Machinery Corp. in New Milford, Conn., announce a renewed distribution agreement for the sale of Coral's woodworking line of dust collectors and antipollution products in the U.S.

"This agreement, effective March 1st, 2017, follows a cooperation in the marketing and sales in this country, going back to the mid 1980s, with thousands of units sold and still in service today," the companies said in a statement.

"With many hundreds of portable and stationary dust collectors, plus spray booths, cartridge filters, and down draft tables in the field, Coral has become a household name in the woodworking field. Their innovations have made them an undisputed leader in the industry. Coral products, including original factory spare parts, will be stocked in a separate warehouse strategically located in North Carolina, to better serve the woodworking community."

For more, visit www.atlanticmach.com.

SAi announces new design contest

SA International (SAi), a provider of software solutions for the professional sign making, wide-format digital printing and CAD/CAM for CNC machining industries, is seeking entries for its EnRoute Design Contest.

"As the first competition of its kind from SAi, the challenge aims to encourage EnRoute users to demonstrate the creative accomplishments that they have achieved from harnessing the feature-rich capabilities of the software. Individuals or groups of four are invited to submit designs/projects from one of four categories: signs, architectural millwork, furniture and novelty," the company said in a statement.

The overall winner will receive \$1,000 cash prize as well as an all-expenses paid trip to the EnRoute Summit, scheduled for Sept. 27-29 in Salt Lake City.

The contest is open to North American-based users.



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- Max. rabbeting capacity: 1/2"
- Cutterhead dia.: 3", Speed: 4800
- Cutterhead knives: 4 HSS; 8" x 3/4" x 1/8" (G0656)
- CPM: 20,000 (G0656), 21,400 (G0656X)
- Approx. shipping weight: 522 lbs.

4-Knife Cutterhead

G0656 ONLY \$895⁰⁰

Spiral Cutterhead

G0656X ONLY \$1295⁰⁰



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12" X 83 1/2" PARALLELOGRAM JOINTER

- Motor: 3 HP, 230V, single-phase, 15A
- Precision-ground cast iron table size: 12 3/4" x 83 1/2"
- Max. depth of cut: 1/8"
- Rabbeting capacity: 3/4"
- Cutterhead dia.: 3 3/8"
- Cutterhead speed: 4300 RPM
- CPM: 19,800
- Footprint: 44 1/4" L x 18" W
- Approx. shipping weight: 1056 lbs.



Spiral Cutterhead!

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G0609X \$2795⁰⁰ SALE \$2650⁰⁰

\$295⁰⁰
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PROFESSIONAL SPINDLE SHAPERS

- Motor: 5 HP, 220V, single-phase, TEFC (G5912Z) or 7 1/2 HP, 220V/ 440V*, 3-phase, TEFC (G7214Z)
- Table size: 35 1/2" x 28"
- Spindle sizes: 3/4", 1", 1 1/4"
- Spindle speeds: 3600 – 10,000 RPM
- Spindle travel: 3 1/4"
- Max. cutter dia.: 5 5/8"
- Approx. shipping weight: 604 lbs. (G5912Z), 613 lbs. (G7214Z)

5 HP, Single-Phase

G5912Z \$2775⁰⁰ SALE \$2595⁰⁰

7 1/2 HP, 3-Phase

G7214Z \$2995⁰⁰ SALE \$2850⁰⁰



\$159⁰⁰
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7 1/2 HP, 3-PHASE DUAL-FILTRATION HEPA CYCLONE DUST COLLECTOR

- Motor: 7 1/2 HP, 220V/ 440V*, 3-phase, 25A/ 12.5A, TEFC Class "F"
- Intake hole size: 10"
- Max. static pressure (inches of water): 14.7"
- Primary filter: 99.9% at 0.2-2 microns
- Secondary filter: HEPA rated 99.97% @ 0.3 microns
- Airflow capacity: 3468 CFM @ 4.3" SP
- Approx. shipping weight: 1139 lbs.

DUAL-FILTRATION DESIGN WITH EXTERNAL HEPA FILTER!



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G0637HEP ONLY \$5050⁰⁰

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8" X 76" JOINTERS

- Motor: 3 HP, 240V, single-phase, TEFC, 3450 RPM, 15A
- Max. depth of cut: 1/8" • Max. rabbeting capacity: 1/2"
- Cutterhead dia.: 3 3/8" (G0490), 3 3/4" (G0490X)
- Cutterhead speed: 4800 RPM
- Cutterhead knives: 4 HSS, 8" x 3/4" x 1/8" (G0490)
40 inserts (G0490X)
- Approx. shipping weight: 564 lbs.

4-Knife Cutterhead

G0490 \$1025⁰⁰ SALE \$995⁰⁰

Spiral Cutterhead

G0490X \$1395⁰⁰ SALE \$1250⁰⁰



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THE ULTIMATE 16" JOINTERS

- Motor: 5 HP, 220V, single-phase, 25A (G9953ZX); 5 HP, 220V/ 440V*, 3-phase, 14A/ 7A (G9953ZXF)
- Precision-ground cast iron table size: 16 1/4" x 99 1/4"
- Cutterhead speed: 5000 RPM
- Max. depth of cut: 5/16"
- Bevel jointing: 0–45° L/R
- Center mounted fence: 6 5/8" x 43 1/4"
- Approx. shipping weight: 1742 lbs.

3-Phase, Spiral Cutterhead

G9953ZXF \$6595⁰⁰ SALE \$6295⁰⁰

Single-Phase, Spiral Cutterhead

G9953ZX \$6795⁰⁰ SALE \$6495⁰⁰



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PROFESSIONAL TILTING SPINDLE SHAPERS

- Motor: 5 HP, 220V, single-phase, 25A (G5913Z); 7 1/2 HP, 220V/ 440V*, 3-phase, 20A/ 10A (G7215Z)
- Table counterbore: 7" x 5/8" D • Footprint: 26" L x 27" W
- Precision-ground cast iron table size: 28" x 35 1/2"
- Spindle travel: 3 1/4" • Spindle tilt: 45°
- Spindle sizes: 3/4", 1", and 1 1/4"
- Spindle speeds: 3600 – 10,000 RPM
- Spindle capacity under nut: 5 5/8" (1 1/4" spindle)
- Approx. shipping weight: 710 lbs.

5 HP, Single-Phase

G5913Z \$3250⁰⁰ SALE \$2995⁰⁰

7 1/2 HP, 3-Phase

G7215Z \$3375⁰⁰ SALE \$3195⁰⁰



TLTNG SPINDLE!

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10 HP, 3-PHASE DUAL-FILTRATION HEPA CYCLONE DUST COLLECTOR

- Motor: 10 HP, 220V/ 440V*, 3-phase, 30A/ 15A, TEFC Class "F"
- Intake hole size: 12"
- Max. static pressure (inches of water): 16.8"
- Primary filter: 99.9% at 0.2-2 microns
- Secondary filter: HEPA rated 99.97% @ 0.3 microns
- Airflow capacity: 4029 CFM @ 4.3" SP
- Approx. shipping weight: 1555 lbs.

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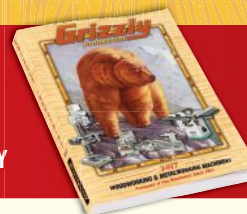
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COMBINATION JOINTER/PLANER WITH FIXED TABLES

- Motor: 2 HP, 240V, single-phase, 7.5A
- Jointer table size: 7 $\frac{3}{8}$ " x 45 $\frac{1}{8}$ "
- Cutterhead knives: 3 HSS single-sided
- Knife size: 6 $\frac{1}{4}$ " x $\frac{3}{16}$ " x $\frac{1}{8}$ "
- Cutterhead dia.: 2 $\frac{1}{16}$ "
- Cutterhead speed: 5400 RPM
- Max. planing height: 6"
- Planer feed rate: 11 & 22 FPM
- Planer table size: 19 $\frac{1}{4}$ " x 14 $\frac{1}{8}$ "
- Fence: 4 $\frac{3}{4}$ " x 41 $\frac{1}{8}$ "
- Approx. shipping weight: 418 lbs.



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G0809 ~~\$1495.00~~ **SALE \$1395⁰⁰**

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shipping
weight 418 lbs.

12" COMBINATION JOINTER/PLANER WITH CARBIDE INSERT SPIRAL CUTTERHEAD

- Motor: 5 HP, 220V, single-phase, 25A • Jointer table size: 14" x 59 $\frac{1}{2}$ "
- Cutterhead dia.: 3 $\frac{1}{8}$ " • Cutterhead speed: 5034 RPM
- Cutterhead: Spiral, 32 inserts • Cutterhead insert size: 15 x 15 x 2.5mm
- Max. jointer depth of cut: $\frac{1}{8}$ "
- Max. jointer width of cut: 12"
- Floor-to-table height (Jointer): 35 $\frac{1}{2}$ "
- Fence: 6" x 51 $\frac{1}{4}$ "
- Planer feed rate: 22 FPM
- Max. planer depth of cut: $\frac{1}{8}$ "
- Max. planer cutting height: 8"
- Footprint: 26" L x 19 $\frac{1}{2}$ " W
- Approx. shipping weight: 704 lbs.



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G0634XP ~~\$2550.00~~ **SALE \$2395⁰⁰**

\$159
shipping
weight 704 lbs.

