WOODSHOP Shaping the Successful Shop™ woodshopnews.com July 2013

www.woodshopnews.com

Charleston charm

Father and son make a good pair at South Carolina shop

Sorting through financing options

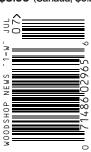
Flexner's 9 rules for finishing

Work smarter with hand tools

NEW TOOLS

- SCM wide belt
- Laguna table saw
- Virutex stair jig
- Bioformix adhesive

\$3.95 (Canada, \$5.95)







INNOVATIVE PRODUCTS

SINCE 1989!



TRACK SAW

- Motor: 120V, 9A, 1100 watt, 5500 RPM
- Blade diameter: 160mm (61/4")
- Cutting capacity: With track: 131/32" @ 90°, 17/16" @ 45° Without track: 25/32" @ 90°, 15/8" @ 45°



Includes: Saw, Guide Rail, and Accessory Pack

W1835 Track Saw

D4363 Accessory Pack **D4362** Guide Rails

14" BANDSAW

- 1 HP, 110V/220V
- Precision ground cast iron table measures 14" x 14" x 11/2"
- Blade size: 93½" (1/8" to 3/4" wide)
- Cutting capacity 13½" (throat)
- Cast iron frame and wheels
- Ball bearing blade guides
- Includes fence and mitre gauge

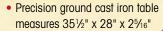
Feature packed, and an incredible value

W1706 14" Bandsaw



5 HP SPINDLE SHAPER

• Motor: 5 HP, 220V, single-phase, 25A, 3450 RPM



- Spindle travel: 31/4"
- Spindle sizes: 3/4", 1", 11/4"
- Spindle capacity: 41/4" 45/8", 51/8"



W1827 5 HP Spindle Shaper

10" TABLE SAWS with Riving Knife

- 3 HP, 220V, single-phase motor
- Cast iron table size: 27" x 40¹/₄" (W1819) 53⁵/₈" w/extension. (W1820) 74" w/extension)
- Max. rip capacity: (W1819) 29½", (W1820) 50"
- Camlock fence with HDPF face

Free 10" Carbide-Tipped Blade

W1819 10" Table Saw

W1820 10" Table Saw w/ Long Ext. Table

- Motor: 1/2 HP (360W)
- 1/2"-11/2" material thickness range
- 12" aluminum fence

- clamp
- Drill 4 holes in a cabinet side in just 2 pulls

POCKET HOLE MACHINE

- Spindle Speed: 2500 RPM
- U.S. Patent
- 2-pc, back fence stop No. 7,140,813
- Two swing stops
- "No Adjust" hold-down
- of the handle

W1833 Pocket Hole Machine

OSCILLATING BENCHTOP SPINDLE SANDER

- ½ HP, 120V, single-phase, 3.5A
- Table size: 15" L x 111/2" W
- 58 Oscillations per minute
- Stroke length: 5/8"
- 2000 RPM (1/2" spindle)





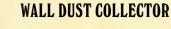
W1831 Oscillating Benchtop Spindle Sander

OUTSTANDING SHOP FOX® DUST COLLECTORS

PORTABLE CYCLONE

- Motor: 1½ HP, 110V/220V, pre-wired 110V, single-phase
- CFM: 806
- Filter: 2.0 micron, pleated
- 20 gal. steel collection drum with casters
- Inlet: 6" (or 4" x 2" with included Y)
- Maximum static pressure: 10.4"
- Includes remote control





- Motor: 1 HP, 110V/220V, single-phase
- · Air suction capacity: 537 CFM
- Bag capacity: 2 cubic feet
- Standard bag filtration: 2.5 micron
- Static pressure: 7.2"



W1826 Wall Dust Collector

3-SPEED HANGING AIR FILTER

- Motor: ½ HP, 120V, 60Hz, 1A single-phase
- Air flow: 260, 362, and 409 CFM
- · Outer filter: 5.0 micron
- Inner filter: 1.0 micron



W1830 Hanging Air Filter

WOODSTOCK® INTERNATIONAL, INC. IS ALSO HOME TO PRO-STICK®, PLANER PAL®, JOINTER PAL®, AND MANY OTHER FINE BRANDS. PLEASE VISIT OUR WEBSITE OR CALL TOLL FREE TO FIND AN AUTHORIZED DEALER NEAR YOU.





I didn't know...

Stiles has the largest factory-certified service team in the country.

Whether you have a machine down and need it running now, or you just need answers to help you be more productive, Stiles has over 100 field service representatives available to you. Our technicians are available for quick dispatch from any of our five regional centers across the country.

We have the right people, in the right place to provide you exceptional service, without exception.

For more information, contact John Casto at **616.890.9654** or **jcasto@stilesmachinery.com**. Or visit us at **www.stilesmachinery.com**.





Table of Contents



Features

- **CHARLESTON CHARM:** Father-and-son duo has built a custom cabinetry niche in South Carolina that has weathered tough economic conditions.
- **PERFECT STRANGERS:** Two artists who live just miles from each other in South Dakota and Wyoming found out they have much more in common than locales.
- **MORE FOR YOUR MONEY:** Financing your next equipment purchase requires a serious analysis of all the options available to your shop.

News Desk

- **8** Future uncertain for Baltimore furniture show.
- 10 North Carolina college gains crafts grant.
- 10 Indiana business starts myShop program for woodworking students.
- **24** WOOD MARKETS: Walnut's high demand continues.

Tired of Low Suction Dust Collectors?

Oneida Air Systems[™] Award Winning 2 & 3hp "Smart Dust Collectors".



Automatically increases suction as needed!

Quality, Made in America 1.5hp - 20hp Dust Collection Systems

- GE® HEPA (Certified H-12) Filter Media. See specs on website.
 Most Systems.
- Filter Flame-Guard
 Protection
 Most Systems Pat. Pend.

See complete list of awards on our website.



Ductwork

Free shipping on ductwork orders of \$300+ / 48 states / Some restrictions apply.

Nordfab[®] Quick Fit[®] Ductwork Available



Dust Deputy®



Go to Dust Deputy's at www.oneida-air.com to watch the review.

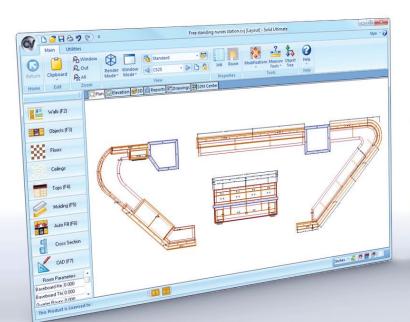
Like Dust Collection Systems and Components Since 1993.

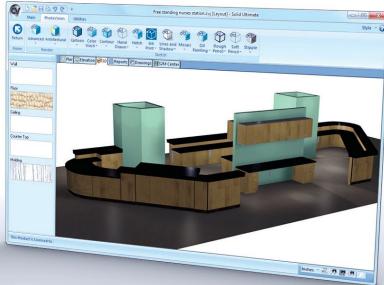
Call Today for FREE Catalog! 1.800.732.4065 www.oneida-air.com



Right-sized solutions.

From entry level cutlist packages to fully integrated Screen-to-Machine™ solutions, and every step along the way, we have a software that is right for your business. But unlike other software companies, every product level we offer delivers the core functionalities that cabinet and casegood manufacturers need to get the job done. With Cabinet Vision, you don't need to purchase add-ons or upgrades to automatically generate shop drawings, 3D customer renderings, cutlists, and material requirements, or estimate and price your jobs.















cabinet vision

: Design for manufacturing software for woodworkers

Perfect for kitchen cabinets, closets, commercial casework, millwork, bathrooms, office furniture, store fixtures and much more, Cabinet Vision makes the easy jobs simple and the complex ones possible.

- Custom Cabinet & Room Design
- Photo Realistic Renderings
- Material Optimization

- Full Costing Direct from Design
- Cutlists & Bill of Materials
- Designed for ease of use





Columns

- **20 FINISHING:** Nine rules. By Bob Flexner
- **22** THE CUTTING EDGE: Aggregates for CNC machining. By Bob Barone
- **26** PRO SHOP: Bite your tongue. By David Getts

Tools & Techniques

- SCM Group rolls out smaller wide-belt sander.
- **16** Virutex speeds up stair layout process.
- DeWalt adds a gyroscopic screwdriver.
- Bioformix unveils new wood adhesive.
- **19** Laguna Tools updates its Fusion saw.

Departments

- **Taking Stock**
- **New Products**
- At the Galleries
- Calendar **50**
- Classified **52**
- **56** Out of the Woodwork

Visit us online at www.woodshopnews.com

BLOGS



Over the Workbench Talkin' shop with former editor A.J. Hamler



This Business about Woodworking Share an opinion with David DeCristoforo but don't expect to be right

- Contact Customer Service www.woodshopnews.com/subscribe
- Tools & Machinery www.woodshopnews.com/tools-machines
- Contact the Staff www.woodshopnews.com/contact-us
- Advertising Information www.woodshopnews.com/advertise
- 2013 Online Resource Guide http://resourceguide.woodshopnews.com

Tooling and Accessories **Since 1926**



For: Tenoners Moulders **Shapers** Routers **Planers**



For a complete List of our Tooling, Accesories and Machinery ask for our New Catalog

Specializing in Insert Tools



For Surfacing, Grooving, Routing Tenoning and Profiling

See all of Tools and pick up a copy of our catalog at AWFS, Booth 7931 July 24-27

If You Know Our Name You Know Our Number

Charles G. G. Schmidt & Co., Inc.

