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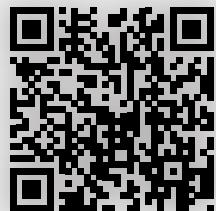
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BLOGS



Over the Workbench

Talkin' shop with former editor A.J. Hamler

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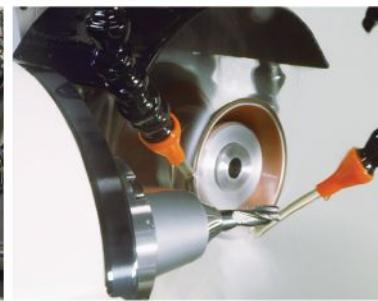
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Grizzly Industrial names new president

By Tod Riggio

JUNE 2025

WOODSHOPNEWS

Grizzly Industrial, a provider of woodworking and metalworking machinery and tools, announces that Shabir Balolia is assuming the role of President. Balolia, the son of company founder and CEO Shiraz Balolia, was previously the company's COO.

"We are thrilled to welcome Shabir Balolia as the new President of Grizzly Industrial," said Shiraz Balolia. "Shabir's deep understanding of our company, our customers, and the industry, combined with his proven leadership as COO, makes him the ideal person to lead Grizzly into the future. He embodies the same passion for quality and customer satisfaction that has driven our success since day one."

"Shabir Balolia brings a wealth of experience to the role, having grown up within the company and served in various key positions," the company said in a statement. "As COO, he was instrumental in overseeing a period of company process modernization, product development, sourcing and strengthening relationships with key suppliers."

"His leadership in these areas demonstrates his ability to drive innovation and operational excellence. His intimate knowledge of Grizzly's product line and customer base, cultivated through years of hands-on experience, ensures a seamless transition and continued commitment to the company's core values."

"I am honored to take on this responsibility and build upon the strong foundation and principles

we have created over the years," said Shabir Balolia. "Grizzly has always been about providing high-quality machinery and tools at exceptional value, and I am committed to upholding that tradition while driving innovation and expanding our brand focus into new venues and regions."

SAVE THE DATE

The Association of Closet and Storage Professionals (ACSP) announces its 20th Anniversary Reception on June 10, starting at 6 p.m., at E.R. Bradley's in West Palm Beach, Fla.

"This celebratory evening, held the night before the Closets Conference & Expo kicks off, will bring together industry professionals, partners, and supporters from across the country to honor two decades of growth, innovation, and community within the closet and storage industry," the ACSP said in a statement.

"Everyone is welcome, whether you're a longtime member, a supplier, a designer, or simply passionate about the industry, we invite you to join us for drinks, appetizers, and great conversation in a beautiful setting by the water."

"This milestone represents the incredible collaboration and commitment of professionals across our industry," said Amanda Conger, Executive Director of the ACSP. "We look forward to celebrating with our community and recognizing the impact we've made together over the past 20 years."

RSVPs are encouraged. Email: director@closets.org. **W**

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AWFS expects a bustling July show

By Jennifer Hicks

Momentum is building for the upcoming AWFS Fair on July 22-25 at the Las Vegas Convention Center. Early numbers suggest attendance should meet or exceed previous fairs and several new programs have been added to complement traditional show highlights, according to AWFS officials.

"Attendee registration is trending well above previous years, and the floor plan is quickly filling. Exhibitors span from large machinery to hand tools, all directly related to woodworking and furnishings," show officials told Woodshop News in April.

"The Tool Tour will have attendees grooving through the aisles. The Safety Zone is making a comeback with PPE, gadgets, software, and services to keep workers safe and companies OSHA compliant. Rapid Fire now provides exhibitors with the option to record their presentations, allowing them to reuse the content for their marketing purposes. Destroy Responsibly returns, shredding wood waste, and helping make the AWFS Fair environmentally friendly."

8 The College of Woodworking Knowledge (CWWK), the Fair's educational program, is returning with 60 sessions in six tracks for shops of all sizes.



"Some interesting and new topics are part of the CWWK program for 2025 including sessions on AI and Wood Manufacturing; Profiting Off of Your Woodworking Waste; A Case Study on Automation and Robotics for a Mid-sized Shop, and Hands-on Workshops with CNC and Epoxy," show officials said.

The Fair will also feature daily WED (WEducation) Talk on the main stage with industry experts discussing the big trends and hurdles facing wood manufacturing. Topics include Understanding the Custom Woodworking Business, Getting Younger Generations into the Wood Industry, and Cloud-Powered Millwork.

The Visionary New Product Showcase returns, which honors exhibitors for innovation for new-to-market products since the 2023 AWFS Fair.

"These showcases will be located outside of the show's main entrance and have proven to be one of the fair's most popular features. All first-time exhibitors are welcome to enter a product as well."

And the Fresh Wood Student Competition also returns, bringing students and their woodwork to the show from across the nation.

Register and learn more at awfsfair.org. **W**

CMA conference to feature plant tours

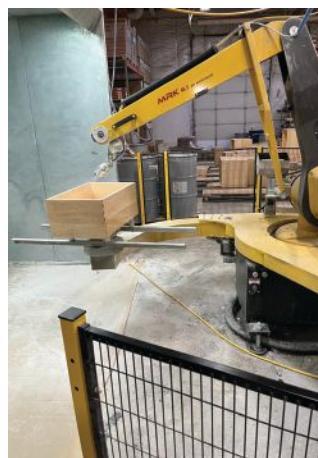
By Jennifer Hicks

The Cabinet Makers Association's national conference, scheduled for Oct. 1-3 in Detroit, will offer attendees the chance to take guided plant tours for a behind-the-scenes look at production processes, materials management, and automation solutions that can be applied to businesses of all sizes.

The event will take place mainly at the Westin Book Cadillac Detroit and feature keynote presentations, breakout sessions, and numerous networking opportunities designed to help woodworking professionals grow their businesses.

"We are thrilled to offer exclusive plant tours," Randy Niewind, president of the CMA, said in a statement. "These tours are an invaluable experience for attendees to see innovation in action and bring fresh ideas back to their own shops."

Tours are scheduled at Burke Architectural Millwork, Elliott Woodworking, JB Cutting, Bakes & Cropp, and Richelieu Hardware.



Elliott Woodworking



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The conference will begin with the Wood Diamond Awards ceremony, where CMA members recognize and nominate work by industry peers.

Keynote presenters include Michael Fuez of ITR Economics and Marc Sanderson of Innnergy.

Register and learn more at cabinetmakers.org. **W**



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AHFA awards scholarships to children of industry workers

By Jennifer Hicks

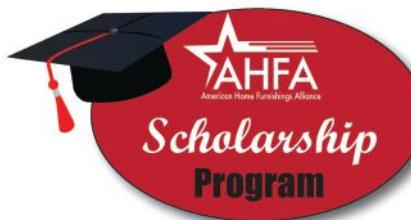
The Solution Partners division of the American Home Furnishings Alliance (AHFA) announced the recipients of its education scholarships, totaling \$35,000, in April. The winners are all children of workers in the home furnishings industry.

"The AHFA had the opportunity to make 12 students very happy recently as they received news they were being awarded a Solution Partners scholarship during a live online event. Ten of the students received \$2,500 scholarships and two received \$5,000. All recipients have a parent who works full-time at an AHFA member company," says Patricia Bowling, AHFA's vice president of communications.

Six of the scholarships were based on academic merit and financial need, while the other six were based on academic merit alone.

Recipients of the \$2,500 scholarships were Melany Brown, daughter of Sierra Brown, an employee of HM Richards; Taylor Cotie, daughter of Tina Hinshaw (Legacy Classic Furniture); Addison Cox, daughter of Zachary Cox (Leggett & Platt); Lucas Gross, son of Angel Gross (Century Furniture); and Kayli Jenkins, daughter of Marlon Jenkins (Carpenter Company).

Also, Rachel Knudsen, daughter of Janice Knudsen



(Ashley Furniture Ind.); Charlotte Lowery, daughter of Joesph Lowery (Carpenter Company); Kathryn Quiram, daughter of Daniel Quiram (Carpenter Company); Natalie Schroeder, daughter of Peter Schroeder (Hickory Springs Mfg.); and Addison Wood, daughter of Debra Spears (Carpenter Company).

Karen Minton, daughter of Rebecca Minton (Bluewater Logistics Group) won the \$5,000 AHFA scholarship and Britney Zulueta, daughter of Angel Zulueta (Huntington House) received the \$5,000 Bill Hauck Memorial Scholarship, funded by Deliverright Logistics.

The Solution Partners Scholarship Program is supported by an annual golf tournament, first held in 1990. The first four scholarships were awarded in 2000.

Since then, 165 students have received financial assistance from AHFA to help them attend a university, community college or technical school.

The 2025 golf tournament is slated for Sept. 24 at Lake Hickory Country Club's Catawba Springs Course in Hickory, N.C.

Based in High Point, N.C., the AHFA represents more than 200 furniture manufacturers and distributors, plus about 150 suppliers to the furniture industry worldwide. Learn more at ahfa.us. **W**

JUNE 2025

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WOODSHOPNEWS

MANAGEMENT TEAM ACQUIRES MAJORITY INTEREST

Diversified Wood Products in Jeffersonville, Ind., announces that its management team, consisting of Olin "Buddy" Bryant, Chris Totten, and Tim Griffin, has officially acquired a majority interest in the business.

"This strategic move reinforces the leadership team's commitment to the company's long-term success," the company said in a statement. "With deep experience in the business and a shared dedication to innovation and customer satisfaction, the new majority owners plan to build upon the company's strong foundation while exploring new opportunities for expansion and improvement."

"We are thrilled to take this next step in the company's evolution," added Totten, CFO of Diversified Wood Products. "Our team has been deeply invested in this business for years, and this acquisition allows us to further align our vision with the future of the company. We look forward to continuing to serve our customers, employees, and stakeholders with the same passion and excellence that have defined our company."

Diversified Wood Products supplies architectural plywood. Learn more at diversifiedwp.com.

NEW ACTING REGIONAL FORESTER FOR EASTERN REGION

Gordie Blum will serve as acting regional forester for the Eastern Region, effective May 1, according to an April 21 announcement from USDA Forest Service Chief Tom Schultz.

Blum will temporarily succeed Regional Forester Tony Dixon as he reaches his planned retirement after 34 years of service. "I would like to thank Tony for his dedication and exemplary leadership for over three decades. He's left a meaningful legacy and has truly been a champion of our mission and employees," said Schultz.

As acting regional forester, Blum will oversee management of 17 national forests and one national tallgrass prairie spanning the Northeast and Midwest United States.

"Gordie's understanding of the importance of field work and collaboration with state and local decision-makers perfectly positions him to serve in this leadership role for the Eastern Region. As the agency focuses on safety, active forest management, fire management and recreation, Blum will work with our partners to advance the agency's mission critical work," said Schultz.

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Hettich

Plywood sellers deal with tariff implications

By Jennifer Hicks

Tariffs are a hot topic in the hardwoods market, especially for plywood and paneling. While prices are relatively stable, customers are worried about an increase, which is having an impact on order volume and purchase timelines, according to suppliers interviewed by Woodshop News.

