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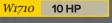
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- Milwaukee plunge track saw
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Over the Workbench

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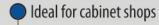
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# WCA welcomes two new board members

By Tod Riggio

The Woodwork Career Alliance of North America announces the appointments of John Stearns and Brad Bagnall to its board of directors.

Stearns, career technical education director for the Amity School District of Amity, Ore., and Bagnall, a construction/robotics teacher at Bowness High School of Calgary, Alberta, were appointed to three-year terms. They succeed Greg Heuer, Duane Griffiths and Mick McGowan, who have all retired, according to a release from the WCA.

Stearns and Bagnall are WCA accredited skill evaluators.

"I use the WCA standards as part of my safety training with students. I am OSHA-10 and OSHA-30 authorized to train, but the (WCA's) measurable tool safety tool standards are more user friendly for the instructor and student," Stearns said. "I look forward to serving on the WCA board. I hope I can be an effective sounding board as a high school instructor."

Bagnall said he hopes to expand the WCA's presence in Canadian high school construction and skilled trade-related courses. "Being a part of the WCA board of directors allows for more networking capabilities with industry and I am excited to explore additional opportunities to bolster the WCA in Canada," he said.

"On behalf of the WCA, I want to thank Greg, Duane and Mick for their years of dedicated service and many important contributions to helping the WCA develop new programs and grow its membership," said Scott Nelson, president of the WCA. "We wish them all the very best in their future endeavors.

"I also want to thank John and Brad for volunteering to become WCA board members. They each bring a lot of experience, not only as woodworking instructors, but for having a working knowledge of how the WCA skill standards and credentialing program work. They each have the unique vantage point to help us improve our existing programs and develop new programs for schools and industry."

The International Woodworking Fair (IWF), in a new partnership with the Tunnel to Towers Foundation, will produce its third annual Woodworking Manufacturing Month this October. The national campaign showcases woodworking innovation and will benefit the foundation's mission to house catastrophically injured U.S. veterans and first responders.

"The new partnership is the first national collaboration of its kind in IWF's 53-year history. It enables all Woodworking Manufacturing Month participating manufacturers and service providers to support the Tunnel to Towers cause directly while also promoting the newest innovations in their individual business operations," the IWF said in a statement.

All companies doing business in the woodworking industry are eligible and encouraged to participate in Woodworking Manufacturing Month. Details are available at iwfatlanta.com. W



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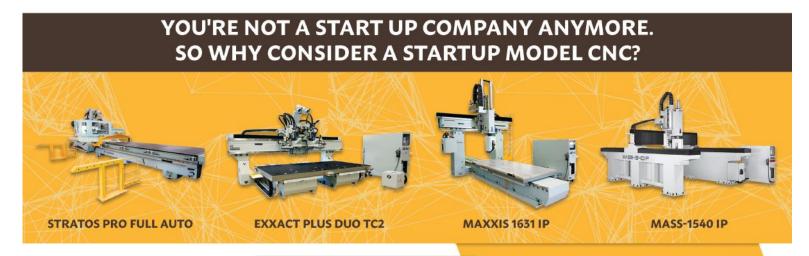
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Scenes from the 2023 International Builders' Show, one of five shows that comprise Design & Construction Week in Las Vegas.

# Record turnout at Design & Construction Week

By Jennifer Hicks

The 10th annual Design & Construction Week, held Jan. 31 to Feb. 2 at the Las Vegas Convention Center, drew over 200,000 housing and design professionals, according to an event producer.

"What an incredible way to celebrate 10 years of Design & Construction Week with this record attendance," Jerry Howard, CEO of

the National Association of Home Builders, said in a statement. "Walking the show floor and attending the education sessions and networking events, you could feel the energy and enthusiasm from exhibitors and attendees alike. We knew this would be the event of the year for the housing industry, but this has even surpassed our expectations."

This year's Design & Construction Week featured five trade shows, including the International Builders' Show (IBS), Kitchen & Bath Industry Show (KBIS), National Hardware Show (NHS), International Surfaces Event (TISE), and Las Vegas Winter Market. In total, there were approximately 1,800 exhibitors spread over 1 million sq. ft. of exhibit space.

Approximately 70,000 attended IBS, while KBIS had about 40,000 visitors. The Las Vegas Market was second with about 50,000 attendees.

Next year's Design and Construction Week is scheduled for Feb. 27-29 in Las Vegas. W



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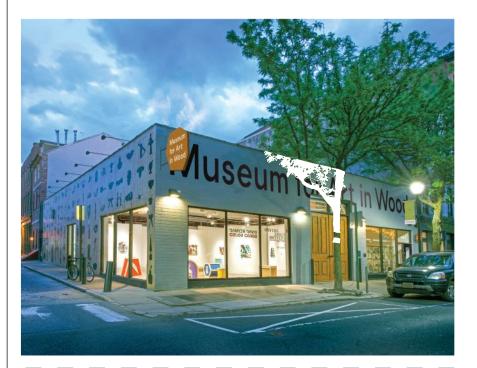


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The new exterior of the Museum for Art in Wood in Philadelphia.

### **Center for Art in Wood** rebrands as museum

By Jennifer Hicks

In January, the Center for Art in Wood in Philadelphia officially rebranded as the Museum for Art in Wood.

The museum has its roots in biannual woodturning symposiums and exhibitions held at the George School in Bucks County, Pa., between 1976 and 1981. For the past 40 years, its leaders have strived to enhance public understanding of contemporary art in wood through exhibitions and other programming.

"The move allows the museum to be further recognized by an international community of artists, scholars, and collectors as a critical resource in studying art, craft, and design in wood. It also reinforces the Museum for Art in Wood's mission to stimulate and nurture creative engagements surrounding wood, an organic, shapeable, sustainable, and conceptually inspiring material," Jennifer-Navva Milliken, the museum's executive director and chief curator, said in a statement.

The museum recently announced a \$10 million endowment from the Windgate Foundation, designated to strengthen its future and expand its mission, programs, and plans for growth. The endowment includes a \$3.5 million gift from the Arkansas Community Foundation, which provides critical funding for contemporary craft and visual arts education in the United States.

"The endowment is a culmination of our partnership over the past 29 years, and clearly shows our belief in the leadership, values, and mission of the organization," said Patricia Forgy, executive director of ≥ the Windgate Foundation executive director, in a statement. "We are thrilled to congratulate the newly named Museum for Art in Wood on this exciting transformation and encourage others to visit and support this exceptional institution."

For more, visit museumforartinwood.org. W

# Director change at Society of Arts & Crafts

By Jennifer Hicks

Brigitte Martin is ending a four-year tenure as executive director of Boston's Society of Arts & Crafts, an organization formed in 1897 to support and celebrate craft makers. Deputy director Karina Burston is now the acting executive director on the eve of the organization's quasquicentennial celebration.

"In the next phase of life for this 125-year-old institution, the Society of Arts & Crafts will remain committed to support and advocacy for artists in woodworking and all disciplines of craft," Burston said in an interview with Woodshop News.

"With the annual John D. Mineck Fellowship we administer, and the many

wood artists whom we've shown, supported and sold for over the years, it's clear that this discipline is important to us and to the larger craft field. Personally, I'm surrounded by crafted wood beauty – my partner is a woodworker and furniture maker – so it holds a prominent place in my heart."

Martin guided the Society through the pandemic and transitioned its semiannual CraftBoston event into a yearround online educational marketplace.

"I speak for all of us on the board and staff when I say how grateful we are to Brigitte for her steady guidance over the past four years and her leadership in creating a new vision for the organization's future," Gary Roberts,





Karina Burston

chair of the Society's Board of Trustees, said in a statement.

"She joined the Society at a crucial moment, when the future of brick-and-mortar craft retail was becoming increasingly unsettled, and the pandemic was threatening to change how artists and customers interacted. Her enthusiasm for craft energized our organization and will be missed."

For more, visit societyofcrafts.org. W

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# Herbine Hardwood

# Steamed or not, walnut is in demand

By Jennifer Hicks

The ongoing popularity of black walnut (Juglans nigra) can't be overstated, according to suppliers interviewed by Woodshop News. The premium domestic hardwood continues to sell well, whether steamed or unsteamed, despite prices that remain at a post-pandemic high.

Bruce Stevens of Highland Hardwoods in Brentwood, N.H., which carries steamed walnut from a midwestern mill, says the high prices are a result of supply and demand.

"Walnut is still an item that's produced in smaller, lower volumes and it has maintained its pricing," says Stevens. "We've seen prices on a number of items come [down] here in the last quarter, but walnut prices have remained very stable because of the limited resource. All prices went up during the pandemic, including walnut. But the majority of them - oaks, maples, poplars - have come way down.

"We sell a non NHLA grade. It's a proprietary grade that's very clear and very dark. This upper grade offers a much higher yield and there is limited volume of it. We buy what we can, and it sells very well."