301 West Grand Ave Montvale, NJ 07645 Fax 201 391-3565 www.cggschmidt.com





TAKING STOCK

with TOD RIGGIO

EPA rules seeks new limit on formaldehyde in wood

he U.S. Environmental Protection Agency proposed two rules in May to help protect Americans from exposure to the harmful chemical formaldehyde, consistent with a federal law passed by Congress in 2010.

These rules ensure that composite wood products produced domestically or imported into the United States meet the formaldehyde emission standards established by Congress, according to the EPA.

Formaldehyde is used in adhesives to make a wide range of building materials and products. Exposure to formaldehyde can cause eye, nose and throat irritation, other respiratory symptoms and, in certain cases, cancer, according to the EPA.

"The proposed regulations announced today reflect EPA's continued efforts to protect the public from exposure to harmful chemicals in their daily lives," James J. Jones, EPA's acting assistant administrator for the Office of Chemical Safety and Pollution Prevention, said in a statement. "Once final, the rules will reduce the public's exposure to this harmful chemical found in many products in our homes and workplaces."

In 2010, Congress passed the Formaldehyde Standards for Composite Wood Products Act, or Title VI of the Toxic Substances Control Act, which establishes emission standards for formaldehyde from composite wood products and directs EPA to propose rules to enforce the act's provisions. The EPA says its proposed rules align, where practical, with the requirements for composite wood products set by the California Air Resources Board.

Most manufacturers are already following requirements for composite wood products already in place in California so that they are able to sell in any state. The EPA says its proposals will provide one national standard, thus preventing a patchwork of different state requirements and providing a level playing field between states and between American companies and importers. The EPA estimates that formal-

dehyde concentrations in new and renovated homes will be reduced by 9 to 25 percent when the rules are final. The EPA also anticipates that the proposed rules will encourage the ongoing trend by industry towards switching to noadded-formaldehyde resins in products.

The EPA's first proposal limits how much formaldehyde can be emitted from hardwood plywood, MDF, particleboard and finished goods that are sold, supplied, offered for sale, manufactured, or imported in the U.S. The emitted formaldehyde can be left over from the resin or composite wood-making process or be released when the resin degrades in the presence of heat and humidity. This proposal also includes testing requirements, laminated product provisions, product labeling requirements, chain of custody documentation, record-keeping, a stockpiling prohibition and enforcement provisions. It also includes a common-sense exemption from some testing and record-keeping requirements for products made with no-added-formaldehyde resins.

The second proposal establishes a thirdparty certification framework designed to ensure that manufacturers of composite wood products meet the Toxic Substances Control Act's formaldehyde emission standards by having their composite wood products certified though an accredited third-party certifier. It would also establish eligibility requirements and responsibilities for thirdparty certifiers and the EPA-recognized accreditation bodies who would accredit them. The EPA says the proposed third-party certification program will level the playing field by ensuring composite wood products sold in this country meet the emission standards in the rule regardless of whether they were made in the U.S. or not.

The proposed rules were published in the Federal Register, paving the way for comments by the woodworking industry and other interested parties. The 60-day comment period ends Aug. 9. To comment, visit *www. regulations.gov.*

WOODSHOP Shaping the Successful Shop** NEWS*

JULY 2013 VOL. XXVII, NO. 8

Editor: Staff Writer: Online Editor: Art Director: Editorial Assistant: TOD RIGGIO
JENNIFER HICKS
MIKE TROCCHI
STEVEN JYLKKA
ESTHER POPE

GARY DESANCTIS

VP & GM AIM Marine Group:

VP Digital Media: CHRIS KELLY

Group Digital Director: IAN C. BOWEN

Group Circulation Director: STEPHANIE FLANAGAN

ADVERTISING INFORMATION AND OFFICES
Main Office, 10 Bokum Road, Essex, CT 06426

AL, AZ, CA, CO, CT, FL, GA, HI, IL, IN, IA, MN, NJ, NM, NV, OH, OR, PA, TN, WA, & all international

National Sales Manager: RORY BEGLIN (860) 767-3200 Ext. 242, Fax (860) 767-1048 E-mail: rory@woodshopnews.com

AK, AR, DC, DE, ID, KS, KY, LA, ME, MD, MA, MI, MS, MO, MT, NE, NH, NY, NC, ND, OK, RI, SC, SD, TX, UT, VT, VA, WI, WV, WY

National Account Manager: ALEX ROBERTSON (860) 767-3200 Ext. 284, Fax (860) 767-1048 E-mail: alex@woodshopnews.com

Classified Marketplace Advertising (860) 767-3200 Ext. 284, Fax (860) 767-1048

(860) 767-3200 Ext. 284, Fax (860) 767-1048 E-mail: marketplace@woodshopnews.com

Business Office Manager: K

CLAIRE BRAYFIELD

Circulation Marketing Manager:

FLAINE CIRILLO

Production Manager: Production Coordinators: SUNITA PATEL LAUREN EGAN JASON LALIBERTE JENNIFER MAURITZ BRIANA SMITH

Woodshop News, (ISSN 0894-5403, U.S.P.S. 000-966),
Vol. XXVII, No. 8, is published monthly by Cruz Bay Publishing, Inc., an
Active Interest Media company. The known office of publication is: 10
Bokum Road, Essex, CT 06426. \$21.95 for one year; \$35.95 for two years
(Canadian subscribers add \$12 per year for postage; U.S. funds, foreign
subscribers add \$14 per year for postage; U.S. funds). Periodicals postage
paid at Essex, CT, and additional mailing offices. Printed in the U.S.A.

POSTMASTER: SEND ADDRESS CHANGES TO: Woodshop News, PO Box 433212, Palm Coast, FL 32143-3212 CANADA POST RETURN ADDRESS UNDELIVERABLE TO: APC-PLI, P.O. Box 503, RPO West Beaver Creek, Richmond Hill, ON L4B 4R6.

Canada Post Publication Mail Agreement No 40624074. Subscription Customer Service and Orders: Call (800) 243-9177, Mon. - Fri. 7:00 am to 12:00 pm Midnight EST. Sat. - Sun. - 9:00 AM to 6:00 PM EST.

Classifieds (860) 767-3200, Mon. - Fri. 8:30 am - 5:30 pm EST. **Headquarters:**10 Bokum Road, Essex, CT 06426 (860) 767-3200 • Fax (860) 767-0642

Editorial E-mail: editorial@woodshopnews.com Circulation E-mail: circulation@woodshopnews.com Advertising E-mail: sales@woodshopnews.com Website: www.woodshopnews.com

Advertising Billing Questions: (310) 356-4121





ACTIVE INTEREST MEDIA

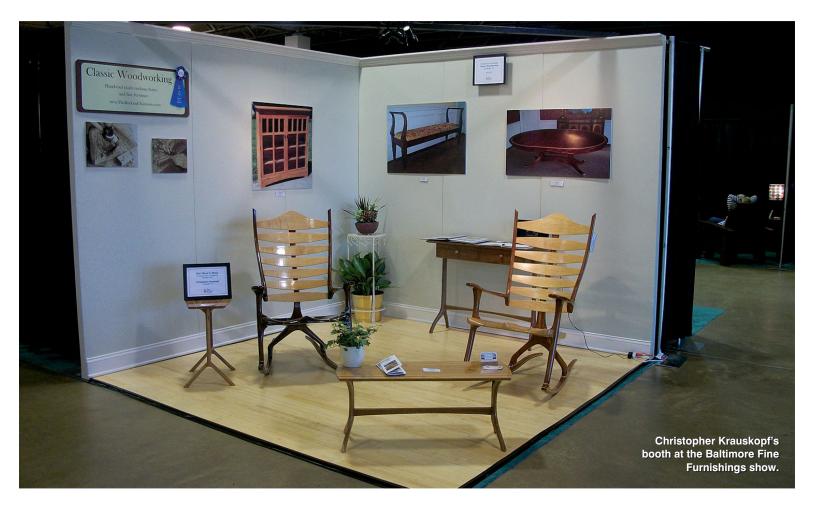
Chairman & CEO:
President & COO:
Senior VP & CFO:
Senior VP, Operations:
VP, Controller:
Director of Retail Sales::
Retail Sales Manager:
VP, Research

EFREM ZIMBALIST III ANDREW W. CLURMAN BRIAN J. SELLSTROM PATRICIA B. FOX JOSEPH COHEN SUSAN ROSE BEV GIACALONE KRISTY KAUS

Copyright 2013 © Cruz Bay Publishing, Inc.



NEWS DESK



Future uncertain for Baltimore furniture show

By Jennifer Hicks

he fifth annual Baltimore Fine Furnishings show featured about 30 exhibitors, a similar turnout to last year, but not as strong as anticipated. Although the show served its purpose to custom furniture makers and other craftspeople who sold their wares in rented booth space, its future is under review.

Show director Karla Little says she created the show because a significant number of furniture makers wanted one in the Baltimore/Washington market. "These individuals also wanted an invitational show rather than a juried show, so that they could count on it every year. Year One, the economy tanked, so what has happened is the need isn't really there anymore," says Little.