15" PLANERS

- Motor: 3 HP, 240V, single-phase, 15A
- Max. stock thickness: 8"
- Max. cutting width: 15"
- Min. stock length: 8"
- Max. cutting depth: $\frac{1}{8}$ "
- Feed rate: 16 & 30 FPM
- Cutterhead dia.: 3"
- Cutterhead speed: 4800 RPM
- Cutterhead knives: 3 HSS, 15" x 1" x $\frac{1}{8}$ " (G0453); 74 inserts (G0453Z)
- Precision-ground table size: 15" x 20"
- Approx. shipping weight: 675 lbs.



G0453Z shown

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3-Knife Cutterhead
G0453 **ONLY \$1250⁰⁰**

Spiral Cutterhead
G0453Z **ONLY \$1795⁰⁰**

20" PLANERS

- Motor: 5 HP, 240V, single-phase, 19A
- Max. cutting width: 20"
- Min. stock length: 8"
- Max. cutting depth: $\frac{1}{8}$ "
- Feed rate: 16 FPM & 20 FPM
- Cutterhead dia.: 3 $\frac{3}{8}$ "
- Cutterhead knives: 4 HSS, 20" x 1" x $\frac{1}{8}$ " (G0454); 98 carbide inserts (G0454Z)
- Cutterhead speed: 4800 RPM
- Table size: 20" x 25 $\frac{1}{4}$ " (20" x 55 $\frac{1}{2}$ " w/ extension)
- Approx. shipping weight: 932 lbs.



G0454Z shown

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208624 US

4-Knife Cutterhead
G0454 ~~\$1750.00~~ **ONLY \$1495⁰⁰**

Spiral Cutterhead
G0454Z ~~\$2675.00~~ **ONLY \$1895⁰⁰**

Built-in Mobile Base

\$189
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weight 932 lbs.

20" PLANER WITH SPIRAL CUTTERHEAD

- Motor: 5 HP, 220V, single-phase
- Max. cutting width: 20"
- Min. stock length: 7"
- Max. cutting depth: $\frac{1}{8}$ "
- Feed rate: 16 & 20 FPM
- Cutterhead dia.: 3 $\frac{3}{4}$ "
- Cutterhead speed: 5000 RPM
- Table size: 25 $\frac{1}{4}$ " x 20" (56" x 20" w/ extensions)
- Overall size: 39" W x 56" D x 41" H
- Approx. shipping weight: 909 lbs.



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AWARDS

EXTREME
SERIES

G1033X ~~\$3225.00~~ **SALE \$3095⁰⁰**

\$189
shipping
weight 909 lbs.

24" EXTREME-DUTY PLANERS WITH SPIRAL CUTTERHEAD

- Cutterhead motor: 10 HP, 220V, 3-phase, 30A (G9961); 10 HP, 220V/ 440V*, 3-phase, 30A/ 15A (G9741)
- Feed motor: 1 HP • Feed rate: 20-40 FPM
- Precision-ground cast iron table size: 24" x 35 $\frac{1}{2}$ "
- Max. stock thickness: 9" • Min. stock thickness: $\frac{1}{4}$ "
- Max. cutting depth: $\frac{5}{16}$ " (G9741), $\frac{3}{16}$ " (G9961)
- Max. cutting width: 24" • Min. stock length: 10 $\frac{1}{2}$ "
- Cutterhead knives: 4 HSS, 24 $\frac{1}{8}$ " x 1 $\frac{3}{16}$ " x $\frac{1}{8}$ " (G9741); 162 carbide inserts, 14 x 14 x 2mm (G9961)
- Cutterhead dia.: 4 $\frac{1}{8}$ "
- Cutterhead speed: 5000 RPM
- CPM: 20,000 (G9741); 30,000 (G9961)
- Approx. shipping weight: 1935 lbs. (G9741); 1980 lbs. (G9961)



G9961 shown

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4-Knife Cutterhead
G9741 ~~\$7995.00~~ **SALE \$7495⁰⁰**

Spiral Cutterhead
G9961 ~~\$9250.00~~ **SALE \$8500⁰⁰**

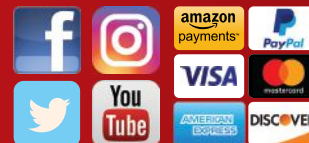
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Steve Hanson

COASTAL CONNECTION

Hanson Woodturning in Maine tackles a diverse set of projects from among a national clientele

By Jennifer Hicks

Steve Hanson, owner of Hanson Woodturning in the village of Cape Porpoise in Kennebunkport, Maine, does anything but mundane lathe work. On a daily basis, he and his two full-timers find themselves engaged in making custom architectural products and ornamental wood components and using just about any type of hardwood.

"We are a diverse shop. We can work with anything, but we just don't build kitchen cabinets or work with panels. No laminates, Formica or veneering. We like working with solid wood for sure," Hanson says.

A business owner for more than 20 years, Hanson develops his customer base through relationships with architects, homebuilders, designers and other woodworkers. Through these partnerships, he gets commissioned to produce furniture, staircases, balusters, finials, bedposts, columns and more, many of which are part of historical restorations.

Whether he's asked to create products using contemporary, Colonial,

Federal, English or traditional design styles, his ultimate focus is quality and perfection.

GETTING STARTED

Hanson's first exposure to woodworking was at Kennebunk High School, where a great shop teacher boosted his enthusiasm to work with his hands.

"I built some furniture in high school and did a little bit of turning. That's where I kind of found my direction," Hanson says.

After graduating in 1987, he worked with several builders in the Kennebunk area building elaborate wood projects in high-end homes. Several years later, he found work with a boatbuilder in Kennebunkport, the next town over.

"I worked on 70' to 80' boats as the ships' carpenter building bulkheads and companionways and other things. It was a lot of fun. I did



Hanson's "Cape Porpoise Stool".



Hanson creates all types of specialty furniture such as this kitchen center island.



Hanson's shop and cutting tool drawer.

that for three or four years.

"While I was building boats, I started collecting machines in the garage of the house I was renting with some friends. Then I just started doing projects on my own on the weekends and I sort of morphed into working full-time in my shop. I would do specialty work for local builders and for other woodworking shops and cabinetmakers, along with woodturners. And that still holds true today in that we work with a lot of shops on projects they're either not able to do or they just rely on us to do what they otherwise would be doing."

By 1996, Hanson Woodturning was officially established. Hanson joined forces with friend and fellow cabinetmaker Derek Preble and the two shared a small shop that was barely 300 sq. ft. As his clientele and machinery list grew, so did his need for space.

"I realized I needed to have more room and bigger machines and that eventually led to me renting space at an old mill in Biddeford, Maine. That got purchased and the new owner sort of forced me out. I built this shop in the fall of 2007 and I had three guys working for me."

The 3,500-sq.-ft. shop is a beauty. Spacious and meticulously designed for machinery placement and project assembly, complete with a loft-style office on the second floor, the barn-style structure is located on the same large property as his home, just a few blocks from Cape Porpoise Harbor.

Hanson, a machinery guru, has invested in dozens of specialized machines that he's accumulated since his early years, some custom-made overseas, to get jobs done right. In 2000, he added hydraulic copy lathes. He shares his machinery knowledge with employees, particularly how geometry and math are involved with production of his niche products.

THAT DARN RECESSION

With the new shop up and running just as he'd envisioned, things seemed fine at first. But just like that, it was like the rug was pulled out from under him. The calls stopped coming in. By Thanksgiving in 2008, he had to lay everyone off because there was no more work.

"We went from having our best year ever in 2006-2007 to having our worst year ever in 2008-2009. We were cranking and we had three guys. So then I worked by myself in this shop for about two years and then slowly brought another person in part-time. Just about three to four years ago, around 2013, things got busy again. I hired my main guy that I still have with me now, Nick Philbrick, and I just added a third person to the shop (Maxwell Frank)."

Though he now reflects back on those years with a sigh of relief, he can't deny they were some of the most tumultuous of his career.

"In spring 2009 I was still working every day with no employees, but it was more like treading water. So, at that point, I developed the Cape Porpoise Stool Company," he says, proudly turning to grab a unique-looking barstool in his office featuring a walnut seat with accents made from wenge.

He developed the product in its entirety, made from all turned parts. That spring he built 30 of them, notified all of his contacts and ended up filling 100 orders by the end of the year. The company is a separate entity from Hanson Woodturning.

