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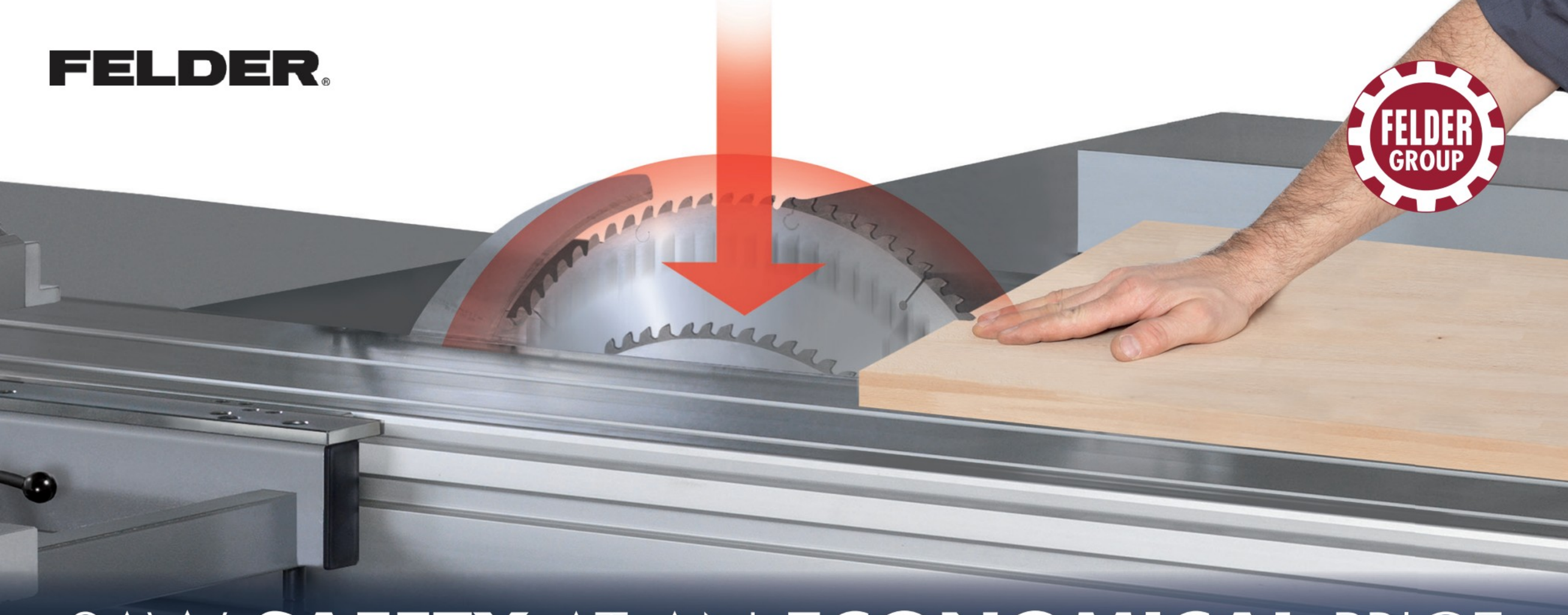

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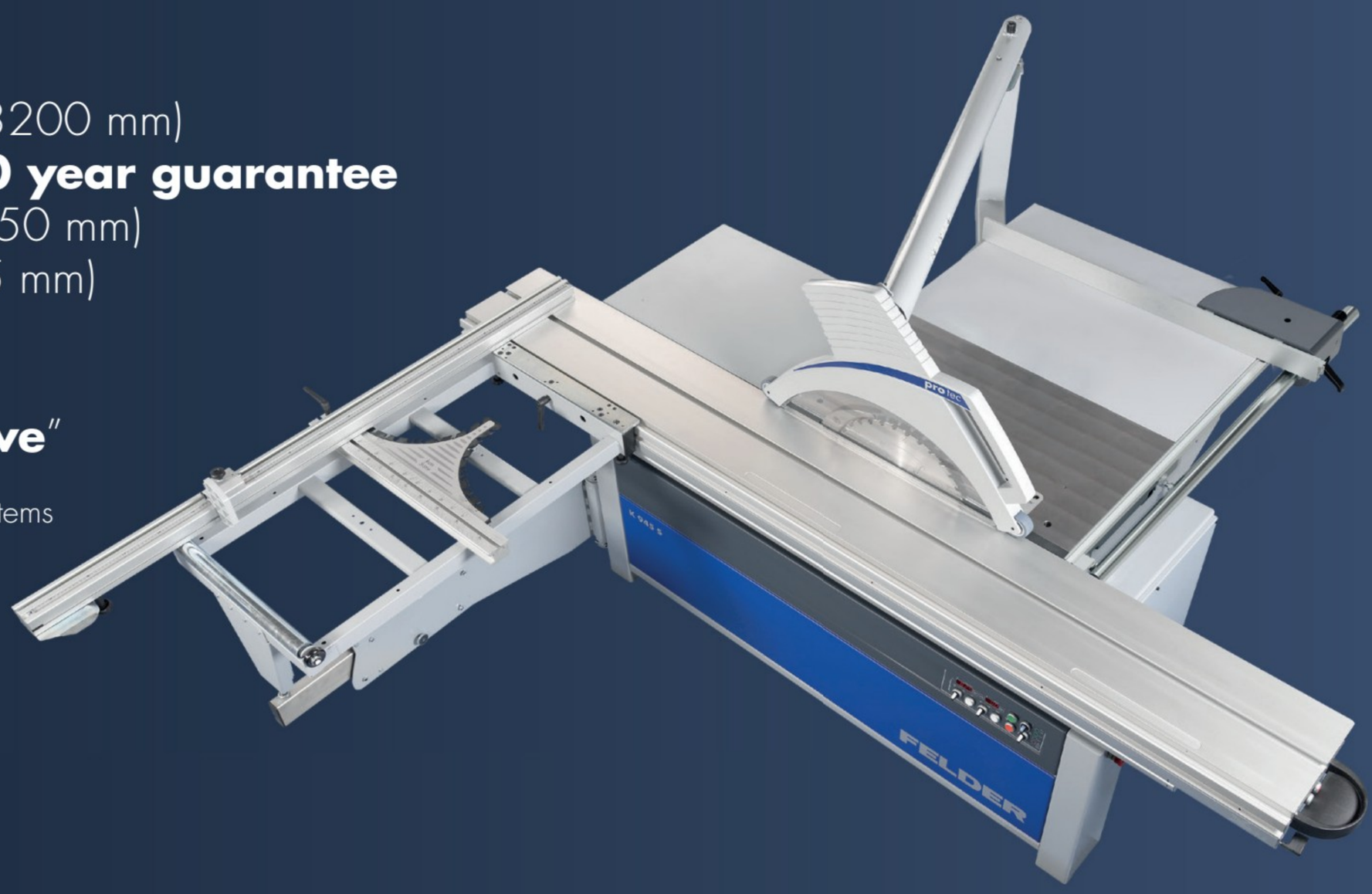

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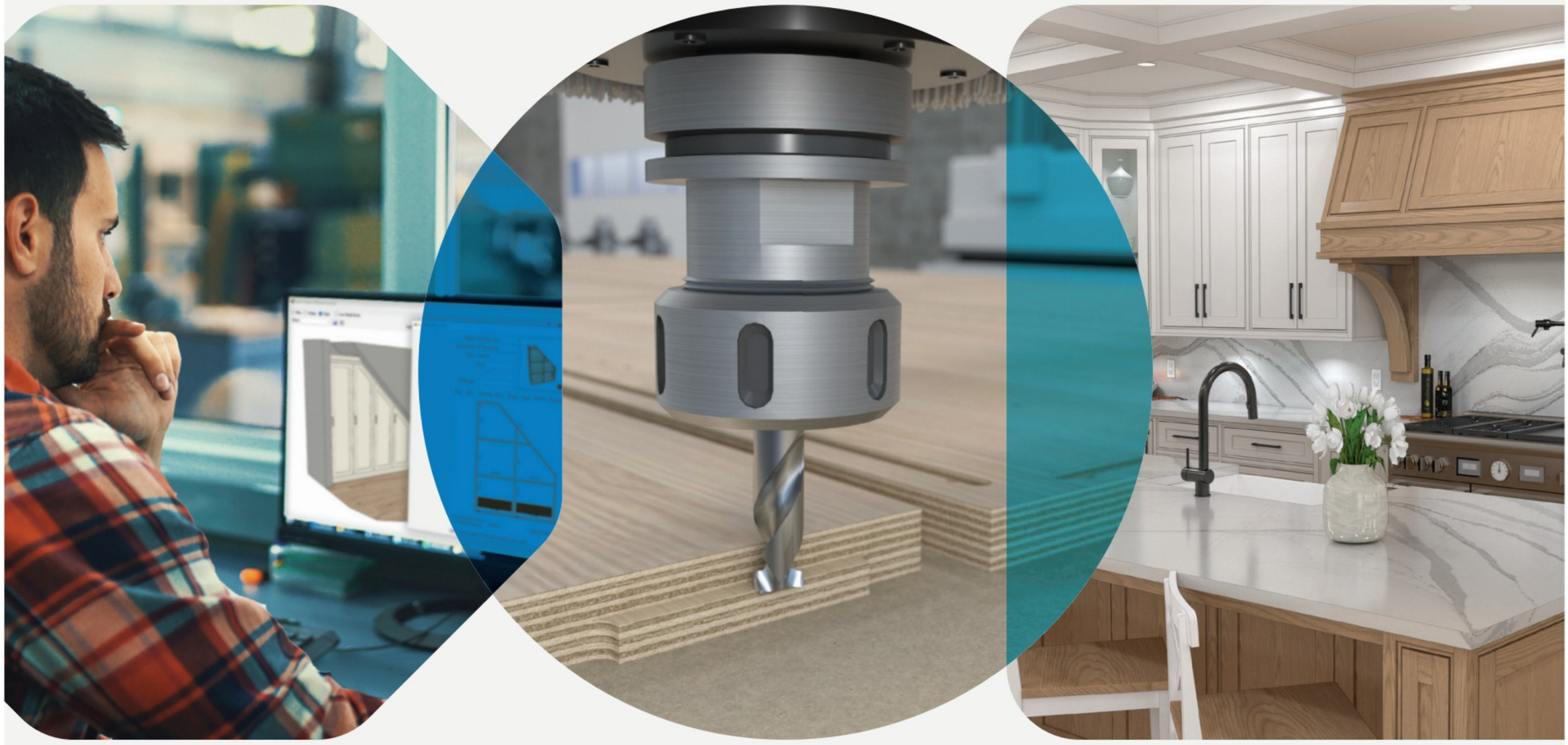

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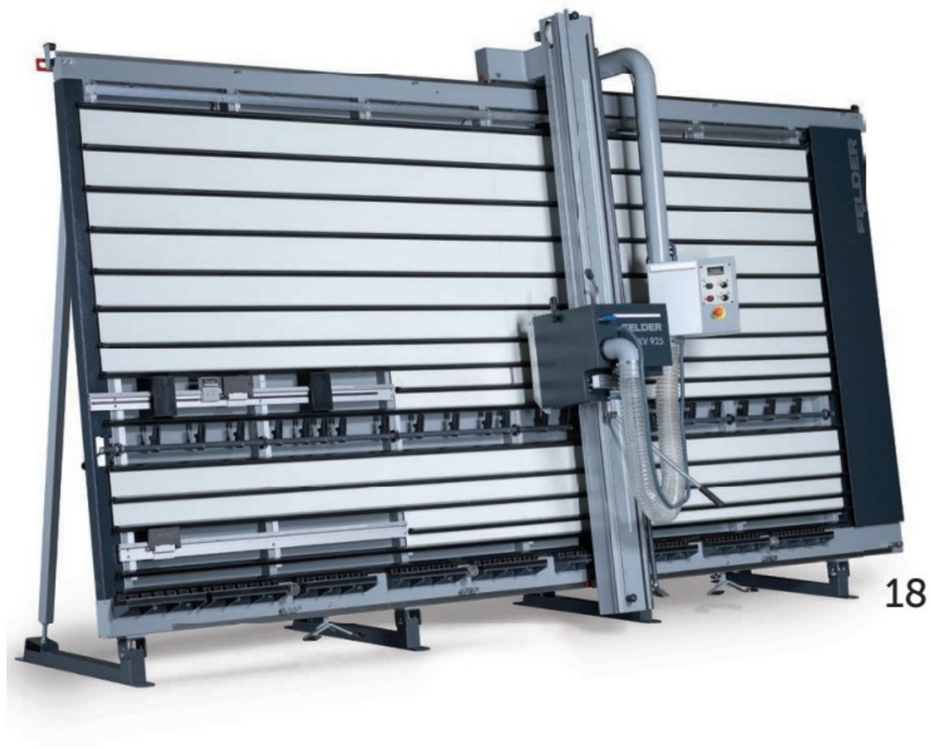

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Over the Workbench

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2024 Online Resource Guide

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I+D draws record number of entries

By Tod Riggio

Innovation+Design (I+D), organized by the **International Society of Furniture Designers** (ISFD), is receiving strong interest from the next generation of makers and designers.

"It is exciting to see how the Innovation+Design event has grown over the past five years," says David Blair, executive director of ISFD, of the juried competition and exhibition.

"This year alone we had an 18 percent overall increase over last year in the number of submissions from both professionals and students and we are seeing submissions from many new designers. In addition, the quality of the submissions this year is remarkably creative, making winning the competition even more notable."

I+D is open to professional makers/designers who create their own products and woodworking students who are anticipating a career in the custom wood and related home furnishings industries. Finalists get to show their work at the spring High Point Market.

Professional and amateur woodworkers can apply to participate in the **Minnesota Woodworkers Guild's** Northern Woods Exhibition, scheduled for April 25-28 at the Eden Prairie Center in Eden Prairie, Minn.

This annual show, celebrating its 40th year, is one of the country's premier fine woodworking exhibitions and features items made from wood by the guild's members and nonmembers of all ages and skill levels.

Show participants display their work and compete for 16 prizes in 13 categories. The entry deadline is April 14. Apply and learn more at mnwwg.org.

Online registration for the 2024 **International Woodworking Fair** (IWF) in Atlanta is scheduled to begin on Feb. 19. The cost is $25 per buyer attendee before July 15 and $50 afterwards.

Attendees must register before hotel bookings in official IWF properties can be made and before IWF Education Conference course and symposia bookings can be completed, according to the IWF. Learn more and register at iwfatlanta.com.

SATA GmbH & Co. KG announces the acquisition of **Dan-Am Co.** in Spring Valley, Minn., by its subsidiary, SATA USA Inc.

Dan-Am has been a long-time supplier of SATA's finishing application equipment.

"The acquisition of Dan-Am Company, a renowned company with a long history of success in the distribution of SATA products in the U.S. and Puerto Rico, represents a significant milestone for SATA and is part of the company's strategic growth initiatives to strengthen its presence in the whole North American market and expand its product portfolio," according to Mike Carlos Wolf, CSO of SATA GmbH & Co. KG. **w**

WOODSHOP NEWS
Shaping the Successful Shop™

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Courtesy of Certainly Wood

New owner at Certainly Wood

By Jennifer Hicks

Greg Engle is the new owner of Certainly Wood, a veneer supplier in East Aurora, N.Y., following the retirement of founder Jim Dumas,

Engle, the long-time sales and purchasing manager at Certainly Wood, says he's excited to continue the company's legacy with the help of a terrific team.

"I'm extremely thrilled about taking ownership of Certainly Wood after being here 36 years. Since the company turned 40 last year, that's when we exchanged discussions on the change of ownership. Seeing the development and growth of this company, when it started out as a garage-based business, and turning into a brand that's recognized globally is just to me, unbelievable," Engle tells Woodshop News.