There are two problems with this show, Little says. Every year it's been held the first weekend in May and every year there are more and more conflicts, specifically with new events going on at the same time. Little produces two other shows in Milwaukee and Providence, R.I., that do better in the fall.

Little says she also faces competition from the older and more established American Craft Council and Washington Craft Show, both held in in the spring. Within four months, she will make the decision to either change the date or end the show.

Exhibitors interviewed by Woodshop News gave mixed reviews. First-time Baltimore exhibitor Christopher Krauskopf of Classic Woodworking in Louisville, Ky., says he scored several commissions and has a list of prospective clients.

"I think there was a good mix of modern and traditional work. Everything was of extremely high quality. I can't stress that enough," says Krauskopf.

Sean Schieber of Myrtle Grove Furniture in New Market, Md., another first-time exhibitor, didn't fare as well but got inspired during the show. He got the names of booth visitors and plans to invite them to an open house at his shop.

"I really didn't get much response at the show. There wasn't a lot of activity there. But I am following up with some leads that seem like they'll make going worth my time," says Schieber.

The Milwaukee show will take place Oct. 4-6 at the Harley-Davidson Museum, followed by the Providence show Nov. 1-3 at the Pawtucket Armory Arts Center in Pawtucket, R.I.

Contact: Fine Furnishings Shows. Tel: 401-816-0963. www.finefurnishingsshows.com



PURVEYORS OF FINE MACHINERY®, SINCE 1983!

OVER A MILLION SQUARE FEET PACKED TO THE RAFTERS
WITH MACHINERY & TOOLS * 2 OVERSEAS QUALITY CONTROL OFFICES
STAFFED WITH DUALIFIED GRIZZLY KONGINEERS * HUGE PARTS
FACILITY WITH OVERIN BY PHONE OR ONLINE * MOST ORDERS SHIP
THE SAME DAY

30[™] ANNIVERSARY 14" BANDSAW

- Motor: 1 HP, 110V/220V, single-phase, TEFC
- Precision-ground cast iron table size: 14" sq.
- Table tilt: 15° L, 45° R
- Cutting capacity/throat: 131/2"
- Max. cutting height: 6"
- Blade speeds: 1500 &
- Approx. shipping weight: 205 lbs.



3200 FPM







30[™] ANNIVERSARY 17" **HEAVY-DUTY BANDSAW**

- Motor: 2 HP, 110V/220V, single-phase, TEFC
- Amps: 20A at 110V, 10A at 220V
- RPM: 1725
- Precision-ground cast iron table size: 17" x 17" x 11/2" thick
- Table tilt: 10° left, 45° right
- Floor to table height: 371/2"
- Cutting capacity/throat: 161/4" left
- Maximum cutting height: 121/8"
- Blade size: 1311/2" long
- Approx. shipping weight: 342 lbs.

MADE IN ISO 9001 FACTORY!





G0513ANV \$89500 SALE \$79500





3 HP DUST COLLECTOR Motor: 3 HP, 240V, single-phase, FULLY MOBILE WITH

- 3450 RPM, 12A
- Air suction capacity: 2300 CFM
- Maximum static pressure: 16.7"
- Impeller: 123/4" balanced steel, radial fin
- 7" inlet with removable "Y"
- fitting with three 4" openings Portable base size: 211/2" x 491/2"
- Bag volume: 11.4 cubic feet
- Height (with bags inflated): 78"
- Standard bag filtration: 2.5 Micron
- Approximate shipping weight: 170 lbs.



\$43825 SALE \$39500



BUILT-IN CASTERS

MADE IN TAIWAN



6" JOINTER

- · Motor: 1 HP, 110V, single-phase
- · Precision-ground cast iron table size: 7½" x 46"
- Cutterhead diameter: 21/2"
- Cutterhead knives: 3
- Cutterhead speed: 4800 RPM
- · Approx. shipping weight: 260 lbs.

FREE PAIR OF SAFETY PUSH BLOCKS

G0452P \$52500 SALE \$49500



BUILT-IN

WITH

11/2 HP SHAPER

- Motor: 11/2 HP, 110V/220V, single-phase
- Spindle speeds:
- Max. cutter dia.: 5"
- weight: 240 lbs.



MADE IN TAIWAN

- Precision-ground cast iron table size: 201/4" x 18"
- Spindle travel: 3"
- 2 interchangeable spindles: 1/2" & 3/4"
- 7000 & 10,000 RPM
- Approx. shipping





G1035P ONLY \$56000

8" x 76" JOINTERS

- Motor: 3 HP, 240V, single-phase, TEFC, 3450 RPM
- Maximum depth of cut: 1/8
- Maximum rabbeting capacity: 1/2"
- Total table size: 8" x 763/8"
- Cutterhead diameter:
- 33/16" (G0490), 33/8" (G0490X)
- Cutterhead speed: 4800 RPM Approximate
- shipping weight: 560 lhs.



WITH 4 KNIFE CUTTERHEAD G0490 \$97500 SALE \$92500 WITH SPIRAL CUTTERHEAD





PAIR OF

SAFFTY PUSH

BLOCKS



15" PLANERS with Built-in Mobile Base

- Motor: 3 HP, 220V, singlephase
- Precision-ground cast iron table size: 15" x 20"
- Max. cutting depth: 1/8" • Feed rate: 16 & 30 FPM · Cutterhead speed:
- 4800 RPM · Approx. shipping weight: 660 lbs.



GRIZZLY GREEN & TAN

G0453Z \$169500 SALE \$159500 POLAR BEAR SERIES WHITE

G0453PX ONLY \$169500



10" HEAVY-DUTY CABINET TABLE SAW with Riving Knife

- Motor: 5 HP, 220V/440V*, 12A/6A, 3-phase
- Precision-ground cast iron table with extension measures: 27" x 753/4" • Table height: 347/8"
- Arbor: 5/8" Arbor speed: 4000 RPM Max. dado width: 3/4" • Capacity@ 90°: 33/16", @ 45°: 23/16"
- Max. rip capacity: 52"



24" WIDE-BELT SANDER

₹79 г

- Sanding belt motor: 10 HP, 230V, 3-Phase
- Feed motor: 1 HP
- Table elevation motor: 1/4 HP
- Sanding Belt: 25" x 60"
- Drum speed: 2500 FPM
- Conveyor speed: Variable 15-49 FPM
- 243/8" W x 6" H Minimum board dimensions:
- 14"L x 1/8" H Approximate shipping weight: 1573 lbs.



G0582

\$819500 SALE \$779500





VIEW VIDEOS AT GRIZZLY.COM



744 [1]-[5]]]] 1-800-523-4777











TECHNICAL SERVICE:

570-546-9663



3 GREAT SHOWROOMS!



Warren Wilson College's updated wood center.

North Carolina college gains crafts grant

By Jennifer Hicks

arren Wilson College, a liberal arts school in Swannanoa, N.C., was recently awarded a \$2.1 million grant by the Windgate Charitable Foundation to enhance its arts department. The college intends to revive traditional craft work in the areas of fine woodworking, fiber arts and blacksmithing. School officials say they sought help from the foundation because it traditionally offered grant programs focused on arts and crafts as well as on art history.

The college's dean of work Ian Robertson says the grant will allow the school to increase its craft outreach to the greater community and its artisans, which include woodworkers and those working in other media. He adds that the grant, which will be dispersed during the course of the next three years, will provide the department with funding for the facilitation of studio craft through work outreach programs and also to increase faculty and staff positions. The school also plans to provide internships for recent graduates during the grant period.

"We have an opportunity with some funds

from the Windgate Foundation to actually put into place some leadership programs through internships and also to bring some artists in residence to work on particular skills," says Robertson.

When applying for the grant, the college partnered with the Center for Craft, Creativity and Design in Hendersonville, N.C. Stephanie Moore, executive director of the center, says the grant is significant in that it will allow the college to expand their craft area in terms of wood. The center is a national organization that advances the understanding of craft in a variety of ways. It has been working primarily with the state's university system to address the issue of craft in higher education.

"Most of their grant allows for rapid staffing of artists in residence and permanent work crew, so it is about pulling jobs into and onto their campus, which includes not only students who supervise the work crews, but faculty and artists in residence," says Moore.

"Our interest in this is to not only support the next generation of craft artist and the practice of craft, but to be able to preserve and teach the history of craft."

For information, visit www.warren-wilson.edu. W

Indiana business offers outlet for students

By Jennifer Hicks

dvanced Cabinet Systems in Marion, Ind., has developed an educational program that encourages area high school students to consider careers in the woodworking industry.

The company, which averages 25 to 30 employees, manufactures plastic laminate casework and retail store fixtures and also offers architectural millwork on an as-needed basis. Its leaders developed what they're calling the "myShop program" as an extension of the Architectural Woodwork Institute's Adopt-A-Shop program. The program involves partnering with local schools and discussing with their students careers in the industry such as sales, marketing, regulatory compliance, engineering and carpentry.

"The myShop program consists of our company inviting students from local schools to our facility. We do a plant tour to mentor students and hopefully get them interested in careers in woodworking," ACS creative director Mark Dunker says.

"The ultimate goal, of course, is that we want to develop a future workforce within the woodworking industry. A lot of schools are getting rid of their woodworking programs so we're trying to compensate for that by offering programs like this."