"I made the stools between jobs. I'd do 100 legs, then an order would come in. Then things would be slow and I'd do the stretchers, then assemble and finish. I never tried to sell them. They were a pyramid thing. You'd go to a cocktail party and you see these at someone's



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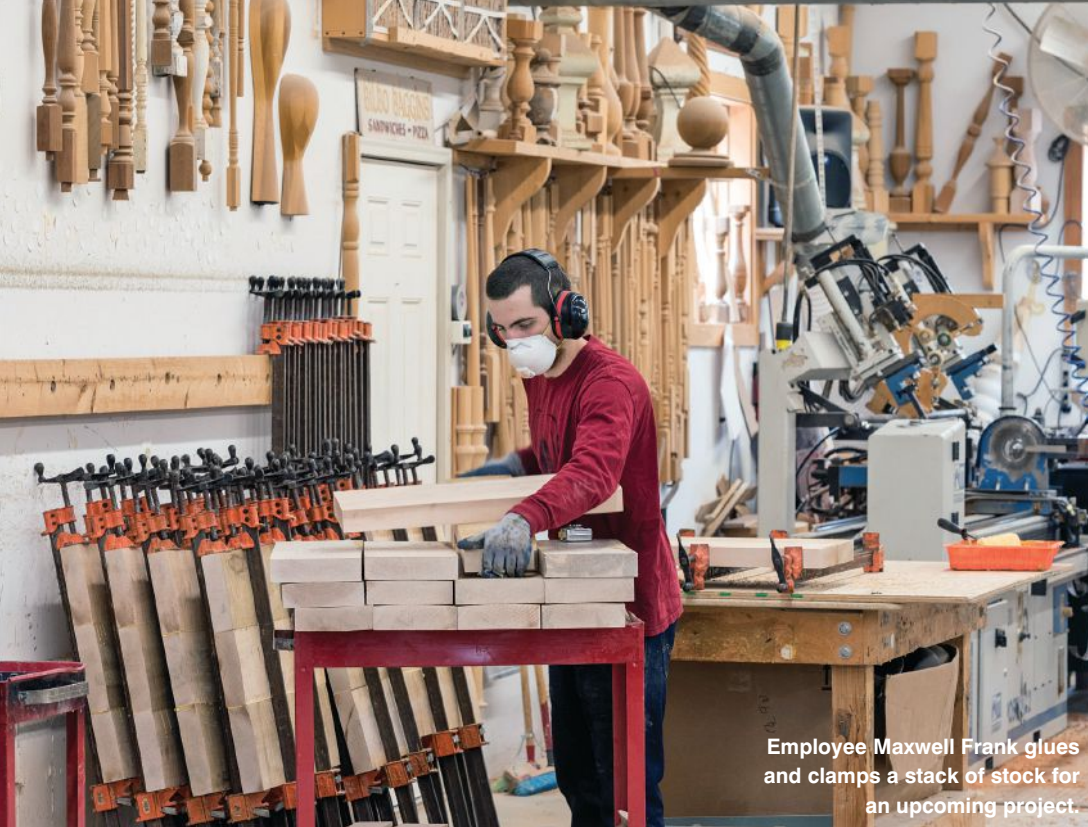
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Employee Maxwell Frank glues and clamps a stack of stock for an upcoming project.



Hanson at the shop's Torreda Postmax 2 lathe.

kitchen. I don't push as much now because we're really busy as a job shop again, but I still sell about 50 a year."

FROM COAST TO COAST

Now that the company's back to prerecession sales, business is thriving with requests from the usual clients and then some.

"Our work is not regional. It's all over the place. Ninety percent of it is out of state and the rest is from anywhere in Maine. The service areas we are busiest with now are Texas, Oklahoma, Arizona and California, mostly for table bases and specialty wooden products. A lot of what we make we advertise on the website, but other stuff rolls in that is just out of the ordinary."

Hanson is on the shop floor almost every day and does all of the hand-turned work. He designs projects when asked, but many clients send him plans or want something copied.

Table bases are becoming increasingly popular, whether turned, square-profiled or machined. He believes clients are finding it easy to source the specialty tops with all of the live-edge and other options available these days

and usually find him online.

"We do a fair amount of stair packages where we make the newel posts, handrails, balusters and other components. We do four to five big stair packages a year," Hanson adds.

General one-off projects are popular, too, such as a 17' x 17' wall made of walnut pieces that look as if they're woven together. Recently, a client in California ordered several dozen 8' columns.

"Some of the things we turn in here get huge like 20' tall and 3' in diameter, weighing 1,000 to 2,000 pounds."

Having developed a positive rapport with clients through the years, most work is generated by referral.

"We've experienced great success with the pyramid effect — you do a great job for one guy and he tells two guys. Then you do another great job. I still have a Rolodex full of all of the same people I've been dealing with for the past 20 years and they always come back. At this point in my career it's really still amazing to me that the list of contacts and the list of clients I have still impresses me because I'm really proud of that."

Of course, some customers are only shopping for price. "I wouldn't sell you something that would fall apart in five years. And I wouldn't want you to call me back in five years. I want it to be handed down to your kids. We're not a discount furniture annex, but sometimes we get treated that way by price shoppers. It's makes things difficult sometimes, but I can kind of see it coming now," Hanson says.

There are several large woodturning companies in Hanson's local market. Hanson says he's learned to pivot his business in whatever direction is necessary to keep the doors open.

"We've always been able to switch gears when a certain part of the business drops off. We're not reinventing ourselves, but thinking outside the box to get another product going."

Hanson plans to keep the business where it's at for the time being. He and his wife are still raising two children, ages 10 and 12, and enjoy camping, skiing and visiting the ocean as a family. Feeling rewarded by the process of teaching others, Hanson and longtime friend Derek Preble have discussed opening a woodworking school in the near future. [W](#)

Contact: Hanson Woodturning, 27 Slack Tide Road, Cape Porpoise, ME 04014. Tel: 207-967-6085. www.hansonwoodturning.com.

PHOTOS: MICHAEL GORDON

NEW SENSATIONS

Today's offering of jigs provides the repeatability,
accuracy and interchangeable parts that will wow any woodworker

By John English

A new jig, available
from Micro Fence, for
installing puck lights.





JDL's SH-2 coping jig.

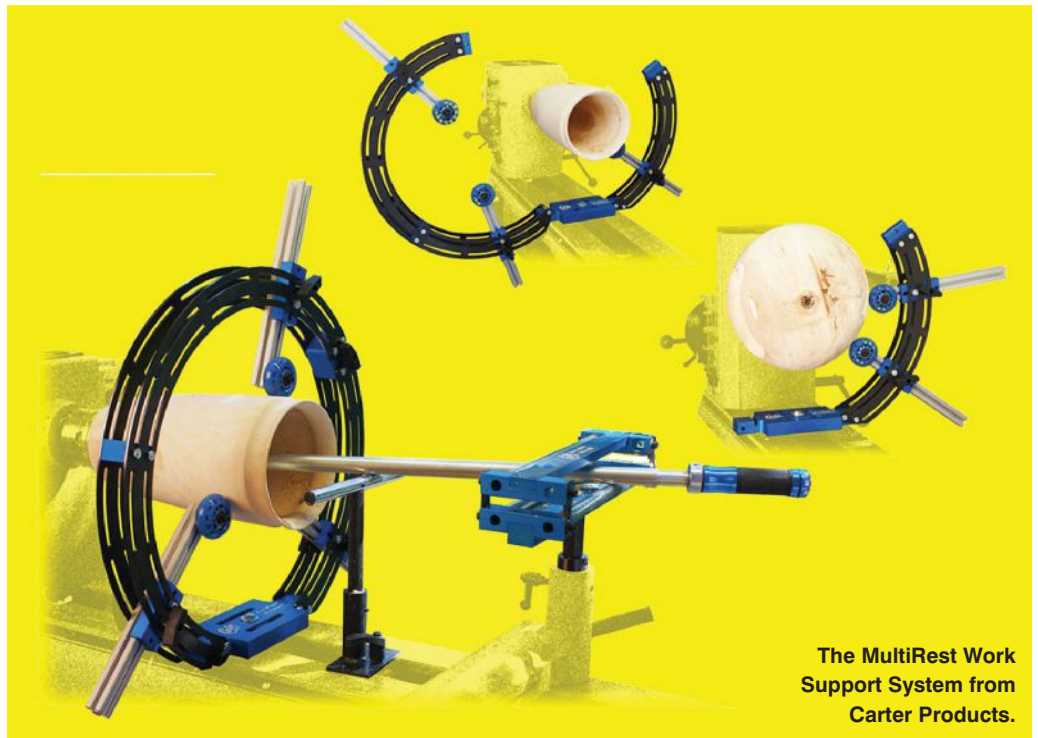


Kreg's Khi-pull jig for cabinet hardware installation.



Having been born and raised in Ireland, I can honestly say that a good jig — musical or woodshop — always lightens my heart. And here's one that any casework installer will like.

Rockler (rockler.com) just came out with a new, very-much-downsized table saw sled that sells for \$75. Listed as item No. 55916, the miniature crosscutter is lightweight (5 lbs.), small (12" x 15-1/2") and ideal for tot-



The MultiRest Work Support System from Carter Products.

ing to the job site. It makes lots of small part operations safer, including cutting dowels, tenon stock and small moldings at a precise 90-degree angle, with little to no tear-out. The sled features zero-clearance support (you run it through the blade the first time out to establish that) and this reduces the chance of small pieces getting stuck between the blade and throat plate or falling through entirely. A small plastic ramp on one side of the kerf carries the dropoff piece away from the blade and the sled includes a miter track stop that limits forward travel so your hands aren't exposed at the back. A rear-mounted blade guard is adjustable to fit most table saws and an aluminum T-track on the top of the fence lets you add a flip stop (not included) for repeatable cuts. There's even a short T-track parallel to the blade that can accept an optional hold-down clamp.

Micro Fence (microfence.com) has recently started offering a jig (model the TP-PLJ) from True Position for installing hockey-puck lighting in cabinets. It lets woodworkers place the lights at precise locations in case tops, bottoms or even shelves and run the wiring to them invisibly.