"But more importantly, to me, it's the team of people that have been here and are working here at Certainly Wood that has created our current stand in this worldwide market of natural wood veneer."

Engle adds that he's grateful to Jim and his wife Roz Dumas for allowing him the opportunity to purchase the company. Certainly Wood currently sells well over 100 different species of domestic and foreign hardwood veneers. It serves hobbyists, cabinetmakers and architectural millworkers in North America and beyond.

Learn more at *certainlywood.com*. **w**




For inspiration, students can study Castle's Table Chair.

Wendell Castle Workshop sounds the first bell

By Jennifer Hicks

The Wendell Castle Project, a nonprofit organization dedicated to supporting the late artist's legacy through education, conservation, and programming, is starting a new woodworking school, the Wendell Castle Workshop, at Castle's longtime studio in Scottsville, N.Y.

The first schedule features about a dozen classes, including "Making a Veneered Miter Fold Box" with Scott Grove; "Introduction to Marquetry" with Silas Kopf, and "Creating a Sculptural Cabinet" with Andrew Glantz.

"We selected our instructors and course content very carefully, and with access to many of Wendell's pieces, students and instructors will be inspired to do their best work in his space. We look forward to providing an outstanding environment and instruction for our students," says Ken Page, interim director of the Wendell Castle Project.

Page adds that he and other board members found it important to hire instructors whose teachings align with Castle's principles. "I call it keeping the DNA of the place. Wendell would describe himself as a designer and a sculptor, so we wanted to still have that emphasis in some of our courses. We've got some instructors with ties to Wendell, and that's part of keeping that DNA.

"Scott Grove was a former employee of Wendell, Silas Kopf was a former employee, and some of the others are RIT School for American Crafts grads who Wendell influenced directly critiquing their work, because he was at RIT for a bit. Some other instructors never worked for Wendell or were students of Wendell but were greatly influenced by Wendell."

Registration is open for classes beginning in April. The school welcomes students of all skill levels for weekend, week-long and two-week classes that will typically be limited to 10 to 12 students. Learn more at *wendellcastleworkshop.org*. **W**


Courtesy of Wendell Castle Project, Adam Atkinson

Philadelphia artist selected for winter residency

By Jennifer Hicks

The Museum for Art in Wood and NextFab, two Philadelphia-based organizations, recently selected Adam Atkinson for their fourth annual Winter Residency Program. Atkinson is a Philadelphia-based artist who works in various mediums, a curator and educator.

The Winter Residency Program is a collaboration between the museum and NextFab, a membership-based maker space. Each year, the two organizations assemble a jury of makers and educators to award one fellowship to an artist in the region who works either solely in wood or other materials in combination with wood. The fellow receives a stipend for project materials and access to NextFab's workshop space.

"Receiving the Museum for Art in Wood and NextFab residency has been a big dream of mine for the past several years," Atkinson tells Woodshop News. "I look forward to connecting with the Philadelphia wood community and making a new body of work exploring mourning and remembrance through wood carving. I'm grateful for the time and space to explore this project."

Atkinson received a Bachelor of Fine Arts in Interdisciplinary Studio Practices from Boise State University in 2013 and a Master of Fine Arts in Metal Design from East Carolina University in 2019. His work has been exhibited nationally and internationally, including at the Metal Museum in Memphis, Blowing Rock Museum of Art and History in Blowing Rock, N.C., and Nagoya Zokei University in Japan.

Learn more at *museumforartinwood.org*. **W**

PDS ADDS CLARK DOGGETT AS SALES ENGINEER

Precision Drive Systems (PDS), a global provider of precision motor spindles, expert support, and repair services near Charlotte, NC, has hired Clark Doggett as a sales engineer for new engineered products and services.

"Clark has the unique combination of technical ability and sales experience that PDS and our precision machining customers seek," Robert Turk, president of PDS, said in a statement. "He has worked with a diverse range of domestic and international industrial manufacturers, serving clients engaged in precision motion control applications, pneumatic and hydraulic fluid power operations, abrasives finishing, and industrial seals and components."

At PDS, Clark will work closely with consulting engineers and automation system integrators to identify and secure new business and cross-sell PDS solutions to grow relationships with key customer accounts.

Before joining PDS, Clark worked in technical sales for Neugart USA and Carolina Seal Inc. He has also been in inside sales for Carolina Fluid Components, and a key account manager for Bosch's Special Markets Group for flexible abrasives. Clark is a graduate of the University of North Carolina at Greensboro.

Learn more about PDS at *spindlerepair.com*.

REMODELING EXPECTED TO DECLINE

Spending for residential improvements and repairs is expected to shrink this year for the first time since 2010, but signs point to some easing of declines by year's end, according to Leading Indicator of Remodeling Activity (LIRA) from the Remodeling Futures Program at the Joint Center for Housing Studies of Harvard University.

The LIRA projects that declines in annual homeowner renovation and maintenance expenditure will worsen through the third quarter of this year before moderating slightly to -6.5 percent by the end of 2024.

"Home remodeling will continue to suffer this year from a perfect storm of high prices, elevated interest rates, and weak home sales," Carlos Martín, the program's project director, said in a statement. "These headwinds create considerable uncertainty in the economy, and remodeling spending is projected to fall from $481 billion last year to $450 billion in 2024."

"Even with the anticipated downturn, spending for improvements and repairs to owner-occupied homes this year is expected to easily surpass the robust levels seen early in the pandemic," added Abbe Will, the program's associate project director. "Recent improvements in homebuilding and mortgage rates also support the prospect of turning a corner on the rate of remodeling spending losses by the end of the year."



Hickory rides the rustic wave

By Jennifer Hicks

Hickory (*Carya ovata*), also known as shagbark or true hickory, is gaining popularity due to its rustic aesthetics and budget-friendly price, according to suppliers interviewed by Woodshop News.

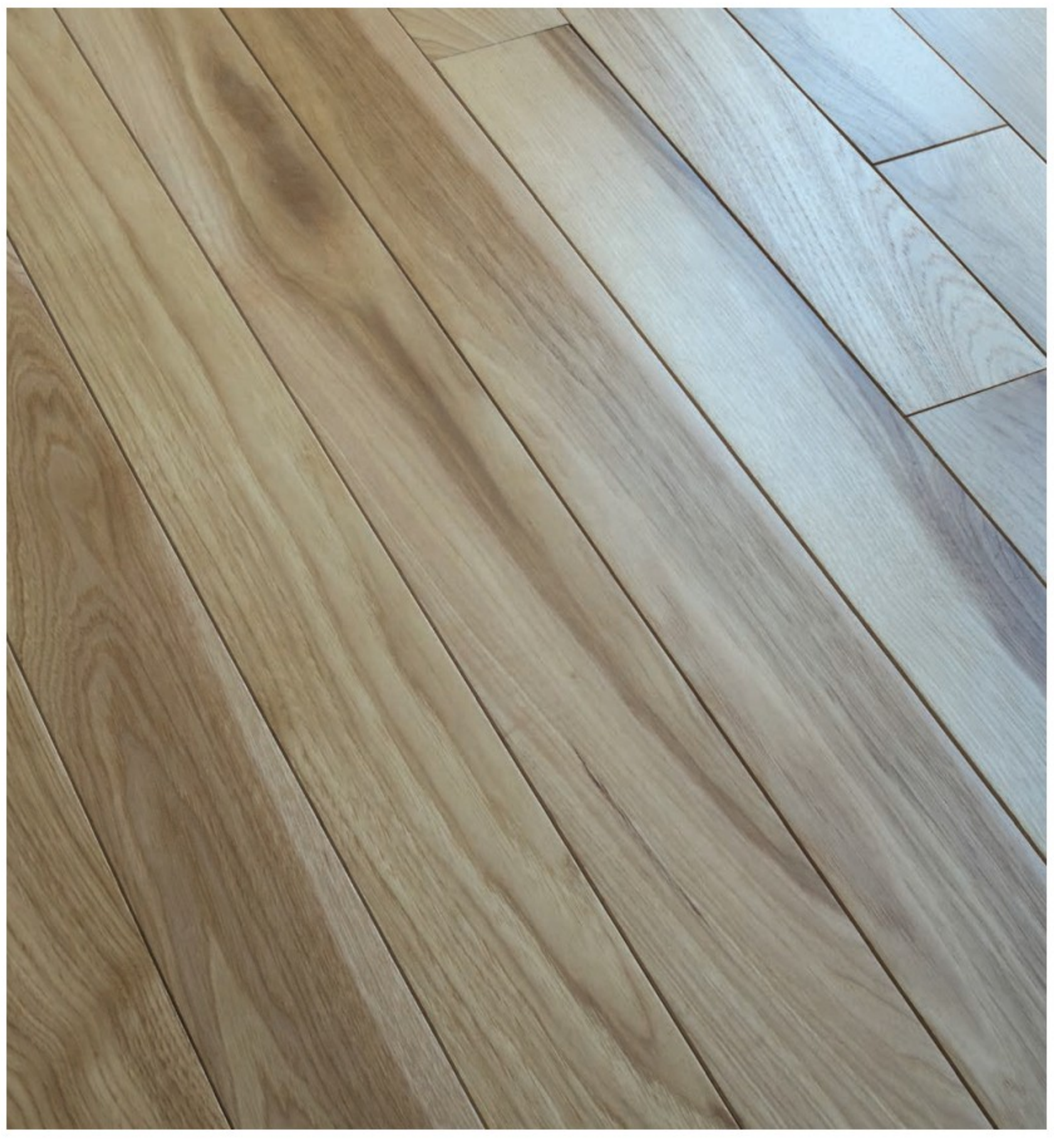
Known for its multi-tone appearance and high durability, it's a top pick for flooring, mantles, countertops and cabinets.

"Our hickory sales have been up a little bit, more than anything for countertops and tabletops in the 8/4 thickness," says Clint Dillon of Steve Wall Lumber in Mayodan, N.C. "We've also seen a slight uptick in it for lumber and plywood in cabinets. In the last few months, we've had more people interested in the character-grade cabinets than the painted."

"Hickory is something we like and our customers like. It's very solid, it mills pretty well, and we love the coloring on it. It usually has that rustic feel to it," says Dave Norman of Parkerville Wood Products in Manchester, Conn., who makes a point to educate customers on how to work with the wood's color variations to bring proper visual flow to a room.

"It's a frustrating wood to work with because of the coloring, though. Sometimes a board is all brown, or all white, or you get that mixture of white and brown, which can sound good but when you're doing a kitchen, then all of a sudden you have one kitchen door all white and one all brown, so you really have to spend some time laying it out.

"You want to alternate your growth rings, but the way the trees grow, the white grows to one side, generally, so it can be tricky trying to get enough where you can get a consistent pattern. It depends on what you're using it for. On mantles it's great, but you usually can't get it over 8/4 thick so you're going to have a thinner mantle. We've done a handful of box mantles that are miter folded, so you can create something that looks like a solid piece but it's not; it's hollow on the inside. That's a nice look because the rustic thing is really in."



Chad Muterspaw of CR Muterspaw Lumber in Xenia, Ohio, has seen an uptick in sales on the commercial end.

"Rustic hickory is used more these days than what I ever remember it being. It seems like a lot of the rustic is actually going into flooring, and then we've got a few cabinet shops that use it (for) panels and raised panels where they can leave some of the knots and character," says Muterspaw.

"Hickory's been a strong mover on the commercial side. On the retail side, I feel like it's intimidating for some of the beginning woodworkers because it's so hard and dense that they'll steer clear of it. But our bigger commercial shops use quite a bit of it."

Averaged retail prices for 4/4 hickory were quoted at $3.60/bf for rustic and $5.90/bf for select. **w**

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What's new with abrasives

They're getting faster, cleaner and more flexible

By John English

While sandpaper comes as discs, belts, sheets and rolls in a huge variety of shapes, widths, grits and backings, its most important element is still the abrasive – the material that actually does the work. Woodshops have traditionally used open coat aluminum oxide for softwoods, and a closed coat for hardwoods. Silicon carbide has some serious fans, too, especially in shops that process harder and more dense hardwoods. Stearate coatings on these grains helps avert clogging, and aluminum oxide is more popular because it fragments easily when sanding wood. That process, called friability, constantly reveals new, sharp edges.

There are new, sharp solutions in this arena all the time, but most of them have nothing to do with the actual abrasive. Robotics continue to make significant inroads in sanding, and woodworking is following the lead here of auto manufacturers. That sector is experiencing one of the worst droughts in qualified labor and has replaced the majority of its production lines with robots. It makes sense: robotic arms can move quickly and precisely, and they can apply exactly the right amount of pressure and speed during a sanding operation. Plus, sanding has always been regarded as a health issue, so removing humans from the line is a logical cost-saving step. Even for small woodshops, the future of abrasion lies at the end of a cobot arm.

Beyond that, the most dramatic progress of late in actual abrasives has been in backers, where meshes and new hole patterns have dramatically improved dust collection by allowing more waste to enter the vacuum stream.

TECHNOLOGY TRENDS

One of the manufacturers leading the way in backers is **Mirka** (*mirka.com*), a company that was founded in Helsinki, Finland in the 1940s. In 2001, Mirka pioneered mesh backing with the introduction of Abranet, and that has changed the way that many shops approach sanding of both raw wood and cured coatings.

Mesh is exactly what it sounds like, a flat net that is coated with abrasive minerals. It's more holes than whole. The Abranet line uses ceramic abrasives bonded with resin on a polyamide net mesh. Polyamides are natural or synthetic polymers, which in lay terms are essentially just substances made up of large molecules. Familiar natural examples of polyamides would be silk and wool.

This porous backing improves the longevity of the abrasive, and also speeds up the sanding process. The

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3M's new Cubitron II sanding discs feature a ceramic coating and StickIt backing.