In the next five years, the company will continue developing the program by including more job-shadow and internship opportunities and eventually prepare itself to hire students at the facility. The program is currently limited to schools within Marion Country where the business is situated. Dunker describes the company's efforts as a way to locally address what the AWI is doing to help resolve a national problem.

"I think the reason woodworking is dying off is that high schools are pushing towards college-level curriculums and avoiding exposing children to trades. I think they're going towards that and the economy has played a role in that. Schools are likely going to cut woodshop and similar courses, if anything, and we look at it as a disservice for students who would have thrived in woodshop, but no longer have that option available."

Contact: Advanced Cabinet Systems, 1001 E. 38th St. Marion, IN 46953. Tel: 765-677-8000. www.advancedcabinetsystems.com ₩

INNOVATION AND IDEAS







JULY 24-27, 2013 LAS VEGAS CONVENTION CENTER LAS VEGAS, NEVADA www.awfsfair.org





EVERYWHERE YOU LOOK.

With an expanded trade show floor, more new exhibitors, lively show features and 50-plus educational seminars, this year's AWFS®Fair will offer greater opportunities to hone your skills and improve the way you do business. This year you'll find more new products, equipment and information than ever before—making this show a must attend event—full of real possibilities to help you compete more effectively and grow your business.

REGISTER NOW: www.awfsfair.org | 877.303.0711

Find us:









Scan to view event details and complete seminar information.



TOOLS VIECHNIQUES

Do hand tools have a place in today's shop?

They complement power tools and can have an important, albeit limited, role in helping you push projects to production

By John English

im Krenov was a hand tools guy. In his waning years, despite macular degeneration, he spent a lot of time building bench planes. With his sight failing, he enjoyed the tactile nature of the exercise.

Sam Maloof liked his band saw. He was scary to watch as he free-formed chair parts with the blade guard tucked out of the way. But Maloof used rasps and files to sculpt and round and ease wood and meld parts into a whole.

Maybe it's a generational thing.

Older woodworkers seem to like hand tools, perhaps because they are reminded of a life that was a little simpler. When young artisans discover them, they enjoy the challenge and finesse — the sense of craft. But most of us in the middle are trying to get work out the door as fast as possible to pay the bills and hand tools just don't seem to cut it.

Artists like Darrell Peart and David Marks simply couldn't perform their magic without hand tools. But those guys produce one piece at a time. They're not building kitchens and bank lobbies.

So why would a production woodworker trade in a belt sander for a smoothing plane? Well, hand tools complement power tools. They have their place, even if it's limited. Running a panel through a wide belt sander is obviously far more efficient than flattening it with a series of planes. But grabbing a sharp block plane is quicker than setting up a router to ease chamfers on table legs.

Industrial revolution?

About the time we brought dishwashers and vacuum cleaners into our homes, we brought electric drills and sanders into our shops. While nobody in their right mind would go back to doing domestic tasks by hand, the same isn't true of woodworking. Our fascina-

tion with the ease and speed of power tools — and subsequent reliance on them — has not been as exclusive as the domestic revolution. People get emotional about secondary bevels in a way they never did about washing diapers by hand. And while scrubbing the kitchen floor on your hands and knees is about as much work as using a scrub plane to flatten a tabletop, only one of these is a labor of love.

The biggest conceptual problem with hand tools is that they need sharpening. A dull belt sander just needs a new belt, but a dull rabbeting plane needs to be disassembled, ground, honed and then reset. And if you're not good at sharpening, then the results are disheartening. If all your plane iron does is chatter, why on earth would you bother reaching for it? The key is to get a good edge. Most standard set planes (jacks, jointers and smoothers — Nos. 3 through 8) need a 25 degree primary bevel and a 2- or 3-degree secondary bevel.

Um, what was that?

Well, plane irons and bench chisels are usually sharpened in two stages. The first, a primary bevel, is ground using coarser stones or even mechanical means like a slow bench grinder. This is generally in the 25- to 28-degree range. Then, a short series of fine stones is used to hone a small secondary bevel that's another couple of degrees sharper. When the tool gets a little dull, it takes just a minute or two to hone the very short secondary bevel and you're back in business. It would take half an hour to regrind the primary properly, so that task is only done when the secondary has been touched up





dozens of times and is no longer a micro-bevel.

Some specialty planes don't even need to be disassembled to be touched up. Take, for example, the router plane. This is a flat oval-shaped piece of steel with two round handles on it and a small L-shaped blade (which in planes is called an iron). If you use a table saw to nibble a dado or rabbet and the blade leaves a few small ripples that won't allow a panel to seat properly, a couple of quick passes with a router plane will clean out the bottom of the groove a lot faster than setting up a portable router and a clampedon fence. If a groove needs to be dressed on a job site and Fred forgot to pack a 1/4" straight bit, this little tool can be a lifesaver. It'll reach into places that a plunge router base can't handle, too. And touching up a router plane can be as simple as rubbing a stone across the bottom of the cutter a couple of times.

Benchmarks

While a router plane is a bit specialized, there were lots of standard items in our grandfathers' toolboxes that still make sense today. They used chisels a lot, most of which haven't changed in a century. You can still buy a decent 3/4" butt chisel at the local hardware store for about the price of a fast-food lunch and it'll last longer than the indigestion. Very inexpensive chisels usually have either coarse, soft steel that won't hold an edge or the metal is too hard and brittle to take an edge. But move up a notch to the less expensive name-brand versions like Stanley and Ace, and they're are generally well-made with tool steel that might have a little chrome or vanadium hardener. These are the chisels to use in a production shop for cleaning glue out of faceframe corners or chopping a small hole for a plumbing pipe during an install. If you're going to be performing fine surgery such as hand-cut dovetails, they won't hold up. Their edge will be dull to start — and duller in seconds. If you're not ready to invest in a full set of better quality bench chisels, at least get a 1/4" and a 1/2" one. These two will allow you to do the vast majority of simple benchtop tasks.

If your production works involves mortiseand-tenon joinery, a Domino from Festool is hard to resist. Not only is it accurate and fast, but it's also portable. However, there are times when chopping a mortise by hand is a better choice, such as when the joinery is visible or in very small picture frames or perhaps in furniture repair where an original is being matched. Grandpa had special chisels for this job, and they're still widely available. While a bench chisel is generally kind of short so that the woodworker has more control over the direction it's taking, a dedicated mortising chisel is long and thick, so it can be driven deep into the wood and used to leverage out the waste. Bench chisels usually have bevels running down the edges of their top faces, so they can reach into tight spots like dovetails without jamming. The handle can be wood (use a mallet) or plastic with a steel cap (hammers are OK). Mortising chisels have only one bevel (the cutting one) and almost invariably come with wooden handles.

Power vs. hand tools

High-volume production means that time is of the essence, so perhaps the only occasions where a hand tool beats a power tool are when the former doesn't need sharpening or the latter can't reach. Hand tools require practice — and lots of it — to become proficient. But once continued on next page



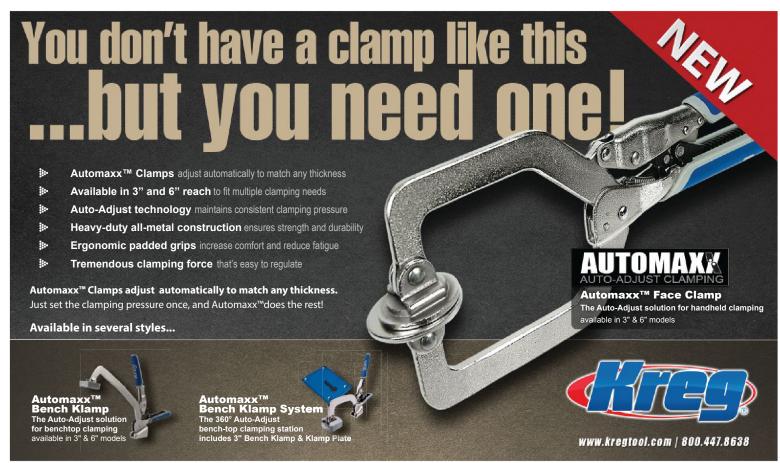
HAND TOOLS from previous page

you're there, a hand tool can often be quicker and is almost always more accurate and controllable than a power tool.

Another aspect of hand tools is that they require time and muscle commitment, so they force you to think more about what you're doing. If a shop has dedicated a lot of time, materials and expertise to a job, and it's now being installed on site, then using hand tools to slow down this phase a little and be precise isn't such a bad idea. For example, a cabinet that has been scribed could be modified to fit the wall using a belt sander, but one small slip and the part can be ruined. Using a small plane to gently sneak up to the line and pare it perfectly is an enticing option.

The bottom line seems to be this (and please send a letter to the editor if you disagree; this can be an interesting discussion): for repetitive processes such as sawing sheet goods into cabinet sides, power tools are the answer. For one-off tasks, it could pay to consider hand tools not because they save time (which they might or might not do), but because they offer extra control. Being able to do the task once and get the optimum result is perhaps more efficient than doing it faster every time, getting away with that most of the time, but occasionally hav-





SCM Group rolls out smaller wide-belt sander

By Jennifer Hicks

designed to satisfy the production and quality requirements of small woodworking shops, says the company. With a 43" working width, the machine is ideal for shops

requiring more width capacity than the standard 37".