"We're seeing a lot of anxiety because every vendor right now is throwing a tariff notice on their products, stating tariff prices could spike at any point and a tariff charge could be charged at any time during the buying process. Everybody is on edge. They're expecting at least a 10 percent across the board on everything, even if it's domestic," says Dave Norman, of Parkerville Wood Products in Manchester, Conn.

"A lot of the plywood comes out of Canada, but some comes out of Asia, and then Baltic birch. But anything coming out of Canada has been a little bit of a concern because a lot of plywoods move through there."

12 Norman tells customers that at the moment, things are holding stable with prices rising slightly. But pricing can't be guaranteed for more than seven days.

"Many jobs are bid weeks, if not months ahead of time, and the seven-day price hold is not helping with jobs that were bid quite a while ago.

"The other thing I've seen is that products are getting tied up in containers, and people need to buy something local to keep things rolling. There's a lot of nonsense that happens with this sort of thing. We got a load of hardwood about a month and a half ago, and the paperwork on the tariffs that came with it was like a book. So, there's a lot of paperwork that can slow things down as well," says Norman.

Michael Johns of Suwanee Lumber in Suwanee, Ga., says that since the April announcements of sweeping



tariffs, consumers have expected all the imports to go up, which has affected pricing and costs to them and competitors in the region.

"In general, it's not a huge change. It's not a huge tax like a lot of people were calling us and asking us about. But what that has led to is that a lot of people are really bulking up their inventories, especially on the import products, in expectancy of those items getting higher in price probably within the next six months. So, in the past month, we've sold probably 20 to 30 percent more than normal, which is good, but we are expecting prices to continue to go up a little bit," says Johns. **W**

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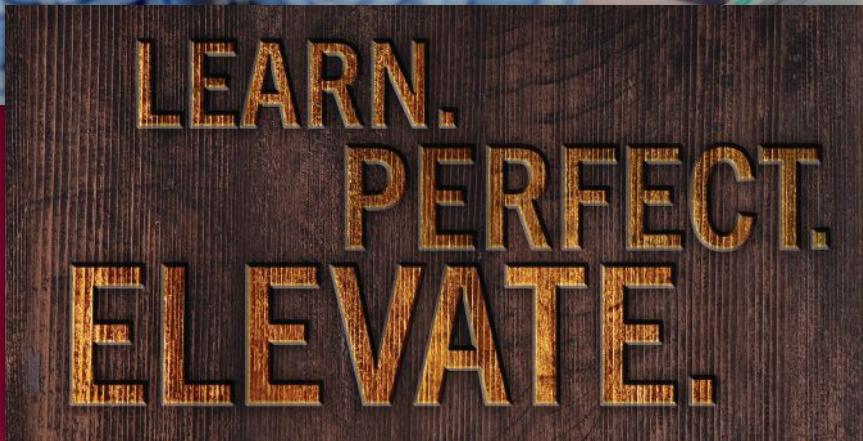
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The power of outsourcing

Outsourcing has become one of the most powerful ways for smaller shops to flourish

By John English

Recent turbulence regarding the effects of tariffs on stock markets has underscored that we live in a global economy. That means America's woodworkers can peruse catalogs, place orders and transfer payments instantly to anywhere on the planet. Globalism is a reality that translates into Chinese plywood, Canadian hardwoods, Baltic birch multi-ply, and cabinet hardware that's either made overseas, or manufactured here with imported metals. Almost nothing that woodshops use is an exclusive North American product, and some of the sources are surprising. For example, Vietnam is a big player in the decorative hardware field, and Germany exports more paint, dye and varnish than any other country in the world, including the U.S.

So, what does all this have to do with the daily task of getting kitchens onto the loading dock? Well, those global supply chains can affect a woodshop's scheduling, pricing, sales, inventory, and even labor

costs. Shops are no longer just competing with a cabinetmaker or two in the neighborhood. The industry has entered an era where lean manufacturing alone won't cut it. Over the past decade, outsourcing (buying in doors, drawers, and ready-to-assemble cabinet boxes) has become one of the most powerful ways for smaller shops to keep pace.

The global marketplace means that shops are no longer restricted to local vendors, but buying cabinets from overseas isn't always practical because of shipping costs and delays. With rising prices and trade disruptions, the purchasing ability of domestic outsourcing suppliers – large factories located in North America that specifically serve cabinet and furniture shops – can significantly curb costs and calm supply streams. Big buyers not only enjoy volume discounting, but they also have access to more suppliers than the average woodshop. Their diversity is a potent tool in an erratic marketplace.

THE ADVANTAGES

The biggest benefit of buying-in cabinet components is the most obvious: it lets a woodshop install more product in less time. This means that more jobs can be sold and delivered. It also means that the shop owner can spend more time selling than making (which may or may not be an advantage: some woodworkers prefer to play with machines more than meeting clients). But somebody will be freed up for sales, and also for other tasks.

That's the second big benefit: by not spending all day building basic boxes, the crew at the shop can specialize in areas that take advantage of its strong core competencies. It allows a shop's designer to add some artistic flair, and talented people on the shop floor to exhibit their potential. Design trends in the marketplace currently lean toward decorative accents such as architectural stove hoods and turned island legs, or complex coating solutions such as natural wood combined with more than one paint color.

These decorative elements take time to complete, and they can cause bottlenecks on saws, CNCs, and in spray booths. Buying in pre-coated, completed components alleviates those logjams. If most of the kitchen arrives on flat-packed pallets instead of having to be built in-house, that creates time for the shop to add embellishment.

Artistic flair doesn't need to rely only on newly liberated shop hours. Outsourcing can also include options such as turned or bentwood accents, or curves and cuts to casework that are beyond a shop machinery's abilities. It can also offer new materials such as glass and metal with which the shop's woodworkers have no expertise, and that can open new sales streams such as adding commercial work to the core residential catalog or moving from mass market to more profitable upscale homes.

For small shops wishing to grow, outsourcing offers a far less painful path to expansion. The key here is that the shop doesn't need to invest in an expensive production line full of smart machines and robotic material handling or coating. Instead of spending heavily on equipment, a small shop can essentially rent time on the big shop's machines — which are more efficient and more accurate. Outsourcing also means smaller physical spaces, which come with lower costs. If there's no need for a second CNC, then there's no need for all the square footage around it that needs to be free for loading and unloading. The electric bills are lower, too. And with outsourcing, there's less inventory to carry and finance, plus jobs can be delivered right to the customer's home or office rather than eating up storage space at the shop. There are peripheral savings, too. The small shop owner doesn't need to pay for the second CNC's dust collection, vacuum pumps, carts and tooling, to mention a few.

Aside from investment costs, outsourcing also reduces current expenses. The largest of these is usually payroll. If a shop doesn't have a second CNC, it doesn't need to hire, train and pay operators for it. As sales grow, there's no need to increase staff for the cutting room, assembly station or spray booth, and consequently no need to hire administration for those people or functions. Other expense savings provided by outsourcing may include abstracts such as not having to heat or air condition extra shop space or provide employee support such as extra lunchroom space or parking spots. Even the light bill will be lower.

And the flexibility of outsourcing can't be ignored. The ability to take on fewer or more jobs in response to market fluctuations is a lot easier, and far less expensive, than gearing up in-house production or laying off staff, and then trying to rehire them when conditions allow. Job size is another issue. Small shops find they can now bid on municipal jobs such as schools and clinics, or larger commercial jobs that the woodshop's physical capacity simply can't handle.

The integration of cabinet libraries with design software is another advantage. A shop owner can build a kitchen in a program that automatically loads specs for a specific line of outsourced casework, so there's no need to individually draw each and every box. Just pick the unit and drop it in place. Systems such as Cabinotch have been doing this for quite a while, so the glitches are all gone and the process is very streamlined. Kentucky-based Cabinotch offers face-frame and full-access (frameless) cabinet boxes made with PureBond hardwood plywood, plus dovetailed drawer boxes and cabinet doors.

Outsourcing suppliers are by nature quite custom, so the larger ones can generally make almost anything a woodshop requires. That includes items such as boxes, doors, drawers, moldings, columns, corbels, range hoods, islands, carvings,

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inlays and onlays, and furniture feet or legs. Doors can be inset or overlay, solid or five-part, glazed or grilled, and they come in a massive variety of coatings and materials. Most of the bigger suppliers offer libraries of pre-drawn CAD designs. Almost all suppliers offer catalogs of door styles online that can be customized for dimensions, materials and finishes. Cabinets can come fully assembled, or flat-packed on a pallet with a variety of assembly methods and hardware. And most suppliers will ship directly to a jobsite.

CHALLENGES OF OUTSOURCING

With outsourcing, it's important that woodshops choose a reputable and time-tested supplier as the shop will be adopting the factory's quality controls. Scheduling can be a challenge, too. If a part arrives damaged, instead of just running back to the shop and making a new one, the shop may have to request a replacement from the factory because of the need to match specific materials, coatings or profiles. There can also be communication issues where

the shop and the factory are using different design software programs that don't talk to each other.

One of the biggest concerns for a shop is that it is now relying more heavily on those global supply chains mentioned earlier. Instead of using drawer slides from a stock that was purchased and paid for, and are kept in-house, the shop is now subject to global problems such as a political bottleneck in the Panama Canal, or a storm in the South China Sea. High-volume, time-tested suppliers will have procedures in place to handle this.

In a world with hacking, identity theft and ransomware, it's a little unnerving for a shop owner to share private information with a factory supplier. That's especially concerning when the outsourcing supplier is a foreign entity with no history.



WHAT'S NEW?

Suppliers are constantly updating their offerings, so it pays to revisit their websites on a regular basis. For example, **NorthPoint Cabinetry** in Louisiana is a Hardware Resources brand that has been shipping flat-packed RTA (ready-to-assemble) casework under its QuickBuild brand for some time. Now, the company has added the option of ordering units as fully assembled cabinets. Boxes ship quickly from several locations nationwide, and shops can order online through a newly designed user interface. The line also offers a new drawer for bathroom sink cabinets that has a U-shape designed to avoid plumbing, and the **Jeffrey Alexander** division of Hardware Resources has just released four new decorative hardware collections, too: Fontana, Griffin, Ivan, and Jules.

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Wisconsin-based **WalzCraft** manufactures custom cabinet doors, drawer boxes, moldings, and cabinet components. The company has introduced rift sawn red oak as a sustainable and attractive alternative to increasingly scarce and costly quartersawn white oak. This natural wood product promotes sustainable logging by optimizing the use of available resources, and WalzCraft offers it in both standard and select grades. It is remarkably like traditional white quartersawn and provides considerable cost savings. Also new from WalzCraft is an expanded catalog of range hood options, just in time to satisfy that emerging trend.

The new Edge modular closet system from **Rev-A-Shelf** offers four packages designed on width and/or depth that can completely transform a closet and turn it into a flexible, well-accessorized space. It offers telescopic, removable units including cushioned drawers along with trouser, skirt, shoe and laundry racks along with rods and compartments for everything from dresses and skirts to jewelry, belts, bags, and glasses.