Walnut is steamed to even out the color. But there's also a market for unsteamed walnut, particularly from small sawmills, such as Herbine Hardwoods in Leesburg, Va.

"Sales in walnut have been great for me," says the owner, Rick Herbine. "I just absolutely cannot hold on to 8/4 walnut. I sell a lot of natural edge slabs, mostly 8/4. I've gone through a lot of walnut here so far this year. Compared to last year I'd say it's been strong for me for a while now, and the 8/4 it just goes as fast as it comes out."

Hearne Hardwoods in Oxford, Pa. sells unsteamed plainsawn, quarter-sawn and figured walnut to customers that want something unique.

"Walnut, right now, is hard to keep on the shelf and we always have it in the kiln," says owner Rick Hearne. "Our strongest market for it right now is probably for flooring and built-ins, rather than furniture.



A pair of unsteamed walnut slabs at Herbine Hardwoods in Leesburg, Va.

"Our particular spin on walnut is that we don't steam our walnut. When you steam the wood, it takes the life out of the color. The custom furniture makers we have prefer to get the rich colors of the heartwood, which can be purple to red to gold, all in the same board."

Price quotes for 4/4 FAS walnut started at \$8.50/bf, while a clear premium or upper grade was going for \$13-14/bf. **W** 

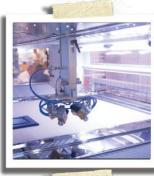
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Festool's new cordless sliding compound miter saw, the Kapex KSC 60, features a twin-column guide, brushless EC-TEC motor, miter angles of up to 60 degrees on each side, and bevel angles of up to 46 degrees right and 47 degrees left.

### **Festool unveils new** products for 2023

By Jennifer Hicks

Festool USA previewed several new tools at its "Festool Recharged" event, held Feb. 8 at the company's U.S. headquarters in Lebanon, Ind., and broadcast on social media channels.

"Our next launch will feature our first cordless miter saw. We will also have new track saws this year as well as many other cordless tools. It should be a banner year for Festool," said product manager Rick Bush, in an interview with Woodshop News.

The event featured the new Kapex KSC 60, a cordless sliding compound miter saw, slated for release this spring. The 36-volt saw is mounted

on a self-contained portable stand and features extensions that break down and fold into each other as one unit. It will sell in a kit with two batteries, chargers, accessories, and Systainer carrying case for \$1,298.

Another release scheduled for the spring is the Cleantec CTC Midi cordless mobile dust extractor.

Later this year, the company will introduce the TS 60 KEB track saw, a corded tool featuring anti-kickback technology that will shut the saw down with any upward or backward movement, and the CSC SYS 50 cordless table saw, featuring a sliding table and digital blade adjustment. W



### **OVVO adds DH1 connectors**

By Jennifer Hicks

OVVO, a manufacturer of hidden connectors, introduces its new Drilling Housing (DH1) connectors that are compatible with standard inline drilling processes. The DH1 works with OVVO's RD12 and RN12 connectors to join panels of thicknesses from 15mm and above.

"The new Drilling Housing products make it easier than ever for manufacturers to achieve the benefits of tools free assembly," Brendan Phillips, OVVO's chief executive, said in an interview with Woodshop News.

The DH1 connects cabinet and furniture parts using standard drill holes on both sides of the joint. Like all OVVO connectors, they get installed during the manufacturing process so the end-user can assemble parts without tools, screws or glues.

They can be used with a variety of materials from hardwood to particleboard and are available in a range of sizes in both permanent and releasable options.

"Manufacturers no longer need to pre-assemble cabinets prior to delivery - simply snap everything together onsite or even let the consumer do it - it's that easy. Ultimately, this saves time and money on labor and transportation," says Phillips.

OVVO, based in Ireland, recently announced partnerships with software providers Cabinet Vision, TopSolid, iFurn, Swood, and Cabinet Sense to help manufacturers incorporate its connectors into existing processes and develop new products. For more, visit ovvotech.com. w





OVVO's new DH1 connector with the RD12 end boring (top left) and RN12 face boring connectors (top right). They allow installers or customers to assemble cabinet and furniture parts without tools.

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### Triton updates its **Power Planer**

By Jennifer Hicks

Triton Tools presents the TPL180B Power Planer, an evolution of its predecessor, model TPL180, featuring a 7" cutting width and the company's patented triple-blade drum.

"This would be ideal for doing any type of flattening, live-edge work, dimensional lumber. It's a nice in-between from a smaller hand-held planer versus a true stationary product,"







the company's patented threeblade design.

says Stas' Kotula, the North America business development manager for Toolstream Inc., Triton's U.S. distribu-

"There's nothing in this size out there. The next biggest one is more expensive, and this retails around \$300. So, it's a very good price point, but it gives you the functionality to do some larger applications that you might not be able to use a smaller planer for or if the material's so big you can't put it through a stationary machine."

Upgrades include a more powerful 14-amp motor, soft start feature, and a larger 2" dust port, according to

Other features include a 10-position depth control dial and reversable HSS blades.

The TPL180B Power Planer sells for \$309.99. For more, visit *tritontools*. com. W



Milwaukee adds cordless plunge track saw

By Jennifer Hicks

Milwaukee Tool has added to the track saw category with a 6-1/2" cordless model, part of its M18 Fuel family of tools.

"This is a tool that has grown in popularity over the years and has become a must-have for the professional carpenter. Track saws are remarkably accurate and clean with their cuts; a tool that users have been needing on the jobsite and in the shop. We developed the new saw to provide users with a solution that

has the corded performance, with the convenience and portability of cordless," says Tyson Apfelbeck, vice president of product management for Milwaukee Tool.

The saw has a 2-1/4" depth of cut and a bevel range of -1 to 48 degrees. It features a variable speed dial, three bevel stops, and a brushless motor.

The company has also introduced a line of blades for the new track saw. Available for general purpose, finish, fine finish, fiber cement, and laminate cutting, the blades feature an anti-friction coating that resists corrosion and gumming, and cobalt-

infused tungsten carbide teeth, according to the company.

The saw sells in kit, model 2831-21, for \$549. It includes an XC6.0 battery, charger, and carrying case. Guide rails, available in lengths of 31", 55" and 108", and other accessories are sold separately.

For more, visit milwaukeetool.com. w



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### Defending my turf

By David Getts

I've had a professional home office for decades. For years I have endured the demeaning comments and snide remarks, from both clients and peers, that working from home is somehow less professional. I even had a fellow colleague say, who knew I worked from home, that his business was never legitimate until he moved into a commercial space.

I guess I never realized that for some narrow-minded people, making a profit, employing others, and developing a solid reputation for good work in the community isn't considered legitimate.

Years ago, I started working with a prestigious client, the CEO of a big

company, who was shopping for an extensive kitchen remodel. Even though he was very conservative, he wanted every bell and whistle. I got the feeling he was finally loosening the purse strings.

During the sales process, we went over the budget for each of the specific items with relative ease. I was expecting more resistance, but the guy was very understanding of the cost and process, until we came to the slab stonework. There's something I've noticed about most people engaged in a major remodel. There is typically one aspect regarding a trade, fixture or color, for example, that has some extra special

meaning to them. Oftentimes they don't even care about the most expensive or important aspects of a job, but it's that one pet detail that means the world to them. And for this client, it was the natural stone component.

When we began to discuss the hard surfaces, the world seemed to stop as the client took over the conversation with poetic passion for the merits and characteristics of stone. The way it could look both hard and soft, the supple softness the fingers experienced, and even how the rock cold surface temperature made his blood flow. I was both stunned and impressed with his knowledge of not only the material itself but the specific details of how it should be handled, fabricated and installed. I was so carried away with his words I kind of forgot where and even who I was. It wasn't until he uttered one sentence that I was immediately transported back to earth from



my comfortable perch at the dining room table.

"We really need to find the right stone guy to fabricate these surfaces for the house. After all, he could be building them in his garage. And the last thing I'll have in this house is subpar workmanship," he said.

In that moment I felt my ideals for creating a professional business were being put to the test. If I ignored, or even worse, dissed the idea of a product being produced at the stone guy's house, I would be nothing short of hypocritical. If I defended the fabricator's home shop, I risked not only losing the job, but most certainly my own credibility as a contractor/craftsman.

So I blurted out, "Well, if you hire me, your cabinetry will be built in my home shop." I had to hold back the joy that was released once I openly denied his ignorant supposition. Afterall, allowing a foothold like this is unacceptable. The very notion that someone believes you can't be the best just because you work from home is absurd and I was not going to have any part of that kind of ignorant thinking. Surprised by my candor and confidence in telling him the truth, without another word spoken, the client flipped to the last page of the contract and asked for a pen to sign the agreement.