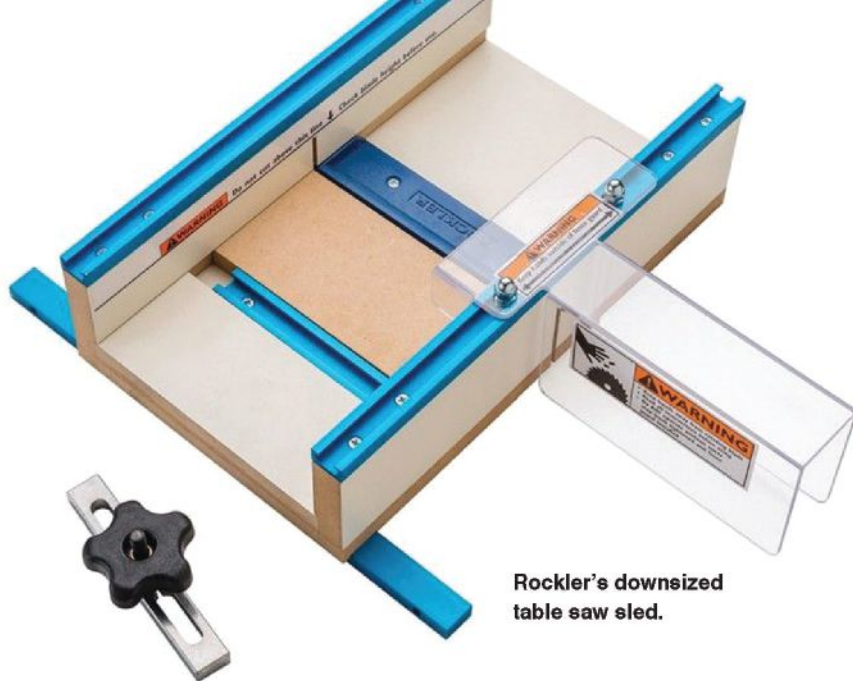
Betterley Industries (betterleytools.com) offers the Twin-Trim router (right), which turns a laminate trimmer into a two-function tool. Make a pass to trim the edge and then turn the base 180 degrees and make a second pass that is 1/16" closer, so it trims extra close and also eases the top edge. The stepped base means that the woodworker doesn't have to stop and change settings between passes.

Powermatic (powermatic.com) introduced a new tenoning jig a year or so ago that is easier

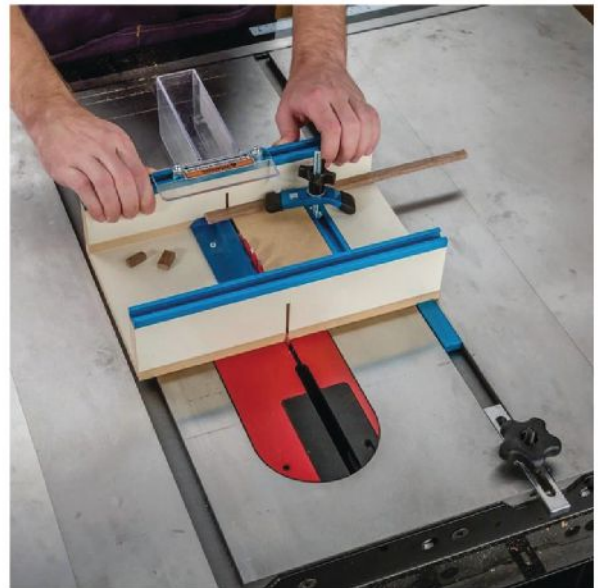
to set up than most traditional versions — and is certainly easier to adjust and use than most other options out there. The jig, which retails for \$300, can use the chisel from a shop's hollow chisel mortiser to configure the setup, which eliminates the need to transfer measurements. It includes a precise micro-adjustment system that lets the woodworker add or shave extremely thin amounts of stock from cheeks for a perfect fit in the mortise. And it can be used with a low-profile riving knife without having to remove that safety device.

Versidex (versidex.com) has a new benchtop jig for anyone building with either biscuits, Lamello's P-System or Festool's Domino. It lets a woodworker position and cut pockets every time. Called the Mini 25, it reduces what





Rockler's downsized table saw sled.



can be a somewhat confusing exercise in layout (especially for new hires) to a repeatable and relatively simple process. Floor models are also available.

Two brothers in New York, Ron and Keith Bow, have come up with an inspired little jig to handle kickback on a table saw. Based in part on traditional concepts, it adds new technology and materials to the traditional

featherboard. With compressed foam fingers and unique geometry, cuts are smoother and there's incredible kickback protection. The brothers claim that their FeatherPro products also reduce chatter, so the woodworker ends up with a better cut.

If you turn wood, Carter Products (carter-products.com) has a new steady rest jig. Called the Carter MultiRest Work Support System,

it is compatible with lathe swing sizes from mini up to 20" with no additional hardware required. The base of the MultiRest has independently adjustable spacer blocks that provide a secure fit on lathe beds with way sizes from 1" to 4.5" in width. Each roller wheel assembly can be positioned anywhere around the ring to adjust the center position for a wide range of lathe sizes and part diameters.



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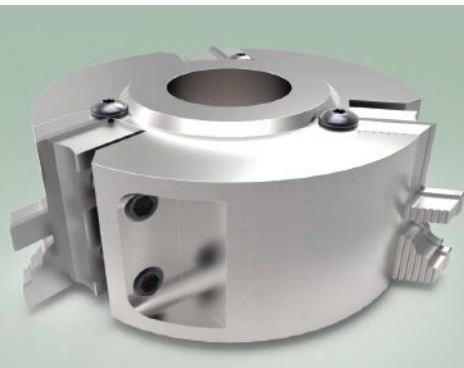


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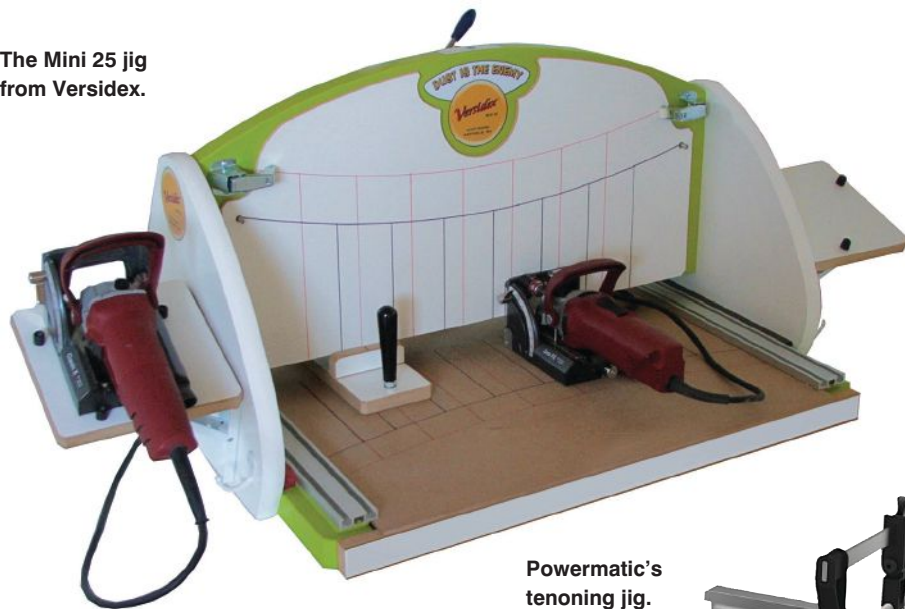
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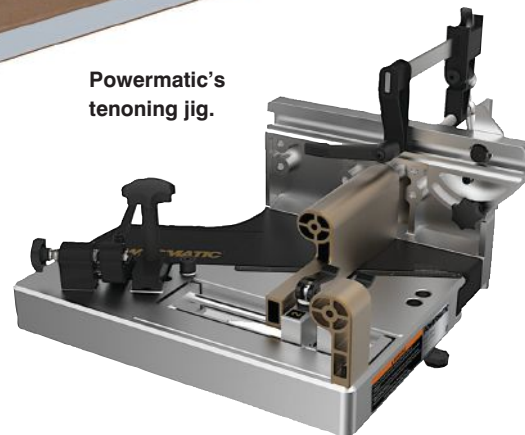


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The Mini 25 jig
from Versidex.



Powermatic's
tenoning jig.



The two-piece design allows the jig to be quickly opened for mounting parts, while leaving the base firmly attached to the lathe bed. And if you separate the larger ring, the remaining smaller one becomes a bowl rest, providing solid support behind the workpiece yet fully exposing the opposite side of the piece for exterior cutting operations. The jig is made from laser-cut steel and aircraft-grade aluminum components, with urethane wheels and the same high strength industrial sealed bearings used in Carter's band saw guides. These wheels can be positioned anywhere around the ring and, unlike any other steady rest on the market, you can add more as needed.

JDL (jdltes.com) is a small, family-owned-and-operated company in Chicago. The owner is a longtime woodworker with a background in mechanical engineering. One of his products, the SH-2, is a coping jig that mounts on a shaper or router table to make precision cope- and crosscuts. The SH-2 installs quickly with a couple of supplied bolts (no miter slot required). The jig has simple adjustments for different thicknesses of wood and delivers tear-out-free results thanks to an additional side clamp that holds a sacrificial wooden stop that can have a coped edge. The SH-2 has a big brother (the SH-3) and JDL also offers a 45-degree miter plate (MP-1) that bolts to the jig.