Elias Woodwork has streamlined its operations to the point that it can now offer cabinet shops a very brief



three-week lead time on full RTF kitchen cabinetry (some restrictions may apply). There are one-piece and five-piece RTF door galleries on the company's website that show the wide range of colors, grain patterns, and door styles available.

A new ordering system at **Arkansas Wood Doors** makes it easier for shops to navigate the catalog. The company's catalog includes a lot more than doors. AWD also supplies drawers, cabinet refacing components, and a complete line of frameless and face frame Stonehenge RTA cabinets that are made in-house.

Decore-ative Specialties provides shops with RTA cabinets, doors and drawer fronts, drawer boxes, moldings, cabinet accessories, finishing services, hardware and specialty items. The company offers a simplified process for ordering 24/7 and quoting its ready-to-assemble, frameless Streamline cabinets, and orders are filled from locations in California and North Carolina.

DOORS & DRAWERS

Amish Country Woodworx in Indiana offers two price options in their dovetailed drawer options, the Express and custom Select. Express drawers are built with UV-coated white poplar, have a five-day lead time, and can be ordered in a selection of standard heights but with the options of customized width and depth. Custom Select drawers can be ordered in custom heights and with an optional clear satin coating. They normally require a 10-day lead time.

CCF Industries in Pennsylvania offers standard, custom and value drawers. The standard line are half-blind dovetail drawer boxes made to the nearest 1/32" based on a shop's specifications, and in heights rang-

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ing from 2" to 23". The bottom panel thickness can be 1/4", 3/8" or 1/2". The prefinished Baltic birch value line is still high quality, but is designed with a budget in mind. And the gallery of custom drawers on the CCF website is inspiring.

New England Drawer also builds custom drawers and has introduced a new line called the N.E.D. Poplar plus+ drawer. These are the same quality and design as the company's select maple drawers but executed in poplar. It has also started carrying Blum undermount slides.

Blum provides four different drawer box systems that answer the need for sleek, modern solutions. LegraBox offers slim-sided drawers in different colors; MerivoBox brings easy assembly and a vast array of design choices; TandemBox has light gray metal box drawers; and MetaBox offers drawers for commercial and residential use.

The Vionaro drawer box from **Grass America** is a minimalist design statement that works with the company's Dynapro undermount slides. Grass also offers the designer-friendly, durable and fast Zargen sys-

tem that has five height choices and a flexible railing system. And rounding out the catalog is ZBox, which adds full-extension slides to a simplified design that can be assembled in the shop in less than two minutes.

Among the new drawer products from **Hettich** include Avantech You illumination and an update to Quadro. The illumination is an LED light that comes on when a drawer is opened, and is especially dramatic when combined with glass inlays with polished or ground edges. Easy to install, the system runs on a rechargeable battery pack. And Hettich's Quadro V6 5D drawer slides now offer precise tool free five-way adjustment for height, side, depth, tilt and radial facility for perfect front panel alignment with minimal reveal widths.

Known for its comprehensive decorative pulls and knobs selections, **Richelieu Hardware** also provides an impressive range of cabinet doors. The material options include melamine (TFL), aluminum framed,



solid wood, wood veneer, polyethylene, thermoplastic, polymer, polyester and tambour doors from a broad selection of reputable manufacturers.

Ohio-based **Century Components** offers American-made drawer organizers plus a large assortment of accessories for vanities and base, wall and tall cabinets. Among the clever solutions is the Galaxy charging drawer, which keeps clutter off the countertop and lets clients charge devices in a secure and out-of-sight location. To house the chargers, Century makes a solid maple dovetailed drawer box with a 60-sheen natural conversion finish. The electronics are attached to the back of the drawer.

It's important to remember that outsourcing isn't just limited to casework, doors and drawers. In January, **Designs of Distinction** launched a new line of brass components that are de-

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3. CS-55PAAU 55" Automatic Sliding *\$30,990.00*

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signed to "add elegance and sophistication to high-end cabinetry, furniture, and architectural projects." They include 1/4" and 3/8" solid bar in lacquered polished brass or lacquered satin brass

finishes that can be used as an on-lay or insert to create clean, modern lines on casework. DOD also added solid brass corner and strap connectors.

One last note about design: the lat-

est Kitchen & Bath Collection catalog is available from **Osborne Wood Products**. It contains 77 pages of ideas that can add a little drama and style to standard outsourced cabinetry. **W**

RESOURCES

Full cabinet lines with accessories:

CabinetParts.com cabinetparts.com
 Cabinets Quick cabinetsquick.com
 CabParts cabparts.com
 Canary Closets & Cabinetry canarycc.com
 Decore-ative Specialties decore.com
 Dura Supreme Cabinetry durasupreme.com
 Elias Woodwork eliaswoodwork.com
 Express Kitchens expresskitchens.com
 Hardware Resources hardwareresources.com
 Keystone Wood Specialties keystonewood.com
 Northern Contours northerncontours.com
 Signature Woodworking signature-woodworking.com
 WalzCraft walzcraft.com

Cabinet doors:

Arkansas Wood Doors arkansaswooddoors.com
 Conestoga Wood Specialties conestogawood.com
 Modern Fronts in Maryville, TN modernfronts.com
 TaylorCraft Cabinet Door taylorcraftdoor.com

Cabinet drawers:

Amish Country Woodworx acwoodworx.com
 Blum blum.com
 CCF Industries ccfdrawers.com
 Drawer Box Specialties dbsdrawers.com
 Drawer Connection dcdrawers.com
 Hettich hettich.com
 Grass Americ grassusa.com
 New England Drawer newenglanddrawer.com
 Timbercraft Drawers timbercraftdrawers.com
 Top Drawer topdrwr.com

Accessories and components:

Century Components centurymade.com
 Designs of Distinction brownwoodinc.com/dod
 Osborne Wood Products osbornewood.com
 Outwater Industries outwater.com
 Rev-A-Shelf rev-a-shelf.com
 Richelieu Hardware richelieu.com

Miscellaneous:

Talbert Architectural Panel & Doort albertusa.com
 Newmouldings newmouldings.com
 Cabinotch cabinotch.info



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TOOLS & TECHNIQUES

Grizzly unveils new benchtop planer & jointer

By Jennifer Hicks

Grizzly Industrial presents its new 15" benchtop planer with a spiral cutterhead, model G0999, offering an unmatched combination of a wide capacity, precision features, and a space-saving design, according to the company.

"We wanted to introduce a machine that was like no other," said Shabir Balolia, president of Grizzly Industrial. "The G0999 is a feature-rich pinnacle of capacity, affordability, and performance, all wrapped up in one for small shops to large."



"We know the extended capacity is important for people," adds Grizzly product manager Pat Raynor. "Our goal was to come up with a 15"-wide planer in a benchtop model and make it more like a production machine, and not a 'lunchbox planer.' We really tried to focus on features in this and have some of the things you get in stationary machines."

Raynor says the spiral cutterhead produces smoother, quieter cuts with reduced tear-out. The model also features a 2-hp motor, two-speed gearbox, digital thickness readout and micro-adjustable depth stop. It sells for \$1,359.

Grizzly has also added a 10" benchtop jointer, model G0986.

"It's great for just everyday use, but when you have that wider piece that you need to flatten, then it's a must-have," says Raynor.

"We've also added extended rollers, so it's 54" in length, and we made the fence 4" longer than on our 6" and 8" benchtop jointers. It has a 24" fence that I think is a great addition to it."

The 10" jointer has a 1.75-hp motor and a spiral-type cutterhead with 20 indexable HSS inserts. It sells for \$679.

Learn more at grizzly.com.

New hinge borer from Maksiwa

By Jennifer Hicks

Maksiwa introduces the new HBM.1000 hinge boring machine, allowing woodworkers to bore and insert hardware efficiently for system and hinge connections. The machine provides flexibility for various hinge types and panel thicknesses, and does not require the user to work with any specific hinge type.

"This gives woodworkers the option to offer a premium hinge, or something else very good that costs less," says Maksiwa sales director Vitor Saar.

"There are several other manufacturers that provide this type of machine, but some of those machines have you buying their hinges, which is good and bad. Yes, most of the time they're a very good hinge. But sometimes a customer doesn't want to pay the premium for that type of hinge, and they want other options in the market that are good but not so expensive."

The hinge borer has a 1-hp, single-phase motor and weighs 110 pounds. It measures 33-7/16" wide, 28-3/8" deep, and 31-1/2" tall.

The HBM.1000 sells for \$3,499. Learn more at maksiwa.com. **W**

NWFA HOSTS SUCCESSFUL WOOD FLOORING EXPO

The National Wood Flooring Association (NWFA) hosted its 2025 Wood Flooring Expo from April 15-17 in Charlotte, N.C., drawing over 2,500 wood flooring professionals worldwide. Marking NWFA's 40th anniversary, the event embraced the theme "Go the Distance," offering hands-on demonstrations, innovative product showcases, educational sessions, and networking opportunities.

"The 2025 NWFA Wood Flooring Expo in Charlotte was a resounding success, marking 40 years of dedication to the hardwood flooring industry," says Steve Brattin, NWFA Board Chair and owner of SVB Wood Floors. "We are proud to have provided professionals with the tools and inspiration needed to advance their businesses, ensuring a thriving future for our craft."

Next year's NWFA Expo is scheduled for April 21-23 in Orlando, Fla. Learn more at nwfa.org.

Courtesy of Maksiwa



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WOODSHOPNEWS

MicroJig adds Grid Router Guide to MatchFit system

By Jennifer Hicks

MicroJig presents the MatchFit Grid Router Guide for creating MatchFit dovetail grids and clamp tracks with a router.

"This guide base was designed for woodworkers to be able to make a dovetail grid pattern of any size they want to with a small router. It's the easiest and fastest way, with no measuring, no marking. The only adjustment for the user is to set the depth of the cut of the two bits to make the relief groove and the dovetail groove," says Ralph Bagnall, MicroJig's product development manager.

Bagnall explains that the new guide base enhances the company's original MatchFit dovetail clamp system, based on a 14-degree, 1/2"-wide dovetail groove.

"From there, we created hardware to go with the clamps, all built around jigs, fixtures, and router table fences. Then we started looking at making assembly tables and workstations

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that had the dovetails in a grid pattern, so you could place clamps and dovetails anywhere on the grid. Our customers really took over on that and started making all kinds of things. Customers asked if they could buy a table like this, and it doesn't really make sense to manufacture the tabletops with the dovetail grooves in them, so we created the guide," says Bagnall.

The guide fits most routers with 4" to 7" bases and 1 to 3-hp motors. A 1-3/8" Porter-Cable style bushing adapter is required, according to the company.

The MatchFit Grid Router Guide sells as a kit with two bits (relief and dovetail) for \$99.99. Learn more at microjig.com. **W**

Courtesy of MicroJig

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New transport rack from PaintLine

By Jennifer Hicks

PaintLine has introduced the new Pro Face Frame & Door Mover (PFFDM), a mobile rack for moving cabinet doors, panels and face frames through a shop.