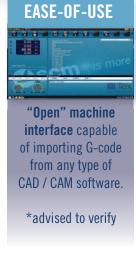
I think about this encounter every time I have or hear a conversation about working from home. It taught me a valuable lesson about how the world is relentless in its attempt to force the square peg of your ideals into the round hole of a politically correct compliance. But when you know who you are, your limitations and strengths, and have the confidence to run a business wherever you are, you don't have to conform to a set of rules designed to direct the masses. I'm not saying running a business from home is better. And in the ying-yang of the same breath, it's certainly not worse either. If you reach a growth stage that requires commercial zoning and space, then by all means move. Apple moved when it outgrew its garage, but it also didn't bury the fact that it began in one. Great things typically start small.

Working during the eye of the Covid storm, I dealt with a lot of clients

that were working from home. Many of those who chose not to lost their jobs. After a solid year of sitting at the desk in their pajamas every morning, some people, and even the companies they worked for, saw the advantage of working from home. It's funny how small companies can work from home successfully for years and still be considered unprofessional, but once the big corporations deem it viable it

becomes a new revelation of how to achieve goals. Whatever. Those of us who have found a niche puttering in our home workshop already know that those benefits are the real deal. We didn't need a pandemic to show us, and we certainly weren't forced into a corner to do it either. In fact, the very thing they thought was unprofessional and complete torture became their saving grace from Covid bankruptcy.W

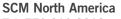








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presents it new Chroma-Inset and Moda-Inset painted and wood slab style doors with inset cabinet construction. The doors are available with flush inset or beaded inset styling. The Chroma-Inset door is offered in any of Dura Supreme's painted finishes, while the Moda-Inset door is offered in cherry, maple, and quarter-sawn white oak wood species. For more, visit durasupreme.com.



#### **PAINTLINE**

introduces the Interior Door Spray and Dry System, which allows a single operator to paint, finish and dry up to 20 full-sized doors. It features a foot-operated turntable and bottom-edge, screwin door stands, so operators can spray all sides of a door while they are standing in a stationary position. The system, identified by the company as the PSDRID, is available for pre-order. It sells for \$785. For more, visit thepaintline.com.

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**CANTEK** presents the D405ANC, a 1-axis sliding table saw that features a numerical control rip fence, providing the operator with the added convenience of setting the rip width automatically through an eye-level control. For more, visit *cantekamerica.com*.











#### **AXIOM PRECISION**

introduces SureGrip EVA as an upgrade over a MDF spoilboard. "Ethylene-Vinyl Acetate (EVA) is a closed cell foam. It is often used in floor and exercise mats, sports equipment, crafts, life jackets, flip-flops, and now, CNC spoilboards," the company explained. "SureGrip EVA is easy to install, thicker than standard MDF, machines easily and firmly holds your project with tape, screws, or substantially less clamping pressure. Now available for all Axiom CNC routers, each complete set of spoilboards comes ready to install on your Axiom CNC router using your existing hardware." For more, visit axiomprecision.com.



#### **MICROJIG**

introduces the Grr-ripper2 Go table saw accessory for cutting pieces as thin as 5/16" safely and accurately with no bare-hand feeding. It can also be used to keep hands and fingers away from bits and blades on the router table, band saw and jointer, according to the company. The Grr-ripper2 Go retails for \$29.99 at microjig.com.





#### BY JOHN ENGLISH

ust, spray and fumes can affect the quality of finishes on wood, but far more important is the threat they present for employee health. Fortunately, plenty of solutions are available in today's marketplace.

Festool USA (festoolusa.com) recently introduced two new cordless dust extractors, the Cleantec CTC Sys and the CTC Midi. Both come in basic and HEPA models, and the company describes the rectangular Sys model as a "Systainer on the outside, cordless dust extractor on the inside." It can be wheeled onto the jobsite, stacked on the rest of an installer's Festool equipment, and runs off two 18-volt batteries. Features include three suction levels, Bluetooth auto-start, a remote control, and shoulder carrying strap.

Makita USA (makitatools.com) has become something of a leader in the cordless vacuum field, offering a catalog of solutions based on its 36-volt, 2.1 and 4-gallon wheeled units, plus a 2-gallon rectangular box vacuum with a handle on top. Named the XCV11Z, it has a brushless motor that delivers 57 CFM using a single 18-volt battery. It's very compact: the entire unit only weighs about 10 lbs., yet it has a filter cleaning system and a HEPA filter. Makita also makes 0.5 and 1.6-gallon backpack dust extractors.

**DeWalt** (*dewalt.com*) also has a new cordless vacuum, model DCV585B, featuring a HEPA filter, wireless remote, and automatic filter cleaning function.

In the corded category, **Bosch** (boschtools.com) presents the new 9-gallon wet/dry vacuum, model VAC090AH, with a HEPA filter and automatic filter cleaning system that op-



Laguna has seven cyclone collectors in its catalog; DeWalt's new cordless vacuum (right) with a HEPA filter. At left, dust extractors from Makita, Bosch, Baileigh and Fein.

erates every 15 seconds for maximum suction power.

The Turbo II X AC HEPA wet/dry extractor from Fein (fein. com) features an automatic filter cleaning system and the added benefit that tool cases from various systems can be placed on the vacuum lid and secured. Another advantage here is reach: it comes with a 25' cord and a 13' hose.

### CATCHING CONTAMINANTS

Back in the woodshop, **General International's** air filtration system (*generaltoolsusa.com*) includes a patent-pending Smart infrared dust sensor control system with an electrostatic filter, an eight-bag inner filter, a diffuser filter, and an optional PM2.S filter that "combine to remove 99 percent of all particles 5 microns, and 85 percent of particles 1 micron in size," according to the company. There's an optional activated carbon filtration layer and HEPA filtration layer, plus a remote control that has a built-in timer.

Among the latest innovations from **JPW Industries** (*ipwindustries.com*) is the ISF-1000 'intelligent' air filtration system. Designed for small shops, this unit from the company's Baileigh Industrial division has an automatic air quality sensor that adjusts the fan to one of six speed settings based on air quality. The ceiling-hung unit has an LED light that tells when the filter needs changing and timer that runs up to 16 hours.

**SawStop** (sawstop.com) offers a floating overarm dust collection system that looks like it could be used on just about any cabinet saw to harvest airborne particles at the blade. What's especially nice is that it swings out of the way when not needed, and then quickly back into the operating position.

### **DUST DEVELOPMENTS**

In larger shops with central dust collection, a spark extinguishing system detects sparks as they evolve and automatically extinguishes them. **Fagus-GreCon** (*fagus-grecon. com*) has patented a new optical detector that identifies



dangerous ignition sources using multi-sensor technology to read the infrared radiation spectrum. The detector then processes those signals and puts out the fire within a matter of milliseconds.

In smaller shops, cyclones are the way to go because they help maintain airflow speed. They also provide the opportunity to separate large and small debris, thus minimizing impact on the fan blades. **Laguna Tools** (*lagunatools. com*) introduced a new lineup of seven smaller cyclones last year, with larger surface areas and premium filters. But it's the details that make the difference, so inside each canister there are two paddles to knock the build-up down, and the company has patented a drum-lifting mechanism that eliminates hoses. The plenum is a single piece too, to minimize resistance. Laguna also offers several 5- and 10-hp baghouse-style collectors for larger shops.

For smaller shops that want to turn a single-stage collector into a cyclone, the new Super Dust Deputy 4/5 by **Oneida Air Systems** (*oneida-air.com*) works with nearly any 1- to 3-hp unit. It has two 4" OD adapters that allow the cyclone's inlet to connect to 4" or 5" hose, and the outlet to connect to 4" or 6" hose as needed. Oneida also offers cyclonic collectors from hobby units that run on household



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Festool's Cleantec CTC Sys (top) cordless mobile dust extractor and an air filtration system from General International.

current to 20-hp collectors.

**South Bend Tools** (southbend-tools.com) sells an interesting downdraft table (37" x 53") that has built-in stops to hold work.

Stiles (stilesmachinery.com) offers a Dust Management solution that includes experts who will design, engineer, install and service a complete solution from the ground up, and a new clamp-together ducting system.

Recycling becomes a possibility in shops that produce a large enough volume of wood waste, but there may be a requirement to separate solid wood from resin and plastic based sheet materials. **Nederman** (nederman.com) has

developed a wide range of products and systems including dust collectors, hoses/ducts, fans, conveyors, silos and automated control systems. These systems allow customers not only to achieve a healthy working environment but also to recycle waste wood that can have significant economic value.