Kreg Tool Co. (kregtool.com) has a new cabinet hardware installation jig featuring moveable, hardened-steel drill guides that lock in place to align with common hole-spacing measurements for cabinet knobs and pulls. This allows an installer to drill straight, accurately positioned holes. And a moveable edge guide with built-in measuring scales (in imperial and metric) ensures that the

holes are positioned correctly without having to measure and mark every time. The Khi-pull jig sells for \$24.99 without the 3/16" drill bit.

Every woodworker knows that to avoid kickback you shouldn't use the table saw's fence and miter gauge at the same time. But Micro Jig's new Dado Stop gets around that safety hazard. The jig is part of the company's Matchfit product line and its primary goal is to deliver perfectly fitted dados in small parts. It sets the shoulders of the dado using the actual part that has to drop into the groove, so there's a perfect fit without measuring, or even making test cuts. But its best aspect is safety: it moves the fence a full 3 inches farther away from the blade so there's plenty of room for parts to avoid being trapped.

No matter what jig you choose or use, it will work better with proper care. There are a number of ways to maintain slick surfaces. Back in the day, we used to micro-sand plastic laminate jigs, and even cast-iron surfaces, and then coat them with clear boot polish. It's slick, doesn't adhere to wood fibers, and is relatively inexpensive. Today products such as Slipit (slipit.com) have replaced the elbow-grease methods and deliver a much better surface. There's a silicone-based version for metal and a silicone-free one for wood. **W**

OUTSOURCING ON CALL

As customer needs evolve, the outsourcing industry is supplying woodshops with more services than ever

By John English

Twenty-four years ago, Max Hunter and his family founded one of the first woodshops that was specifically designed to make parts for other cabinetmakers. It didn't evolve from a small custom cabinet shop: it was built for outsourcing.

Located in Vallejo, Calif., Western Dovetail (drawer.com), has grown from dovetailing drawer boxes to supplying an entire range of drawers, doors (wood, laminate and foil), inserts and trays, slides, pulls and a host of other hardware and jigs. Along the way, the company even survived an earthquake: on the last day of IWF 2014 in Atlanta, its factory on Mare Island (which is actually not an island, but rather a peninsula in Vallejo) had to be evacuated after a 6.0 tremor partially destroyed the building. That was on Sunday, and Max and his team immediately hopped on a plane home. By Wednesday, they had already moved the shop and were back in production.

Western Dovetail's story illustrates a few primary aspects of the evolution of outsourcing. The first one is timeliness: Hunter's biggest concern after everyone's safety was getting all work-in-process completed and shipped to his customers. Today, the company's custom drawers usually ship within five to 10 business days. And Western Dovetail has also done what several other industry leaders saw early on as a necessity for growth: it has expanded beyond a core product (drawers) to offer a one-stop shopping experience.

Hardware Resources (hardwareresources.com) has been in business for 28 years and took a slightly different evolutionary track. With headquarters and manufacturing in Bossier City, La., and warehouses from coast to coast, it is perhaps the fastest-growing manufacturer of hardware in the country. It builds mitered cabinet doors and drawer fronts,

but also designs and makes a huge catalog of hardware for kitchens, baths and closets. It also makes decorative corbels, capitals, posts, legs and feet and has developed a vast network of dealers.

STAYING LOCAL

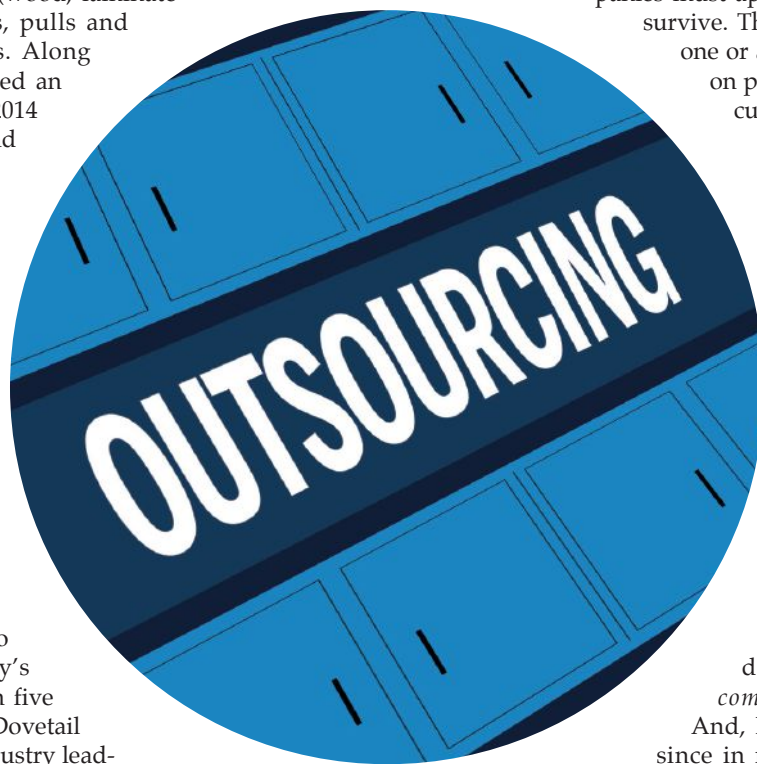
While the corporate approach is certainly convenient and predictable and offers economies of scale, smaller outsourcing companies must appeal to a different set of priorities to survive. They remain regional or even local, do one or a small number of things and depend on personal interaction to establish a loyal customer base.

For example, Cabaxis (cabaxis.com) builds drawer boxes in a second-generation cabinet shop in western Kentucky and does so with a five-day turnaround time. The company appeals to a woodshop's sense of pride in construction, but also appeals to the purse strings with free shipping on orders over \$500. But what sets Cabaxis apart from the bigger competition is something less evolutionary than traditional: call the phone number and you can talk directly to somebody who actually knows how to run a dovetailer.

Like Western Dovetail, CCF Industries in Apollo, Pa. (ccfdrawers.com) opened its doors in the 1990s.

And, like Cabaxis, it has specialized ever since in manufacturing dovetailed drawers.

In addition to solid hardwoods, CCF builds with foil, melamine and plywood such as Baltic birch. To set itself apart, the company's marketing has evolved to include features such as a one-hour Quick Quote system with no minimum order size, in-house laser engraving, edgebanding, front and side scoops, file slots and undermount slide notches. CCF also carries slides from Accuride, Blum and Sterling, using hardware as one way to expand its offerings.



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Top Drawer (topdrwr.com) in Apache Junction, Ariz., also offers laser engraving as an option on its dovetailed drawers. In fact, Top Drawer prides itself on innovative solutions such as corner drawer stacks with additional depth, curved fronts, angled drawer sides (or fronts and backs) and specialty storage solutions such as tie drawers for closets and custom trash can drawers.

Another regional supplier that specializes in drawers is Timbercraft (timbercraftdrawers.com) in New Milford, Conn. The company slogan is "Delivering your drawers throughout the Northeast in five to seven days," and that pretty much sums up the business plan. Timbercraft has been building solid-wood, custom dovetailed drawers since 2003 and, through the years has added features such as integrated wooden drawer pulls, custom drawer inserts and all-wood cabinet door storage units.

Martincraft (martincraftwoodproducts.com) in Owens, Wis., makes custom dovetailed drawers and components such as trash bins, spice racks, silverware drawers, knife block drawers, cookie sheet pullouts, file drawers and so on. The drawers are handcrafted in maple (other hardwood species can be specified) using classic English half-blind dovetails.

Indiana-based Amish Country Woodworx (acwoodworx.com) is perhaps a little more sophisticated, despite the name. In fact, the website stresses that the company integrates tradition (Amish craftsmanship) with technology (online ordering). A supplier of dovetailed drawers, the business is another prime example of the way that outsourcing is evolving. It offers exactly what it says: high-quality traditional products, sold through an online ordering process.

Drawer Box Specialties (dbsdrawers.com) in Orange, Calif., follows much the same parameters. Woodshops can browse an online catalog of components, choose various materials and construction methods, and then either place the order through the website or request a quote if the job is more custom than basic. The company has an extensive offering of specialty items, including drawer-in-a-drawer options that take advantage of taller spaces.

Canary Closets (canarycc.com) lies somewhere between a small custom supplier and large factory. The shop in Union, N.J., is named after founder and manager John Canary. A cabinetmaker for more than 30 years, his work has appeared in numerous publications such as Architectural Digest, The New York Times and House and Garden. Bridging the gap between custom and industrial with hands-on personal service has been key to the evolution of this business. Canary Closets also offers an online closet design tool that shows real-time pricing and creates end-user bids. While many woodshops already use similar programs, the idea here is to bring new and smaller shops into the fold. The design software is free and web-based, so a woodworker doesn't even need to install it on a computer. The ClosetPro program works on any device including laptops, tablets or even smartphones and comes with video tutorials.

Drawer Connection (dcdrawers.com) in Mesa, Ariz., specializes in dovetailed and doweled drawer components in solid wood, melamine and plywood material choices. Its new Drawer Outlet Kit is a sign of the times: it can "upgrade a kitchen in less than 15 minutes" by adding electric outlets that are stored out of sight until they're needed. The kit includes two dovetailed drawer boxes, full-extension ball-bearing drawer glides and all of the necessary hardware. They're ideal for charging phones and tablets: just plug them in, drop them in and close the drawer.