"The cabinet industry needed a better way to transport cabinet parts and small panels on the production floor, so we developed the PFFDM to seamlessly integrate into nearly any workflow," explains PaintLine's CEO Kyle Robinson.

Features include slotted trays that safely and quickly guide panels into place, and fiberglass rods that keep cabinets from touching each other.

"This unique slot-and-rod divider system is easily cleanable, non-marring, and highly configurable," the company said. "With heavy-duty, 5" polyurethane casters, the cart rolls easily, even when fully loaded."

The PFFDM sells for \$483 without shelves, and \$669 with shelves.

PaintLine also offers the Pro Face Frame & Door Mover Angled (PFFDM.ANG) with a five-degree angled base, designed for shops



"Our new kitchen looks incredible... and we love how the cabinets started warping!"

Said No One Ever.

The new Pro Face Frame & Door Mover from PaintLine.

with inclines or ramps.

Learn more about both products at paintline.com. **W**

IWPA HONORED FOR E-LEARNING PROGRAM ON LACEY ACT COMPLIANCE

The International Wood Products Association (IWPA) has received the Gold TRENDY Award for Best E-Learning and Live Training Program at the 2025 Association Trends Salute to Association Excellence. This award recognizes IWPA's commitment to industry education and its success in equipping businesses with the knowledge and tools needed for compliance with the Lacey Act.

Funded through a grant from the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), IWPA's training program provides on-demand, hybrid, and in-person education to businesses impacted by the Lacey Act's evolving regulatory requirements. Through its five-module Lacey Act Due Diligence Course, specialized service provider training, interactive hybrid discus-

sions, and targeted compliance workshops, IWPA has helped over 1,500 industry professionals navigate regulatory complexities and implement effective compliance strategies.

"We're honored to receive the Gold TRENDY Award as the result of our commitment to regulatory education and supporting industries impacted by the Lacey Act," said Ashley Amidon, Executive Director of IWPA. "Thanks to APHIS's generous support, we've developed a comprehensive training program that empowers businesses with the knowledge they need to comply with federal regulations while continuing to source and distribute wood products responsibly."

Learn more about IWPA's Lacey Act Compliance Training Program at iwpawood.org.

Courtesy of PaintLine

80% of all problems in wood projects are caused by moisture content issues. A quick and simple, non-damaging moisture meter reading can save you from angry customer calls, unnecessary repair time, and a bad reputation. Call today and learn why Wagner's industry-leading Orion meters may just be the most important tool for your shop.



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WOODSHOPNEWS

Joinery adhesives

Tips for choosing and working with PVA and polyurethane glues

By John English

There's an old joke about a goat who got into the woodshop's garbage and ate an empty can that had once contained adhesive. It didn't kill him, but it did encourage him to change his diet. Ever since then, he's been glue-tin free.

Adhesives come in many guises from edge banding to cyanoacrylate and hide glue, but the go-to products for joinery are polyvinyl acetate (PVA) and polyurethane glue such as Gorilla Glue and Titebond's poly.

The molecules of a wood glue need to be smaller than the cell structure of wood, so they can penetrate the two surfaces that are being joined. The adhesive has to get below each surface and gain a toehold, because that's what holds parts together. Water-based glues can also saturate the fibers and cause them to swell a little, making for a tighter joint. Polyurethane glue expands as it cures, fulfilling the same function. However, it can expand a bit too much and blow a joint apart, so use lots of clamps. A yellow PVA is a lot easier to clean up, but poly forms a very strong bond, and it sticks to other surfaces beyond wood such as stone, metal, ceramic, foam, glass and concrete. On the other hand, it can absorb water over time, plus it's a bit susceptible to UV degradation and yellowing.

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WOODSHOPNEWS

As glue cures, the water or another carrier evaporates, and the residue hardens. The adhesive molecules in a PVA interlock, so the net result is that the joinery is connected by both a mechanical and a chemical bond.

That chemical bond can be either adhesive or cohesive.

Adhesion is an attraction between two different surfaces (the glue and the wood). It's a subjective bond, only as good as the wood. But we're in luck here because the surface being presented to the glue is fibrous and organic and full of minuscular pits and holes and hollows. Wood offers glue a good purchase.

Cohesion describes the way that glue sticks to itself, and it's this quality that makes adhesives viable. If the glue penetrates both wood surfaces and also exists between them, everything is tied together.

AVOIDING ISSUES

Unfortunately, there are three ways that a glue joint can fail or delaminate.

If the adhesive is not fluid enough, or thin enough on a molecular level, it won't penetrate the surface of the wood properly. Spreading evenly is also a criterion. If there are big globs in a couple of spots and lots of areas with no



The family of Titebond adhesives includes Genuine Hide, Type II Dark, Type II Premium, Type III Ultimate, Original, Quick & Thick, Speed Set, and Translucent.



Among the newer products from Gorilla Glue is Ultimate, which offers up to 15 minutes of open time.

coverage, the bond may eventually fail. That's why we brush or roll out glue to spread it over large areas.

If the chemical formula for the glue is off a bit, which can happen if it's too old, or was stored incorrectly, or was subjected to too much or too little humidity, or had to live with other factors such as heat or oxidation, there can be a cohesive failure. That means the glue won't stick to itself.

The third element of risk is the surface (well, surfaces). The wood can be too oily, or too polished, or maybe it suffered some exposure to wax or other coatings, or it could be too uneven for enough of the surfaces to meet. It can also be too wet. That can happen because it wasn't properly dried, but it can also happen when the surfaces are wetted down too much before clamps are tightened. Another way to invite failure is to cross-laminate. That means gluing two pieces of wood together where the grains run at

90 degrees to each other. As the wood moves in response to changes in humidity and temperature, the two surfaces are actively breaking the adhesive bond. That's because wood expands and contracts across its grain, so if the grain patterns don't line up, they're fighting each other. The same principle is at work with end-grain. The cells in wood are long and thin, so exposed end-grain cells absorb far more moisture (and glue) than side grain. The wood will wick away the adhesive through an end-grain cut, leaving a much weaker joint.

Once an adhesive has cured (that is, the carrier has completely evaporated and the liquid has changed to a solid), it becomes more resilient to factors such as UV and moisture. The old hide glues used to reabsorb water, so a joint could be soaked and then pulled apart. But today's polyvinyl glues are basically plastic after curing, so they don't absorb moisture. The wood around them can still drink water and become unstable, but if the adhesive has sufficiently penetrated its fibers the joint should hold. Of course, the amount and term of exposure play a part: soak the wood too much or too long and almost any joint will fail. But it's the wood failing, not the glue.

If you pull a glued joint apart and one surface is almost clean, either the adhesive bond or the surface material failed. If there are almost equal glue residues on each surface, then the cohesive bond failed, and it's time to buy new glue.

Adhesives don't like rough, grippy surfaces. They want flat, relatively smooth surfaces with unclogged pores.

Clamping does two things. It squeezes adhesive into the pores, but it also removes excess glue so the surfaces can get closer to each other. But too much clamping pressure can bring those surfaces too close and leave no glue between them.

That brings up another concern regarding glued joints. The better the wood joint is cut, the better it will hold and



Besides its familiar PVA wood glue, Elmer's also makes ProBond Advanced and Glue-All multi-purpose adhesives.



The Glubot dispensing system from FastCap offers a high degree of application precision.

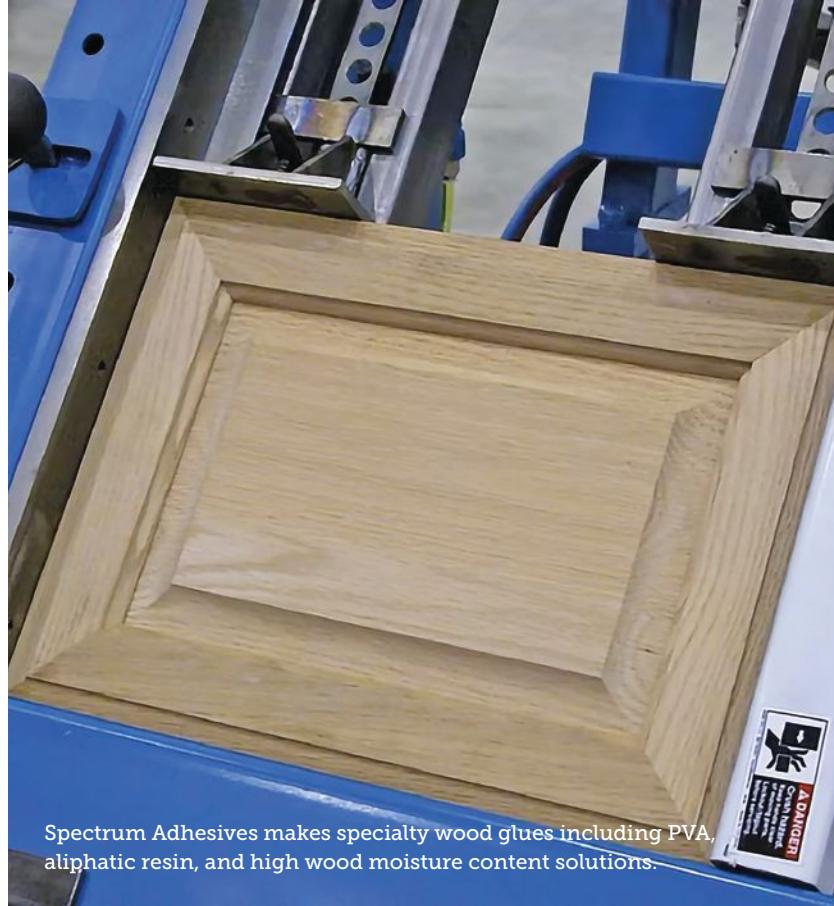
last over time. Relying on glue to fill too many gaps means that the adhesive in those gaps isn't under pressure, and that doesn't create a strong adhesive bond. Joinery needs to be tight enough to resist movement, but not so tight that it expels too much glue.

The viscosity of an adhesive plays a critical role in the quality of the bond. Thicker, more viscous adhesives can

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WOODSHOPNEWS



Spectrum Adhesives makes specialty wood glues including PVA, aliphatic resin, and high wood moisture content solutions.

have a hard time penetrating side grain. But today's polyvinyl, polyurethane, epoxy and cyanoacrylate adhesives are thinner than hide glue, so they offer better penetration. Slow-cure glues also tend to offer deeper penetration as they stay fluid longer and keep moving into the pores.

Wood glues tend to be less brittle than other adhesives after curing, and that makes them a little less susceptible to shock, such as when a chair falls over.

MAKING GOOD CHOICES

For solid wood joinery in projects that will be used indoors, nothing works better than polyvinyl acetate adhesives – good, old yellow glue. The carrier is water, so the clean-up is water and a rag. Most adhesives, including PVAs, tend to resist oil- and water-based stains after curing, and glue residue can show up after finishing as a discoloration. So, it's important to wipe, scrape and sand the squeeze-out as soon as possible.