SCM marketing manager Max Salmi says the machine's design was inspired by customers seeking features often available only on larger sanders.

"Items such as sealer sanding, brushes for denibbing, etc. Even larger factories that do a lot of sanding are requesting smaller machines for cell-type manufacturing and would like to see narrower width machines with lots of features that previously were not available," says Salmi.

The Sandya 300 series, which also includes a 37" model, is available with single-head, double-head and planer/sander configurations.

The 43" model is a two-speed, variable speed unit with a motorized table height adjustment and an automatic thickness setup device, which gives the user an exact starting thickness.

Other features include digital readouts of worktable position and height, electronic belt tracking, adjustable drum and pad positions, an automatic table positioning device and two roller infeed and outfeed table extensions.

SCM also offers an exclusive digital ammeter as a standard feature, which gives the operator an immediate readout of the main motor's power draw.

Machines in the Sandya 300 series start at \$30,000.

Contact: SCM Group North America. Tel: 770-813-7874. www. scmgroupna.com W





Virutex speeds up stair layout process

By Jennifer Hicks

irutex's new template for closed and open stair treads, model PFP, eliminates the need for woodworkers and carpenters to design the full stair layout, leading to quick and precise construction of a staircase, according to the company.

"Stairs are a repetitive thing. So with this fixture, once you know one tread and once you calculate one stair you can just repeat it so it speeds up the work and also increases accuracy. Here, you measure the riser and step one time and once that's done and the fixture is fixed, you just move the fixture," says product manager Alex Akavan.



The system is reversible for right and left stringers and the tread thickness is adjustable from 18 to 55 mm with the standard templates. It is equipped with a special stopper for 90-degree trimming.

The template sells for \$399 with a 27-mm router guide ring.

Optional accessories include the Virutex AngleCopy cutting guide, which divides an angle in two, indicating the exact position for the cut on a miter saw. There's also an extension set for stair landings from 600 to 1000 mm.

Contact: Virutex. Tel: 800-868-9663. www. virutex.com ₩





DeWalt delivers with its gyroscopic screwdriver

By Tod Riggio

very now and then, a new tool comes out that's just plain fun to use. The first thing anyone's going to do with DeWalt's new gyroscopic screwdriver is watch it run left and right with a corresponding wrist turn. Then another 15 minutes will pass as you make it run faster or slower. At some point, you'll finally put a bit in the chuck and start practicing with actual screws.

As we all know, a gyroscope is essentially a top, a self-balancing spinning toy that we used to play with as kids, put to instrumental use. Gyroscopes are used in inertial navigation systems where magnetic compasses won't work and to stabilize radio-controlled helicopters and, one would suspect, unmanned aerial vehicles, otherwise known as drones.

"Although gyroscopic technology is not new to electronics, it is one of the newest forms of technologies to be used in power tools," De-Walt group product manager Jim Watson says.

Black & Decker, a sister company to De-Walt, introduced a 4-volt palm screwdriver last year to the amazement of the DIY market. DeWalt's 8-volt version packs a bit more torque and, when fixed in the inline position, looks more like a standard screwdriver. DeWalt's version also has an adjustable handle to create a pistol grip.

Who needs an electric screwdriver? DeWalt



is targeting electricians and HVAC installers, as well as woodworkers (think hardware installation). While you can't — or perhaps shouldn't — open a can of paint with it, De-Walt's gyroscopic screwdriver has a few features to make life easier.

Variable speed, controlled by wrist movement, tops the list, followed by a clutch and a lithium-ion battery. The tool also has a LED ring light so you can see what you're doing and a fuel gauge so you know when it's time to charge the battery. The 1/4" hex chuck accepts 1" bit tips and requires just one hand to work.

The tool, model DCF680N1, sells for about \$90 with a single battery. There's also a two-battery kit, model DCF680N2, for about \$99.

For information, visit www.dewalt.com. W



The new evolution in planing precison. Amazing planing results, 20 times longer usable life of the blades and up to 50 % reduction in audible noise (-10 dB). The new Silent-POWER® spiral knife cutterblock from Felder.





24" planing width meets every requirement!





c-express 920CNC drilling and milling centre



profil 45Shaper

FELDER-GROUP USA

East: 2 Lukens Drive, Suite 300, NEW CASTLE, DE 19720, salesinfo@felderusa.com
West: 3006 Beacon Blvd., WEST SACRAMENTO, CA 95691, west@felderusa.com
S. Cal: 26060 Acero Suite 103, MISSION VIEJO, CA 92691, s.ca@felderusa.com

DE: 866-792-5288

N Cal: 800-572-0061

S Cal: 866-714-6005

866-922-8879



www.format-4usa.com



Bioformix unveils new wood adhesive

By Jennifer Hicks

ioformix introduced Nexabond 2500 instant wood adhesive in May, a water-free glue that speeds up project completion by reducing assembly time and allowing for sanding and finishing in minutes, according to the company.

The product is specifically designed for woodworkers and wood products manufacturers and is formulated with a water and solvent-free formula. Components glued with this product will achieve high-strength bonding in minutes, compared to 24 hours with water-based carpentry glues, says the company.

"Because the Nexabond 2500 adhesive does not contain water, wood joints don't swell, eliminating long dry times prior to finishing. Without water, it can bond any wood, even oily woods. This adhesive's quick bonding chemistry also reduces or eliminates the need for clamping," company president Adam Malofsky says.



In addition to fast, flexible glue-up, the adhesive accepts most stains and finishes and bonds regardless of humidity and temperature variations. It also works with most wood species and can be used to attach metal, ceramics, glass, plastic, foam and more to wood, according to the company.

"Its water-free formula means trouble-free

joinery and assembly. It combines the speed and versatility of a super glue with the high bond strength of traditional wood glues," Malofsky says.

Pricing varies depending on quantity purchased, starting at \$5.98 per one-ounce bottle.

Contact: Bioformix. Tel: 513-448-0308. www. bioformix.com ₩



MIRKA-ONLINE.COM



Laguna Tools updates its Fusion saw

By Jennifer Hicks

aguna Tools has updated its Fusion 10" table saw, which comes standard with either a 36" or 52" rip capacity. It features a 1-3/4-hp motor and operates on 110-volt power.

Sales manager Benjamin Helshoj says the name Fusion represents a cross between a contractor's saw and a cabinet saw, typically referred to as a hybrid. He says similar hybrids usually have a smaller body that justifies their lower cost and that this is a full-body machine that can still be found at a price similar to competing models.

"This saw works like any other table saw. It runs off of 110-volt power, which is basically available in any garage or shop. The cutting is very accurate because the trunnion is not at-

tached to the tabletop, but is mounted onto the frame like a real cabinet saw to ensure stability," he says.

The table top is made of premium grade cast iron, heat-treated and ground to a mirror-like flat surface, perfect for precise cuts, according to Helshoj. The saw includes a $20'' \times 27''$ main table with two $3/4'' \times 3/8''$ miter slots and two $10'' \times 27''$ cast iron wings.

The fence rides on the front and back of the saw, never touching the table, giving operators a smooth transition from one measurement to another. The 4" dust port allows operators to attach a dust collection system to keep their work environment clean, Helshoj says.

The 36" model sells for \$1,295, while the 52" costs \$1,395.

Contact: Laguna Tools. Tel: 800-234-1976. www.lagunatools.com

Biesse America opens West Coast Showroom

Biesse America officially opened its West Coast showroom and service center in Anaheim, Calif., April 25-26.

The event drew 75 attendees for machine demonstrations on a wide range of applications including nested based cabinet manufacturing, machining of plastics and composites and the fabricating and milling of wood panels. In addition, several industry partners were on hand to discuss financing, software, dust collection and vacuum fixturing, according to the company.

The showroom has multiple machines under power and ready for demonstration as well as industry experts on hand to answer questions. For information, contact *marketing@biesse america.com*.

Bunk Bed Company Creates Cash Flow for Small Shops



1800BunkBed is a nationally recognized woodworking business with a 19-year proven track record. It offers a turnkey woodwoorking business, geared toward one-to four-man shops. By using existing equipment and know-how, shop owners are able to create a reliable cash flow and eliminate slow times.

What started as a small backyard operation is now the nation's fastest growing woodworking business and the country's largest producer of custom bunk beds and loft beds.

Joining 1800BunkBed is quite affordable. Pricing is minimal and determined by population (currently averaging just \$285 per/month per territory) and a 1-time setup fee of only \$95.

1800BunkBed

It's Your Business!™

Visit www.1800bunkbed.com/wn for more information.

An A+ member of the Better Business Bureau and the U.S. Chamber of Commerce.



FINISHING

with BOB FLEXNER

Flexner's ironclad Rules for Finishing

If experience has taught him anything, it's that these nine guidelines will get you through the toughest projects

By Bob Flexner

hrough many years of teaching and writing about finishing, I've found myself repeating certain phrases — or what I call rules — over and over. They are rules because they are almost always true. Here are nine of my favorites.

1. There are only three tools used to apply finishes: rag, brush and spray gun. All three are simple to use. Even a spray gun is no more complicated to use than a router.

All stains and finishes can be applied with any of these three tools. The differences are as follows:

A rag is a cheap and efficient tool for applying a stain or finish that you intend to wipe off, but rags don't work well when you're trying to build a film because there's no good way to prevent ridges and troughs.