LARGER SUPPLIERS

One of the wood industry's go-to outsourcing suppliers, Elias

Woodwork (eliaswoodwork.com) has been in business since 1983 and is located right at the center of the continent in Winkler, Manitoba — a stone's throw from the North Dakota/Minnesota border. Elias is the epitome of evolution: its plant has grown to 255,000 sq. ft. and includes state-of-the-art finishing facilities. Production is centered on building cabinet doors and refacing products for the kitchen and bath industry, but it also does a large volume in recreational vehicle casework. As it continues to evolve, Elias has recently added several new lines such as custom ready-to-assemble cabinet boxes, a polyester-saturated paper on MDF cabinet door line (DLV), a high-gloss acrylic line of cabinet doors, new Thermofoil colors and a greatly expanded wood species selection.

WalzCraft in LaCrosse, Wis., has managed to evolve into one of the biggest players in the industry without losing its personal touch. Founded as Cabinet Factory Inc. in 1982, the company started out with a few profiles and one wood specie. Today, it has more than 340,000 sq. ft. of manufacturing and administration space and employs almost 300 full-time employees. WalzCraft continues to grow its product lines and keep up with trends. For example, one of its newest offerings is a weathered barnwood option called Rotary Mill Mark Distressing, which has the look of the rough circular sawn lumber that is often seen in reclaimed barn wood.

Decore-ative Specilaities (decore.com), established in 1965, has embarked on an aggressive journey to provide a product that removes the difficult aspects of finishing for its customers. It offer water-based finishes and an extensive line of doors and drawer fronts, drawer boxes, components, molding, and hardware.

Another corner-post of the industry, Keystone Wood Specialties (keystonewood.com) in Lancaster, Pa., has been serving the needs of cabinetmakers, furniture builders and remodelers for more than 40 years. The menu includes cabinet doors and drawer fronts in a number of styles, plus dovetailed drawer boxes, cabinet face frames, molding, wainscoting and panel arches. One of the newer offerings is locked miter construction that can be ordered at any angle between 90 and 140 degrees for projects such as non-rectangular face frames, Lazy Susan doors, end panels, column or post wrapping, and so on.

Perhaps one of the oldest outsourcing suppliers, Clever Storage by Kesseböhmer (cleverstorage.com), was founded in 1954 and has grown through the years into a corporation employing more than 2,000 people. Based in Bad Essen, Germany, Clever Storage is still family run. It's now one of the world's leading kitchen furniture industry suppliers (European-style cabinetry), and distributes to over 60 countries worldwide, including the U.S. where it has a branch in Wilmington, N.C.

SPECIALTY SUPPLIERS

On the other end of the hardware outsourcing niche is Sawtooth Shelf System (sawtoothshelvesystem.com). This California company supplies wooden shelf supports. Its product is based on a pre-industrial revolution cabinetmakers' design that uses ratchet or bird's mouth "teeth" cut into pairs of wooden up-rights that catch and hold horizontal supports for the ends of shelves. The company recently expanded its offering to include wine rack storage, closet organizers and currently in the works, gun racks and glass shelf cleats.

Some companies have evolved into a specialty role that served the needs of those serving others' needs. For example, Rev-A-Shelf (rev-a-shelf.com) in Louisville, Ky., began back in 1978 and its first product line was metal and polymer Lazy Susan components that

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were manufactured for the largest U.S. cabinet builders. The company is now one of the North America's largest suppliers of everything that goes into cabinets such as hampers, blind corner solutions, closet organizers, drawer inserts and dividers, wire and rattan baskets, recycling bins, pullouts, swing-outs, door storage, appliance lifts, wine racks and the like. Rev-A-Shelf even offers a combination knife holder/cutting board system that glides on full-extension ball bearing slides and actually replaces a drawer.

Brown Wood (brownwoodinc.com), based in Lincolnwood, Ill., is the ultimate outsourcing supplier, claiming that it "can produce virtually anything in wood, to any specifications." Equipped to also incorporate silk screening, laser engraving, and imprinting in the wood finishing process, the company offers project design services for components, plus assembly and packaging. Brown Wood also offers thousands of turned and carved decorative wood components through its Designs of Distinction branded product line.

Turned, carved and molded wood components are also among the specialties of Osborne Wood Products (osbornewood.com), which makes its home in Toccoa, Ga. Osborne has been providing woodshops with beautifully crafted table legs, island legs, corbels, bun feet and moldings since 1979.

Another supplier with a vast inventory is Outwater (outwater.com), which offers a wide array of architectural and millwork components. Founded in 1972, its original business plan was to provide small and mid-sized furniture and cabinet manufacturers with a reliable source for plastic extrusions — and do so with sensible minimums. Today, the company has evolved into an international manu-

facturer and stocking distributor of more than 65,000 standard and innovative component products with 300,000 sq. ft. warehousing and distribution facilities located in both New Jersey and Arizona.

Another specialty supplier, Kentucky-based Create-A-Bed (wallbed.com), has taken its outsourcing role to the other extreme, offering just two primary products (a standard and a deluxe Murphy bed kit with plans for a do-it-yourself cabinet) and a couple of accessories. But, despite that, the gallery page shows how other shops have taken the basic kits and flown with them. Design ideas shown here include sports, kids and traditional casework themes.

Speaking of light kits, a woodworker might take a minute to visit Doug Mockett (mockett.com) and see a little bit of evolution in that area. The company has a number of hidden phone charging kits and pop-up power sources that can add a very custom, and very contemporary element to any casework.

There will always be a need for custom components, and they're not always wood. Take, for example, The Glass Source (theglasssource.com) which is a stained glass studio located in Seymour, Conn. It's one of the top studios in the country for restoration and custom glass design, as well as a major learning center for glass arts. Adding custom stained or art glass to a cabinet job can elevate an ordinary office or kitchen project to a whole new level.

Having an outsourcing supplier who can guide a woodshop through that process is very comforting. Growth and learning have their perils, but also their rewards. As our customers' needs evolve, it seems the outsourcing industry is not only keeping pace, but perhaps even setting that pace at times. **W**



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▲ **RIDGID** offers a new 18-volt cordless and brushless compact router, model R86044B, featuring a 5-Ah battery. The router can cut up to 400 ft. of laminate per charge, according to the company. Other features include variable-speed control, micro-depth adjustment, soft start technology and a quick-release lever for removing the motor housing from the base. The battery and charger are sold separately. For more, visit www.ridgid.com.



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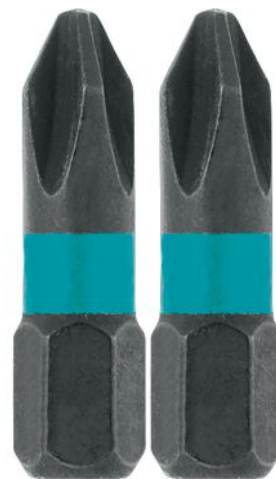
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◀◀ **DEWALT** introduced the 25' XP tape measure, featuring a tougher case, blade coating and hook connection, according to the company. The tape is built around DeWalt's Dual-Core technology, a patented spring system that uses two retracting springs in an impact-resistant case. "The result is a compact, professional-duty ergonomic tape with a case designed for a better fit in the user's hand," the company said in a statement. For more, visit www.dewalt.com.

▶▶ **MAKITA** offers a new line of insert bits and fastening accessories engineered for use with high-torque impact drivers. The line, ImpactX, is built for pro contractors, and effectively fills the gap between higher-priced premium torsion bits and standard bits, according to the company. For more, visit www.makitatools.com.



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▶▶ **MAKITA** released a new cordless cutting solution for framing, formwork and carpentry with the 18-volt X2 LXT rear-handle 7-1/4" circular saw, model XSR01. The saw runs on two 18-volt Li-ion batteries, so users get maximum power and runtime without the cord, according to the company. The bare tool sells for \$199. It's also available in a kit with two 5.0-Ah batteries for \$359. For more, visit www.makitatools.com.



◀◀ **WALZCRAFT** has added a rotary mill mark distressing option to its catalog, offering the look of rough circular-sawn lumber that is often seen in reclaimed barn wood. Rotary mill mark distressing is available on cabinet doors, drawer fronts, face frames and panels. For more, visit www.walzcraft.com.

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► **MILWAUKEE TOOL** is introducing a new portable miter saw stand, scheduled for availability in June. The stand weighs about 31 lbs., has a bracket system that fits all miter saw brands, and can support over 500 pounds, according to the company. Options include a carrying strap and tabletop. For more, visit www.milwaukeetool.com.



◀ **M. K. MORSE CO.**, manufacturer of hand and power tool accessories, presents a new line of bi-metal hole saws. Available exclusively through the company's authorized distributor partners across the globe, the hole saws feature a deeper cut depth and proprietary cutting edge, according to Morse. For more, visit www.mkmorse.com.

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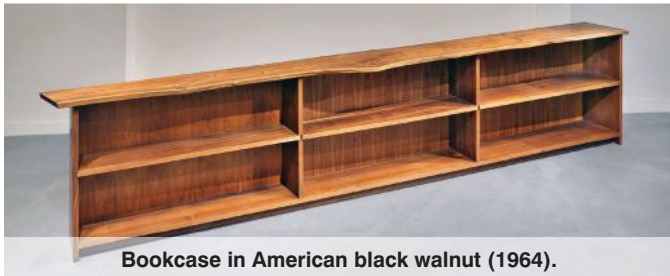
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Philadelphia gallery brings back Nakashima exhibit

Student work is showcased at Messler Gallery in Maine



Nakashima dining table made of Persian walnut and matched with rosewood butterflies (1971).