PVAs are not really designed for gap-filling. If you have big gaps, consider an epoxy. They also don't like the cold. If the shop is under 45 degrees F, also consider an epoxy.

For large areas such as panels that are built on a relatively stable substrate, contact adhesives work better than PVA with many manmade surfaces such as plastic laminate, and the new generation of hide glues can be a better choice for veneers.

PVA glue is produced through the polymerization of vinyl acetate. This is a colorless and flammable clear liquid, and polymerization is a chemical process that makes



Courtesy of manufacturers

larger molecules out of smaller ones (there's a chemist somewhere writhing in agony after reading that simplification).

Cured PVA adhesives are harder and stronger than almost every wood species, and they don't cost an arm and a leg. The water carrier either evaporates into the air or is wicked into the wood, and what's left behind is a mildly flexible coating. The formula can be adjusted to create adhesives that give the woodworker choices when it comes to tackiness and open time (the amount of time where adjustments can still be made). Tackiness describes the initial cohesive bond: when you spread glue on two surfaces, rub them together, and then pull them apart, tackiness is the glue's resistance to being pulled apart while it's still wet. The better the tackiness, the easier it is to place parts for clamping.

PVAs like mechanical fasteners (screws, brads) that hold everything in place while they cure, and these can augment the joinery, too. But PVAs are quite successful without fasteners as long as they are kept in clamps long enough to cure properly. Experienced woodworkers clamp for at least an hour and preferably overnight, and they don't subject the joint to any shear (sideways) or impact (such as cabinet doors closing) pressure for at least



LePage manufactures a full range of woodworking adhesives, including a white PVA glue.

24 hours. Old hands also wipe up the excess immediately with a slightly damp – and certainly not wet – cloth, and then scrape after an hour or so, before the glue is fully cured. Blue painter's tape also works to catch seepage and reduce the clean-up.

For wet wood, which is anything over about 10 percent moisture content (known as MC, and the standard varies a little with location and altitude), you may be better off using either a polyurethane glue or a two-part epoxy. PVAs prefer a maximum MC of about 8 percent, so it's important to have a moisture meter on hand when gluing up joinery. There are two kinds. A pin-less one leaves no mark as it sends a radio wave through the wood. When the signal gets back to the meter, it measures the difference between the outgoing and incoming signal and that determines the level of moisture in the wood. A pin meter, on the other hand, pricks the surface with two sharp pins and measures the electrical current between them to determine MC. It leaves tiny holes in the wood, so discretion is required.

Because it isn't brittle after curing, PVA glue can creep over time. Parts can actually shift a hair, especially if they are under load. For bent wood, which is always under a load caused by memory, other glues such as epoxies may be an option. **W**

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Climbing the mountain

Case by Case Cabinets starts its journey to the top

By Jennifer Hicks

Case by Case Cabinets in Norwood, Mass., is a turnkey custom cabinetry business serving residential clients in the greater Boston market. The company is owned and operated by Rani and Natanella Zabari, who immigrated to the United States from Israel where Rani ran a woodworking shop. After a challenging start, they're looking at a promising future.

"I think this is a manufacturing field with lots of potential. The demand during Covid was unbelievable because people were home and weren't spending their money, so that's why I really feel that this is a very steady, very stable field to be in," says Rani.

"That's also the reason I chose cabinetry. There's always a need. I worked in the furniture design industry in Israel when I graduated from school there. When people save money for their dream home, a big chunk of it will go towards the cabinetry. They have a serious budget for their cabinetry and storage, and especially in this area."

STARTING OUT

After graduating from design school, Rani started a woodworking business called the Wood Log in 2011. But the married couple saw more opportunity in the U.S. and picked Boston because Natanella had family in the area. Upon arriving, she followed her career path as a physical trainer, while Rani searched for work in his field.

"In 2019, I started working at a kitchen production plant building cabinets at Cory Manufacturing in West Bridgewater. They don't exist anymore, but they had about 10

employees and did all custom kitchens," says Rani. "I spent about a year there. I wanted to learn how to translate professional terms that I knew from Israel in Hebrew, like dado, rabbit, things like that, and get used to the imperial measuring system. Then I decided to go self-employed."

"I had no shop. I had nothing but a sedan vehicle. So, I started to do restoration projects for houses, on site, and from there I took on bigger projects with the contractors I knew. I used to order pre-cut plywood from a mill in Medfield, Mass. I gave them cut lists and applied edge banding to cabinets, purchased hardware off Amazon, things like that, and started building small kitchens."

After sharing shop space with another woodworker, Rani started looking for a space of his own. He searched Craigslist and Facebook and sent out a flurry of e-mails, all without much luck. He found a studio space in a Norwood mill, but the building was shut down due to code violations. He ended up renting a storage facility to keep equipment and materials.

During the fall of 2020, Rani was contacted by the owner of Woodstack Carpentry in Norwood.

"That was one of the shops I reached out to for space. He wanted to sell his shop and retire. I came here and met him. We clicked. He saw that I wanted to succeed and had a lot of ambition."

Rani couldn't meet the asking price, but the owner invited him to use his shop while he worked on some final jobs. The two discussed ways to make the purchase work, which led to obtaining a loan from the Small Business Administration.



Rani Zabari at the controls of the shop's Shop Sabre CNC; a bedroom storage project.

"The SBA based the loan on the fact that he had a good business for over 30 years," says Rani. "In 2021, we started to run the business as Case by Case Cabinets," with the new name reflecting a more modern approach and focus on the customer experience.



"The former owner was more of a traditional one-man shop. I'm also still a one-man shop, but I always tell my clients that I'm not a romantic woodworker. I don't have a vision of Geppetto working with wood. My vision is more of a technological aspect, and I like to bring in ideas of interior design. I just think that that's where this field is going."

Rani says his main goal is to offer a quality product and positive customer experience.

"I look at those as a package because when people want to remodel their house, they can easily have a bad experience," says Rani.

The couple aims to get more high-end projects in its residential market. About 85 percent of jobs are sourced through their website, but referrals are picking up. Their strongest markets are Brookline, Newton, and Wellesley.

"I do work with some contractors,

but I'm still struggling with finding the right contractors. I started to work more with interior designers and architects, who are also a challenge to work with sometimes but at least they're organized and at least they send clients. I'm sure one day I'll work with a high-end contractor and be happy."

They have remodeled a few retail outlets and restaurants, but that work is few and far few between.

"At this point, I'm okay with just residential. But I've always liked the idea of more restaurants and stores because you can get more creative with the designs. At this point, kitchens are our main thing."

FUTURE PLANS

Rani works in the shop, meets with clients, and does the finishing and installs. Natanella helps in the shop, does all of the office work, and maintains the company's website.

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Rani and Natanella Zabari.

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Most of their cabinetry is full overlay. "It's just our design preference: contemporary with a traditional hint," says Rani. "Also, in Israel, that's the market, influenced by a more European market with cleaner lines and all."

Rani hopes to hire a full-time employee in the next year and have three to five employees within the next five years.

"My plan is to have a well-established workflow," he says. "I'm not concerned with any downshift in the economy. Our clients always have the money to spend. I realized after Covid, there is competition, but there's enough work for everyone. There's a demand for more cabinetmakers. And in my case, I don't materialize the product and want to give that good experience, which helps us stand out."

The couple has a home in nearby Stoughton and are busy outside of work raising three young children. They are grateful for the opportunity to buy Woodstack.

"Before buying the business, this process was like climbing a mountain and then finding another ridge of mountains. But now, I'm starting to notice that we're gradually getting to the top. Our hearts are in it, and we will be fine, but it will take time."

Learn more at casebycasecabinets.com. **W**

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PaintLine's new Pro Face Frame and Door Mover has slotted trays and Fiberglas rods so it can be adjusted to the job.

The SATA Dry Jet 2 is a blow gun, available at Total Finishing Supplies, that can significantly reduce the time needed for flash-off.



Faster finishing

Methods and products to speed up the drying process

By John English

Woodworkers are familiar with the difference between dry time and cure time, and they also know that both of those mean downtime.

Spray booths have a habit of becoming bottlenecks while we wait to handle freshly coated parts. Dry time (or recoat time) is the period when the solvent or water carrier is evaporating, while some is also being absorbed a little by the wood. That process lasts until the surface is dry enough to touch, and to coat again. Cure time, on the other hand, is a much longer period during which the chemicals in the coating react with each other and bond to create a durable surface. That can be days or weeks depending on humidity, temperature, and the chemical formulae. Somewhere between drying and curing, coatings become hard enough for parts to be moved, stacked and even installed.

There are things that a woodworker can do to speed up the drying process. The most basic method is to treat the air in the shop or the spray booth by drying it, then warming it, and finally moving it.

FANS AND HUMIDITY

Moving air with box fans can cause problems such as ripples in thick coatings, and it can also distribute any

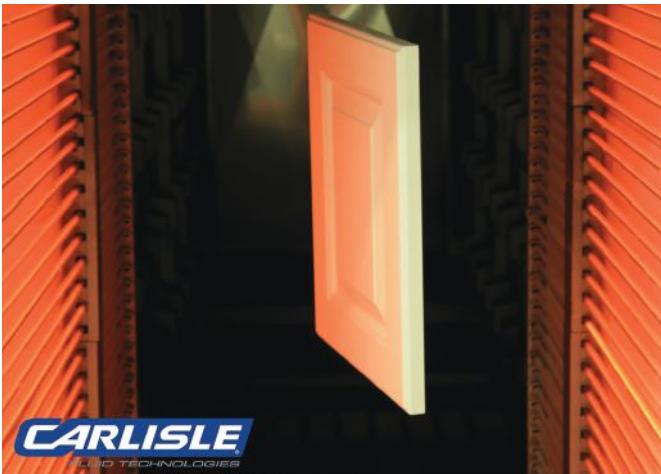
fine dust that has managed to sneak into the booth on parts, carts or clothing. Several manufacturers make small Venturi-effect blow guns that can direct an adjustable jet of drying air toward a small target, and that's a better solution. Designed originally for automobile painting, solutions such as the SATA Dy Jet 2 blow gun can significantly shorten flash-off (evaporation of the carrier) by combining compressed air with the ambient air in the booth.

But before moving the air, it needs to be dry. Portable dehumidifiers are relatively inexpensive, and they don't use a lot of power (much less than air conditioning), so they can be a good place to start. They can be used to reduce humidity in a booth or a small shop before the spraying takes place, but they're usually not spark-proof so they need to be unplugged before volatile solvents are sprayed. They also need to be turned off when coatings are airborne, or their filters will quickly clog.

Air conditioning reduces ambient humidity but also reduces the air temperature, so that's a bit of a trade-off. AC systems also have filters that clog quickly, so they don't do well around fine wood dust or sprayed coatings. There's a spark risk here too, and a woodshop's location and the time of year also factor in. For example, it wouldn't make



EasyAccess foot-operated turntables from Smartech.