A brush is the slowest of the three tools for applying stains and finishes, but it is also the least wasteful.

A spray gun is fast and applies the most level film. But spray guns are the most expensive tools and, because of bounce-back and overspray, they are wasteful of finish material and require an exhaust system for the best results.

This short overview of the three tools should make it clear how much finishing differs from woodworking. Woodworking is mostly about mastering a large number of tools whereas finishing is mostly about mastering the use of a large number of products.

2. When sanding wood or finish, choose a sandpaper grit that removes the problem efficiently without creating larger-than-necessary scratches. This means different grits for

different situations.

For example, you might choose 80- or 100-grit to remove washboarding caused by a jointer or planer, but 120- or 150-grit might work best for veneered plywood or MDF because it has already been sanded at the factory.

Likewise, you would choose a coarser grit (say 220) to remove the raised grain from a first coat of water-based finish and a finer grit (say 280 or 320) to smooth lacquer sanding sealer or remove dust nibs.

3. Apply a wet coat of stain and wipe off the excess before it dries. This is the basic instruction for applying all stains. The exception is when you spray the stain and leave it as sprayed.

Stains designed for spraying and leaving are sometimes called no-wipe or spray-to-color stains. They are distinguished from wiping stains by being thinned a great deal so they are easier to control without lap marks and darker areas on complex objects.

The reason some stains color wood darker than others even when all the excess is wiped off is that they contain a higher ratio of colorant (pigment or dye) to liquid (binder and thinner). You can get any stain to color a little darker by leaving it wet on the wood for a few minutes. As the thinner evaporates, the ratio of colorant to liquid increases.

You can also apply a second coat after the first has dried.

4. Dye dissolves, pigment suspends and settles. Dye, therefore, penetrates into the wood everywhere the liquid does. But pigment only lodges in pores and sanding scratches large enough to hold it.

This difference is responsible for the different effects that you get from these two col-

orants. Dye colors wood more evenly and thoroughly than pigment. Pigment highlights grain better. Many commercial stains contain both dye and pigment, together with a binder.

Dye dissolved in a liquid with no binder has the potential to make wood very dark, even black by increasing the dye-to-liquid ratio or by applying several coats. Unlike stains with a binder, dye stains with no binder don't build.

Keep in mind that dye also fades much quicker than pigment.

5. The only thing you can do in finishing that can't be easily fixed is to blotch the wood with a stain. All other problems can be fixed, with the worst case being that you have to strip off the finish and begin again.

To fix blotching, you have to sand, scrape or plane the wood to below where the stain has penetrated or hide the blotching with glaze or paint, both of which radically change the appearance.

6. The first coat of any finish seals the wood; all additional coats are topcoats. Products sold or promoted as sealers don't seal the wood any better than the finish itself. They solve a problem.

Sanding sealers make sanding easier, so they are often used to speed production. Sanding sealers and vinyl sealers provide better holdout. They partially fill the pores, so they are used to produce a more level finish. Shellac acts as a barrier against oil, resin or wax in the wood, which can interfere with the flow out and drying of the finish.

So-called self-sealing finishes are just finishes that are a little easier to sand.

Following this definition of sealing, it should be clear that it doesn't make sense to say you applied two sealer coats. If you apply two coats of sanding sealer, for example, you are actually applying a sealer coat of sanding sealer and a first topcoat of sanding sealer.

- 7. The thinner you make any finishing product, the easier it is to apply and the better it levels. Thinning a product is the solution for the most common application problems brush marks, orange peel and air bubbles drying in the finish. But thinning reduces the film build, which might result in your having to apply an extra coat or two of finish.
- 8. An old finished or painted surface should be clean and dull for successful recoating. If there is grease or dirt on the surface, or if the surface is glossy, a fresh coat of paint or finish might not bond well. But if an old surface is clean and dull, any new paint or finish should bond fairly well.

To clean, wash dirt and sugary spills with soap and water. Wash grease and wax with a

solvent such as mineral spirits or naphtha. Dull glossy surfaces with an abrasive such as steel wool, sandpaper or an abrasive pad.

With many finishes you can accomplish both in one step by washing with household ammonia or tri-sodium phosphate and water. Commercially available degreasers can also work depending on what solvents are included.

9. Pull the trigger and keep the gun moving. This is the basic rule for using a spray gun.

OK, it's really a little more complicated than this. The spray gun should be clean and adjusted optimally for the object you're spraying, you need to overlap strokes on large flat surfaces, etc. But I use this rule especially with beginners to simplify spraying so they aren't afraid to try. The point is that there's not much hand-eye coordination involved.

Bob Flexner is the author of "Understanding Wood Finishing" and "Flexner on Finishing."

Hawaii's Woodshow moved to September

The Hawai'i Forest Industry Association announced Hawaii's Woodshow, Na Lā'au o Hawai'i, is scheduled for Sept. 1-15 at the Honolulu Museum of Art School at Linekona.

The show was previously held in April. "We want to let interested wood artists know of the change in date and encourage them to enter," Heather Simmons, HFIA's executive director, said in a release. "We hope the additional time will allow them to create fabulous pieces for the exhibition."

Hawaii's Woodshow is a juried exhibition. Entries from highly-refined calabashes to stunning furnishings and unique sculptures showcasing the versatility and beauty of Hawai'i woods are submitted in award categories including furniture, woodturning, sculpture and musical instruments. There is a special student division for ages 18 and under. The exhibition typically features 90 or more heirloom-quality works made from Acacia koa, mango, kamani, milo, Norfolk pine, macadamia nut, kiawe and other Hawaii-grown woods.

For information, visit http://woodshow.hawaiiforest.org.

Flakeboard's Wade Gregory named president of AWFS

The Association of Woodworking & Furnishings Suppliers installed its 2013 board of directors at April's Woodworking Industry Conference, led by Wade Gregory of Flakeboard America Ltd. as president.

Archie Thompson of Spectrum Adhesives will serve as vice president; Philip Martin of Hafele as secretary/treasurer, and Dan Hershberger of Stiles Machinery as the 2013 trade show chair. Joan Kemp of CP Adhesives Inc., will stay on the board as immediate past president.

Continuing as board members through 2015 are Kevin Bedell of ABAD Foam; Kevin Corder of Froedge Machine & Supply Co.; Ed Fiantaca of Accurate Technologies; Rob Howell of SCM Group North America; Steve Regele of Blum; Robert Slater of Stiles Machinery, and Gene Valcke of Hanes Industries.

New board members include Don Bigelow of Vero Software Ltd.; Dave Golling of Royal Plywood Co., and Michael Williams of Festool USA.



Nobody makes CNC easier than ShopBot.

We pioneer technology and continue making digital fabrication tools more useable and affordable for every size shop. And we provide a network for you to grow your business, 100kGarages.com, where you can connect and collaborate with customers and designers everywhere.



Learn more about the tools and read testimonials of woodworkers who use them, at ShopBotTools.com Then give us a call. We'll help you choose the right tool for your needs!

We make the tools for making the future.



ShopBotTools.com 888-680-4466



THE CUTTING EDGE

with BOB BARONE

Profits start to add up with an aggregate

Use of aggregates with CNC greatly increases the versatility, capability and value of an already expensive machine

ikipedia states: "An aggregate is a collection of items that are gathered together to form a total quantity." OK, I can work with that, although it's probably not the best description of a tool for our industry. An aggregate or angle head, as the metal working industry calls it, is a device that is attached to the spindle drive of a CNC to allow the user to rout or drill at different angles other than

where the spindle is orientated. They are almost always used in conjunction with a tool change format like HSK, ISO or BT.

The use of aggregates on CNC machining centers greatly increases the versatility, capability and the overall value of an already very expensive machine.

CNC spindles in most all cases are always mounted at a right angle to the machine table so there are two distinct reasons to add aggregates to your machine: to change the direction of the spindle (meaning the way the tool is orientated to the workpiece) and to add a new operation to the machine like mortising, tenoning, sawing or cutting soft materials with a reciprocating knife.

The less you or your employees have to handle a part, the less cost you are building into that part. And less cost equals greater profit. See where I'm going here?

Aggregates and the C axis

Having a C or a fourth axis on a CNC machine is not necessarily a requirement for the use of aggregates. A three-axis machine could make very good use of a four-way, 90-degree aggregate. This would allow the user to machine in X+ and X-, also Y+ and Y-. However, many aggregates are relatively useless without a C axis.

Take, for instance, a molder unit. This is an aggregate that can accept profile ground knives to produce curved mouldings such as elliptical or round window casings. This operation absolutely requires an interpolating C axis, allowing you to drive the aggregate around the curve of the casing. If a machine does not have a C axis, it will need an aggregate anti-rotation ring or a stop block. This is the device that the torque pin of the aggregate fits into, preventing it from spinning around like a Whirling Dervish on caffeine when you start the spindle motor. By the way, this will make a terrible noise and is guaranteed to break something. If you are not sure if you have the anti-rotation device, call your manufacturer and ask.