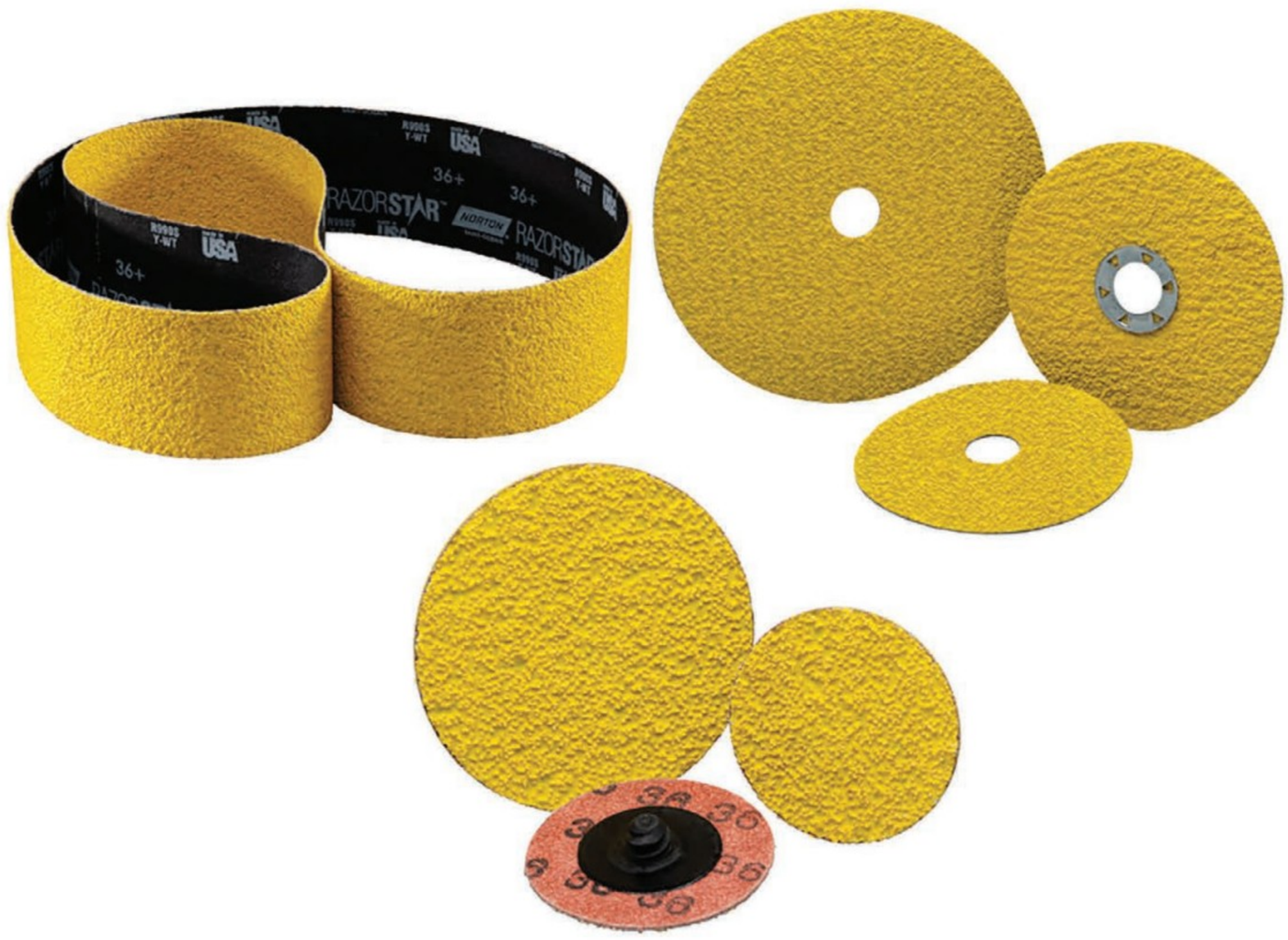
flexible mesh resists edge wear better than paper backers and doesn't inherit the problems of uneven thickness that can be part of a woven cloth backer. But the real advantage is the porosity, where fines can be sucked right through the disc and deposited into the collector's airstream. The design creates an environment where the entire surface acts as a recovery agent, rather than relying on strategically located hole patterns. Mirka says that its "net abrasive solution is 99.97 percent effective at removing dust particles that are smaller than 0.3 cm in size."

Klingspor (*klingspor.com*) also offers a mesh backer. Called Klingnet, it comes in 5" and 6" discs in grits from 120 to 800. Speaking of discs, Klingspor offers woodshops a way to convert old PSA disc sanders to hook & loop by using its Black Hook material. A woodworker decides what size disc and which hole configuration is needed, and then affixes a precut disc to the old pad. That can be found in Klingspor's 2024 catalog, which is available online as a PDF file. The company offers a broad range of products using both aluminum oxide and alumina zirconia abrasives.

Klingspor says that "it's always best to use a closed coat if loading isn't an issue", and that brings up a significant area of concern for woodworkers. Some species such as oily teaks and sap-heavy softwoods will do better with an open coat. In that case, the grains cover about half of the backer (or a little more), so there are gaps where larger particles can go. That helps reduce glazing and makes it easier for a resin-based cleaning block or even a compressed air jet to dislodge them and renew the abrasive. Open coats can run a bit cooler too, so the saps and resins in wood aren't quite as susceptible to melting. Open coats work well with SPF and even cedar, but they're aggressive and are generally used in coarser

(smaller number) grits, so the shop may need to move to a semi-open or closed grit for fine sanding.

3M (*3m.com*) is also pioneering new abrasives. The company's Cubitron II product has a ceramic coating with a friability that reveals new cutting edges in a manner that delivers very consistent performance. On the company's Stickit line of J-weight cloth-backed discs, this ceramic is arranged in an open coat that's designed to prevent clogging. 3M says that "the Stickit backing allows for easy application and removal, and a liner prevents dust and debris from contaminating the adhesive." The pressure sensitive discs are stuck to a flat pad and come in a variety of hole configurations. The Cubitron abrasive itself is a precision-shaped, triangular, ceramic grain that is "designed to slice through the substrate, rather than gouging or plowing like conventional abrasives, resulting in a disc



The new RazorStar line of aggressive abrasion products from Norton was intended for metal but will find many uses in woodshops.

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INDASA's Rhynogrip HT is an aluminum oxide abrasive with a clog resistant coating.

that cuts up to two times faster than conventional abrasives." There is a static resistant coating over the particles that provides additional dust control in some woods, and the resin bond resists heat build-up.

Uneeda (*sandpaper.com*) has developed the Filmtek line that uses a waterproof, highly flexible and very durable film (it's actually a plastic) backer that outlasts paper backers by a factor of two or three, depending on the application. What's most significant about the Filmtek product is that the company has been able to bring the price down to the same neighborhood as paper discs. The abrasive on the blue Filmtek discs and sheets is aluminum oxide, and the film backer is a solution that offers the durability of cloth plus the smoothness of paper. Filmtek products are also stearated, and that coating adds a soapy lubricant quality to the abrasive. While stearation is usually applied as a topcoat, in this case it's incorporated in the resin. It both cools the process and allows fine particles to escape, so that they don't clog the spaces between the abrasive grains. Filmtek is available in a variety of shapes, with PSA or hook-and-loop fixing, and in a wide selection of hole patterns.



Uneeda uses plastic as a backer for its Filmtek aluminum oxide abrasive.

IMPROVING ABRASIVES

The Gator family of products from **Ali Industries** (*gatorfinishing.com*) offers random orbit sanding discs in both traditional aluminum oxide and also zirconium oxide (ZrO_2) options. This latter may sound familiar because zirconium is widely used to make things such as dental implants and manmade engagement rings. Zirconium oxide has excessive hardness and chemical neutrality, and forms an advanced ceramic product that is significantly tougher than aluminum oxide. It has impressive heat resistance too because of its very low thermal conductivity properties, plus high strength and friability (self-sharpening).

Global Abrasive Products (GAP, online at *globalabrasiveproducts.com*) also makes an aluminum oxide product but it's on a film backing rather than paper. Branded as FilmBac, it is produced as PSA discs with a stearated coating that comes in grits from 80 to 2000.

The newest addition to the Rhyno line from **INDASA** (*indasa-abrasives.com*) is called Rhynogrip HT and it has been on the market for a couple of years now. Available in strips and discs on a grip (hook and loop) fastening system, it offers a very uni-



Klingnet is a mesh-backed abrasive from Klingspor, available in 5" and 6" discs.

form scratch system along with good flexibility and high initial cutting action. The aluminum oxide abrasive has a high strength resin bond that minimalizes grit shedding, and an advanced clog resistant coating. Offered on both D and B weight latex papers, it comes in grits ranging from 40 to 2000.

Norton Abrasives (*nortonabrasives.com*) introduced its new Razor-Star line of highly aggressive discs and belts in January. The collection was designed for metalworking, but that won't stop renovators, refinishers, wood carvers and other woodshop pros from using them when they need to shape or remove a lot of wood quickly. The discs and belts have an engineered, shaped, ceramic grain that cuts quickly but doesn't generate too much heat.

ABRASIVES TOOLS

DeWalt (*dewalt.com*) introduced the new Elite Series of abrasive grinding wheels last May. While their primary purpose is not abrading wood, they can be quite useful on the jobsite when dealing with demolition issues, or in the shop when working with mixed media materials. The new wheels have a Pressure Pact design that boasts high grain density with increased grain availability, for higher performance and longer life. They also have self-sharpening crystalline grains that enable fast grinding.

The new G0967 from **Grizzly Industrial** (*grizzly.com*) is a 20" variable speed disc sander. The 2-hp, single-phase machine has both X and Y miter slots, a tilting table, and a built-in motor brake.

And for shops with unusual abrasive challenges, **Laguna Tools** (*lagunatools.com*) makes hundreds of sanding accessories plus machines, including single and double brush sanders. These can often handle shapes and challenges that standard abrasive machines just can't tackle. **W**

Images; Courtesy of manufacturers

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New waterborne coating from Sherwin-Williams

By Jennifer Hicks

Sherwin-Williams introduces Sher-Wood Environmentally Adaptive (EA) Hydroplus technology in a new waterborne wood coating that can be applied in a variety of conditions.

This self-sealing, water-reducible acrylic system is available in a wide range of colors and is ideal for cabinetry, furniture and other projects, the company says.





"There is massive demand for a waterborne product that can perform across a wide range of environmental conditions," said Kevin ONeill, the marketing director for the Sherwin-Williams Industrial Wood Division.

"Our customers have asked us for a solution like EA Hydroplus (and) our goal was to provide a robust technology that performs the same on a hot day or a cold day, in a dry environment or a humid one, helping woodshops maintain optimal production without the need to compensate for less-than-ideal environmental conditions."

The technology features the ability to hang in vertical spraying applications without running or sagging. Other benefits include a low VOC content, Greenguard Gold certification for sustainability, and easy cleanup, according to the company.

"EA Hydroplus is a game-changer in terms of how a waterborne coating is applied," adds ONeill. "We've achieved desirable, consistent performance in every scenario we tested the product in and it has outperformed competitive formulations when applied to substrates in terms of flow, leveling and hang."

Learn more at *sherwin-williams.com*. **W**

Courtesy of Sherwin-Williams

Grizzly adds a feature-rich 8" jointer

By Jennifer Hicks

Grizzly Industrial presents a new 8" jointer with a spiral cutterhead, model G0490ZX, and a parallelogram table adjustment mechanism.

"This jointer is a parallelogram jointer with a four-row spiral cutterhead. We know that the spiral cutterhead is pretty much the future of all machines like this because of improved quality of cut, reduced noise level, and it saves the user time from sharpening," says product manager Pat Raynor.

"Also, the parallelogram table adjustment feature is much easier to adjust whenever it's out of adjustment. You can make the two tables parallel much easier than a dovetail wedge jointer, so I think the ease of adjustment is a big feature. Eventually, as the machine ages, you're going to drop a heavy piece on the table and it's going to get out of parallel, and that's the beauty of the parallelogram, being able to easily adjust it to parallel."

The jointer also features a 3-hp motor, 8" x 76" cast iron table, 5" high x 36" wide fence, pedestal-mounted on/off switch, 4" dust port, and built-in mobile base.

Model G0490ZX sells for $2,195 at *grizzly.com*. **W**



Courtesy of Grizzly Industrial



Felder adds vertical panel saw

By Jennifer Hicks



The Felder KV 925.

Felder presents the KV 925 vertical panel saw to the U.S. market after its premier at LIGNA 2023.

Available in sizes for cutting 4x8 (model KV 925 S) and 5x10 (KV 925 M) sheets, it has a vertical design that keeps space constraints in mind.

"Its applications are for any shop that can use an industrial sliding table saw but doesn't have a large enough area to have one of our sliding table saws," says product manager Leo Gonzalez.

"This takes up half the size, goes up against the wall, and allows it to have an insane amount of output so it should increase your productivity without necessarily taking up all your shop space."

Features include digital readout for both vertical and horizontal cuts, an automatic moving back wall that prevents blade damage, integrated TRK dust extraction, parts support for small pieces, and built-in scoring unit.

Learn more at *felder-group.com*.



ALLPRO CORP. ADDS PAINTLINE TO ITS B2B BUYING CO-OP

PaintLine's product line is now part of the AllPro Corporation's business-to-business buying cooperative of over 2,000 independently owned paint and home improvement stores.

"Being added to the AllPro buying co-op is great for PaintLine's brand and products," says Kyle Robinson, CEO of PaintLine. "Building awareness and exposure among AllPro store fronts will really help us extend our reach to key customer groups. We're really excited about working with them."

"Adding PaintLine to our members' product offering furthers our mission of providing them with a distinct competitive advantage," adds Michael Beaudoin, Executive vice president of AllPro Corp. "We're confident that PaintLine products will increase their retail sales and profitability."

Courtesy of Felder

Osborne adds traditional table legs

By Jennifer Hicks

Osborne Wood Products introduces two new table leg designs, Tahoe and Sonora, featuring traditional Mission elements. They are ideal for kitchen islands, vanities, and counter-height table projects, according to the wood components manufacturer in Toccoa, Ga.

The legs feature recessed centers with added turned elements separating the centers from the top and bottom blocks. The Sonora has rounded elements, while the Tahoe has square edges.

The designs are a result of Osborne's close attention to industry trends.

"We know there's a greater deal of diversification, sometimes blending what we would consider traditional design categories," says Jeremy McClain, Osborne's director of marketing. "We're seeing that [and] trying to respond to our product catalogue by offering additional options for customers, and we certainly think that the Mission legs provide some opportunities for customers to find some things that they may not be able to find in the market currently."

Both leg designs measure 34-1/2" high and 3-1/2" wide. They are available in 15 wood species. Prices vary by the wood selected, starting at $102.89 for a knotty pine Sonora leg and $123.46 for a knotty pine Tahoe leg. Volume discounts are available.

Learn more at *osbornewood.com*. **W**



Courtesy of Osborne Wood Products

The new Tahoe (left) and Sonora table legs from Osborne Wood Products.





The new PrecisionPro X portable CNC from Yeti Smartbench is a full-size tool that can be toted to the jobsite by one person.

Smarter than the average bear

The latest high- and low-tech 'smart tools' that you can take to the jobsite

By John English

A smartphone is a device that uses the Internet to deliver a multi-media experience that takes it far beyond merely making and receiving phone calls.

So, what's a 'smart tool'?

Basically, it's a portable tool that can talk to your smartphone. Or it might also communicate with a laptop, desktop, or tablet to relay information such as its location (past and present), its performance, and even maintenance issues. Some smart tools don't need an app or a phone to work, because they have everything they need on board. And there are some tools that aren't even electronic but they're just, well, smart.

If you've ever wondered about the source of the term, therapists use the letters in SMART as an acronym for Specific, Measurable, Achievable, Relevant, and Time-bound. These are goals for patients seeking sobriety, but they are just as relevant to productivity. Indeed, the origin of the acronym lies in a 1981 article about ways to write business management goals and objectives. Penned by George Doran, Arthur Miller, and James Cunningham, it appeared in that year's November issue of Management Review.

Today's smart tools hit on most, if not all of those parameters. A good example is the ELaser, from **ETemplate Systems** (*etemplatesystem.com*). This is a digital measuring system that combines the company's Measure Manager software with Leica lasers. It uses data generated by a cabinetmaker on a jobsite to draw a complete map of a space in 2D and/or 3D, and then sends that to the kitchen designer back at the office. The manufacturer's Xpress 3D model is widely used for measuring spaces that will receive countertops. It replaces archaic templating methods that used to include large sheets of cardboard or even lauan plywood that had to be hauled to the site, cut, marked, taped, glued, and then hauled back to the shop. The new software automatically draws a digital template as the space is being measured. It's accurate to 1/16", and immediately available to the countertop fabricator.

There's a wide array of Bluetooth-connected portable power tools from manufacturers such as **DeWalt, Makita, Bosch, Metabo,** and more. Most have to do with performance monitoring to prevent overheating, or anti-theft

apps. Some offer jobsite enhancement such as battery monitoring or cordless speakers that amplify tunes from a smartphone. Others such as **Festool** use smart apps to control dust extraction or cutting speeds. That kind of technology pretty much hits on all the letters in SMART.

And so do tools such as the Shaper Origin and Yeti Smartbench. These alternatives to a standard, stationary CNC are the epitome of smart tools.

The **Shaper Origin** (shapertools.com) is perhaps best described as a portable router with a brain. It's used in much the same way as a standard router, but the operator uses some special tape and a CAD program to guide it. The bit/collet can move around inside the router's housing, so it can make small adjustments as the tool glides across a surface – and it does that without any additional input from the woodworker. Plus, it can be paired with a workstation (which, coincidentally is called The Workstation) that does all kinds of work-holding and fixturing.