For larger shops, **SCM** (*sc-mgroup.com*) offers the Formula VPF, where each model is available in versions with either a rotary valve or a briquette press, in addition to the classic version with bins for sawdust collection. The company also makes a line of smaller shop collectors with filter bags, which is called the Formula Eco line. **W** 

### **ADDITIONAL RESOURCES**

### Company Offerings Company Offerings

AGET (agetmfg.com) Dust collectors	Lapp Millwright (lappmillwright.com)Central dust collection systems
Air Handling Systems (airhand.com)Hoses, connectors	Lee Valley (leevalley.com)Oneida, Mirka, Festool and Rikon
Atlantic Machinery (atlanticmach.com)Collectors, downdraft tables, booths	Maksiwa (maksiwa.com)Single-stage, cyclone collectors
Beaver Tools (beavertools.com)Dust collectors	Masterduct (masterduct.com)Dust collection hoses
Burns Power Tools (burnstools.com)	Mirka (mirka.com)Corded HEPA extractor
Cantek (cantekamerica.com)Collectors, downdraft tables	Nilfisk (nilfisk.com)Industrial-grade wet/dry vacuums
DustCollectionBags.comCollection bags, accessories	Nordfab (nordfab.com)Ductwork,Quick-Fit clamp system
Felder Group (felder-group.com)Dust extractors	Rockler (rockler.com)Dust collectors,accessories
Grizzly Industrial (grizzly.com)Dust collectors, downdraft tables	SandMan (sandmanproducts.com)Downdraft tables
Harvey (harveywoodworking.com)Gyro air and dust processors	SDC (scientificdustcollectors.com)Industrial baghouses cyclones, downdraft tables
Hendrick (hendrickmanufacturing.com)Hendrick, Oneida, Donaldson Torit	Servair (servairfilters.com)Spray booth filters
Hermance Machine Co. (hermance.com)Dust collectors	U.S. Duct (us-duct.com)Clamp-together, modular and flanged ductwork
Klingspor (woodworkingshop.com)JET, Powermatic, Laguna, Festool	Wandres Corp. (wandres.com)Technology that cleans panels before coating
L. L. Johnson (theworkbench.com)Rikon and more	Woodcraft Supply (woodcraft.com)Dust collectors, accessories

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- · Motor: 3 HP, 230V, 12A
- · Max. width of cut: 8"
- Max. depth of cut: 1/8"
- Max. rabbeting depth: ½
- · Min. stock length: 10"
- Min. stock thickness: ½" • Cutterhead diameter: 31/16"
- · Cutterhead type: 4-knife
- Knife size: 8" x ¾" x ½" Overall dimensions:
- · Shipping weight: 450 lbs.







### **⚠** WARNING! †¹

#### **3 HP SHAPER**

- Motor: 3 HP 240V 12A
- Maximum cutter height: 2½!
- Maximum cutter diameter: 5½
- Spindle diameters: 1/2", 3/4", 1"
- Spindle lengths: 23/4", 3", 31/2"
- Spindle capacity under nut: 2", 21/4", 21/2" • Spindle speeds: 7000 & 10,000 RPM
- Spindle travel: 3"
- Spindle openings: 11/2", 3", 4", 7"
- Table counterbore: 7" dia. x 5%" deep
- Table size: 28 1/4" W x 301/2" D
- Overall dimensions: 30" W x 30½" D x 39½" H
- · Shipping weight: 392 lbs.





G1026 ONLY \$149500



↑ WARNING! †¹

#### 20" 5 HP PRO SPIRAL CUTTERHEAD PLANER

- Main motor: 5 HP, 220V, 25A
- Maximum stock width: 20"
- Maximum stock thickness: 7
- . Minimum stock thickness: 1/4"
- · Minimum stock length: 8"
- · Maximum cutting depth planing full width: 1/16"
- Maximum cutting depth planing 6" wide board: 1/8"
- · Cutterhead diameter: 31/8"
- Cutterhead type: 4-row spiral with 96 inserts
- · Cutterhead speed: 5200 RPM
- Feed rate: Variable, 17-26 FPM
- Table size with extensions: 211/4" x 28 1/4"
- Overall dimensions: 38" W x 40½" D x 42½" H · Shipping weight: 1040 lbs.



⚠ WARNING! †¹

### G0544 ONLY \$799500

### 9" X 138 1/2" OSCILLATING EDGE SANDER



- · Motor: 3 HP, 220V, 15A
- Sanding belt size: 9" x 1381/2"
- · Sanding belt speed: 4120 FPM
- Platen size and type: 9½" x 47½", graphite-coated
- Main table size: 113/4" W x 473/4" L x 15/8" T
- Main table tilt: 0-45°
- · Main table vertical travel: 8"
- Auxiliary table size: 13" W x 18" L x 11/4" T
- Auxiliary table vertical travel: 8"
- Dimensions: 82½" W x 26½" D x 46½" H
- · Shipping weight: 839 lbs.



SB1117 ONLY \$539500

### **5 HP CYCLONE DUST COLLECTOR**

- Motor: 5 HP. 220V. 34A
- · Main inlet size: 10"
- Impeller: 155/8", steel radial fin
- Airflow capacity: 2399 CFM @ 2.12" SP
- · Maximum static pressure: 11.4"
- Filtration rating: 1-micron
- · Filter surface area: 90 sq. ft.
- Collection drum size: 60 gallons
- · Sound rating: 84-86dB Overall dimensions: 59" W x 38" D x 93½" H
- · Shipping weight: 560 lbs.



SB1094 ONLY \$389500





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### 19" 3 HP EXTREME-SERIES **BANDSAW WITH MOTOR BRAKE**

- Motor: 3 HP, 220V, 12A
- Cutting capacity/throat: 181/4"
- · Maximum cutting height: 12"
- Table size: 263/4" x 19" x 11/2" thick
- · Table tilt: 5° left, 45° right
- Floor to table height: 371/2"
- · Blade size: 143" long
- Blade widths: 1/8"-11/4"
- Blade speeds: 1700, 3500 FPM
- Overall size: 36" W x 32" D x 76" H
- · Shipping weight: 512 lbs.













### MARNING! †1

### 10" 5 HP SLIDING TABLE SAW

- · Motor: 5 HP, 230V, 19A
- · Rip capacity: 33"
- · Crosscut capacity: 781/2"
- Blade tilt: 0-45°
- Max. depth of cut @ 90°: 31/8"
- Max. depth of cut @ 45°: 2¼" Main table size: 27" x 14 3/8"
- Sliding table size: 63" x 121/4" • Floor-to-table height: 335%"
- Max. width of dado: 13/16"
- Floor space required: 150" W x 123" D
- Overall dimensions: 76" W x 125" D x 46" H
- · Shipping weight: 688 lbs.











### **HINGE BORING MACHINE**

- Motor: 1 HP, 110V/220V (prewired 110V), 10A/5A
- Table size: 28" wide x 1334" deep
- . Maximum throat: 4"
- Fence length: 12" (x2), plus 28" left extension
- Stroke: 4"
- · Stroke operation: Manual
- Overall dimensions: 29" W x 25" D x 365/8" H
- · Shipping weight: 198 lbs.



G0718 ONLY \$299500



#### 10" 3 HP 220V CABINET TABLE SAW

- Motor: 3 HP, 220V, 13A
- Rip capacity: 36" right, 18" left of blade
- Max. depth of cut @ 90°: 33/16
- Max. depth of cut @ 45°: 23/16
- Table size: 45¼" W x 27" D
- · Floor-to-table height: 35"
- Arbor diameter: 5/8"
- · Arbor speed: 4000 RPM
- Max. width of dado: 3/4" Overall dimensions: 75" W x 44" D x 42½" H
- · Shipping weight: 587 lbs.



G0941 ONLY \$239500



### 80-GALLON 7.5 HP EXTREME SERIES AIR COMPRESSOR

- · Motor: 7.5 HP, 230V, 31A
- · 28 CFM at 40 PSI and 23 CFM at 90 PSI
- · Maximum air pressure: 175 PSI
- · Connection type: Female threaded valve Connection size: 3/4" NPT
- Sound rating: 79dB
- Oil sight glass
- · Ball-valve drain
- Overall size: 40" W x 32" D x 73" H
- · Shipping weight: 620 lbs.





G0942 ONLY \$259500

#### COMPACT AUTOMATIC EDGEBANDER

- · Required power supply: 220V, 30A
- · Feed motor: 34 HP
- Table size: 10½" W x 69¾" L
- Min. panel dimensions: 4¾" W x 11" L
- Panel thickness: 1/2" 13/4"
- Tape thickness: 0.5mm 2.0mm
- · Air requirement: 6 SCFM @ 100 PSI
- Glue pot capacity: 34 oz.
- Edgebanding coil capacity: 311/2" · Panel feed speed: 16 FPM
- Overall dimensions: 1021/2" W x 60 1/2" D x 491/2" H
- · Shipping weight: 771 lbs.



G0854 ONLY \$889500





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# From Concept To Completion

### BALTIMORE SHOP BUSTLES WITH COMMERCIAL WORK AFTER PANDEMIC BOOM

### BY JENNIFER HICKS

ounded in 2014, Concept Wood Design of Baltimore, Md., has progressed from a two-person operation to a full-service custom cabinetry and millwork shop with three owners and six full-time employees. Thanks to the densely populated area, as well as other custom shops in the region going out of business, local work in both residential and commercial sectors is plentiful for this motivated team. The only downside is trying to keep up.