Cure ovens come in radiant, convective and infrared formats. Shown is a BGK unit from Carlisle Fluid Technologies.

much sense to turn on the air conditioning in Michigan in January. On the other hand, it might make sense to use a hand-held heat gun or even a hair dryer to spot warm a small area where a thick coat is being a bit stubborn. But warming the entire volume of air in the booth is also a bit of a conundrum, because as air gets warmer it holds more moisture, which is directly at odds with the notion of de-humidifying. There's a whole science that revolves around relative humidity (the relationship between the volume of water vapor in the air compared to the maximum amount there could be) but suffice to say that if moist air is cooled too much it can reach its dew point and the booth can even experience condensation.

The perfect drying conditions are a balance between warm, cool, wet and dry air. That sounds challenging, but what it really says is that moderation is the key. If possible, remove most of the moisture in the air before spraying begins, and don't let the booth get too cold or too hot. If the booth air is relatively dry but still somewhat warm, fans will speed up the evaporation of moisture from the coating.

Based on budget, the next step up from a basic booth is a paint curing oven, where the much smaller volume of air enclosed lets heat overpower humidity inside the tunnel. Running an oven is a lot easier than trying to heat a whole room. Ovens work in a range up to 400 degrees F or so, with most paints requiring about 150 degrees F. Powder coating needs more heat (generally over 300 degrees F), but too much heat, too quickly applied, can cause bubbles and popping in any coating. Too little heat just means longer drying times.

Most ovens move the parts through the chamber on a conveyor or 'continuous' belt that exposes them to the heat for anywhere from ten minutes to three-quarters of an hour. Some ovens don't have belts, and these are known as stationary or batch ovens. In larger shops, flash-off ovens are often used between coatings to release solvents before parts enter a curing oven.

DIFFERENT HEAT SOURCES

The heat source for an oven can be convective where hot air is circulated around the painted parts, or infrared where just the paint and the parts are heated, rather than all the surrounding air. Another option is a radiant oven that uses lamps to radiate heat toward the parts, and many systems use a combination of these solutions.

Saying that heat dries the paint is a bit simplistic. The reality is that ovens heat the coating so that chemical curing takes place faster, and carriers also evaporate faster. It's worth noting that several thin coats can dry a lot faster than a few thick ones.

Catalyzing is another drying method that's often used in conjunction with an oven but also with simple air drying. A catalyzed coating is a two-part solution where one part is a varnish, polyurethane or lacquer, and the other is a hardener or activator (the catalyst). This is usually an acid-based liquid that kickstarts the chemical cross-linking reaction, and it also delivers a more durable surface with better resistance to stain, water, and even some household chemicals. A coating can be pre-catalyzed at the paint factory and delivered ready to apply, or post-catalyzed in the woodshop just before the spraying process begins. The latter allows for more control over the nature of the final finish. Pre-cat lacquer is widely available, and its properties vary



The Venjakob Ven Dry UV from Stiles Machinery.

SCM Group offers a Linear Dryer for water-based paints where infrared lamps can be added to accelerate the process.



quite a bit. For example, there's a Sherwin-Williams version takes about an hour to dry to the point where doors can be flipped, and Milesi makes a catalyzed urethane.

Cross-linking is a common phrase in spray booths, and it describes the chemical sequence where polymer chains join together, or link, to create bonds. It turns tiny particles into a single interwoven coat.

Ultraviolet (UV) curing is another additive solution that's widely used in cabinet and furniture shops. This technology is offered for sealers, primers, stains and some topcoats, and it's pretty basic. Chemicals added to the coatings are activated by exposure to either mercury vapor lights or LED lights. The resulting polymerizing process delivers a hard surface in short order — minutes at most, and often just seconds. The chemicals are liquid monomers (small molecules) and oligomers (strings of monomers), that are

chosen because they react to UV light. The word 'polymerization' just describes how small molecules combine to form larger, more complex molecules (polymers), which is what causes oils and varnishes to harden and cure.

In UV curing, LEDs have a long and narrow wavelength that can work better than the traditional mercury lamps, and they're a whole lot more energy efficient. But LEDs don't work so well (or sometimes not at all) with some topcoats, so woodshops often still rely on mercury lamps during the final phase of finishing. UV drying is a 'green' technology: it can deliver hard, resistant surfaces with a high gloss, and do so in a more environmentally responsible way. With LEDs, fewer lamps are needed, and the light waves reach down through coatings to create better bonds between layers. The LEDs also run cooler so there's less risk of boiling resins inside the wood, and when LEDs are



The new Sayerlack solvent-borne polyurethane and water-borne coatings from M. L. Campbell, designed for fast curing.



Oil Plus 2C, a hardwax oil, from Rubio Monocoat.



Wood Juice, from Preservation Solutions, treats dry or semi-dry wood to prevent future checking, cracking and warping.



GreenFastCure's wood coating dryers work by mixing air and gas for an infrared cure.

switched off, they turn off: they don't need the cooldown period required for mercury vapor lamps.

Stiles Machinery offers a line of Venjakob high-volume ovens, which includes the Ven Dry UV. This is basically a conveyor tunnel with UV lamps that can be moved to ensure that edges, corners and crannies are fully cured.

Ovens can cure coatings quickly, but drying racks also work well. Racks hold parts during dwell time, so they don't touch each other. In air-drying, dwell is the few minutes after a coating has been applied where the solvent flashes (evaporates) and the coating on horizontal parts will self-level using gravity. The length of time required depends a lot on the thickness of the coat. Vertically hung parts do better (fewer runs) if they receive thin coats. One advantage of using mobile racks on casters is that dwelling parts can be moved far enough away from the spray gun,

so they don't get contaminated by overspray from the next part in line. If fans are used, they should be slow speed and not pointed directly at the wet parts. Warmer air will speed up the drying process. If infrared heat is not being used, air drying can be an overnight process with the optimum temperatures being just above comfortable for a human (anywhere from about 70 to 100 degrees F). Once dry (and still far from cured), parts can be turned over on the racks so the other face can be coated.

Drying methods vary widely, from reducing humidity before spraying to selecting and maintaining the correct temperature range, using fans, investing in continuous or batch curing ovens, relying on heat guns or lamps, experimenting with coating thicknesses, employing pre- or post-catalyzing, drying with UV, and air drying with hangers or racks.

The hardest part of drying is patience. **W**

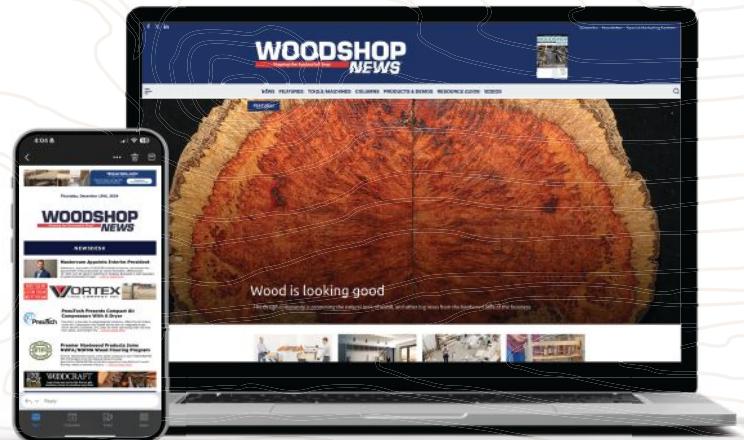
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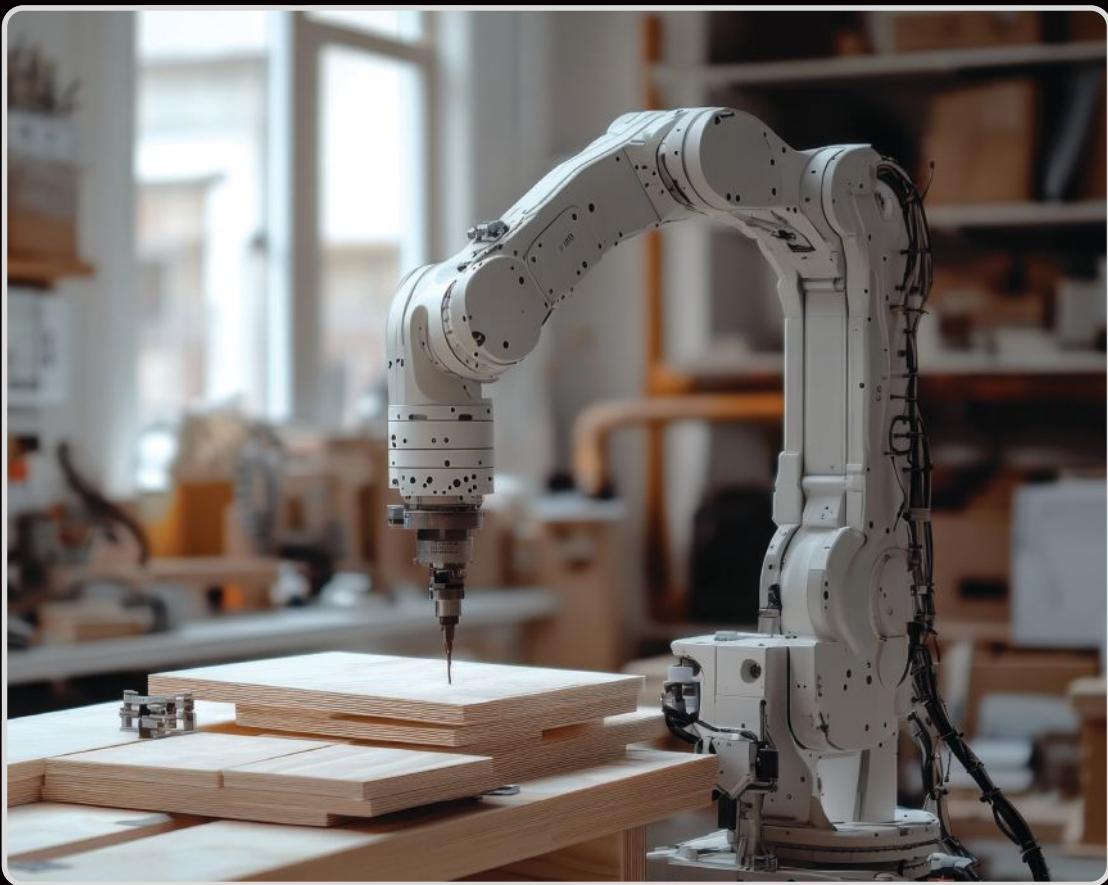
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CNC in 2025

It's a changing landscape

BY JOHN ENGLISH

Artificial Intelligence (AI) is changing everything in our lives, and woodshops are not exempt. The level of automation, even in small shops, has skyrocketed over the past few years. When it comes to CNCs, two parallel technologies are leading the charge: AI and robotics.

We noted in last July's issue that the simplest definition of AI is that it allows a machine to both learn and deduce.