But getting back to productivity, let's take the example of a standard 15-piece stile and rail door. Every operation — raising the panels, doweling or mortising the joints, sizing the assembled door, mortising the lock recess and routing the hinge pockets — can be complete with aggregates on a CNC. What's required is a horizontal drilling unit for the dowels, a horizontal mortising aggregate for the square holes, a sawing unit for cutting the rails and stiles to length, a 90-degree aggregate for cutting the tenons and a lock recess aggregate for both the deep lock cut and the hinge pockets.

Look, it's simple. Anytime you don't have to push parts around the shop from one machine to another, that's money in your pocket. You get paid when your product is complete and ships. Shop efficiencies from start to finish will increase your profit. There's that profit word again. It's not optional.

If you are using your CNC for nested-base cabinet parts, you have probably not read anything so far to justify the use of an aggregate. But have you ever heard of a floating aggregate? This is a device that, regardless of how your panel might vary in thickness, will always maintain an exact depth of cut on the part. It can be used for precision dovetail-



ing or grooving a tabletop edge to accept a solid wood profile with a tongue. How about compound miter cutting with relation to the panel thickness? You can do that, too, with an adjustable-angle sawing aggregate.

A belt-sanding aggregate can sand a door or tabletop edge and an orbital sander aggregate can sand or polish horizontal surfaces, all without moving the part from the CNC machine. There's also an aggregate for holding small parts on a vacuum table. Do you see a pattern here?

Heat and aggregate life

Every so often I get asked, "How long can I expect my aggregate to last?" That's like walking into the auto dealer and asking him, "How long will my new car last?" Well, it all depends on how you drive it. There are two things that will ruin your nice new aggregate — heat and operator error. If you crash it, we can't help that. However, heat, you can control.

Most lubrication will cook off at more than 185 F, causing the unit to ultimately fail. Heat is a result of excess torque on the gear set, often caused by excessive feed speed, too much chip load or insufficient rpms. Almost all aggregates have a temperature strip on the side of the body and it is up to the operator to monitor the unit and make sure it does not overheat. Always partner with a reputable tool supplier that will help you find the optimum tool for your specific application. They can advise you of the proper feed speeds and chip loads to help your aggregate run within its designed loads.

Aluminum is used by most aggregate manufacturers because it dissipates heat very well. A few years back, some manufacturers made small aggregates to fit the onslaught of entrylevel 4' x 8' CNC machines. These routers typically had a limited Z axis and could not accommodate a standard-sized, duty-cycle aggregate. Some of these aggregates were designed with a 30 percent duty cycle, which means you could run it for three minutes and then had to let it rest for seven minutes. You need to be aware of this when you are considering an aggregate purchase. Some manufacturers have multiple duty cycles offered at different price points. Ask if you are not sure.

The amount of aggregate types available is directly related to the amount of different applications possible. If you don't see a particular solution in one of the catalogs, ask your sales rep or contact the aggregate manufacturer directly. There is a good chance a solution already exists. W

Bob Barone is sales director at Benz Inc., a manufacturer of aggregates. He can be reached at bob. barone@benz-inc.com

AWI offers July membership special

The Architectural Woodwork Institute will be offering 18 months of membership for the price of 12 from July 1-31 for new company memberships. Company memberships include both manufacturing and supplier memberships.

AWI offers a wide array of membership benefits specific to each membership type. Manufacturing memberships include the Architectural Woodwork Standards, Design Solutions Magazine, newsletters, Cost of Doing Business Survey Report and Compensation Study, eCost Book, company listing on AWI's website, use of the AWI logo, networking opportunities and much more.

Supplier memberships include the Architectural Woodwork Standards, Design Solutions Magazine, newsletters, company listing on AWI's website, use of the AWI logo, networking opportunities, access to electronic manufacturer member list and much more.

To take advantage of the membership special, companies can apply in person at the AWFS fair in Las Vegas (July 24-27) or submit an application through www. awinet.org/join.





scan code for more table kit info





866.963.5578 **Solution** www.osborneparts.com

Come visit us AWFS Booth 4809 July 24 - 27



WOODMARKETS



Bright future for walnut's darker hue

One dealer reports sales are up about 25 percent from last year because of recent production trends

By Jennifer Hicks

ainly because of design and style trends in furniture, cabinetry and flooring, walnut sales are currently on the rise, according to suppliers interviewed by Woodshop News. Not only is the darker hue of this species attractive to consumers, but wide slabs featuring live edges are popular as well.

Alan Zablonski of Berkshire Products in Sheffield, Mass., says sales of walnut are up about 25 percent compared to this time last year.

"Walnut seems to be coming back into fashion over the last couple of years. It seems to be a trend that people are going with the darker woods. A lot of what we do is the wide natural-edge slabs and that's also where a lot of the walnut is being used. So that type of product requires one large slab. We also sell novel walnut, but our basic business is wide 3- to 5-foot slabs," says Zablonski.

American black walnut (*Juglans nigra*) is a dark-hued species found in the eastern and central parts of the U.S. Claro walnut, found in the western U.S., is the same family, but typically has a little more color and figure.

Doug Grove, owner of Groff and Groff Lumber in Quarryville, Pa., also says walnut sales have been strong, especially in the wider and

For more information on wood properties and species information, visit the U.S. Forest Service Forest Products Laboratory's Web site: www2.fpl.fs.fed.us.



thicker stock selections.

"We see this demand mostly in countertops and tabletops. It runs in trends. I wouldn't say sales have increased because we're having trouble keeping up with supply. It's rare, so now that sales have picked up, we just can't keep up," says Grove.

"It works well, works easy. It's dimensionally stable. You do have to work around defects like sap and knots, but other than that it's pretty nice. We are starting to move a bit of figured maple, too. I think lighter color woods are starting to come back in demand. Everyone is getting used to seeing walnut all of the time so now somebody wants something different they're going to go with a lighter colored wood. Just like 10 years ago, everybody wanted cherry. Now everybody wants walnut. It just goes to trends."

Art Blumenkron, president of Goby Walnut Products in Portland, Ore., says walnut sales have been popular with projects across the board. He agrees there has been a great resurgence in live-edge furniture and that his company supplies a lot of walnut slabs for that purpose.

"Sales are up quite a bit this year from last. I think there are a lot of projects going on that I'm seeing out there in the market, higher-end architectural projects, typically. They want the walnut for the dark color and we've recently been selling a lot of large walnut slabs for conference tables and dining tables and also a lot of thick material for stair treads. Also we've been seeing a lot of pickup in walnut flooring. They like the figure and we always specialize in walnut with the live edge," says Blumenkron.

Retail prices for 4/4 FAS walnut average about \$5.50/bf. Wide slabs go for up to \$50/bf. $\overline{\mathbf{W}}$

Companies collaborate on pre-finished millwork packages

Woodgrain Millwork Inc. and PureColor have co-developed, ready-to-install prefinished interior door and trim packages to give builders and remodelers the choice of a custom stained appearance and the benefits of PureColor's green finishing system.

Buying prefinished reduces costs and shortens project times by eliminating the need for applying coatings in the field. "Offering the appeal of stained wood without the hassle of finishing onsite, at less than the cost of painting, just makes too much sense. Plus it fits with a long-term trend of delivering products to the jobsite prepared for installation," Chris Traylor, Pure-Color's CEO, said in a release.

PureColor stains are all zero VOC, creating an opportunity for builders to meet the growing demand for greener building materials and healthier indoor air environments, according to the company.

"Pre-stained interior door and trim packages help builders deliver the features of upscale homes at an affordable price point for homeowners looking for a custom look. We are happy to be the first company to offer this choice on a national scale," added Woodgrain Millwork's general manager Kim Allen. "The packages are similar to the high-end finished wood seen in custom homes."

The interior door and trim packages will be available through Woodgrain's nationwide distribution network.

Buy a better pod for less Get a grip on your wood! Since 2004, we have been a reliable source for quality replacement pods for most major CNC routers including flat and grid tables. Check out our extensive line of valves, gasket and toolholders. Manufactured only in the USA We also make custom pods! See us at AWFS **booth 8632** 11 11 13 31 Highest Quality and Lowest prices in the industry! Buy a Better Pod for Less ... 877.790.PODS (7637)

www.vacuumpods.com



PRO SHOP

with DAVID GETTS

Selling your work involves a subtle touch

Too much talking, poor hygiene and pushiness can cause an otherwise willing customer to turn and walk away

e have all experienced a classroom setting with an instructor that does not know when to shut up. Although most speakers are well-intentioned, without a sense of audience reception information can be quickly lost. Classes or seminars often start out exciting because you're not exactly sure what lies ahead. However, as the information starts to swell, if you have not been entertained you'll quickly lose interest. Even when it's a topic vou're captivated by, too much information can be stifling. And when that information being shared comes from the craftsperson selling their work, turning off the listener hurts the bottom line.

Teaching the client

Like it or not, every craftsperson or artist who sells their talent has to be a salesperson. It's part of the process, regardless of how loathsome it might be. Most craftspeople I know prefer doing the work, not selling it. But since you cannot sustain yourself without selling what you do, you better learn how to do it. Selling is merely a teaching opportunity that exercises the sweet spot of talking about what you do. And learning how to wield this weapon of presentation is crucial to the success of what you're promoting.

Every time you meet with a potential client, you'll be teaching them something. It could be technical information or simply your interpretation of clothing fashion based on what is worn to the interview. Teaching goes much further than simply the words that come out of your mouth. It includes body language/appearance and perception/analysis of the situation. Teaching is a true art. It's not just being prepared in what you say, but how you say it.