"We're at the point where we're turning down opportunities to bid work because we're booked out well into the months ahead. It's a good problem to have, but it's sometimes frustrating turning down fun projects we'd like to work on. We just don't have the capacity to do all of it properly. If we were to sign up for all of it, we'd end up letting somebody down because we wouldn't get it done in the timeframe they want and we're not going to do that," says John Deosaran, one of the owners.

Paul Deosaran, John's brother, started the company with friend Dave Eske. John joined in 2019. The brothers are making big strides to keep the business moving in a positive direction with Eske about retire.

"Dave is in the process of easing out of the business. But he was a guy that had a lot of vision and helped start this whole thing," says John.

Concept has filled the gap in the D.C/Baltimore area for commercial shops.

**Sreg Pease Photography** 

### TWO FRIENDS AND A DREAM

Paul and Eske harbored a dream for several years to open Concept Design.

"The cabinet work started as a sideline to my remodeling business 25 years ago," says Paul. "It was mostly small residential projects in (Washington) D.C. Over time, I got more and more into cabinetry work, furniture and woodworking in general, and moved away from the G.C. side of things. Dave and I have been friends for 30 years. He was not in this business, but we worked on other things together, and he was into woodworking. We talked about doing this for 20 years."

The first shop was in a specialty lumber retailer, World of Hardwoods, in Linthicum Heights, Md. By 2018, Paul and Dave purchased their current 7,000-sq.ft. shop, and John joined the effort a year later.

John is a former software engineer. "I always did woodworking on the side and built furniture for my house," he says. "In my old life, as I call it, where I sat at a desk and did computer stuff, going home nights and weekends it was cool to build something with your hands where you could look back and say, 'Oh, I made that'."

John mainly works in the office as an estimator, while Paul oversees the shop. The rest of the team features Paula Nyberg, Chris Rollins, Dylan Jacobs, Scott Lee, Graysen Pollard, and Joe Holt.

John says the current building, with its large footprint and high ceiling, gives them lots of options, but their future there is uncertain.

"At the rate we're going, we're likely to outgrow this place in the not-too-distant future, probably in the next two years. That's good news and bad news."



John Deosaran monitors the shop's Style CNC with rotary axis.

### **INFLUX OF WORK**

Paul and Dave garnered a strong reputation through their residential work. But the company has pivoted to commercial work recently, filling a void in the market.

"There were several large shops, with 70 to 80 employees, that went out of business over the last three years which has flooded the market for the smaller shops to pick up the slack," Paul explains.

"2020 was a very good year for us because of the restaurant work we got," says John. "During the pandemic, because so many restaurants had to be closed, they thought that was the time to do renovations, so we had a lot of work come in. The restaurants are really where our business took off, and once we got it in, it just continued to grow. Word got out to G.C.'s managing those projects and they kept coming back to us."

The partners hired their first employee in 2020, just after buying a Style CNC manufactured by Jinan Style Machinery Co. of China. Paul says it was a good, entry-level fit.

"We purchased it directly from them and installed it ourselves. It was half the cost of buying it here," he says. "I

stumbled across it on Facebook for \$12,000 and thought we'd give it a try. We've gotten our money's worth. Mostly it's for sheet goods for cabinets but we also do furniture parts and other pieces. We used to use four machines to cut out parts for cabinets, now you put a sheet on, turn it on and walk away. I'd never go back. It would be hard to make money without the [CNC]."

### A PRIME LOCATION

At this stage, Concept prefers to keep residential work to a minimum.

"The residential side is nice because they tend to be smaller projects, you're paid fast, and your cash flow is better," says John. "But it's not as if I'm going to sell you more than one set of kitchen cabinets, so once I've done that, I've got to go find another, and the next one, and the next one."

Concept's mid-Atlantic location eliminates the need for extensive travel.

"The D.C./Baltimore area, generally, is not recession proof but tends to fare better than the rest of the country. It's the seat of the Federal government, which doesn't stop spend-





The shop hired its first employee in 2020 and the count currently stands at six.

ing money, so recessions tend to not hit the D.C area as hard as a lot of the rest of the country," says John.

The shop's client list includes McCormick & Schmick's Harborside restaurant in Oxon Hill, Md.; Morton's Steakhouse in Arlington, Va.; Union League Golf Club in Philadelphia; Jimmy's Famous Seafood in Baltimore; St. John's College in Annapolis, Md.; Smithsonian Museum of Natural History in Washington, D.C.; Thurgood Marshall BWI Airport in Baltimore., and numerous coffee shops, bars, and taverns.

The brothers like to share that Concept was recognized on the Food Channel television show, Diners, Drive-Ins, and Dives, hosted by Guy Fieri, that featured Jimmy's Famous Seafood.

"During the pandemic, the show was doing Zoomstyle interviews. All the restaurants were sending gifts in along with the food, each trying to outdo the last one. The owner of Jimmy's called us and wanted a wood and epoxy surfboard that had Guy's logo and Jimmy's logo. The piece was sent in the box with all the ingredients for what they wanted to cook," says John.

### **LOOKING AHEAD**

The World of Hardwoods closed recently, presenting a new opportunity for the owners.







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Completed conference table and bar from the shop's growing portfolio.

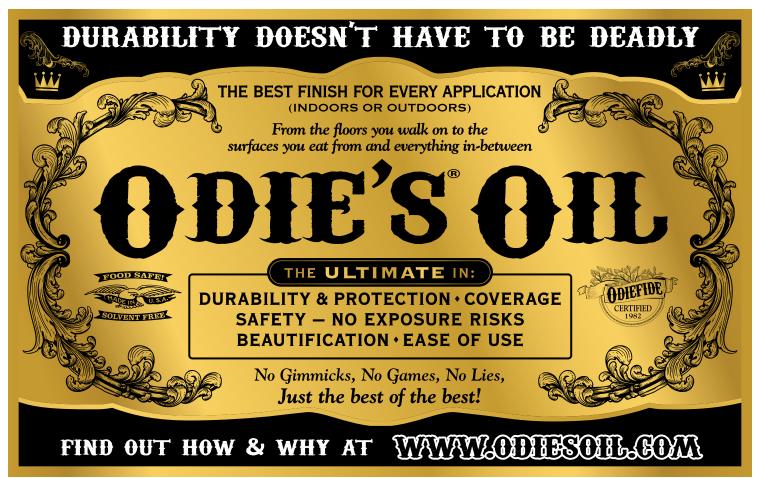
"We ended up buying all their inventory and have started selling lumber on the side. We recently struck up relationships with other local mills. We are working with a guy that collects, cuts, does his own kiln drying but doesn't want to handle sales anymore," says John.

"We definitely want to expand on the lumber division. We recently sold some wood to a small cabinet shop here and hope to get the word out to other shops. Our website company redesigned our site to include the lumber offerings."

The brothers say that down the road, ideally, they would have an employee take over the business. For now, they need to focus on managing the present with their resources at hand.

"We're probably going to outgrow this space and work on a larger scale, if we can find help, but that's a challenge now. The limitations on hiring right now are just finding good qualified folks, and we can only cram so many people in this space and have them be able to work effectively," says John.

For more, visit conceptwooddesign.com. W



## $\frac{\mathsf{COODSHOP}^\mathsf{M}}{\mathsf{NENS}} \mathbf{\mathsf{LOS}}^\mathsf{B}$

## PRODUCTS & DEMOS FOR SPRING 2023

A CLOSER LOOK AT IMPORTANT PRODUCTS AFFECTING OUR MARKET



#### **BLACK BOOK**

SPECIAL SECTION FOR WOODSHOP NEWS

36

#### **ShopBot Tools - Your Success Is Our Priority**



At ShopBot Tools, we dedicate our energy and resources to offering the best, most affordable, and configurable solutions for our CNC tools. Design and engineering choices are based on thorough reasoning and always

with our customer's needs in mind. Our CNC tools are engineered, manufactured, and supported in Durham, North Carolina, USA and we also develop and produce our own control system software.

ShopBot's array of CNC routers are used in prototyping, full-production cutting, carving, machining, and milling in a variety of materials, including wood, MDF, plastics, foams, and non-ferrous metals. Our full line of tools is oriented to be used for both standard and specialty operations. They are affordable, yet deliver the professional power and precision associated with heavier and more expensive CNC equipment.

Our CNC tools range from the Desktop tool line; the ShopBot Desktop, Desktop MAX, and Desktop MAX ATC, that are highly precise and compact enough to fit on a shop workbench; to Full-Size Gantry CNC tools, like the PRSstandard, PRSalpha, PRSalpha ATC, and ShopBot Zeta that are great for cutting full sheets of plywood and other sheet goods; to custom tool configurations. We not only provide a wide range of tool sizes, we support the success of each user with a range of services, including technical support, an active online forum, and production support services.