The Yeti Smartbench (yetismartbench.com) is a full-size (4x8) CNC that can be toted to the jobsite by one person and sets up in a few minutes. It has a floating bridge and full XYZ capabilities. The latest version, the PrecisionPro X, has adaptive feed rates, a 10" interactive console, and is set up for industrial-grade dust extraction. Its accuracy, easy set-up, software and portability mean that it, too, is



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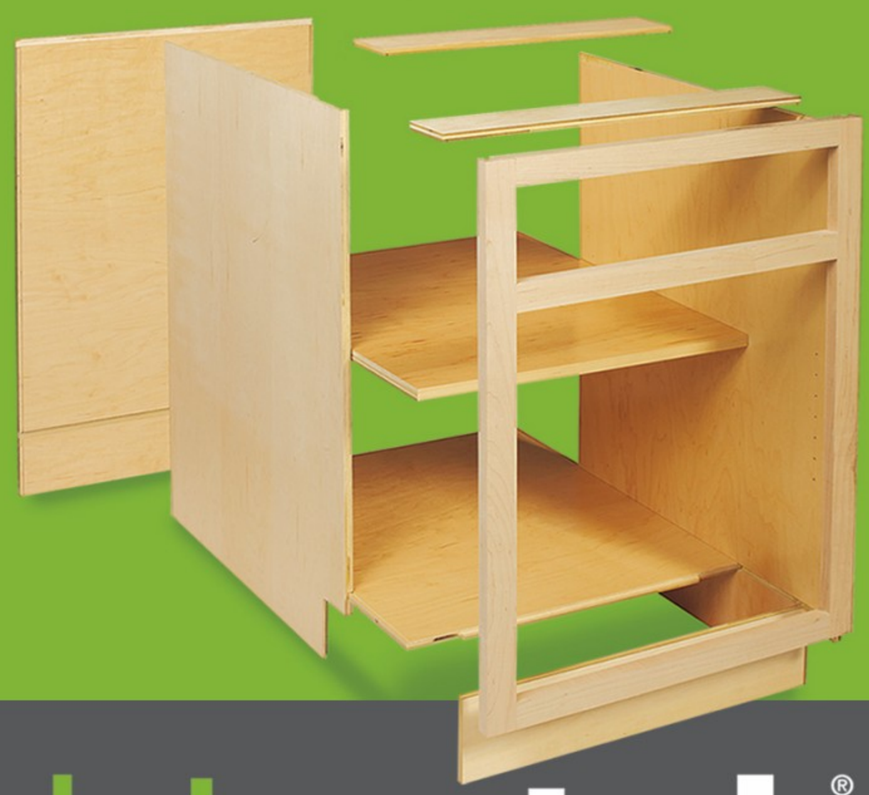

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DIFFERENT KINDS OF SMART

The smartphone itself can be a valuable tool. Yes, it lets the woodworker take photos instead of making lists and drawings. But the apps it can use expand the toolbox in all kinds of other ways. There are apps that can measure, draw, design, change colors in a photo, show a portfolio, locate inventory and tools, track team members and jobs, do complex calculations such as roof pitch or turning segments, convert units of measurement, identify species, and even turn the phone into a short level or a flashlight.

Wagner Meters (*wagnermeters.com*) has a free app called WoodH2O that can calculate the equilibrium moisture content in a specific location. EMC is the level at which wood neither takes on nor loses moisture when exposed to air. Knowing that can help a woodworker avoid wood movement that can result in splits, warps, shrinkage or expansion. The app offers info and links about moisture content challenges. Wagner offers a number of apps that can link a phone to sensors in various situations, such as kilns and lumber racks.

Rockler (*rockler.com*) carries a line of Nova Voyager drill presses that have an onboard computer and digital controls. The computer features DVR (Digital Variable Reluctance) technology, which automatically adjusts and maintains the speed and power of the machine based on resistance. That, coupled with the fact that the Voyager's motor has no belts or pulleys, results in a machine that is incredibly smooth and quiet. The computer also optimizes efficiency so that the motor only draws as much power as is needed.

Of course, not all smart tools have onboard electronics. Some are just smart in the old-fashioned meaning of the word. They take a basic tool and add a little something that makes it much more usable, accurate, or flexible. Saw guidance is a good example. Systems such as the TrackSawGuide from **Milescraft** (*milescraft.com*) can take pretty much any brand of circular saw and turn freehand cuts into



The smart caliper from Grizzly Industrial, the T32261, can send measurements via Bluetooth to phones, tablets and computers.



The Sjöberg Smart Vise can bring the stability of a benchtop two-bar screw vise to smaller woodshops and jobsites.

'smart' results that can save a lot of time and frustration.

Pretty much all of the portable saw manufacturers have some version of the track saw and overall, these are excellent systems that bring unprecedented accuracy to a basic tool. **Milwaukee** (*milwaukeetool.com*) was slow to join the herd, and only introduced its version last year. The M18 Fuel is a 6-1/2" plunge saw that comes alone or in a kit with a track, battery, charger and tote. What elevates this and other leading brands from the basic aftermarket kits that

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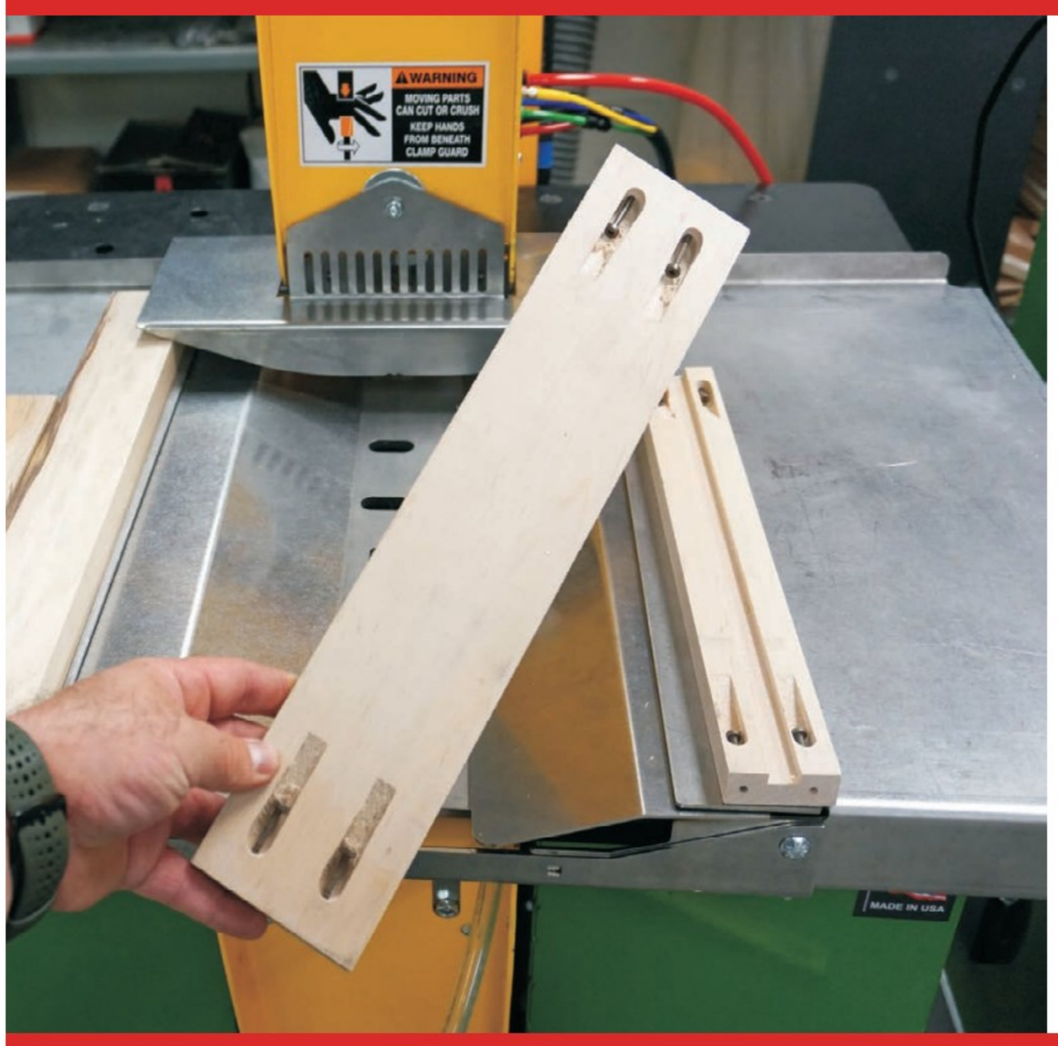

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CastleUSA.com



Milwaukee's new plunge cut saw features the company's Redlink Plus technology.

convert any old saw into a tracked unit are smart technologies such as the company's Redlink Plus, which ensures maximum performance and protection from overload, overheating, and over-discharge. The saw itself has variable speed, and a very smooth plunge action.

Milwaukee has also brought some smart technology to its batteries, most recently adding a six-pack sequential charger (item 48-59-1806) to help avoid downtime on the jobsite.

Speaking of saws, the new **Striebig** Standard S vertical panel saw from **Colonial Saw** (*csaw.com*) is a very smart machine that can be upgraded with the Comfort premium package that adds auto-locking support rollers, digital measuring for the Y-axis with motorized fine adjustment, pneumatic carriage clamping, and a laser cut line guide for horizontal cuts.

MEASURING AND MARKING

The T32261 is a smart caliper from **Grizzly Industrial** (*grizzly.com*) that can connect to most Bluetooth-enabled devices such as smartphones, tablets, and computers. Simply press the data button to output measurement data to most writeable programs and apps. It can measure up to 6" (150 mm), which is perfect for highly accurate readings on mold-

The 12-foot EZ-Wings miter saw station from Red House Tools.

Images; Courtesy of manufacturers

ings, stiles and rails, turnings, mortises and other onsite details. The extra-large LCD readout can switch between inches, millimeters, and fractional displays with just the push of a button.

Woodcraft Supply (*woodcraft.com*) and other catalog houses carry the Sjöberg Smart Vise, which lets a woodworker add a premium two-bar screw vise to any surface such as a table or workbench. Reasonably priced, it can add the option of shop stability to a jobsite location.

Another smart-in-the-old-fashioned-way device has been introduced by **True Position Tools** (*truepositiontools.com*). Called the Cabinet Plumbing Jig, it lets an installer accurately locate pipes that lie behind kitchen bases and other units. What's clever here is that it lets the woodworker mark where drains and feeds need to come through the back of the cabinet without having to use a tape measure, eyeball, or even educated guesses. The jig won a Visionary Award at AWFS 2023.

Red House Tools (*redhousetools.com*) offers a range of miter saw stations called EZ-Wings that convert the portable tool into a very precise machine. It can support very long work, but breaks down to fit in a carrying bag. There are all kinds of clever T-track accessories, and the stations' precision adjustment lets the operator dial in the wings to be a seamless extension of the existing miter saw platform.



A smart device from True Position Tools called the Cabinet Plumbing Jig locates plumbing lines without a tape measure.

Even small smart improvements can make life easier. For example, **Maksiwa's** new Platinum sliding panel saw (*maksiwa.com*) has added a digital rip fence readout with micro adjustment that can mean the difference between good and perfect.

SATA's new nozzle finder app (*sata.com*) makes it easy to select the right nozzle for the SATAjet X 5500 gun. There is a large variety of very precisely calibrated X nozzles that can adapt the coating process to various circumstances. **w**





Exploring cybersecurity issues with a CNC controller

By Ted Bruning

After participating in a recent webinar on cybersecurity, sponsored by Association of Woodworking & Furnishings Suppliers, I started thinking about the security of my school's CNC router controllers.

I teach at a community college with a robust CNC curriculum. We have three controllers, with two running Windows and one running Linux operating systems. They are connected to the school's computer network, which is managed by the school's IT department.

If there are problems, the IT Department will take the lead in resolving the issues. And that's important because a school environment presents unique risks. Students often take G-code to the controller on their USB thumb drive, for example, which could contain malicious software. But the IT department is on top of that, configuring the computers so only it can install software.

So, while the cybersecurity risks are under control at the school, I do not have the same confidence with respect to my personal shop and CNC router. I suspect my situation is similar to many small- and mid-sized shops that do not have the benefit of an IT department.

My shop's CNC router controller does not run anti-virus software nor does it receive regular operating system or application updates to address cybersecurity vulnerabilities. These are 'red flags', according to the webinar's experts, and certainly not best practices for general purpose computers. I've made some recent changes to minimize the risks.

Step one was to minimize the pathways for malevolent software to access my controller. It's now disconnected from my network and I'm using a dedicated USB thumb drive to transfer G-code. On the computers used for design work, I now use a Virtual Private Network (VPN) to connect over the internet. I have installed and run anti-virus software. My network uses a firewall and I have a browser extension that warns me when sites appear to have malevolent features. I use Multi-Factor Authentication whenever it is available. And I take advantage of cybersecurity training and use that knowledge to avoid phishing emails and texts. But other dangers lurk:

REMOTE ACCESS

It is common for CNC providers to have authorized command of a controller on a service call over the internet to the controller. While this is an incredibly effective way to fix whatever problem you're having, it also presents a serious vulnerability that needs to be carefully managed. This requires that the controller be connected to the network.

Remote access is made possible by software that's loaded onto your controller. It's a gateway to typing commands, uploading and downloading files, and pretty much anything else.

The first line of defense, as mentioned earlier, is to leave the network cable unplugged. However, to enable remote support, I must plug that cable in and allow the controller to attach to the network.

The second line is to leave that software turned off except when you can authorize and monitor what is being done. That is easier said than done. The remote access software installed by my controller's manufacturer is capable of "unattended access" and it appears to me that it may be "on" in the background all the time. I have not enabled "unattended access" and do not plan to do that.

When a technician I know from the manufacturer asks for remote access, I must give them an ID and password. When we are done working with the controller, I terminate the session. I also unplug the network cable. It would be bad practice to leave that virtual network door open.

LOCAL ACCESS

It would be a mistake to pay close attention to guarding against risks involved with remote access and then ignore the risks associated with local access. The IT professionals call these measures access control, which is managing who can do what on a computer.

A very old form of access control is a locked door. We can be careful about who has physical access to the controller. This is also useful and necessary with respect to all the other assets in the shop. A padlock on a main power disconnect is another way to limit access to those who are authorized. We have padlocks on the main power disconnects for the CNC routers at the school along with lists documenting who is authorized to check out the keys.

Some controllers use passwords to manage access to the controller, but many do not. Some controllers have passwords or other means to determine who can perform advanced tasks. This is analogous to "Administrator" permissions on a Windows PC. These may be created by the machine's OEM for use by its service personnel.

For example, my controller has a "Run/Setup" mode key. In Run, changes made by an operator are not persistent and are reset the next time the controller is powered up. Setup is used by trained personnel to make permanent changes to the configuration of the controller. If you leave the controller in Run mode and remove the key, this will prevent unauthorized changes to the controller.

Once upon a time, wireless routers and modems shipped with default usernames and passwords. A common combination was the username ADMIN and password ADMIN. The manufacturer advised and assumed that the user would change the username and password. Often, that did not happen. It is important to establish unique passwords where recommended.

BACK IT UP

If all else fails and I am subject to a successful cybersecurity attack, what then? The most useful asset at that moment is likely to be the fact that all my eggs were not in the same basket. That is the value of backups. Back-

"I suspect my situation is similar to many small- and mid-sized shops that do not have the benefit of an IT department."

ups are copies of computer data. Ideally, I will have backups from different points in time. In addition, I will have backups on different devices and stored in separate locations.