Bookcase in American black walnut (1964).



Print stand featuring an English walnut top (1981).

By Jennifer Hicks

A new exhibition and sale, "George Nakashima: Rare & Unique Works," is on display at the Moderne Gallery in Philadelphia through Aug. 12. It is the gallery's eighth major exhibition of the vintage works of Nakashima since 1989.

It features about 40 pieces, including chairs, dining tables, occasional tables, chests, desks and benches.

"This show is the perfect expression of the timeless elegance of the American Studio Furniture Movement in which we specialize," gallery co-director Joshua Aibel says. "We expect that collectors will appreciate the quality and originality in our exhibit, as well as the enduring appeal of Nakashima's eye for great wood, innovative design and extraordinary craftsmanship."

Student exhibition

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The Messler Gallery's exhibit featured a credenza by Adam Howell.



Evan Boyle's "Paracord Credenza".



Joseph Brody's "Tapered Horizon" table.

ture Craftsmanship in Rockport, Maine, held its annual "Current Student Work" exhibit from April 28 -May 31. It featured furniture and furnishings by participants in the school's flagship nine-month comprehensive course.

Students in the course range in age from 25-65 and come from a variety of backgrounds, such as general contracting, interior design, accounting, product development, media management and military service.

The nine-month comprehensive program is for aspiring professional furniture makers and dedicated amateurs who seek in-depth training. Aled Lewis is the lead instructor. www.woodschooll.org

Contacts

Moderne Gallery, 111. N. 3rd Street, Philadelphia, PA 19106. Tel: 215-923-853. www.modernegallery.com

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CALENDAR

Organizations sponsoring meetings, classes or shows of interest to professional or hobbyist woodworkers are invited to submit items to: Calendar, Woodshop News, 10 Bokum Road, Essex, CT 06426; editorial@woodshopnews.com.

Include name, dates, location, description of event and a contact address or telephone number. Calendar items, which should be typed or printed clearly, must be received a minimum of 60 days before the event.

Please note that fees, as listed, might not include materials or shop fees. Check with a specific class for further details.

The complete national calendar of events is continuously updated at www.woodshopnews.com.

— Compiled by Jennifer Hicks

ARIZONA

Aug. 21-Sept. 7 — Fundamentals of Traditional Woodworking 1. The first in a three-part series is a hands-on course for beginners. Fee: \$519 including materials. Location: Southwest School of Woodworking in Phoenix. www.swcfc.org

Sept. 11-Oct. 5 — Fundamentals of Tradi-

tional Woodworking II. Students will practice several types of joints and apply their skills by building a small bench. Fee: \$672 including materials. Southwest School of Woodworking in Phoenix. www.swcfc.org

CALIFORNIA

Monthly — San Fernando Valley Woodworkers meetings are held on the third Thursday of each month at 7 p.m. at the Balboa Park Sports Complex, Gym Building, at 17015 Burbank Boulevard in Encino. www.sfvw.org

FLORIDA

Ongoing — The Dunedin Fine Art Center is offering six-week woodturning classes at its Cottage Campus taught by AAW professional member Tony Marsh for beginners and intermediate-level participants. Full-day classes are held on Thursdays. Call 727-298-3322 or e-mail education@dfac.org.

Monthly — Woodcrafters Club of Tampa meets every third Thursday evening at 3809 W. Broad St. in Tampa. www.tampawoodcrafters.org

MARYLAND

Monthly — The Howard County Woodworkers Guild meets the first Saturdays of the month at the Bain Senior Center at 5470

Ruth Keeton Way, Columbia, Md. from 9 a.m. to 12 p.m. Open to all those working in wood. For information, email Manny Flecker at aaron0641@hotmail.com

MASSACHUSETTS

June 26-30, July 24-28, Aug. 21-25, Sept. 13-17, Oct. 25-29 — David Calvo's five-day Bare Bones of Woodcarving workshops. Location: Calvo Studio in Gloucester. www.calvostudio.com

Sept. 16-17, Nov. 11-12 — David Calvo's two-day woodcarving class. Location: Calvo Studio in Gloucester. www.calvostudio.com

June 29, July 29, Aug. 24, Sept. 16 — David Calvo's one-day introductory woodcarving class. Location: Calvo Studio in Gloucester. www.calvostudio.com

Oct. 7-9 — Paradise City Arts Festival Northampton featuring contemporary furniture and other fine crafts by selected artisans and makers from throughout the country. Location: Three County Fairgrounds in Northampton. www.paradisecityarts.com

Nov. 17-19 — Paradise City Arts Festival Marlborough featuring more than 175 contemporary furniture and other fine crafts by selected artisans and makers from throughout the country. Location: Royal Plaza Trade Center in Marlborough. www.paradisecityarts.com

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MISSOURI

June 22-25 — The Furniture Society and American Association of Woodturners are presenting their first joint symposium, featuring programs, demonstrations, exhibitions and more. Location: Kansas City Convention Center. www.furnituresociety.org or www.woodturner.org

NEVADA

July 19-22 — AWFS fair. A biennial show featuring new products and machinery with some of the latest technology, educational seminars and panel discussions addressing business-related topics, networking opportunities, a student design competition and much more. Location: Las Vegas Convention Center. www.awfsfair.org

NEW YORK

Monthly — Sawdust and Woodchips Woodworking Association meetings are held on the first Wednesday of each month at 6:30 p.m. at the Cold Springs Fire Department in Baldwinville. www.sawdustwoodchips.org

Monthly — Northeast Woodworkers Association meetings held on second Thursday of the month at various locations in Albany area. www.woodworker.org

NORTH CAROLINA

June 22-26 — Society of American Period Furniture Makers' mid-year conference. Annual member gathering that features training seminars, museum tours, networking, and discussion of American period furniture. Location: Old Salem historic district and Museum of Early Southern Decorative Arts in Winston-Salem. www.sapfm.org

RHODE ISLAND

Nov. 3-5 — Fine Furnishings Show offering handmade furniture, accessories and fine art. Location: Pawtucket Armory Arts Center in Pawtucket. www.finefurnishingshows.com

SOUTH CAROLINA

Oct. 29-31 — Architectural Woodwork Institute Convention featuring panel discussions and networking opportunities for industry professionals. Location: Charleston (venue TBA). www.awinet.org

SOUTH DAKOTA

Monthly — The South Dakota Woodworkers Guild meets the last Thursday of every month (except August) at various members' shops. The club has hand tool and woodturning groups. www.sdwoodworker.org

TEXAS

Oct. 5-6 — Closet & Storage Summit featuring independent closet companies. Location: Doubletree by Hilton in Austin. www.closet-summit.com

Nov. 12-14 — Specialty Tools & Fasteners Distributors Association 41st annual convention and trade show. Manufacturers, distributors and other industry professionals will convene and take part in educational programs, seminars and new product debuts. Location: Austin Convention Center. www.staftda.org

WISCONSIN

Sept. 15-17 — Fine Furnishings Show, featuring handcrafted furniture and accessories. Location: Muellner Building in Hart Park, Wauwatosa. www.finefurnishingshows.com

WYOMING

Sept. 7-10 — Western Design Conference, an exhibit and sale of handmade furniture, fashion and home accessories in a Western theme featuring more than 130 artists. Location: Snow King Center in Jackson Hole. www.westerndesignconference.com 



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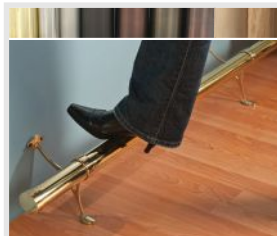
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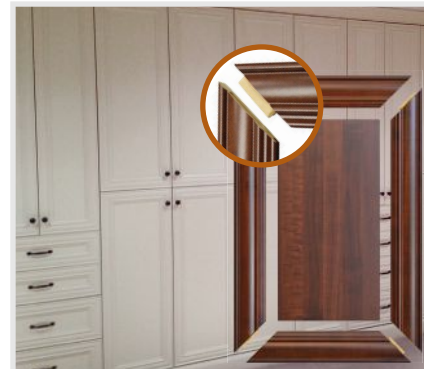
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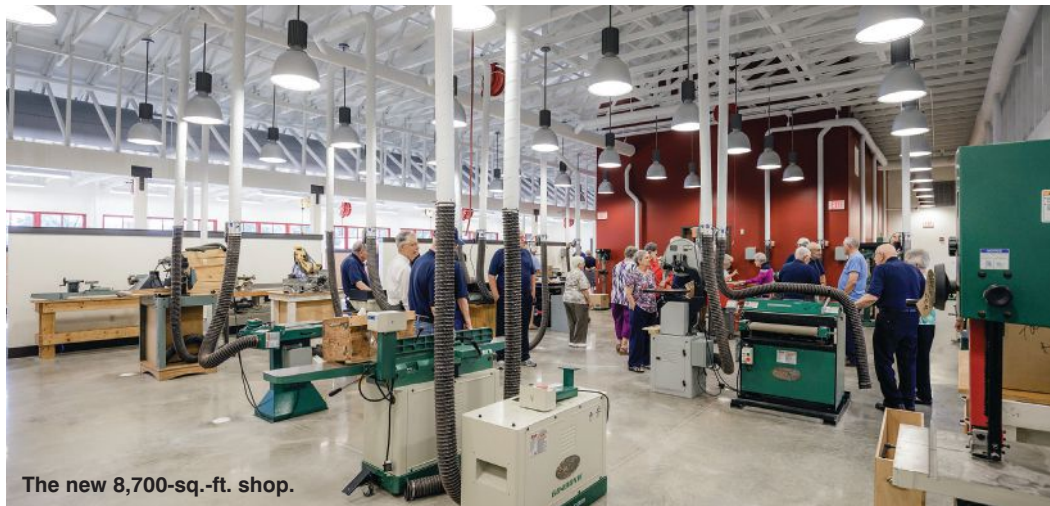
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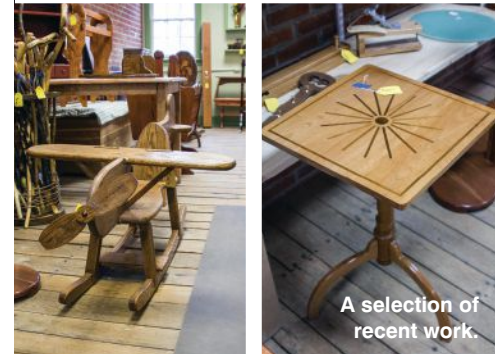
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The ribbon-cutting ceremony at the Rooster's Corner Woodworking Shop.