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#### Sand Pro Sanding Tables, Sanding Booths, & Inspection Lighting



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## 37 WOODSHOPNEWS

#### **Automatic Multi-Bunk Loader System**

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deceive you. The Spectrum-M Series is an industrial grade, Anderson CNC. It delivers the impressive performance, 100% steel construction, &



a long list of standard features & available upgrades. There are even several sizes to choose from, ranging from 4' X 8' and up to 5' x 12'. Best of all, the Spectrum-M includes onsite machine installation & training, lifetime technical phone support, full online remote diagnostics and the same comprehensive 2-year warranty package that comes standard on every Anderson America CNC machine.

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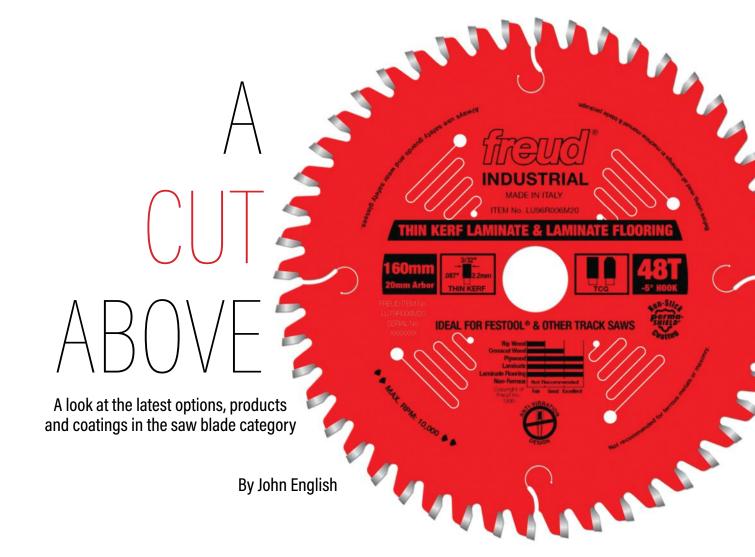




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couple of months ago at a lumberyard, I had melamine panels cut to size on a stateof-the-art CNC panel saw. It's a top-end machine, so I expected perfect edges that could be taped effortlessly. What I got was chipping top and bottom and, from several feet away, the problem was obvious. As expected, the blade was coated with resin and missing several teeth, but what was startling was that the store had installed a cheap, disposable rip blade in this magnificent cross-cutting machine. I was reminded of the adage, "garbage in, garbage out". The store spent \$20,000 on a saw, and less than \$20 on the blade. Perhaps they should have spent a few more dollars training the operator.

Here, we'll look at some specialty blades and a few timely trends that are designed to make it easier to choose the right blade for each job.

#### THE PCD OPTION

GDP Tooling (gdptooling.com) describes diamond as the hardest mineral known to man, and the company also notes that it has the highest thermal conductivity along with impressive abrasion resistance. So, it's no surprise that there has been a huge expansion over the past decade in the number of tools that can be ordered with tips and coatings made from synthetic, lab-grown polycrystalline diamond, or PCD. GDP and



Freud's extensive offerings include a 48-tooth track saw blade.

other tooling manufacturers have now solved enough cost and technical problems that we see diamonds used on everything from molding and shaper knives to CNC router bits.

Diamond blades are also available for table, beam and panel saws, including scoring blades. Depending on the manufacturing process, the cut can still be a hair rough when compared to the silky smoothness of a high-end carbide blade, but PCD has its place when it comes to machining



hard plastics and resins that can dull carbide teeth.

While they cost more than a carbide blade, diamond blades typically have a useful life that is dozens of times longer. Perhaps the biggest advantage to using one is that it can cut through so many different hard or brittle materials that it allows the saw

to keep running without the operator needing downtime to make blade changes.

Diamond blades can look a bit different, too. For example, Peak Toolworks (peaktoolworks.com) makes a SuperSilent thin-kerf panel saw blade that's missing the traditional deep gullets. The plate (the steel disc) is

thick in the middle and steps down to a narrow profile about three quarters of the way to the edge, and then the diamond teeth step back up to full width at the point of impact. This leaves a 'ChipBelt' for efficient chip removal. The blade cuts a 2mm (just over 1/16") thin kerf, and a matching 120mm scoring blade is also available with the same technology.

Diamond blades are ideal for long runs in sheet goods and would probably be an excellent choice for that lumberyard panel saw. They are worth exploring as an option for breaking down sheets that will be CNC routed to final dimensions. When it comes to solid wood stock and the need to reduce the time spent cleaning up saw cuts, my personal take is that some of the latest carbide-tipped blades might better meet the needs of small shops.





SawStop's 10", 80-tooth plywood, solid surface blade.

# Courtesy of Forrest Mfg., Peak Toolworks & CMT Orange Tools

#### **NEW BLADES**

Forrest Mfg. Co. (forrestmfg.com) has added both a 260mm and a 10" Signature series crosscut blade to its Chopmaster line. The 10" blade delivers a 7/64" wide kerf and it has a 30-degree ATB+R tooth design. It's available in nine bore sizes. Chopmaster blades are made with C-4 submicron carbide for longer life, and they have a heavier than normal steel plate for maximum stability, according to the company.

Among several new thin kerf blades from Oshlun (oshlun.com) are a 10" general purpose (rip, cross and laminate) blade with a high ATB tooth, plus both a sliding miter and a large beam saw blade that are available in different diameter and/or tooth count options. The miter saw blades have negative hooks for added safety, and the 16-5/16" beam saw blade has an anti-kickback ATB tooth design and a 0.118" kerf.

DeWalt (dewalt.com) recently added a 10" (DWA11060) and 12" (DWA11260) 60-tooth crosscut/finish blade, 24-tooth rip/general purpose blade (DWA11024), and 40-tooth general purpose blade (DWA11040). The crosscut blades feature the company's patented body slot design for low vibration.

With the explosion in cordless tools, Makita (makitatools.com) has introduced three new 7-1/2" diameter tungsten carbide-tipped blades in its Max Efficiency line for miter saws. The new blades come in 25-, 45- and 60-tooth options, and they join a family of Makita miter/crosscut blades for 6-1/2", 7-1/2", 8-1/2", 10", and 12" saws.

The newest line from CMT Orange Tools (cmtorangetools. com) is called ITK Xtreme and the blades have a chrome plating that is designed to protect them from corrosion, rust and resin build-up. The teeth are brazed onto the plate using a special three-metal process that "allows teeth to handle high stress and impact, especially when cutting harder woods and composite material," the company said.

Blades from Forrest Mfg., Peak Toolworks, and CMT Orange Tools.

Vermont American (vermontamerican.com) has developed a family of Xtend carbide-tipped blades for cordless circular saws. Ranging in diameters from 3-3/8" to 6-1/2", they are designed for optimal performance in portable cordless saws.

#### **COATS OF MANY COLORS**

Amana Tool (amanatool.com) has added an ElectroBlu ecofriendly, non-stick overlay to its Prestige blade. The coating, which is applied using an electrostatic bonding process, is designed to reduce resin accumulation and heat build-up so the tips stay sharper longer, according to the manufacturer. It's available on crosscut, rip, dado, melamine-specific, glue-line and other specialty blade options.

Freud (freudtools.com) offers an astounding variety of blades, including 112 for ripping and 135 for panel scoring. The company's LU96R is a thinkerf, triple-chip blade that's designed to deliver an excellent finish on both the top and bottom of laminates, melamine and veneered plywood. A laser-cut, anti-vibration design yields the plate acoustically dead, and Freud says that reduces the sideways movement of the cutting edge to prevent chipping. It comes in 160mm plus 8", 10" and 12" diameters, and its bright red coloring is a Perma-Shield non-stick coating that "reduces blade drag, and it protects the blade from corrosion and pitch buildup."

SawStop (sawstop.com) offers five blades and a dado set, none of which are restricted to use on its machines. Among them is the BTS-P-80HATB, a titanium-coated, 80-tooth blade for crosscutting plywood and materials such as melamine and MDF.

Woodshops that are having a















DeWalt' finish, framing, and general purpose blades.

hard time finding specialized blades for specific processes or machines can probably find a solution from a custom manufacturer, such as Connecticut Saw & Tool (ctsaw.com).

Other sources include Baileigh Industrial, Carbide Processors, Charles G. G. Schmidt, Comsurge Tooling, Diamond Saw Works, Dimar

USA, Everlast Saw & Carbide, Grizzly Industrial, Infinity Cutting Tools, Irwin, Leitz Tooling Systems, Leuco Tool Corp., RoyceAmerica.com, Specialty Saw, Total Saw Solutions, WEN, Woodcraft's Wood River, and York Saw & Knife.