Backups for personal computers and servers are a bit different than for a controller. For personal computers and servers there are many backup software and hardware solutions that will keep copies of files on an external hard disk. There are also services that will periodically store copies of files to the Cloud. These approaches offer protection in case of computer hardware failure, such as a hard disk drive crash. They also offer protection in the event of a disaster like a fire or flood.

Backing up a controller may be a proprietary process developed by the manufacturer. These backups are often used when making changes to a controller's configuration to enable a "roll back" to a prior configuration when the changes result in undesired behaviors.

If controller backups are made to a removable device such as a USB thumb drive, they can be stored in a different location. I'm unaware of an automated backup process for controllers.

MANAGING RISKS

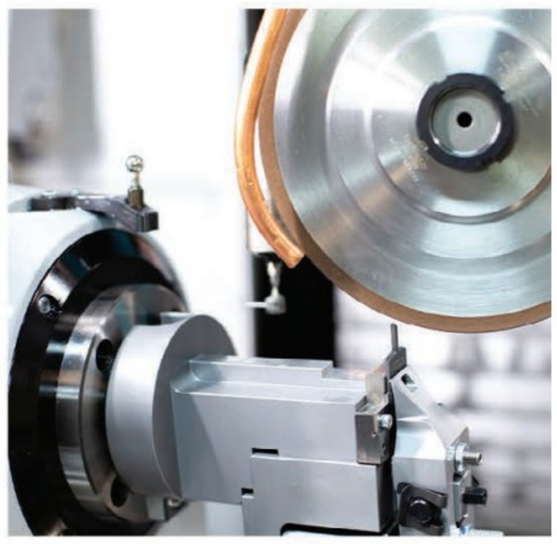
Woodworking and woodshops involve many risks and hazards. Sharp tools, machinery, airborne dust, toxic chemicals, and so on. As we incorporate computers into our business and our processes, we are taking on cybersecurity risks. As with all the other risks we have been accustomed to dealing with, we can manage the risks if we learn how to minimize and mitigate them. As with all those other risks, we ignore them at our peril.

If I were running a business, I would want to discuss cybersecurity coverage with my insurance agent. To be proactive, I would also look into companies that provide cybersecurity services for a fee. These companies assess a client's existing cybersecurity posture, recommend best practices, and assist in implementing those best practices. They can also help in the event of a cybersecurity breach. **W**

Ted Bruning is a part-time instructor in the Fine Woodworking program at Red Rocks Community College.







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Kitchen by William's Handcrafted.

Harris Photography

A BUDDING BUSINESS

William's Handcrafted, led by William Butler, is off to a solid start

BY JENNIFER HICKS

William's Handcrafted, a rising cabinet shop in Richmond, Va., is gaining traction in its mission to expand. The 26-year-old owner and founder, William Butler, discovered woodworking in high school and became determined to make it his career. He's proud to say that 2023, which closed out around $450,000 in sales, has been the company's best year by far.

"We're actively working to grow and expand," says Butler. "In the first half of 2023, we did as much in business as we ever did. More work has come through the shop doors. We've traditionally done about 30 percent with trade partners, such as interior designers, builders, contractors, and 70 percent with private clients. We're trying to flip that and do about 70 percent with trade partners and 30 percent with private clients."

Butler has two employees, shop foreman Jordan Ledbetter and finisher Richie Rice. Working out of a two-story building on the property of a national historic landmark, Historic Tuckahoe, the team focuses primarily on high-end residential work in the greater Richmond market.

TWO-TIME STATE CHAMP

Butler, who grew up in the nearby Henrico County, started woodworking in middle school after acquiring a few tools from his late grandfather.

"I was pretty much self-taught for my first four years through YouTube, TV shows, and trial and error. In 2011, I dove headfirst into it at 14. My parents and I built a 12' x 16' workshop in their backyard for me to work in."

After his freshman year at Deep Run High School, he joined a summer building trades program, then attended a carpentry program through the school's adjunct Highland Springs Technical Center. That gave him the opportunity to compete in a cabinetmaking contest with SkillsUSA Virginia, which he won in 2014, and put



Butler's shop is on the grounds of Historic Tuckahoe.

him in touch with the state's contest chair, Haley Pearsall, who ran Haley Pearsall Cabinetmakers in Richmond. Pearsall became a mentor, helping Butler place 13th at the national contest and hiring him. Butler repeated as state champ in 2015.

"The experience gave me affirmation and confidence to move forward with this as a career. I think it gave my parents confidence, too. They were hoping I was going to college. They went to Duke. I loved Duke growing up and I still do, but when I won, it helped me decide this is the direction I would go," says Butler.

After graduation, Butler worked for a remodeling company until the spring of 2016, when he set out on his own. He obtained a general contractor's license and attended a seminar on how to start a small business. Working out of his parent's shed under the name William's Handcrafted, various cabinetry projects rolled in via word of mouth. In need of more space, Butler moved his enterprise into a community woodshop until Pearsall made an offer.

"Haley called one day, fully retired, and wanted to sell his shop," says Butler. "So, I used my college fund to buy a workshop and a box truck. I had the faith and confidence of my parents, and they were able to help me with that initial start. I'm incredibly blessed and incredibly fortunate to be in this shop with all this equipment."

The shop is on the grounds of Historic Tuckahoe, the boyhood home of Thomas Jefferson from 1746 to 1751.

"When I bought the shop, I just bought the assets of the business, meaning the tools and everything inside. I didn't get a name or customer list, things like that, because a lot of his customers weren't buying woodwork anymore and his contractors all retired. So, I was able to move in basically turnkey to a fully functioning workshop. That was a huge leg up for me."

The shop is leased through the Tuckahoe property owners and offers about 2,000-sq.-ft. of shop space, plus room for an office, showroom and storage.

"We think it was an old wheat threshing barn," says Butler. "This building is private, but the rest of the land is public, which can tour the main house and grounds."



Jordan Ledbetter.

Jennifer Hicks

INCREASING MOMENTUM

In his first year at the new shop, Butler hired a friend who helped him build projects while he navigated the market to grow his clientele.

"Getting started was a little tricky. I started out by literally finding some interior designers in Richmond and cold calling them, sending emails and making introductions. I got a couple of leads from that," says Butler.

That first year brought jobs at six houses in one neighborhood and an office space for an architectural firm.

By 2018, Butler's friend had moved on to other pursuits, so he hired a former co-worker of Pearsall's. Jim Freund was a cabinetmaker and

WHAT'S IN THE SHOP:

Invicta 16" jointer • Delta 15" planer and two shapers • AEM 37" single-head wide belt sander • Ritter line boring machine • CEHISA edgebander • SCM Minimax S30 sliding table saw • CA Technologies air-assisted airless pumps • Mirka Deros 5" sanders • SurfPrep pneumatic sanders



finisher approaching retirement who taught Butler the tricks of the trade. Once Freund left, he hired Ledbetter in 2019, followed by Rice about a year ago.

Butler has also hired marketing help to revamp his logo, website, and improve his social media and online brand presence.

He pays special attention to his high-end customer base. "We make sure a client's experience is the best possible. Many of them are CEOs and other working professionals or retired, and they're used to highly effective businesses and excellent customer experiences, and we try to give that to them."

IT'S GOOD TO BE YOUNG

Butler relishes the role of a young entrepreneur. "Being young, I've been able to learn a lot from mentors on what to do and what not to do. I've always had exposure to social media, CAD programs, CNC machines, so I'm not afraid of that and my guys aren't afraid of that."

Having said that, the shop has its challenges and can't physically support a CNC router, which Butler is interested in.

"I don't think we'll stay here too long. It's a great shop, the rent is cheap, but we have to be creative with how we work," he says. "We just got an off-site storage unit which has helped us take on bigger projects."

Butler married his wife Chloe in 2022 and is active in his church and community. While he has a lot on his plate, he has also filled Pearsall's shoes as chairman of the SkillsUSA Virginia cabinetmaking contest, where he assists in contest organization, project plans, and helps acquire materials and sponsors.

"It's really cool to give back to that organization and help upcoming students in the trade. We're working to grow that program because we've seen a little bit of decline in recent years because of Covid and lack of interest. So, we're trying to get that built back up and get more participants, and also help the advisors who are really struggling with resources, such as money to buy materials."

Learn more at *williamshandcrafted.com*. **W**

Harris Photography



Making the Best Cabinets & Furniture

Great joinery begins with materials.

We are lucky enough to be building casework in North America, which is home to some of the worlds finest hardwoods. Now, the best of those are more accessible than ever with upgrades that Horizon Wood has made to its online portal. The Pennsylvania hardwoods supplier has created a very user-friendly, easily searchable site with excellent photos of its current inventory, along with pricing and shipping numbers. Horizon Wood specializes in flitches and boules, so woodshops creating cabinets or furniture can match grain and color across wide expanses for a superior, aesthetically pleasing appearance.

Hardware can play a big role, too. And recognizing that drawer box building can be a challenge, Lockdowel has developed a complete line of invisible hardware that's faster, simpler and smarter than traditional joinery. That invisible aspect is important: it lets woodworkers perform seamless, beautiful construction in 30% less time, and uses a process that's ideal for flat-pack shipping and onsite assembly.

Blum is working on drawers, too. Three new products that incorporate the company's superlative movement technology are being introduced to North American woodshops. They include the MERIVOBOX drawer system that combines superb functionality with impressive aesthetics, and the SPACE STEP that uses dead space behind toe-kicks to improve access to cabinets and counters for children and adults. The third Blum innovation, REVEGO, is a unique pocket door system that works with single or double doors, and comes in standardized sizes.

For shops that don't build everything in-house, Elias Woodworking has opened up a whole new way to make the best cabinets and furniture – without worries, rejects or even machine operators. The company's brand spanking new 50,000 square foot AOS Elite manufacturing facility can build and ship entire jobs directly to your jobsite, ready to assemble onsite (that's the AOS part). After forty years of meeting woodshops' outsourcing needs, Elias is taking the concept to a whole new level.

And for woodworkers who relish the idea of being involved with fine hardwoods from forest to furniture, there's an unusual opportunity to make the best cabinets and furniture while using hardwoods they have sourced, milled, dried and processed on their own CNC. After fifty years building his business, the owner of Ed Allen Designs in St. Peter, Minnesota is ready to retire. His entire set-up including a high-end furniture shop, sawmill, kiln, and nine acres of buildings and machinery is available for purchase. And Ed has even offered to be part of the deal (if so desired) for long enough to answer all the new owner's questions and give them a running start.

From hardwoods to hardware, and sawing to outsourcing, these companies offer a woodworker support and solutions as they strive to make the best cabinets and furniture.

Blum.com 36
EdAllenDesigns.com 37
Lockdowel.com 38
HorizonWood.com 39
EliasWoodwork.com 40

Moving and Inspiring Concepts from Blum

Three new products from Blum USA are destined to help woodshops make the best cabinets and furniture, and absolutely wow their clients.



REVEGO is a unique new pocket door system from Blum that uses advanced technology to open up large parts of a room for use, and then hide them again as needed. It can be used for single or double doors that retract perfectly into their pocket, and the superlative engineering makes something complex look quite simple. The hardware is characterized by Blum's impeccable movement and quality standards, which combine here to deliver the ultimate in a comfortable living experience. Standardized pocket widths allow for easy planning, so REVEGO can be seamlessly integrated into a kitchen layout or furniture project. The system offers quick and easy assembly, too. Blum's free Product Configurator not only outputs a list of hardware needed for your specific application, but also gives users CAD data that can be transferred to their CNC machines. Installation information can also be found in this free service. If any adjustments are needed, no pieces need to be removed, making it quickly ready to use within a room. The well thought-out pocket system is complete, so the cabinet can be assembled fully in the shop or on the jobsite. It can also be previewed in an app that shows the doors virtually in your own space, so a client can visually appreciate the magic during the design stage. When closed, the full fronts of REVEGO doors exhibit perfectly uniform joints, and they will open with a gentle tap or close just as easily.

MERIVOBOX is a new drawer system from Blum that combines impressive functionality with sophisticated aesthetics. It's also extremely easy to process, and assemble. The keys to the system are an ingenious drawer slide that fits all applications, and universal mounting for the drawer fronts. The process is always the same, always familiar, and always fast. The three building blocks – the slide and box – can be mixed and matched to create endless variety within the same manufacturing process. From the side, an accent line on an open drawer refracts light and merges with clean lines to give MERIVOBOX an unmistakable character.





The innovative L-shape of the drawer slide makes each unit exceptionally stable - even when heavily loaded. And Blum's synchronized running action along with exceptional stability lets a designer combine tall drawer fronts with low box sides for a very unique look. Plus, each drawer has simple, well-marked and easily accessible 3-dimensional adjustment options, so builders and installers will be as delighted as customers with this inspired new system.

The third new idea from Blum is simply ingenious. Called the SPACE STEP, it creates new storage space under base cabinets where there used to be just toe kicks. But it also provides a safe slide-out platform that lets children reach counters or cabinets, and adults reach higher. That lets designers plan taller cabinets and use more wall space for storage. SPACE STEP is especially well-suited to modern apartment living where every cubic inch of storage counts.

As clients get older and need to downsize, they still bring their memories with them and SPACE STEP offers a practical, clever storage option. Thanks to Blum's motion technologies, anyone can open the SPACE STEP with Servo-Drive electric opening support, and Blumotion cushioning ensures gentle closing. The SPACE STEP base solution helps kids help in the kitchen, as the step lowers with a load of just 17.6 lbs., and then locks securely to provide firm footing.

REVEGO delivers privacy and an uncluttered look, while MERIVOBOX offers unparalleled aesthetics and convenient assembly. SPACE STEP lets more people enjoy and organize their personal spaces, and all three systems bring celebrated Blum motion engineering to the quest for building the world's best cabinets and furniture.



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Making the Best Handcrafted Furniture– with your own hardwoods!



It's a woodworker's dream – owning a turn-key operation that includes:

• A fully equipped and recently renovated woodshop and showroom

• A fully stocked log yard

• Equipment that includes a CNC router, a dry kiln, a sawmill, and all the requisite

yard equipment

• A full inventory of thousands of cut slabs and raw logs

After fifty years building his business, owner Ed Allen is finally ready to hang up his overalls. The entire set-up in St. Peter, Minnesota, including the high-end table manufacturing business, is available for purchase. And Ed has offered to be part of the deal (if so desired) for long enough to answer all the new owner's questions and give them a running start.

Ed Allen Designs specializes in procuring raw logs throughout the USA and then mills, dries and manufactures in-house. The company runs the gamut from forest to furniture, providing any prospective owner with a rare, established opportunity to enjoy a most rewarding experience in the yard, shop and showroom.

The Ed Allen process begins with locating large, finest quality, highly figured logs in species such as American black walnut, highly figured live edge maple burls from the west coast, red and American elm, red and white oak, and ash. After they arrive at the Minnesota yard, these logs are sawed into slabs on a band mill that can cut up to sixty-six inches wide and supported by a thirty-two-foot-long deck. Next the slabs are stickered and air dried on sticks for about a year, before being kiln dried down to a moisture content of 6-8%.

Ed Allen Designs prefers to include its customers in the design process, to ensure they are 100% satisfied with the results. Ed likes to take customers through the slab inventory and help them select perfect pieces for their projects. Once that's completed, the slabs are flattened and smoothed on both faces on a CNC, and then subjected to a proprietary process to build and deliver the highest quality live or straight edge tables and countertops.

Ed Allen Designs has perfected a technique that combines beautiful hardwood and colorful, resilient epoxy to create amazing, one-of-a-kind, custom-made tables that complement and augment a client's home, cabin or condo. Plus, the company ships nationwide at competitive rates. These pieces are art and customers talk about handing down to next generations.