The new 8,700-sq.-ft. shop.



A selection of recent work.



The shop's exterior.

Something to crow about

After starting in a renovated chicken coop, the Rooster's Corner Woodworking Shop at the Masonic Village retirement center in Elizabethtown, Pa., is in a new 8,700-sq.-ft. shop.

The shop is home to more than 50 retirees, including some who put in eight-hour days. They take custom and repair orders and each year the group makes donations to the Masonic Children's Home and other charities. Hand-made items include puzzles, toys, boxes, benches and furniture.

"Every artist needs the right environment and the woodworkers of Masonic Village now have a state-of-the-art space which rivals any retirement community woodshop across the country, the center said in a statement.

The shop features 56 benches, more than 20 assembly tables, three storage

rooms, a paint booth, an office and a spacious showroom. It is fully equipped with a dust collection system, air conditioning, plenty of light and dozens of new machines.

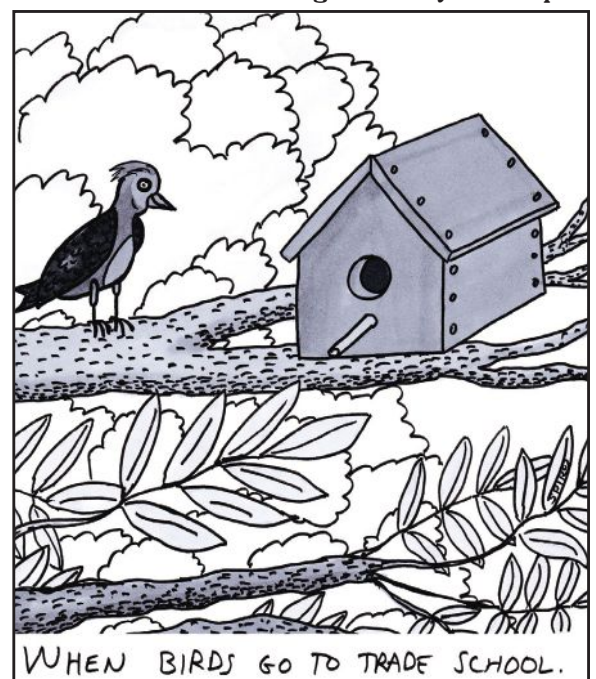
"I believe it is one of the nicest and most modern shops in any of the retirement communities in the state, if not the country," says resident Dean Miller, president of the woodshop. "Three of us from the shop attended all of the design meetings. We had a lot of input and the final design is based on our recommendations."

The Masonic Villages is owned and operated by the R.W. Grand Lodge of F. & A. M. of Pennsylvania. It has other locations in Dallas and Lafayette Hill, Sewickley and Warminster, Pa.

For more, visit www.masonicvillages.org.
— Jennifer Hicks

60 Grit

Rough humor by Steve Spiro





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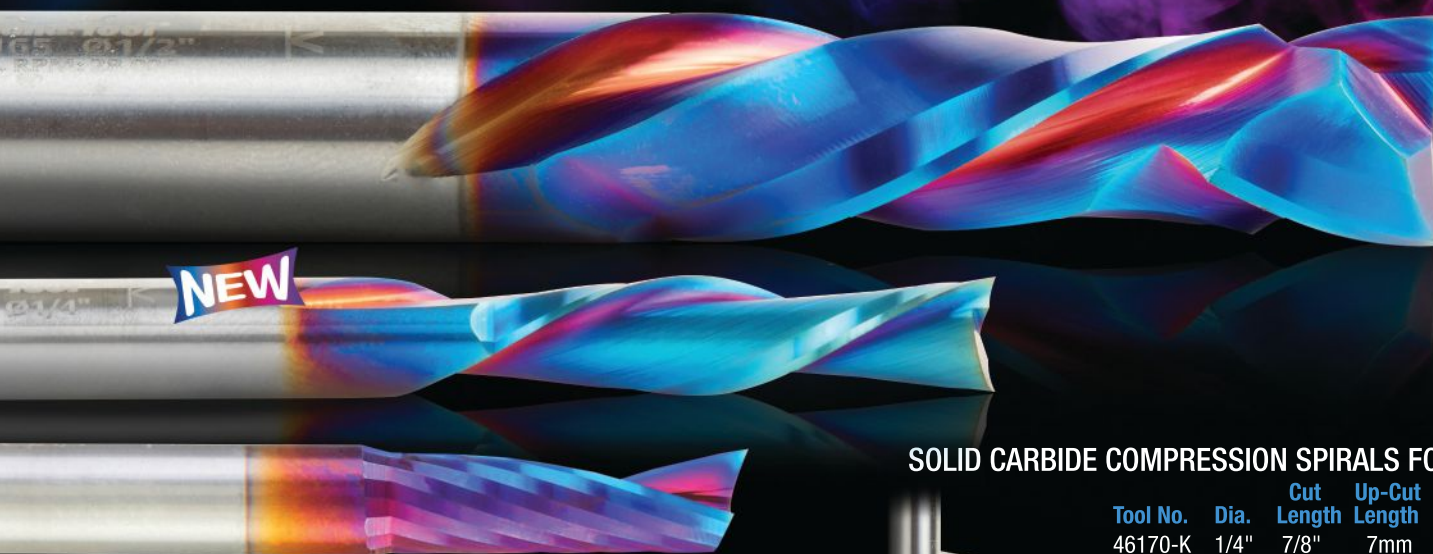
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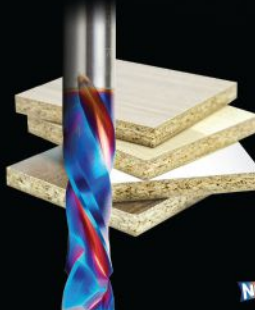


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SOLID CARBIDE COMPRESSION SPIRALS FOR MDF/LAMINATE

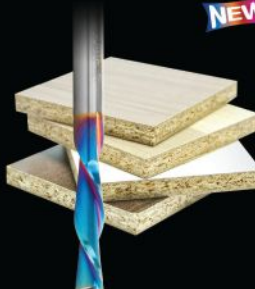
Tool No.	Dia.	Cut Length	Up-Cut Length	Shank	Flutes	Length
46170-K	1/4"	7/8"	7mm	1/4"	2	2-1/2"
46167	3/8"	7/8"	.200"	3/8"	2	3"
46161	3/8"	1"	9mm	1/2"	2	3"
46166	3/8"	1-1/8"	9mm	3/8"	③	3"
46162	3/8"	1-1/4"	9mm	3/8"	2	3"
46163	1/2"	1-1/4"	11mm	1/2"	2	3"
46012-K	1/2"	1-1/4"	9mm	1/2"	③	3"
46165	1/2"	1-5/8"	13mm	1/2"	2	3-1/2"
NEW 46014-K	1/2"	1-5/8"	9mm	1/2"	③	3-1/2"

NEW AMS-182-K - 5 Piece Set



NEW SOLID CARBIDE SPIRALS FOR MDF/LAMINATE

Tool No.	Dia.	Cut Length	Shank	Flutes	Overall Length
Up-Cut					
46100-K	1/8"	1/2"	1/4"	2	2"
46102-K	1/4"	3/4"	1/4"	2	2-1/2"
46315-K	1/4"	1"	1/4"	2	2-1/2"
Down-Cut					
46200-K	1/8"	1/2"	1/4"	2	2"
46202-K	1/4"	3/4"	1/4"	2	2-1/2"
46415-K	1/4"	1"	1/4"	2	2-1/2"



SOLID CARBIDE UP-CUT SPIRAL 'O' FLUTE BITS FOR PLASTICS

Tool No.	Dia.	Cut Length	Shank	Flutes	Overall Length
51441-K	1/16"	1/4"	1/4"	1	2"
51410-K	1/8"	1/2"	1/8"	1	2"
NEW 51411-K	1/8"	1/2"	1/4"	1	2"
51446-K	1/8"	3/4"	1/4"	1	2-1/2"
51417-K	3/16"	5/8"	1/4"	1	2"
51404-K	1/4"	3/4"	1/4"	1	2"
NEW 51405-K	1/4"	1"	1/4"	1	2-1/2"

NEW AMS-166-K - 5 Piece Set