Here's a final thought on that gummed-up blade at the lumberyard:

a good cleaning rather than a full sharpening is often all that a blade needs. Products such as BladeKleen from Forrest, or even household oven cleaners can make a huge difference in performance. But even the cleanest rip blade won't make a tear-out free crosscut, so it's important to install the right blade for the task at hand. W



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The Forust LP2 3D printer is producing furniture components from wood waste.

## WHAT WILL THEY THINK OF NEXT?

Woodworkers have new ways to create products, and new materials to reduce their carbon footprint

#### By John English

ouldn't it be nice if 3D printers could use wood instead of plastic? Imagine being able to create complex parts from just sawdust and lignin, one thin layer at a time.

Well, that future is already here. Massachusetts-based Forust (forust.com) has developed a process that can produce strong, lightweight wood components from nothing more than wood waste. Parts printed with the proprietary process can be finished like standard unfinished wood products, and they can be printed with or without realistic grain patterns. 3D printing is called additive manufacturing because it builds a part, as opposed to the subtractive process used by routers that carves away waste in multiple passes to reveal a part. And in addition to an enviable environmental footprint (this particular

3D printing process is using waste that would normally be burned or buried), wood-based printing lets designers create intricate, complex forms that a shop might not even be able to make on a 5-axis CNC.

The current Forust software allows users to print parts with no grain pattern, or in one of several patterns that can replicate species such as ash or mahogany. The standard printer can deliver complete parts or components up to 13.8" x 8.7" x 7.9" and, similar to one of the major advantages of powder coating, the shop can recover loose sawdust residue for immediate reuse in the printer. The parts can be sanded, stained, polished, dyed, coated, and even refinished in the same manner as traditionally manufactured wood products, and they can hold a nail or screw.







#### **OLD MATERIALS, NEW PRODUCTS**

Woodshops are going to see a lot more recycled, recovered and repurposed materials over the next few years because of three trends. First, there is the obvious ethical obligation to reduce pollution. Second is diminishing resources, including a switch from oil-based industries (the source of plastics such as those used in many laminates and edging tapes) to renewable energy and plant-based raw materials. And third, our growing world population means there is more consumerism, which is already impacting supply chains.

That idea of repurposing is the philosophy behind **Echo Wood**. Available through suppliers such as **Frank Paxton** 



Noho's Move chair (above) is made from recycled carpet; Gradient Fauteuil (bottom left), a 3D printed chair, reinforced with steel and blue-dyed concrete.

**Lumber Co.** (paxtonwood.com), Echo Wood is reconstituted real wood veneer that provides endless opportunities to create the look of rare and common wood. Using CAD technology, the manufacturer manipulates common and certified wood fiber to reproduce the natural appearance of nearly any desirable wood species. This environmentally responsible alternative produces architectural veneers that are defect-free and consistent in color and grain.

Echo Wood is just one example of how businesses and environmentalists are beginning to share the same global goals. Vicente Berbegal is another. A woodworker by trade, he opened a small shop in the mountain town of Castalla, Spain, back in 1968. Berbegal proved to be an exceptional businessman and today his company, **Actiu**, ships products to more than 90 countries. One of its lines, Fluit, is a recycled chair that's made from Fibreglas and polypropylene plastic that are harvested from old fruit cartons. Berbegal is a textbook example of how social and business interests are combining to create and use next generation materials.

Other examples include **Interesting Times Gang** (*itg. studio/project/aibio*), a Swedish company, that has a furniture line called Aibio made from discarded nylon fishing nets, and chairs from the New Zealand manufacturer **Noho** (*noho.co*) that incorporate recycled carpet.





Coffee table and chairs from the Interesting Times Gang's Aibio line, made from recovered fishing nets.

#### **OLD IDEAS, NEW PRODUCTS**

An 18th-century Japanese wood treatment known as Shou Sugi Ban involved scorching the surface of cedar boards, cleaning them, and then coating them with oil. The result was a natural waterproofing process that helped preserve otherwise susceptible timber (Yakisugi) in outdoor applications. The process has found new popularity of late, due to its environmentally friendly methodology. There is no infusion of chemicals, no paint or coating, and no bi-product other than a light ash and a mild carbon release. There is nothing to leach into soil or become airborne.

Wood treated this way, and especially softwood, is now finding its way into interior furniture and wall panels. It's low maintenance, uniform in color, and both moisture and insect resistant. Woods with strong, visible grain work best, and the degree of charring can deliver significantly different textural results. The Norwegian company **Kebony** (*kebony.com*) is a leader in this field and its products have been available in North America since 2014. Another innovative product, the Selex Radiata pine plywood panel, is produced by Brazilian manufacturer **CMPC** and is available through **Boise Cascade**. Usable indoors and out, it's resistant to decay.

Circular manufacturing has been around for a long time. The idea is that a product can be placed in service for its usable life, and it can then be recycled in whole or in part. For example, the Danish company **Stykka** (stykka.com) makes kitchen cabinets and when the doors or shelves wear out or simply look dated, the homeowner can order new ones. Every product in the factory comes with a digital twin that is linked to an online cloud database, making it incredibly easy to maintain or upgrade an existing kitchen. To Stykka, circular design means that individual parts can be replaced to prolong the lifespan of the interiors, and the old

parts are remanufactured and recirculated. That might be a good marketing model for North American custom shops.

Cross-gluing has always been a no-no for fine woodworkers, especially those who have witnessed humidity-induced movement delaminate and destroy a furniture joint. The idea is that wood moves across its grain, so face-gluing two boards at right-angles can often lead to splits, cracks and glue failure. Or so we thought. A new generation of crosslaminated timber (CLT) seems to defy that wisdom. For example, Montana-based SmartLam (smartlam.com) uses Georgia Pacific softwoods to create large cross-laminated panels for applications such as elevator shafts. The same technology is appearing on a smaller scale in lumberyards across Europe where edge-glued panels of 3/4" thick softwoods are face-glued together in three layers, with the middle one at right angles. The result is a 16'-long, 5'-wide panel that is 2-1/4" thick. It's essentially three-layer plywood that is made by using 1x boards. Advances in both drying and gluing have made this possible.

#### **SHEET SOLUTIONS**

As lasers, desktop CNC routers, and small collaborative robots become more accessible, a new type of plywood has been developed to take advantage of the improved accuracy offered by these machines. Ultra-thin bendable boards – all the way down to 4mm (1/64") – from **KoskiPly** (*thinplywood.com*) can be used to make doors, cabinets, and furniture. Koskiply is available through **Plywood & Door Mfrs. Corp.** in Union, N.J. (*pdusa.com*).

Wonder Wood Veneer from Lenderink Technologies (*lenderink.com*) is a new composite veneer that allows small shops to make their own flat or curved 3D plywood. The veneer has a pre-applied adhesive, which bonds when



Selex Radiata, a pine plywood panel from CMPC, and KoskiPly (below), a thin bendable material.

heated to approximately 200 degrees F.

A couple of years ago, CalPlant introduced Eureka MDF (eurekamdf.com) made from rice straw. The product has earned a USDA certified Biobased Product label, which highlights the portion of a product that comes from a renewable source that displaces the need for non-renewable petroleum-based chemicals. Biobased products are playing an increasingly important role in reducing greenhouse gas emissions.

Several manufacturers are tackling the challenge of providing a next generation material that is not only easy to mill but can also be used in humid applications such as bathroom or outdoors. Armorite is an exterior use MDF from Roseburg Forest Products (roseburg.com). Nexos exterior panels from Uniboard (uniboard.com) are made from pre-consumer recycled and recovered wood fibers, with no added formaldehyde.

Tile is a perfect option in humid applications and a new line of porcelain tiles from MSI (msisurfaces.com) features an element of luxury that might appeal to high-end kitchen and bath buyers. Called Eden Calacatta, it includes thick gold veining with a creamy white background in a marblelike statement. Available in a wide variety of options from generously sized 32" x 32" tiles to charming hex, Chevron mosaics and more, a shop can mix and match it for a cohesive look on floors and walls.

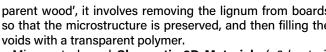
Another exquisite new surface option, Berkshire Brass from Cambria (cambriausa.com), includes never-beforeseen alloy gilded veining on a cool white, marbled background. The dramatic look is available in several surface options including Brass Satin Ridge, Brass Sculpted and Brass Smooth.

#### **SUPER SCIENCE**

The Swedish Department of Fibre and Polymer Technology reports the development of a new wood polymer composite with interesting optical properties. Called 'transparent wood', it involves removing the lignum from boards so that the microstructure is preserved, and then filling the

Minnesota-based Chromatic 3D Materials (c3dmaterials.com) is developing polyurethanes that have the same three-dimensional strength and compression set as injection-molded parts. The new materials can be flexed, stretched, twisted, and squeezed over and over, just like standard polyurethanes, but they are also printable.