Following in the footsteps of his great-grandfather, grandfather and father, Ed Allen has spent a lifetime in the timber business, buying and selling logs both domestically and internationally. His experience and contacts give a potential buyer a serious advantage in this area. Along the way, Ed has retained some of the best logs to build custom, live edge and epoxy tables. He believes that every tree should have a second life, and pursuing that he has developed access to the some of the largest and finest hardwoods in the country. The company now has a plentiful supply of sustainability-sourced classic American hardwoods.



Ed Allen Designs also sells raw hardwood slabs for hobbyist and small shop projects. The company has thousands to choose from, and specializes in filling everything from individual needs to large multi-piece orders for designers, home remodelers, or home or cabin builders.

What they don't have, they will find.

Among its range of activities, the company buys standing timber and cut logs from all corners of the country; mills both its own customers' logs; offers custom saw-milling; provides custom lumber drying; consults on and/or manufactures tables and countertops; performs CNC-based surfacing and planing; designs and executes custom epoxy inlays; and does table resurfacing.

Imagine waking up this spring, standing on your deck with a cup of coffee, and gazing over nine acres of the world's finest hardwoods, before you stroll to the shop and fire up the CNC.

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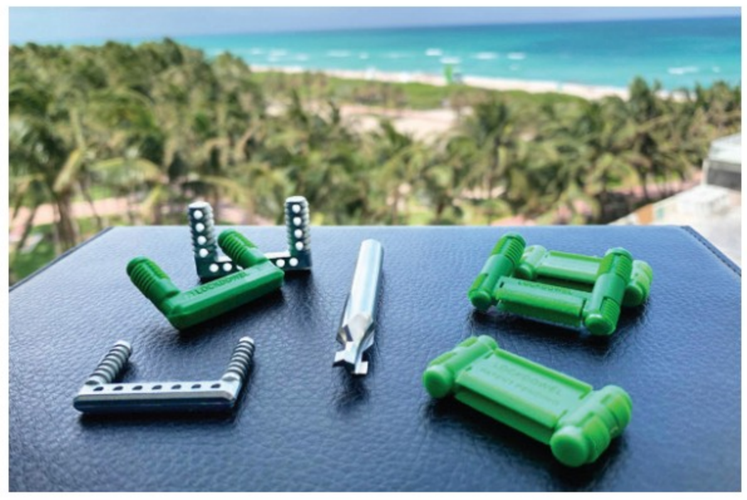
Drawer Box Assembly Can Be Beautiful

Drawer box construction can be a time-consuming process—but it doesn't have to be according to Lockdowel, a company that developed a simpler, faster method of building boxes. The Lockdowel construction method is being embraced by woodshops serving many markets including kitchen and bath cabinets, closet systems, and furniture. Lockdowel's invisible fasteners use a simple assembly process that doesn't require glue or clamps, and results in a clean and professional looking drawer box where no screw heads, fasteners, or staples are visible in the final product.

The Lockdowel system slides and locks fasteners into CNC-routed keyhole slots. The hidden aesthetics are important not only for drawer boxes, but for any finished product.

"One of our customers recently shared a memorable quote," says Jason Howell, the CEO of Lockdowel. The President of Würk Furniture in Mississauga, Ontario, said 'Anything we make that needs to be beautiful, we make with Lockdowel'."

Howell continues, "Lockdowel customers consistently share significant decreases in assembly time, which translates easily into



both labor savings and higher throughput."

"Our fasteners also provide the ability to flat-pack and ship for onsite assembly," he says. "This reduces shipping costs and allows easier material handling on the job. Imagine the time saved by taking an entire kitchen install up in one elevator trip."

The company affirms other product advantages include reducing employee training time to under an hour and the ability to disassemble if needed.

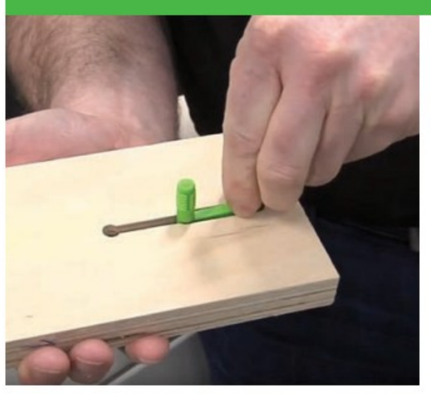
Howell says, "Assembling drawer boxes has never been easier. With a simple modification to design, drawer components slide together perfectly, every time."

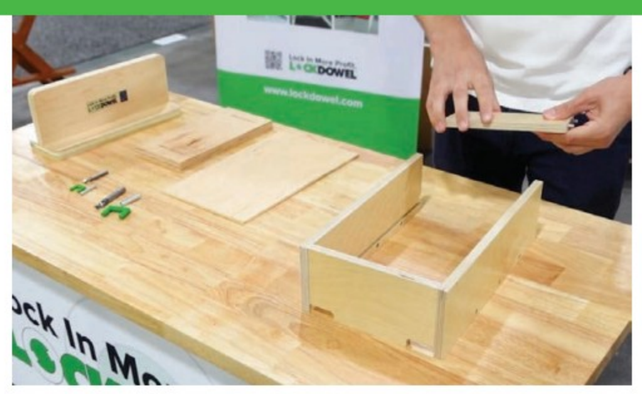
Lockdowel's One-Click drawer slides are often used in tandem with the company's fasteners. Using the same tooling as the fasteners, the One-Clicks also slide-and-click into place with no screwing required.

The precision and simplicity of Lockdowel has made drawer box assembly a beautiful experience.



DO YOU MAKE DRAWER BOXES?







Lockdowel is Your Solution for Rapid Assembly and Versatility

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Horizon Wood Has a New and Improved Online Inventory Website

Horizon Wood is a unique hardwood sawmill located in Pennsylvania.

The company's core products are boules, which woodworkers' treasure as a means of presenting consistency between flitches. Because every piece of the boule is sourced from the same log, each board matches the quality of the others. This perfect match of flitches allows the woodshop to create a masterpiece that is uniform in color, grain, texture, and quality.

Horizon Wood is proud to offer a wide range of interesting options beyond typical square-edge lumber, including specialty items such as prime grade boules, extra-wide stock, and figured or curly woods. Their selection of products includes many Appalachian species such as walnut, maple, cherry and white oak, in a wide range of lengths, widths and thicknesses.

What is special about Horizon, beyond its inventory of the finest Appalachian hardwood boules, is the ease of its selection and buying process. Horizon went live with their first version of an online inventory over fifteen years ago. A woodworker can sort through the inventory online using many different parameters. There's a gallery view for browsing, and a list view for power users. The images are high quality and accurate: what you see is what you get. The website is tied directly to the company's regularly updated inventory database, so what is posted online is actually available in real time and ready to ship.



Woodshops can also see the pricing for full boules or individual piece orders, and get LTL freight quoting based on selected products.

Horizon Wood was founded in the 1970s, when George Terbovich was still working on his B.Sc. degree in environmental resources at Penn State University. Initially it was focused exclusively on the European wholesale market. Today, the sawmill is managed by the second generation with Dan and Pete handling the day-to-day operations. The company still maintains its volume operation, but has expanded sales in the U.S. to include a range of products from slabs to highly figured or high grade boules, to loads of quality lumber. The focus is on buying the best logs available, and sawing a higher grade of log than most mills.

Last year, Horizon launched its new online inventory that caters to skilled hobbyists and high-end custom woodworking companies. Horizon also supplies larger scale customers including architectural millwork companies, nationwide hardwood distributors, and some large dynamic niche woodworking businesses. At times these larger companies will tap into the Horizon website to find a special item to complete a job, but the core customer base using the online inventory is smaller, professional shops building fine cabinetry and furniture.

The staff at Horizon are customer-centric, and work best when they have full details of the job at hand. They work hard to ensure that their products will work for the woodshop's specific project. Once a woodworker explores the inventory on the website and submits an inquiry online, Horizon's staff work with him/her to ensure that the selected boules and lumber are the perfect fit for the shop's needs.



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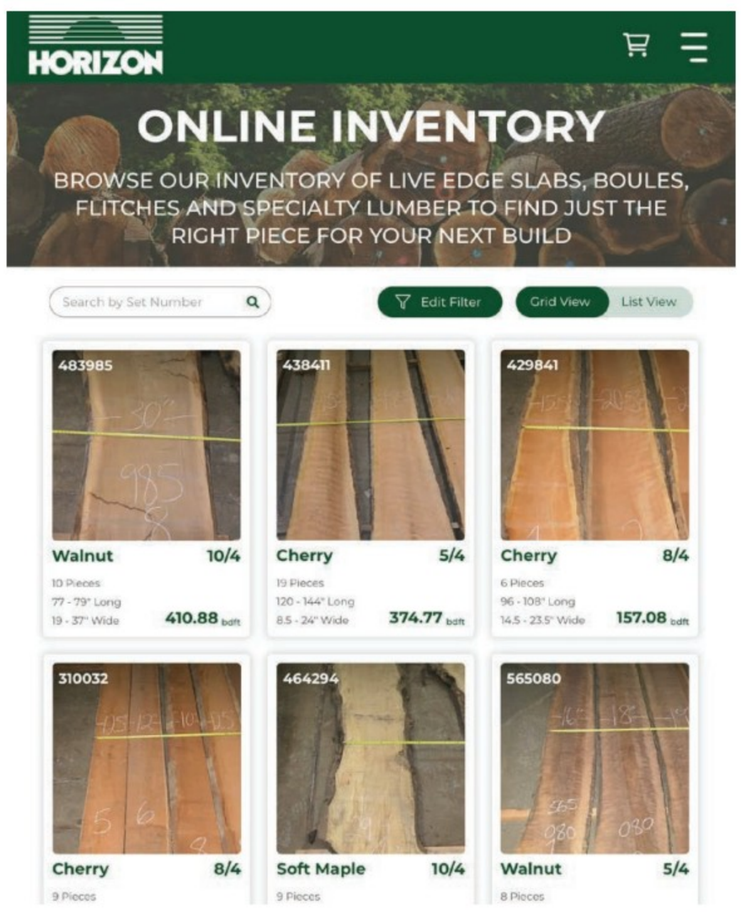

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Elias Woodworking Celebrates its 40th Birthday and a New Facility!

Sometimes making the best cabinets and furniture is less to do with making sawdust and more to do with meeting peoples' needs. That can include offering a huge array of options to meet every style or décor, plus quick turnarounds, no rejects, and onsite assembly.

For more than forty years Elias Woodworking has been helping cabinet shops and industry professionals across North America do exactly that. Woodworkers and designers rely on their company for cabinet doors and drawer fronts in wood, thermofoil and laminate; drawer boxes, inserts and pullouts; moldings and accessories; custom cabinet boxes; and superb finishing.

Now the company has shifted into an even higher gear. Always known for reliable service, the team at Elias have a whole new production facility to support their mission – a 50,000 square foot, state-of-the-art plant that is dedicated to manufacturing AOS Elite Cabinets.

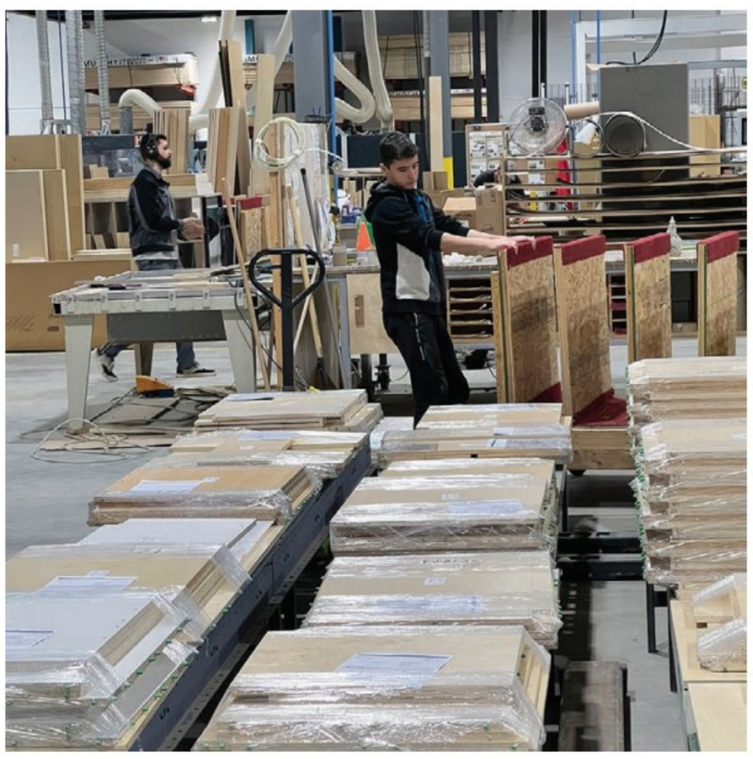
AOS (assemble on site, also known as flat-pack or knock-down) cabinets are immensely popular due to their versatility, cost-effectiveness, and ease of transportation.



The new facility lets Elias fulfill the diverse needs of its customers, while maintaining a strong commitment to sustainability. The new building is equipped with cutting-edge machinery and technology that ensures precision and efficiency in every cabinet. This investment in technology reflects both the company's commitment to building the best cabinets and being a responsible manufacturer. The facility is built around energy-efficient systems and responsible sourcing practices, all designed to minimize its carbon footprint.

AOS Elite cabinets are valued for space-saving and easy assembly. Flat packing on pallets streamlines the shipping process, reduces transportation costs, and makes high quality products more accessible to woodshops from coast to coast.

Elias Woodwork values its people above everything. At the company's 40th Anniversary celebration last fall, the employees welcomed folks from the surrounding communities to a huge open house with children's activities, activities for all ages, numerous food trucks, live bands and an incredible fireworks display. That day, president and CEO Ralph Fehr reflected on the company's growth over the last four decades. He recalled starting out with only a couple of employees working long hours to seed a dream. Now, thanks to those exceptional people and the hundreds who have followed in their footsteps, Elias Woodworking is poised to help even more woodshops all across the continent make their very best cabinets and furniture.





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Clear-Cut TS Stock Guides from JessEm.

Fix it or ditch it?

When to upgrade or restore old machinery

By John English

"Why, back in my day..."

The older one gets, the better the memories become. Unfortunately, not everything from the past was solid and sound. Remember the Ford Pinto?

Woodshop machinery is no exception, but a lot of the old cast iron, 3-phase behemoths are still quite serviceable, and some can be updated and upgraded at reasonable cost. While many of the classic machines have gathered up to a century of sawdust, machines from the past 20 years or so may also be eligible for updates, and that can be a whole lot easier. That's because manufacturers often continue building the core machine and just upgrade the peripherals, so a slightly older dust collector might be a good candidate for a new HEPA filter and maybe even a bag shaker, or an aging planer might accept a new helical insert cutterhead.

So, upgrading can mean repairing and/or adding features to an existing piece of equipment, or actively searching for a chunk of classic iron that's an improvement on modern options, or simply sending something old to Craigslist and buying a new machine.

For small shops, the decision to restore or repair probably boils down to cost and time. For bigger shops, it can be more complicated. Large new machines often need new infrastructure such as dust collection or 3-phase power, along with extra lighting, material handling solutions, employee training, and maybe even a whole new building.

TIME IS MONEY

For shops thinking about going with an old machine and planning on minor restoration, rather than buying new, it can take a lot of hours to search through auctions and find the right machine, and the shipping costs can be substantial. For a machine that is already owned by the shop, the time investment will be in looking for manuals and parts to repair years of wear. Once that's done, the search can begin for modern updates that will enhance performance or increase safety.