Machine learning (ML) doesn't let computers 'think' in the sense that we do. Our thought patterns are obviously influenced by facts, but they're also nuanced by emotional responses, belief systems, traditions, conventional mores, societal norms, and both individual and group experiences and dynamics. AI, on the other hand, makes deductions based only on stored data. Some of its reasoning uses estimated values to jump gaps, but none of it depends on emotion or intuition.

This limited intelligence is known as 'narrow' AI. The concept of an artificial intelligence that can actually think, using both reason and perception, is still in the future. That's called artificial general intelligence (AGI), and the technology to support it is already in the pipeline but not yet viable.

The other big change in the landscape is robotics.

Collaborative robots (cobots) are very adaptable, and also aware of where human co-workers are so they can avoid collisions. In the woodshop, most robots are single arms with a static base, and their main function is to automate the tasks such as sanding, applying coatings, sorting and moving parts, and presenting parts to the tooling on machines. In cabinet shops, cobots can drill for decorative hardware or panel connectors, gently break sharp edges, or perhaps mill profiles. One area they really excel at is sanding complex parts, especially when a small detail sander is attached to the arm. They're surprisingly easy to program, and entry-level models have become quite affordable.

A woodshop owner who is contemplating the purchase or upgrading of a CNC needs to factor in the rapid pace of technology and understand its impact. But AI and robots aren't the only things changing, so Woodshop News has also explored many other aspects of CNCs over the past year.





An example of an aggregate head from Benz Tooling.

THE BASICS

Among those considerations are the physical parameters that a shop needs to explore before buying a CNC. For example, an article in the September issue about CNCs for smaller shops looked at why the length and width of the table are pivotal dimensions. (By the way, the March 2025 issue included a piece on CNC for larger shops, and all of these can be found under the Features tab at woodshopnews.com.)

A very small CNC won't be able to process panels for wide drawers or pantry cabinets. So, the work envelope (X, Y and Z) needs to be bigger than anything the shop intends to machine. Keep in mind that the travel in Z (up and down) might be less than the literature says in the

event that the shop needs to use longer bits or accommodate spindle attachments such as a dust diverter or an aggregate head.

A large table might be able to handle pendulum processing, where one group of parts is being unloaded while others are being machined or loaded.

Size affects precision, too. If the gantry or frame is underbuilt, or the spindle is underpowered, a tool can bog down as it leans into the work and cause chatter or deviate from the toolpath.

A shop owner needs to decide between 2, 2.5, 3, 4 or 5 axes. That 2.5 axis machine is actually a 3-axis model that can only move in two axes simultaneously. It's less expensive and works well for drilling and many simple milling tasks. A fourth axis rotates work around one of the three main axes, X, Y and Z. In the X plane (side to side) the fourth axis, called A, acts much like a lathe at high speed, but it can also rotate work very slowly. Rotation in the Y plane (back and forth) is called the B axis. The C axis rotates in the Z plane around the vertical axis. The more unique, shaped, and intricate the work, the more axes come into play. But if a shop only builds casework with traditional flat rectangular doors, then three axes will most likely be enough. If there's an occasional need to execute a complex, multi-faceted part, it can be outsourced.

Courtesy of Benz Tooling

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Automatic loading and unloading devices, like these from NewCNC, are usually accompanied by alignment and sweeping systems.

A 5-axis machine reduces set-up time and allows the spindle to complete different operations with different tools without changing the fixturing. So, secure the work once, and then approach it from the top and all sides except the bottom. A 3-axis machine often requires that the part be moved to reveal a new face after each machining task, and that can lead to inaccuracy. The more times a workpiece is handled, the more likely dust accumulation or operator error can affect realignment.

Some CNCs offer the option of adding a second spindle and while that's probably not a budget option for most small shops, it might be an upgrade to be considered in

the future. Two tables rather than two spindles can also be a future option.

Adding aggregate heads can transform the agility of a 3-axis machine because the spindle is no longer just pointing straight down. An aggregate can work at any angle up to 90 degrees, so it can do things such as slot the edges of mitered cuts or chamfer at angles other than 45 degrees. Aggregates can hold drills, milling tools, saws, texturing brushes, sanders and a host of other tools. But remember that they extend the point of contact farther from the gantry, so there is more stress and a higher degree of lateral torque at the spindle. Slower speeds and smaller tools can help, but there are limits.

THINGS TO THINK ABOUT

Upgrades to the spindle, fixturing, motor speed, chip conveying and automatic tool changer (ATC) can be added as needed, but the core strengths of a new CNC are the table, gantry and spindle. If these are undersized, add-ons won't help much.

Tool changers reduce the number of set-ups, and downtime. By the way, cheap tools don't cost less. Inexpensive tooling is more prone to overheating, get dull quickly, and

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cause undue stress on the spindle and motors. Worse, dull tools can deliver parts with burned or inaccurate edges, or tear-out.

Before buying a CNC, and especially a used one, it's critical to know the availability of parts and service.

A CNC will need physical space around it to load and unload materials, and that can be a challenge in a smaller woodshop. The new machine will also need room for dust collection ducting, and access to both electrical power and compressed air. If there's a tool changer and a vacuum table, it may require a bigger compressor.

The shop will probably need more carts, including a scissors lift.

If the floor is wood, it needs to be strong enough to hold all the new weight and avoid vibration.

A CNC may require true 3-phase rather than an auxiliary phase converter, so check with an electrician. Plus, the added draw of extra dust collection and a vacuum table might exceed the fuse-box parameters.

The existing dust collector may not be powerful enough for increased volume.

If there's a choice in control systems for the new CNC, odds are that one of them is easier to use while the other offers more features.

The spindle is the heart and soul of a CNC and needs to



The G0894 CNC router from Grizzly Industrial.

be evaluated first on its speed (RPMs) and then on its power (HP), precision, tolerance, and longevity. Some composites behave better with low torque and high speeds, while other materials prefer the opposite for optimum chip load. A variable speed spindle may be an option for shops that process lots of different materials.

The new machine should be compatible with the shop's software. This probably won't be a problem for CAD unless there are library questions, but there may be an integration issue for CAM and third-party software such as performance or maintenance tracking apps.

While the entry level standard is a bed that can accommodate nominal 4' x 8' (49" x 97") sheets, other size sheet goods such as 4' x 10', 5' x 10' or 5' x 12' may need to be processed. For 5' x 5' birch, a wider bed can eliminate the need for pre-sawing.

Spindles can be changed out or upgraded a lot easier and less expensively than a wobbly bridge or a too-small work area.

Rigidity is important. If there's any give or vibration during machining, accuracy suffers.

In a high-volume production environment, errors can become cumulative when a nesting solution is working off an inaccurate edge.

Small CNCs often use belts or lead screws, but CNCs for larger shops are going to be either high-precision ball screws or helical rack and pinion drives. Both have their advocates. Longevity for both systems relies on superior dust control and build-up from resins, sap or adhesives can negatively affect either one.

The traverse velocity (moving the tool in X and Y) translates directly into doors-per-day. A typical bench-top partial-sheet CNC in a one-man shop will move at about 90 inches a minute. A large shop alternative can be more than thirty times as fast.

TOOLING CONSIDERATIONS

If the spindle isn't powerful enough, each cut will need to be made in multiple passes, so it takes longer to make each part. Tooling size, geometry and sharpness will affect cutting speed.

High-volume machines rely heavily on ATC, and carousels are often faster than inline changers.

Automation options increase exponentially as ma-

chines get bigger. CNCs for larger shops offer parts placement and stop systems, robotic sheet loading and parts unloading, labeling, and large enough pumps to power the vacuums.

Polycrystalline diamond (PCD) tools for nesting are game changers. So is their geometry. While there are still traditional straight and plunge bits, there are also upcut and down-cut helix bits and a new generation of compression bits. These different geometries can play a huge part in the quality of the cut edge. Upcut bits are all about chip extraction, while a down spiral or down-cut bit forces the workpiece against the table, and that helps it deliver a smoothly cut edge. The spirals on a compression bit are an engineered combination of both upcut and down-cut helices. Straight bits without a spiral (helix) are less expensive, and these are also the tools of choice for many 5-axis CNC operations because they reduce vibration. But their cut isn't as clean as it can be with up and down spiral cuts.

For a machine that still has a solid frame, flat table and trouble-free gantry, replacing the control panel may seem like a sensible upgrade. But faster controls will probably require upgrading the servo motors too, along with the spindle, most of the wiring, the capacity of the tool changer, and swapping out a few ancillary electrical components.

Regarding retrofits, there's value in an operator's comfort

with the existing machine, its physical space in the shop, and its unique idiosyncrasies. That core familiarity can impart a sense of ease rather than the trepidation that often accompanies learning about a new piece of equipment.

Adding a fourth axis is a logical upgrade for shops that want to make cylindrical parts such as balusters, newels and porch posts. A fourth axis can also execute gentle curves, swirls, ropes and other decorative elements that can't easily be made with three axes.

Custom enclosures are affordable, and they provide a clean environment that reduces rework and maintenance.

An inexpensive upgrade for shops with a vacuum table is a set of gasket tiles to block off unpopulated space and increase the holding strength of the vacuum.

Labeling and scanning devices help the operator keep track of parts and orient them during assembly. There's a wide range of aftermarket options online.

Manufacturers can usually either supply or recommend automatic loading and unloading that's compatible with their machines.

While most CNC programs include a post processor, if a woodshop has more than one CNC machine, each will need a separate processor and the cost for this can add up.

With advances in AI, robots are becoming the standard way to tend machines and feed sheet goods. Ro-



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botic arms can pick up and sort parts according to size, orientation or label, turn them over and stack them for edge-banding, and then sweep and vacuum the table before the next sheet is placed. CNC software suites are constantly updating features such as remote machine monitoring and control, more user-friendly ways to interface, automation apps that make better use of robotics, technologies such as 3D printing and digital twinning, and using artificial intelligence (AI) to assist with maintenance monitoring and quality control. Software and automation also provide a partial response to labor shortages

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by replacing humans who are performing basic or repetitive tasks. And advances in integration let CNC software programs 'talk' to the shop's machines and coordinate with outsourcing partners.

AI isn't just the future. It's already here, from Alexa and Siri to robotic vacuum cleaners and self-driving cars. It has surged over the past year in search engines, which now offer suggestions and answers created by AI modules. In part because of that, but also because of science fiction movies and books, artificial intelligence gets a bad rap. We're both fascinated and frightened by it. But the Architectural Woodwork Institute (awinet.org) recently noted that it's "merging traditional skills with cutting-edge technology." In doing so, AWI notes that artificial intelligence helps sustain the woodworking industry and makes life a little easier for shop managers. It also enhances speed and accuracy on the shop floor.



Thermwood's MultiPurpose 67 CNC.

Plus, there's one more aspect to AI that should encourage woodshops. In March, Futurism (futurism.com) published an article by Noor Al-Sibai that led with this thought: "High school shop classes are back in a big way as students and educators prepare for a future in which AI could take over many of what we today think of as white-collar jobs." That was based on a March 1st piece in The Wall Street Journal that said "school districts around the U.S. are spending tens of millions of dollars to expand and revamp high-school shop classes for the 21st century. They are betting on the future of manual skills [that are] overlooked in the digital age..."