And researchers at the University of Minnesota have successfully cross-linked the bacteria Bacillus subtilis with silica to create a 'living' material that will eventually impact coatings, while the Finnish company LignoSphere (lignosphere.fi) is working on wood-based, carbon neutral adhesives, coatings and paints. W





made from poplar, ash, acrylic paint, and dry wheat.

#### **Maine turning** exhibition explores meaningful causes

By Jennifer Hicks

"Turning It All Around: Turners in Collaborative Conversation," opened in the Messler Gallery at the Center for Furniture Craftsmanship in Rockport, Maine, on Jan. 20 and will run through April 19. The exhibit features intricate works through collaborations by 19 artists from the United States, Canada, and abroad, exploring sentimental ideas in today's world through sculpture in turned wood and mixed media.

The show's curators are makers and teachers Beth Ireland, from St. Petersburg, Fla., and Kimberly Winkle, from Cookeville, Tenn. Ireland is lead instructor for the Center for Furniture Craftsmanship's Turning Intensive, while Winkle is director and professor of Art at Tennessee Tech University.

"For this exhibition, Ireland and Winkle asked 19 premier wood artists to invite collaborators from outside their own areas of expertise to explore their mutual experiences of post-pandemic life by making objects together. The re-

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"A Safe Place" by Melissa Engler and Daniel Essig, made from maple, paper, waxed linen, thread, and acrylic paint.

sult is a visually compelling array of finely crafted objects that explore topics as distinct as war and resilience, healing, social media, gender and discrimination, the environment, and extinction," the center said in a statement.

One installment includes "A New Beginning" by Yuri Kobayashi of Thomaston, Maine, and Daria Veligura of Kyiv, Ukraine. Veligura and her family are in the U.S. as Ukrainian refugees, having fled their home last February to remain safe. Consisting of small painted eggs derived from wood turnings, the pieces are designed to honor and represent an early Ukranian culture called the Trypil Kukuten, which formed 7,500 years ago on the territory of modern Ukraine and Romania in Europe, with two million people living on the land. While the culture lasted two-and-a-half centuries, very little is known about it, except for about 200 examples of Trypil Kukuten ceramics.

Another piece, "Heartwood", by Liz Koerner and Krista Schoeing of Little Rock, Ark., is a vessel depicting a painted ash tree in the base to shed light on the loss of U.S. landscapes due to invasive species such as the Emerald Ash Borer and climate pressures.

For more, visit woodschool.org.

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White Oak

"Heartwood" by Liz Koerner and Krista Schoening, made from ash, oil paint, green goldleaf, and milk paint.



#### THE MASHRABIYA PROJECT

On March 3, the Museum for Art in Wood in Philadelphia unveiled The Mashrabiya Project, an international exhibition with interactive programming, a shared-making experience, and publication. It explores the significance of the woodturned mashrabiya, particularly that of wood-turned latticework found in Cairo, Egypt. It will run through July 23.

Curated by the museum's executive director and chief curator Jennifer-Navva Milliken, the multi-disciplinary exhibition will be the first effort in the U.S. to examine this architectural object and its prominence in Islamic and Egyptian woodcraft while highlighting its greater cultural significance. It features commissioned, never-before-seen works from six international artists and includes hybrid programming to encourage further public engagement and discussion, according to a statement from the museum.

"The translation of object into concept, realized in the work of these six international artists, reminds us that craft objects are not created in a vacuum, they evolve within a society as a reflection of the values and laws that define it," Milliken said.

For more, visit museumforartinwood.org. W





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

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

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

- Compiled by Jennifer Hicks

#### **CALIFORNIA**

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

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

industrial suppliers, and machinery dealers, meets during the second week of each month. For location and dates, visit awfs.org. April 25-28 - Woodworking Industry Conference, co-hosted by the WMIA and WMMA, offering business development, education and networking opportunities. Location: Hotel Del Coronado in San Diego. wmma.org

June 7-July 4 - 40th annual Design in Wood exhibition and competition. Hosted by the San Diego Fine Woodworkers Association in conjunction with the San Diego County Fair, the event features a variety of custom woodwork for viewing and purchase, as well as a competition with 15 prizes in 13 categories. Location: Del Mar Fairgrounds. sdfwa.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. tampawoodcrafters.org

#### MAINE

June 12-Sept. 1 — Twelveweek Furniture Intensive. Featuring two instructors with an assistant available for a class size of 12 students, each participant can design a course of study to fit individual interests. Location: Center for Furniture Craftsmanship in Rockport. woodschool.org

#### **MARYLAND**

**Monthly** — The Howard County Woodworkers Guild meets the first Sat-



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urdays of the month at the Bain Senior Center at 5470 Ruth Keeton Way in Columbia from 9 a.m. to 12 p.m. Open to all those working in wood. For information, email Manny Flecker at aaron0641@hotmail.com.

#### **MINNESOTA**

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

April 27-30 - Northern Woods Exhibition. Presented by the Minnesota Woodworkers Guild, the event features a variety of hand-crafted woodwork including furniture, turnings, carvings and sculptures by participating artisans, as well as a competition for cash prizes. Location: Eden Prairie Center in Eden Prairie. mnwwg.org

#### **NEVADA**

July 25-28 — Association of Woodworking and Furnishings Suppliers' Fair, a biennial woodworking industry trade show featuring new products, educational programs, networking opportunities, and student competitions. Location: Las Vegas Convention Center. awfsfair.org

#### **NEW JERSEY**

Monthly - The North Jersey Woodworkers Association meets the third Monday of every month in. 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 hold 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 meetings held on the second Thursday of the month at various locations in the Albany area. woodworker.

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. liwoodworkers.org

#### NORTH **CAROLINA**

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

Monthly - Charlotte Woodworkers Association meets the third Tuesday of each month at 6:00 p.m. at MakerSpace Charlotte, 900 Pressley Rd. in Charlotte. charlottewoodworkers.org

April 28-May 1 — Society of American Period Furniture Makers' annual conference, focusing on period furniture construction, con-







servation and history. Location: North Carolina History Center in New Bern. sapfm.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 Northminster Presbyterian Church, 703 Compton Road in Cincinnati. For more, visit cincinnatiwoodworkingclub.org.

#### PENNSYLVANIA

Monthly - Lehigh Valley Woodworkers Guild meets at 6:30 p.m. every third Wednesday of the month at Woodcraft, 1543 Lehigh St., Allentown. Various craftspeople provide presentations on their woodworking techniques. lvwwg.com

#### RHODE ISLAND

May 6-7 — Third annual May Day Market. A twoday juried show featuring handcrafted items from over 90 artisans and craftsmen, Location: Waterfire Arts Center in Providence. For more information, visit 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. For more, visit sdwoodworker.org.

#### WISCONSIN

May 2-4 — National Wood Flooring Association Expo. An annual trade show dedicated exclusively to wood flooring. Location: Wisconsin Center in Milwaukee. nwfaexpo.org W

#### MARKET SLOWS FOR IMPORTED HARDWOOD PLYWOOD

In the second half of 2022, U.S. imports of hardwood plywood slowed dramatically from the torrid pace in the first half of the year, according to the data compiled by the U.S. International Trade Commission.

In the first six months of 2022, imports soared by 77 percent in value and 37 percent in volume. The year ended with total growth of 12 percent in value, to about \$2.1 billion, and a decline of 0.3 percent in volume.

Imports from Russia fell by 34 percent in volume. Imports from Vietnam slowed, ending the year up by 14 percent in volume after starting the first half up by 93 per-





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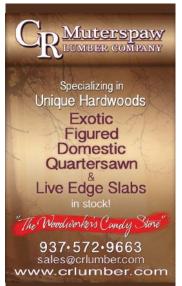


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Drew Christensen, winner of the Woodcraft Sawsome Sweepstakes, with his prize haul that included a SawStop compact table saw, stand, and merchandise.

#### The lucky winners

Last fall, Woodcraft, in partnership with SawStop, presented a new contest, the Sawsome Sweepstakes, where participants could win a SawStop compact table saw and stand in a random drawing. Entries were accepted through October, and winners were announced in February.

Drew Christensen, of Mukwongago, Wisc., won the grand prize, picked from 47,667 eligible entries.

"A woodworker who does a lot of home renovation and cabinetry, Christensen said he is currently finishing a shed to serve as his shop and hopes to have it finished soon. He said his first project in the shop with the SawStop will be installing board and batten in his home's foyer. And, with his new work area and woodworking equipment, he anticipates more than renovation projects in his future," Woodcraft said in a statement.

Christensen also won a \$500 Woodcraft gift card, WoodRiver glue-line rip saw blade, and SawStop swag pack.

Colleen Helz of Montgomery, Texas, and Steve Ward of Centennial, Co., won second- and third-place prizes.

"Woodcraft congratulates these winners and wishes them well in their woodworking journeys," president and CEO Jack Bigger said. "Also, thanks to SawStop for joining with Woodcraft to offer the sweepstakes."

For more, visit woodcraft.com. W

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