It's not so much the money invested in physical parts that are a concern, but rather the time invested in finding them and then retrofitting them to old machines. There's a professional woodworker in Minneapolis who spent two days retrofitting a riving knife to an old Delta Unisaw and he still won't admit how much he spent, or even if it works.

Bigger machinery can make more money sense. An older CNC might be updated in many ways, as long as any play in the spindle or gantry can be corrected first. There's no point in spending money on upgrades if the core is unhealthy. Upgrades such as adding vacuum tables or other fixturing, updating the spindle from air-cooled to liquid (and maybe



Band saw guides, like these from Carter Products, can reduce blade friction and increase accuracy.

upping the horsepower), installing better dust collection, or automating the loading and unloading processes can all add a great deal of value to a basic CNC. Travel times can often be improved with new motors, controllers, wiring or software updates, and even gantries can sometimes be raised to extend the Z. But there comes a time when a whole boxful of bandages just won't cure the patient.

Besides which, new toys are more fun to play with.

On the other hand, a familiar machine is an old friend with a well-worn learning curve.

IS IT COMPLICATED?

For many woodworkers, half the impetus to retain or acquire an older machine is that we get to spend some quality time restoring it. That pure pleasure may offset some of the expense. There's a romance here akin to collecting and reinvigorating vintage automobiles. The machines reek of history and remind us of a collective past when America was the world's factory.

When it comes to traditional floor machinery such as table saws, jointers, planers and shapers, it's hard to beat classic brands like Powermatic, Northfield or Oliver. And a vintage Tannewitz band saw always makes an old woodworker grin (yes, they still make 'em). With a Tanny, one is probably just looking at replacing a power switch or some bearings, and maybe adding new Carter guides to create a machine that can stand with, and probably outperform, most of the new models built overseas.



Shelix cutterheads from Byrd Tool.







The Universal Overarm Blade Guard from Grizzly Industrial.

But other machines can be a bit trickier than a band saw, where the doors simply open to reveal its beating heart. For a start, it can take a lot more time to access malfunctioning trunnions or bearings in an enclosed housing such as that of a table saw or shaper. And if cast-iron tables on a jointer or planer are worn, cracked, warped or severely rusted, they can add up to a costly repair. Grinding them flat is surprisingly affordable, but sometimes that won't work if the damage is excessive.

Among the advantages of buying new equipment, safety looms large. Guards and splitters on older machines were often more of a danger when installed than going without them, so many old machines arrive with these missing. Some of those safety devices were invented by lawyers, not engineers. Today, we have finger-sensing technologies that drop saw blades or set off alarms when digits get too close to a blade. We have extraction ports right at the tool that eliminate fine dust in the air, and sliding tables with fixturing that keep the operator's fingers far away from hungry carbide teeth. In a one-man shop, such safety exigencies might be ignored. That's a choice – a poor one, but legal. If a sole proprietor wants to run a machine without a guard, so be it. But there are few legal recourses if there's an accident. If the shop has employees, such concerns are a matter of both conscience and responsibility. It simply isn't fair or right, or legal, to expose others to avoidable danger.

When it comes to portable tools, there's little question that modern options are a better choice, especially with the advent of cordless tools. The weight alone is enough reason to forego those bulky cast routers and belt sanders from the post-war era. Never mind the noise and dust, and being tethered to an outlet.

Stationary machines, on the other hand, are usually at least worth considering, but there is the issue of apps. Most modern machines can be connected to manufacturers' apps on a laptop or smartphone, so they can monitor everything from performance to employee hours and routine maintenance. That's generally not an option with vintage machines, although there are some exceptions. A modern shop can be run from a coffee shop, a client's kitchen, or even a trade show on the other side of the country. The owner can set up a laptop or tablet and watch in real time as a CNC processes a job. If that kind of convenience and oversight are already part of the shop's culture, it could be quite complicated to upgrade an older machine to those standards.

On the other hand, not everything needs to be that tightly controlled. For example, there's no question that new machines are going to be more accurate – but we work with wood. It's an organic material, so a thousandth of an inch here or there doesn't always make a whole lot of difference. Even when the joinery is perfect, the material eventually moves a little in response to its environment. And the machine's role and placement in the processing sequence can determine the value of exquisite accuracy. An old table saw reliably breaking down sheet goods or rough-sizing stiles and rails before they are machined and sanded is probably as accurate as it needs to be.

A wide belt sander, on the other hand, can't be afforded the same leniency: it usually needs to be spot on, especially if it's thicknessing veneered sheet stock. And those cast iron tables mentioned earlier on jointers, planers and shapers need to be flat and true for production work. If they're not, they will eat up maintenance time trying to achieve unachievable results. Or worse, they will deliver too many rejects and too much reworking to justify their salvation. The only upgrade left is replacement.

WHEN TO UPGRADE

Poor performance in most machines is caused by tooling. When bits or blades are worn or dull, accuracy suffers. But



Woodworkers searching for old iron should visit *vintagemachinery.org*.

if new, sharp tools still don't deliver perfection, then it's time to audit the machine.

The first thing to look for is noise. If something is loose, it usually vibrates and that creates a hum. If it isn't something obvious such as a sheet metal housing or maladjusted feet, then it's time to have a pro check it out. Hopefully, it's something simple but if the repair is going to cost a lot of downtime or serious cash, it might be an opportunity to upgrade.

If a machine can no longer be adjusted to cut square, flat or plumb, it will cause rejects and rework. If the parts are arriving late or with burned edges, and the tooling is sharp, then something else must be out of line.

If a machine simply can't maintain the same production rate as the workstations before or after it, that's a good indication that it's time to upgrade. That might take the form of a bigger, faster machine, or perhaps even just adding a second unit. But odds are that in a production shop, there's an automated upgrade out there that will more than pay for itself by speeding up the processing. And depending on the level of automation, the new machine might even eliminate some tasks, processes or payroll expense.

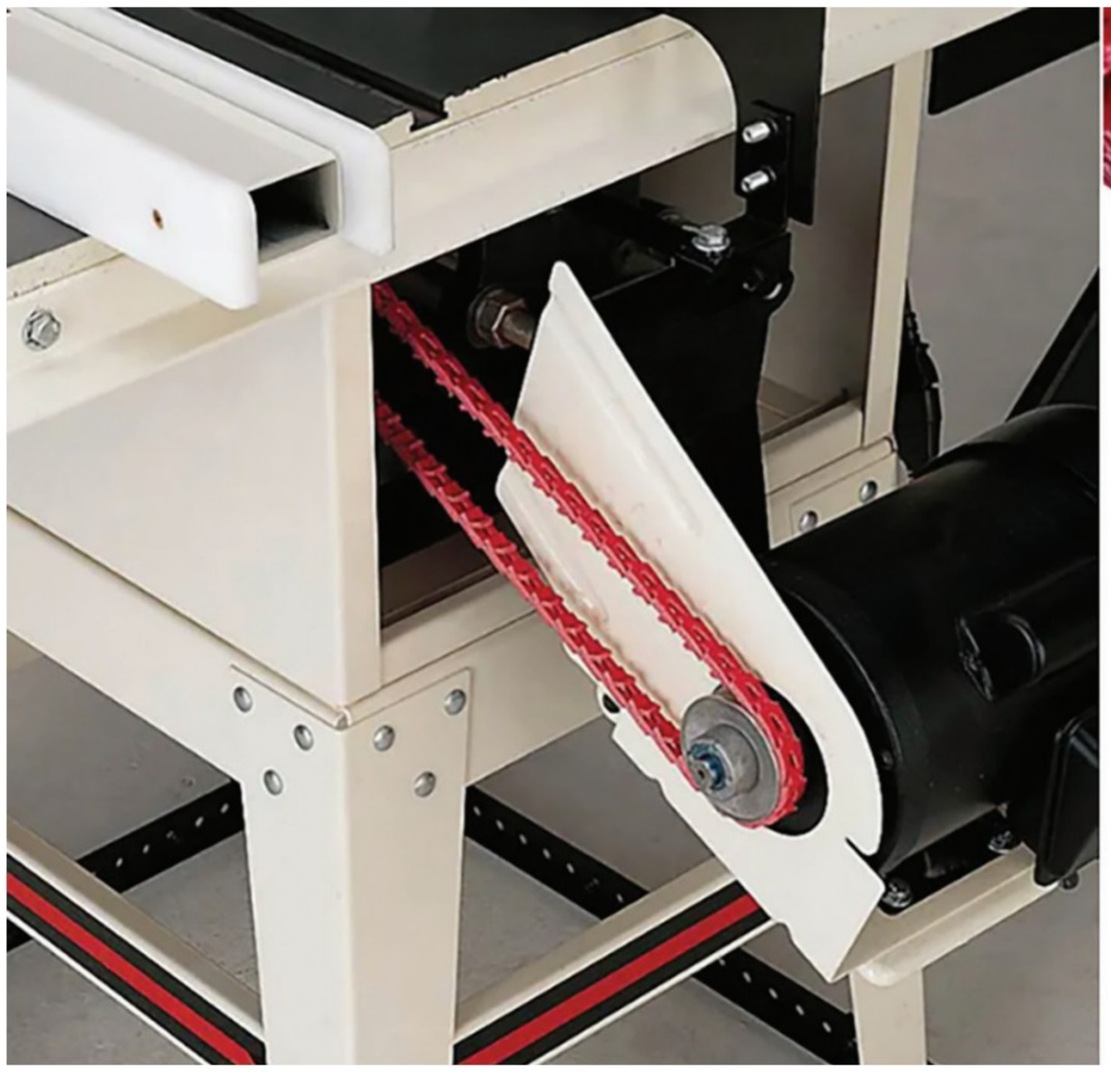
If a machine is constantly breaking down, it may be exhausted from overwork and need to be upgraded.

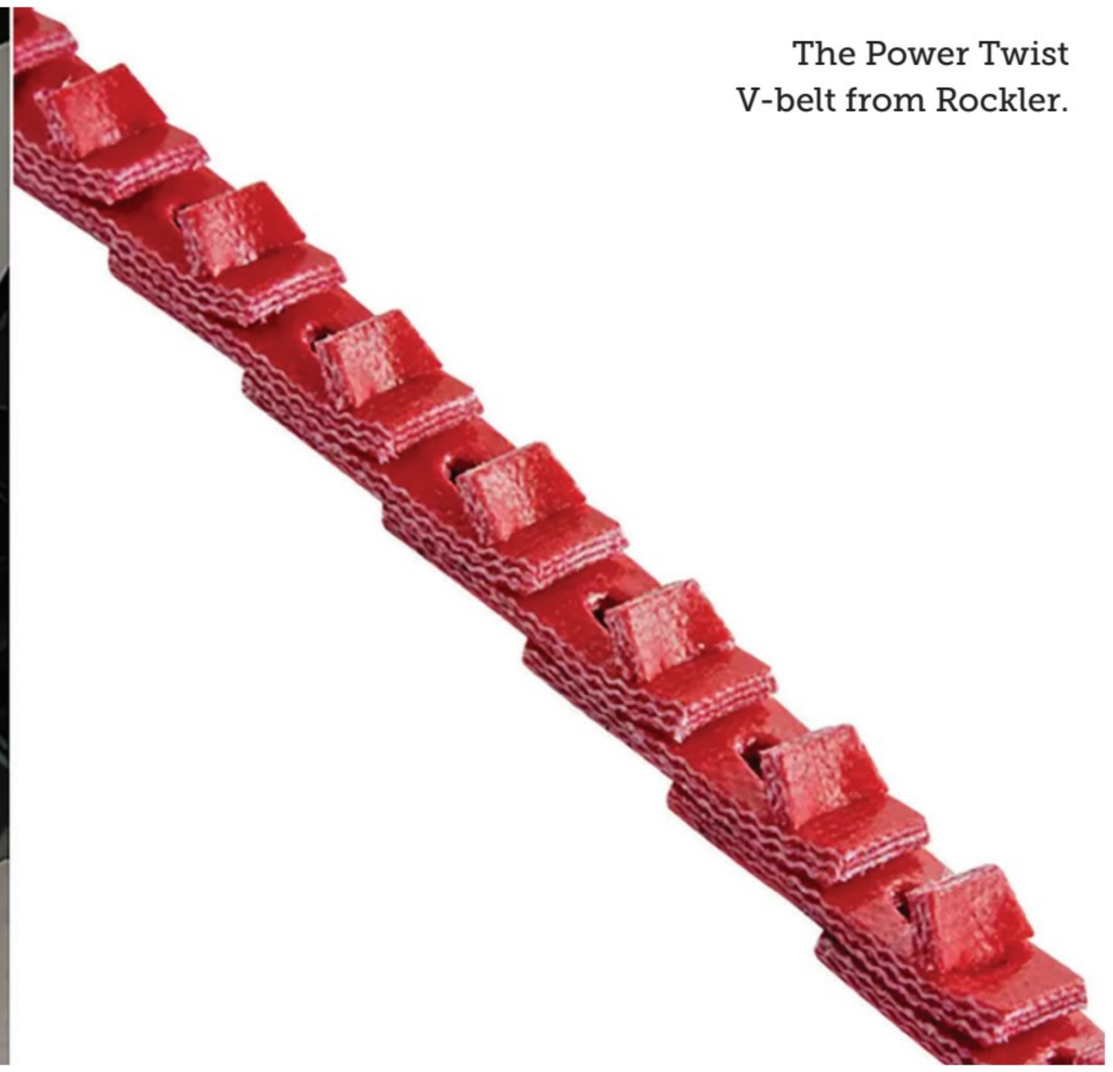
One other reason to upgrade is changing materials. Sometimes a machine was purchased to process one type of material and the shop has evolved into using something else. Along the way, the old machine has been adapted or persuaded somehow to work in ways that are a little foreign to it. For example, a shop that used to work with solid wood might have moved into coated or veneered panels, and the table saw doesn't have a scoring blade or a sliding table.

WHY UPGRADE?

One huge advantage to upgrading an older machine is that the shop usually ends up with a piece of equipment that was very expensive in its day but is now affordable. For the same money, the shop might end up with an older high-end, industrial, big production machine with no bells and whistles, or a medium-duty modern machine with glitz and gizmos. And here's a sobering thought: if an old machine is still running after all these years, it wasn't sub-par to begin with. It's a bit Darwinian, but most of the garbage machines went to recycling long ago and only the best have survived.

Another concern is maintenance. New machines come with warranties, service departments, online user groups, and easily acquirable replacement parts. Older machines are more like us: they seem to accumulate lots of nostalgia, wear, and excess weight. But we don't put Grandpa on eBay for many of the same reasons that we hang onto the old Oliver. We love them both.





The Power Twist V-belt from Rockler.

Unfortunately, sometimes even replacing parts with salvaged ones from other machines won't work. Take, for example, planers or jointers with clamshell heads. Early on, these machines had square cutterheads that swallowed a lot of fingers, so several manufacturers went to a cylinder and called it safer. But they just bolted the knives onto flat areas of the cylinder, so quite a few came loose when they hit a big ole knot or some squirrely figure. Rebuilding an older machine and just reusing the clamshell may not be a smart move. Having a new cutterhead made might push the old machine right back up there with a new one in terms of pricing, so it's something to consider.

Another sticky problem for many restorers is Babbitt bearings. These are poured bearings that are a little softer than the moving part they support, so if something goes wrong the bearing fails, rather than a shaft. Babbitt material is a soft alloy with a low melting point. Woodworkers who aren't also toolmakers or mechanically inclined may want to find the oldest worker in a local machine shop and take him to coffee to have a chat about Babbitt replacement before buying a machine that is so equipped.