The implication is that AI will replace office jobs, but the world will still need woodworkers. What a nice thought. **W**

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Traco Manufacturing - Batavia, NY - Model 45

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Katie Hudnall's first museum-organized solo exhibition at the Museum for Art in Wood features a series of sculptural works and a large-scale, interactive installation made from salvaged wood.



Solo exhibit at the Museum for Art in Wood

By Jennifer Hicks

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WOODSHOPNEWS

The Museum for Art in Wood in Philadelphia presents "Katie Hudnall: The Longest Distance between Two Points" through July 20. The solo exhibit features Hudnall's intricate sculptures and large-scale interactive installation, all crafted from salvaged wood.

"Katie Hudnall's work is so unique in aesthetic and expression that it is immediately identifiable as her own," Jennifer-Navva Milliken, the museum's executive director and chief curator, said in a statement.

"She has built a devoted following through her empathetic, furniture-ish sculpture. It is with honor and delight that the Museum for Art in Wood presents her recent works in this first museum solo presentation. Her sensitivity to her salvage material and its provenance, which take on agency and character through her attentive labor and attention to detail, is on full view in these larger-than-life creatures. The Longest Distance between Two Points invites visitors to think about the beings that thrive in their imaginations and the potential of bringing them to life through disciplined artistic practice."



"The Case" by Wesley Terrell at the Messler Gallery.

and an MFA in Furniture Design/Woodworking from Virginia Commonwealth University.



Wardrobe by Audrey Kasinger at the Messler Gallery.

Learn more at museumforartinwood.org.

Student show at Messler "Current Student Work" opened at the Messler Gallery of the Center for Furniture Craftsmanship in Rockport, Maine, on April 18 and will run through May 28. The exhibition features furniture and furnishings by students in the school's flagship Nine-Month Comprehensive course.

"This collection of work by the Nine-month Comprehensive class has the balance of skill, craft, and imaginative design. These students have pushed the boundaries of traditional furniture making and explored new and exciting ideas in product design. They deserve huge credit

for their hard work and dedication as do the team of excellent co-instructors who have helped make this possible. I'm immensely proud of their achievements," lead instructor Aled Lewis said in a statement.

Exhibitors include Eliot Childress, Alexandra Daum, Spencer Dixon, Rachel Frederick, Sayer Houseal, Audrey Kasinger, Aidan Layng, Benjamin Martinelli, Matthew McDermott, Jeremiah Peschka, Wesley Terrell, and Tristan Zak of Maine.

Learn more at woodschool.org. **W**



CASTLEWOOD

has added the X-Panel Overlay and Island End Panel, which can be used together or separately to enhance and add depth to kitchen island designs. X-Panels are made of solid hardwood lumber, while Island End Panels are made of solid hardwood lumber and veneer core hardwood plywood. Both are available in alder, cherry, hickory, maple, red oak, and white oak. Learn more at castlewood.com.



DART CONTROLS

introduces the EZ VFD, a family of variable frequency drives for 1/4 to 2 hp applications. "These feature-rich models are designed for ease of installation and usage," the company explains. "Built-in safety features include overload protection for current and temperature, anti-coast deceleration, and motor braking. Four models are available with open chassis or NEMA 4X enclosures. Dart EZ VFDs provide precise speed control and efficiency, making them ideal for conveyors, fans and blowers, pumps and compressors." Learn more at dartcontrols.com.

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introduces the new 6-in-1 Stubby Multi-Bit Screwdriver, which measures 3" in length and includes four bits and two nut drivers. It can also be purchased with Milwaukee's 11-in-1 Multi-Bit Screwdriver, which includes eight bits and three nut drivers. Learn more at milwaukeetool.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 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 at least 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.

— Compiled by Jennifer Hicks

ARIZONA

July 28-Sept. 4 — Fundamentals of Traditional Woodworking III. Students will practice various joinery and construction techniques to build a Shaker-inspired table with dovetailed drawer, tapered legs, and mortise-and-tenon aprons. Location: Southwest School of Woodworking in Phoenix. sw-sw.org

Nov. 9-11 — Specialty Tools & Fasteners Distributors Association (STAFDA) annual convention and trade show. Location: Phoenix Convention Center. stafda.org

CALIFORNIA

Monthly — San Fernando Valley Woodworkers meetings are held on the third Thursday of each month at 7 p.m. at the Balboa Sports Center in Encino. sfvw.org

Monthly — Society of Wood Manufacturing, a chapter of AWFS consisting of educators, manufacturers, hardware

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WOODSHOPNEWS



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and industrial suppliers, and machinery dealers, meets during the second week of each month. awfs.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. tampa-woodcrafters.org

MICHIGAN

Oct. 1-3 — Cabinet Makers Association's National Conference featuring keynote presentations, educational sessions and plant tours. Location: Westin Book Cadillac Detroit. cabinetmakers.org

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MINNESOTA

Monthly — The Minnesota Woodworkers Guild meets on the second Tuesday of each month at various locations. mnwwg.org

Monthly — The Minnesota Woodturners Association meets on the first Saturday of each month (except July) in Plymouth. They also offer a wide range of classes for beginners and advanced turners. mnwoodturners.com

Oct. 11 — Sixth annual Woodworkers Expo, hosted by the Minnesota Woodworkers Guild, featuring over 70 exhibitors showcasing custom work and products, demos, and more. Location: Minnesota State Fairgrounds Progress Center in St. Paul. mnwwg.org

June 28-29 — American Craft Fest featuring hand-made objects by up-and-coming makers. Location: Union Depot in St. Paul. craftcouncil.org

NEVADA

July 22-25 — AWFS Fair, featuring over 500 exhibitors, educational seminars, networking opportunities, and more. Location: Las Vegas Convention Center. awfsfair.org

NEW JERSEY

Monthly — The North Jersey Woodworkers Association meets the third Monday of every month. njwawoodworkers.org

Monthly — The Professional Woodworkers Guild of Upper New Jersey meets the third Wednesday of every month. njwoodguild.com

NEW YORK

Monthly — The Woodworkers of Central New York holds meetings on the first Thursday of each month at 6:30 p.m. at the Belgium Cold Springs Fire Department in Baldwinsville. woodcny.org

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

Monthly — The Long Island Woodworkers meet on the first Wednesday of each month at 7 p.m. at the Frank Brush Barn of the Smithtown Historical Society in Smithtown. lwoodworkers.org

NORTH CAROLINA

Monthly — Triangle Woodworkers Association meetings are held on the third Tuesday of each month at 7 p.m. at Kling-spor's Woodworking Shop. Location: MacGregor Village in Cary. trianglewoodworkers.com

Monthly — Charlotte Woodworkers Association meets the third Tuesday of each month, except December, at 6:15 p.m. in Charlotte. charlottewoodworkers.org

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Oct. 25-29 — Fall High Point Furniture Market. The furniture industry trade show features showroom tours, educational seminars, and networking events. highpointmarket.org

OHIO

Ongoing — Cincinnati Woodworking Club meets the second Saturday in the months of Jan., March, May, Sept. and Nov. from 8:30 a.m. to 12:30 p.m. at the E.B. Mueller in Reading. cincinnatewoodworkingclub.org

RHODE ISLAND

Nov. 7-9 — 30th annual Fine Furnishings show featuring fine handcrafted furniture and other artwork for the home. Location: WaterFire Arts Center in Providence. finefurnishingsshows.com

Dec 6-7 — Holiday Arts Market, presented by the Fine Furnishings Shows, featuring handmade creations from select artisans. Location: WaterFire Arts Center in Providence. finefurnishingsshows.com

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. Learn more at sdwoodworker.org.

TEXAS

Sept. 13-14 — Texas Woodworking Festival, an annual event featuring demonstrations, classes and lectures at the Palmer Events Center in Austin. texaswoodworkingfestival.com

Oct. 1-3 — National Hardwood Lumber Association Annual Convention. Location: Marriott Rivercenter in San Antonio. nhla.com

VIRGINIA

Oct. 10-13 — Society of American Period Furniture Makers' annual conference, featuring presentations, networking opportunities, and the Cartouche Award banquet. Location: Williamsburg. sapfm.org

WYOMING

Sept. 4-7 — Western Design Conference Exhibit + Sale, featuring luxury residential interior design and furnishings and other one-of-a-kind items with a western theme. Location: Snow King Sports and Event Center in Jackson. westerndesignconference.com

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WOODSHOPNEWS

Stepping up

The Stairbuilders & Manufacturers Association (SMA) announced the winners of its 2025 StairCraft Awards at its annual conference, held April 10-12 in Pensacola Beach, Fla.



Best in Show by Heartland Stairways.

56 The contest had 61 entries from 12 companies and featured a new Artisan category for best straight and curved staircases by companies with four or less employees.

"The thought behind that was if we had a category where small shops could compete, it would just really open doors for those doing incredible work. We are trying to make it a more inclusive competition," says Terra Erb, the SMA's executive director.

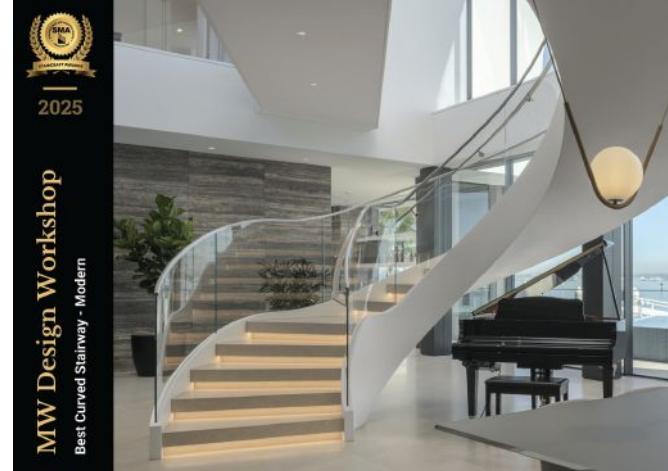
Heartland Stairways in Holmesville, Ohio, won the Best in Show and Best Spiral Stairway award. The Maine Stair Co. in Cumberland, Maine, won the People's Choice award.

Other winners included The Heirloom Companies in Campobello, S.C.; MW Design Workshop in Salem, Ore.; Arrows in Neenah, Wis.; Parks and Sons in Knoxville, Tenn., and Select Stairs and Millwork in Sellersville, Pa.

Erb said the conference drew 165 attendees, just short of the organization's record turnout of 168 in 2018.



The People's Choice pick by the Maine Stair Company.



Best Curved Stairway by MW Design Workshop.

"We had 48 first-time attendees," says Ebb. "And out of 165 people, that's a good percentage of first timers. The feedback is overwhelmingly incredible."

"The turnout gives momentum into what we've got going on next, which is our shop tours in May, August and November."

Next years' annual conference is scheduled for April 30 to May 2 in Kansas City, Mo.

Learn more at stairways.org. **W**

60 Grit

Rough humor by Steve Spiro



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