SPECIFIC MACHINES

Older drill presses with familiar brand names are usually a good prospect for upgrading as most don't seem to have many run-out issues. Plus, the older quills often travel far enough to bury a long bit. Laser positioning is an easy upgrade on these machines, but electronic variable speed is a relatively new option so switching belts for speed changes is the only option. But then, how often do we need to do that in the average woodshop? In situations where there are only a couple of bits that are being swapped out frequently, the best upgrade may be buying a second, modern, less expensive press and just leaving a 35mm Forstner bit (or whatever is needed) chucked in it.

When it comes to lathes, most turners will shy away from trying to upgrade an older machine. The new ones have variable speed controls in a couple of torque ranges, larger capacities for swing diameter (although the old ones are usually longer between centers), and that all-important reverse switch that immeasurably improves sanding results. Some new machines even have sliding headstocks that allow very large outboard turning. That's not a viable upgrade for an older lathe.

Adding a rotary axis to a basic old CNC is often a possibility. And sometimes an aggregate head can upgrade an older machine to perform tasks that are beyond the reach of XYZ.

One machine that most woodworkers will agree is a great candidate for upgrading is a vintage wide (more than eight inches) jointer. Many of the old cast iron tables on these were milled and dressed to the point that wood slid along them like the Jamaican bobsled team. And it still will, with a little TLC. Unfortunately, it can be a challenge to upgrade the knives to carbide inserts, so it's a good idea to check on the availability of a spiral cutterhead before taking the plunge.

The supply bottlenecks a couple of years ago revealed a glitch in importing. It became difficult to find parts support for some machines that were built overseas. The world is no more stable now than it was then, so such supply woes may well become routine over the next few years. That's a pretty good argument for researching new domestic machines, or stockpiling sensitive replacement parts, or upgrading older machinery that was made in the U.S.A.

When it comes to vintage iron, here are some great old names to look for, or perhaps hang onto if they're already gathering dust in the back of the shop: Buss (1862-1964), Delta (1919-), Greenlee (1862-1985), Moak (1918-1992), Newman Whitney (1906-), Northfield (1920-), Oliver (1890-), Porter (1882-ca.1982), Powermatic (1928-), Tannewitz (1909-), Wadkin (1897-), and Yates (1925-). Many of these are still in production, although some have outsourced the machines to overseas manufacturers. But most were active in the heyday of American woodworking equipment, and some still even offer new parts for old machines, or their websites can help locate them. **w**

Images: Courtesy of manufacturers

Hawaii & Maine celebrate their own

By Jennifer Hicks

The 2023 Hawaii's Woodshow, Na La'au o Hawai'I, was held at the Hawaii Opera Plaza in Honolulu from Oct. 29 to Nov. 8. The annual fine woodworking exhibition is presented by the Hawaii Forest Industry Association.

The show calls for work made of wood from Hawaiian-grown tree species, particularly those that have been planted and brought to maturity in Hawaii. It also aims to encourage the public to plant native and non-native high value hardwoods for future generations.

The show featured 91 pieces from 48 makers in three categories: Master, Main, and Novice.

Luke Shaffer won Best of Show for "Spark", a Steampunk-style wooden robot dog made with milo, koa, copper and epoxy. Other winners in the Master class included Frank McClure (Award of Excellence), Bob Butts (Award of Distinction), and Mats Fogelvik (Award of Merit).

The show also includes the Imagination + Inspiration



Spark by Luke Shaffer (above); hope chest by Bob Butts, and classical guitar by David Gomes from Hawaii's Woodshow.

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Photos: Brad Goda

Student Challenge which encourages hands-on learning and understanding of forest resources amongst high school and university-level students.

Learn more at *hawaiiforest.org*.

MAINE WOOD

Maine Wood 2024 opened at the Messler Gallery at the Center for Furniture Craftsmanship (CFC) in Rockport, Maine. The biennial exhibition showcases the breadth, creativity, and excellence of Maine's woodworking community and runs through April 17.

"It's fitting that we wrap our 30th anniversary year with the opening of Maine Wood 2024. This show of talented Mainers highlights what CFC strives to accomplish: amplifying and exemplifying the value of craftsmanship as it enriches the life of the maker as well as the communities in which they work and reside," said Matt Hoggle, the center's executive director.

The show features furniture makers Virginia Blanchard (Thomaston); David Boyle (Bath); Richard Chalmers (Camden); Sam Cotton (Hope); Andy Glenn (Waldoboro); Rob Hiza (Rockland); Saer T. Huston (Kennebunkport); Terry Kelly (Presque Isle); John Rogers (Woolwich); Osamu Sassa (Camden); Ethan Stebbins (Woolwich); Olivia Van Oot (Portland); Kristina Varshavskaya (Waldoboro); Paul Wanrooij (Harpswell), and Geoffrey Warner (Stonington).

The show also features John Bryan









Torus chair by Reed Anderson. (Hawaii's Woodshow)



Come Spring Table by David Boyle. (Maine Wood)

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Courtesy of Mesler Gallery, Brad Goda

The Night Owl by John Brya and Mending by Jim Macdonald. (Maine Wood)

(North Yarmouth); Danielle Rose Byrd (Bar Harbor); Clara Cohan (Cape Elizabeth); Dennis Curtis (Augusta); Jeff Enck (Cumberland Center); Crockett Lalor (Lincolnville); Jim Macdonald (Burnham); Max Miller (Thomaston); and Julie A. Vogel (Harpswell).

Jurors are Dixie Biggs, a woodturner and instructor in Gainesville, Fla; John Cameron, a furniture maker in Gloucester, Mass., and Adam John Manley, associate professor of furniture design and woodworking at San Diego State University.

Sponsoring organizations include the Eastern Maine Woodturners, Maine Crafts Association, and Maine Woodturners. Learn more at *woodschool.org*. **W**





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 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 Highland Hall Waldorf School woodshop in Northridge. *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 10-12 — International Wood Products Association's World of Wood, an annual convention featuring seminars and networking opportunities. Location: San Diego. Visit *iwpawood.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. Leartn more at *tampawoodcrafters.org*.

April 9-11 — Woodworking Industry Conference, an opportunity to connect with fellow woodworking machinery importers, manufacturers, distributors, and suppliers. Learn more at *woodworkingindustryconference.com*.

GEORGIA

Aug. 6-9 — International Woodworking Fair, North America's largest woodworking technology and design trade show. Location: Georgia World Congress Center in Atlanta. *iwfatlanta.com*

IDAHO

April 6-7 — Idaho Artistry in Wood Show, a juried show and one of the largest of its kind in the West. Location: JUMP (Jack's Urban Meeting Place) in Boise. Learn more at *idahoartistryinwood.org*.

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April 16-18 — National Wood Flooring Associa-

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tion expo featuring new products and trends, networking and educational opportunities. Location: Morial Convention Center in New Orleans. *nwfa.org*

MAINE

Ongoing — The Center for Furniture Craftsmanship offers year-round classes in woodworking to the highest degree of craftsmanship. One- and two-week workshops from June through Oct., twelve-week Furniture Intensives, nine-month Comprehensive, eight-week Turning Intensive, and Fellowships. *woodschool.org*

MARYLAND

Monthly — The Howard County Woodworkers Guild meets the first Saturdays of the month at the Bain Senior Center at 5470 Ruth Keeton Way 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 25-28 — Northern Woods Exhibition by the Minnesota Woodworkers Guild, an annual fine woodworking exhibition. Location: Eden Prairie Center in Eden Prairie. *mnwwg.org*

NEW JERSEY

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

Monthly — The Professional Woodworkers Guild of Upper New Jersey meets the third Wednesday of every month. Learn more at *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. Learn more at *woodcny.org*.

Monthly — Northeast Woodworkers Association meetings held on the second Thursday of the month at various locations in the Albany area. Learn more at *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. Learn more at *liwoodworkers.org*.

May 19-21 — International Contemporary Furniture Fair, a trade show focused on contemporary furniture design. Location: Javits Center in New York. Learn more at *icff.com*.

NORTH CAROLINA

Monthly — Triangle Woodworkers Associa-





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tion meetings held on the third Tuesday of each month at 7 p.m. location: Klingspor's Woodworking Shop in MacGregor Village in Cary. Learn more at *trianglewoodworkers.com*.

Monthly — The Charlotte Woodworkers Association meets the third Tuesday of every month at 6 p.m. Location: MakerSpace in Charlotte. Learn more at *charlottewoodworkers.org*.

April 13-17 — High Point Furniture Market Spring Show. Location: High Point. Learn more at *highpointmarket.org*.

May 9-10 — Cabinet Makers Association's Open Shop with Gregory Paolini Design. Location: Canton. Learn more at *cabinetmakers.org*.

OHIO

Ongoing — Cincinnati Woodworking Club meets the second Saturday in the months of January, March, May, September. and November from 8:30 a.m. to 12:30 p.m. at the E.B. Mueller Co., 101 E. Benson, Reading, Ohio. Learn more at *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. Learn more at *lvwwg.com*.

June 28-July 1 — Society of American Period Furniture Makers' Mid-Year Conference featuring educational presentations, guest speakers, tours of private collections, and more. Location: Ursinis College in Collegeville. Learn more and register at *sapfm.org*.

SOUTH DAKOTA

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

DATES ANNOUNCED FOR SPRAY FINISHING WORKSHOPS

Carlisle Fluid Technologies and Owens Community College are teaming up to present Spray Finishing Technology Workshops.

Workshops are scheduled for May 1-3 and Nov. 6-8, 2024, in Toledo, Ohio. Classes meet from 8 a.m. to 5 p.m. daily and include both classroom and hands-on sessions. Attendees should be involved with industrial, contractor or maintenance spray finishing applications, or spray equipment sales and distribution.

The workshops will cover equipment types and selection; equipment set-up, operation, and maintenance; surface preparation and defect analysis; material selection, and safety and regulatory concerns.

Learn more and register at *owens.edu*.



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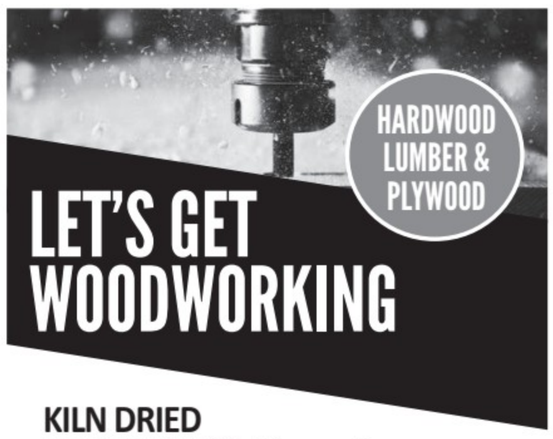

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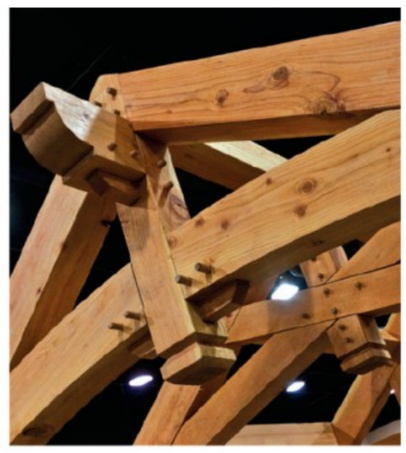


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The Kraken Bath.

Janie's got a bathtub

Nathie Katzoff, owner and founder of NK Woodworking and Design in Seattle, has acquired numerous fans of his work over the years, including Steven Tyler, the singer for Aerosmith. Through his friendship with Tyler, Katzoff donated one of his sculptural wooden bathtubs to the 65th Grammy Awards Viewing Party held Feb. 4 in Hollywood, Calif., to benefit Tyler's Janie's Fund that supports young female survivors of abuse.

"It's a big honor that [Tyler] invited me to auction one of my art pieces at the Grammy's gala," Katzoff tells Woodshop News. "For the gala, he just reached out on this, and for me it's a really cool opportunity. There are a lot of big names associated with this party. They auction about 15 things and we're one of them, so it's a big deal."

Katzoff is known for making elaborate wood staircases, furniture, bathing tubs and other sculptural pieces. The donated tub is called the Kraken Bath and made from sapele mahogany with a glossy finish, then wrapped in hand-forged steel 'tentacles' to depict an octopus grabbing onto it.

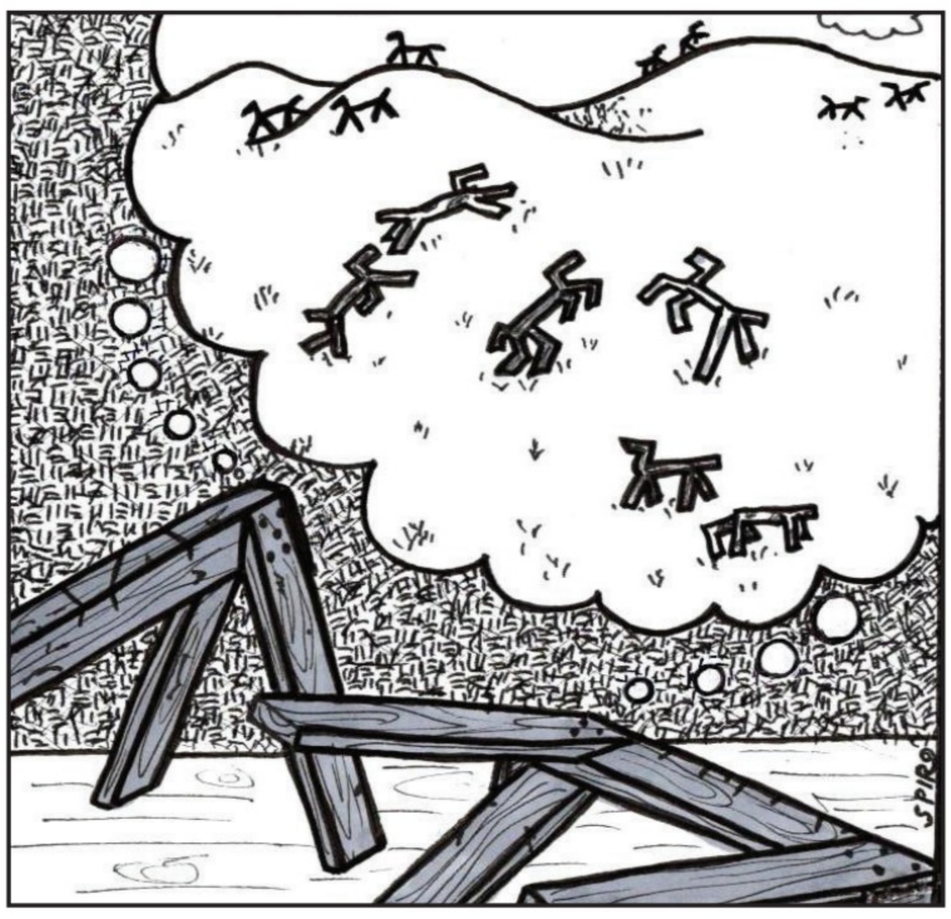
"The idea is a ship-like bath with this cool mystical sea creature. It was inspired by being here in Seattle, with the new hockey team the Seattle Kraken, and the Pacific Northwest was where the Great Pacific Octopus was discovered. I think everyone here claims that is important. Prior to that it was only in fairy tales with the big octopus taking down the ship."

Katzoff says his company strives to build aesthetically beautiful pieces that make clients stop in their tracks with awe. In fact, it was one of his architectural staircases that led him to become friends with Tyler.

"Steven Tyler saw one of my sculptural staircases years ago, prior to the pandemic. He was at one of my clients' homes who has one and was apparently really blown away by it and wanted to tell me over the phone. My client called me one night and put him on the phone and he told me it was so cool. So, then we became friends. He's continued to stay in touch, and we've stayed in touch. He's been a big admirer of my work."

Learn more at *nkwoodworking.com*. W

60 Grit — **Rough humor by Steve Spiro**



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