Technical droning

Although this is probably the most impor-

tant thing in a presentation, it can also be the most boring. People want to learn and they can only learn with good information. However, too much of a good thing instantly becomes not-so-good. I can't overemphasize the importance of thorough preparation. If you're stumbling and bumbling through the placement of information on your client's plate, you'll lose the deal every time. People that are ready to spend their hard-earned money want to work with someone they perceive to be competent. If you don't know how to convey information or just simply don't know what you're talking about, they'll snub the notion of eating at your table and find someone who prepares a better meal.

We live in a gluttonous society. Supersize this, jumbo-size that and give me a Venti Coffee to caffeine-up my system for the day. More is not always more. Proper use of drugs can heal, but too much intake can cause addiction or death. Information is much the same. Less is more. People can only take in so much technical babble before they shut down. I don't care how intelligent someone is, the brain can only take in so much information before it gets distracted and chooses to move on to something more entertaining. Presentations need to be informative and concise. And, by all means, talk about things other than work. You don't have to become everybody's best friend, but you've got to demonstrate you are human, not just a working, money-making drone. People like to work with people, not a disconnected salesperson lost in their own make-believe world that what they're saying is more important than life itself.

The visual language

When talking about your craft, the potential client takes in much more than your vast knowledge on the subject you're presenting to them. They will remember how you greeted

them at the door, how hard you shook their hand, what you smelled like, if your glasses were dirty, if you had a beard, if you ignored their dog and so forth. People study other people and constantly draw comparisons. It really doesn't matter if those comparisons are accurate or not, they will still be drawn.

For instance, if someone had a bearded father who mistreated them, your beard might put you at a disadvantage right from the get-go. It's not fair, makes no sense, but it happens. It's impossible to prepare for every contingency and therefore you shouldn't even try. The most important thing is to stay true to yourself. You can dress up for a meeting to elevate your appearance or simply wear what you work in. That in itself is really not the issue. The issue is to not contradict your personality. Let me give you another example. When I was in my early 20s, I had the opportunity to meet with several businessmen from other professions in order to elevate my game. Acting on my impulse of creating a major game-changer, I put on the only good clothes I had: a three-piece suit worn only once to my dad's wedding. I climbed into my 1953 Chevy pickup that was adorned with wooden sideboards advertising my small company. When I arrived at the white-collar meeting, I not only noticed how overdressed I was, but how ridiculous it was to represent myself in attire worn only to formal occasions, thus misrepresenting who I really was. If you've seen the movie "Step Brothers," you'll understand how important it is not to wear a tux to a job interview.

What I'd really like you to remember about visual language is to never underestimate its power. It's a proven fact most people remember what they see more than what they hear. Photographs and videos are powerful mediums for presenting information. Like the saying, "A picture is worth a thousand words," your visual presence will be taken under review. Again I need to stress I'm not simply talking about personal hygiene or dress. Body language like poor eye contact or disinterested posture, speaks volumes of information. And once a client makes a judgment based on what they see, you'll have a hard time bringing them back to your side with flowery words.

Perception with eyes wide open

I like saving the best for last. There is something sweet about putting your nose to the grindstone first and then rewarding yourself with a perk. Now that we've discussed the sweaty details of presentation, it's time to discuss the reflection of your labor. Talking with people about something

they do or do not want is an art. Fortunately, most of us selling our wares are dealing with potential clients who initiated contact and want our services. The Arts and Crafts world rarely deals in hard selling and cold calls. We're in a good place; people want what we do. Therefore, we start out with a captive audience. It's not exactly like preaching to the choir because you're often dealing with competing shops, but the people needing your services have already unlocked the vault to drop money on the project. Therefore, review these facts in your head every time you meet with a potential client:

Remember, they need what you provide: Even if they tell you, "I'd do it myself, but blah, blah, blah," you wouldn't be standing there if they did not need you.

Keep your eyes wide open: Don't fall in the trap of thinking you alone are being interviewed. Of equal importance is the necessity of you interviewing the client. Observe what they say, what their body language is, how they present themselves and what they perceive of your craft and talent. This is a two-way street. Like I said before, people want to work with people, not drones. Don't you want to work with people who respect your gifts rather than those that try to take advantage of those "underneath" them?

Keep your ears open: One of the best things you can do in any form of conversation or communication is to listen. It doesn't do you any good if you do all the talking. How will you ever figure out what someone wants when you're constantly flapping your gums? Remember, God gave you two ears and only one mouth. Pay attention to the obvious and start using your senses appropriately.

Reflecting on the hundreds of people I've talked to in the years of supporting myself through the craft of woodworking, I can honestly say it feels as though I know less than when I started out. This is because I've learned that negotiating a sale is not selfish. When I was I young, my ambitious energy convinced me I could achieve what I wanted if I tried hard enough. "Book it and they'll come" was the mantra I worked by. What I didn't realize is that you can't make people do what you want them to. And why should we? It's not our place to decide for someone else what's best for them. Instead, the goal in presenting our craft to the marketplace should be educating the consumer on our merits and utilizing enough confidence along with the right kind of arrogance to construct their dreams. And hone the art of listening. If you truly know how to "hear" what is being conveyed, you'll reduce con-

Hardware show reports attendance increase

Attendance at the 2013 National Hardware Show in Las Vegas was up more than 16 percent compared to a year ago, according to the producer.

"The National Hardware Show was a great success this year," Sonya Ruff Jarvis, the show's vice president of attendee programs, said in a release. "It was bigger and better than ever. Strong attendance really shows the home improvement industry is coming back, and we've gotten some great feedback from both attendees and exhibitors who were very happy with the show."

The show is shaping up to be even bigger next year, with a renewal rate of 25,000-plus square feet more than last year, according to the producer.

For information, visit www.nationalhard wareshow.com.

flict, avoid those who are a poor fit and create better well-received work. $\ensuremath{\mathbf{W}}$

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



FESTOOLS-ONLINE.COM



PURVEYORS OF FINE MACHINERY®, SINCE 1983! OVER A MILLION SQUARE FEET PACKED TO THE RAFTERS WITH MACHINERY & TOOLS

- 2 OVERSEAS QUALITY CONTROL OFFICES STAFFED WITH QUALIFIED GRIZZLY ENGINEERS
- HUGE PARTS FACILITY WITH OVER 1 MILLION PARTS IN STOCK AT ALL TIMES
- 24 HOUR ORDERING BY PHONE OR ONLINE MOST ORDERS SHIP THE SAME DAY

10" HYBRID TABLE SAW with Rivina Knife Motor: 2 HP, 110V/220V, single-phase BEAUTIFUL WHITE COLOR! Precision-ground cast iron table with wings measures: 27" x 40" Arbor speed: 3850 RPM Capacity: 31/8" @ 90°, 23/16" @ 45° Rip capacity: 30" R, 12" L Quick change riving knife Approx. shipping weight: 404 lbs.



Motor: 2 HP, 110V/220V, single-phase, TEFC

Precision-ground cast iron table size: 17" sq.



Cutting capacity/throat: 161/4"

Max. cutting height: 121/8"

Blade size: 131½" L (1/8"-1" W)

Blade speeds: 1700 & 3500 FPM

Quick release blade tension lever

Approx. shipping weight: 342 lbs.

BEAUTIFUL WHITE COLOR!

INCLUDES DELUXE EXTRUDED ALUMINUM FENCE,

G0513P ONLY \$89500

ALSO AVAILABLE IN GRIZZLY GREEN G0513 HEAVY-DUTY 17" BANDSAW

\$895⁶⁰ SALE \$875⁰⁰





INCLUDES BOTH REGULAR & DADO BLADE INSERTS

10" LEFT-TILTING CONTRACTOR-STYLE TABLE SAW with Riving Knife

- Motor: 1½ HP, 110V/220V, single-phase
- · Precision-ground cast iron table with wings

• Table size: 251/4" x 40" • Arbor: 5/8"

 Arbor speed: 4000 RPM Capacity: 31/8" @ 90°, 21/4" @ 45°

Arbor: 5%"

Cast iron trunnions

· Rip capacity: 30" R. 12" L

Approx. shipping weight: 221 lbs. FREE 10"

CARBIDE-TIPPED BLADE MADE IN ISO 9001 FACTORY!

G0732 \$79500 SALE \$69500 = \$99 T



MADE IN TAIWAN





10" LEFT-TILTING TABLE SAWS with Riving Knife & Cast Iron Router Table

Motor: 3 HP or 5 HP, 240V, single-phase

Precision-ground cast iron table size with wings: 27" x 48"

G1023RLWX 5 HP ONLY \$139500



MADE IN TAIWAN

with Riving Knife & Extension Rails Motor: 3 HP. 220V. single-phase Precision-ground cast iron table

10" CABINET TABLE SAW

- Table size with extension: 27" x 743/4"
- Arbor: 58" Arbor speed: 4300 RPM
- Max. depth of cut: 31/8" @ 90°. 23/16" @ 45°
- Max. rip capacity: 50" Max. dado width: 13/16"
- Approx. shipping weight: 572 lbs.



EXTREME SERIES BANDSAWS

Motor: 3 HP, 220V,

single-phase, TEFC

Table tilt: 45° R, 5° L

Precision-ground cast

Max. cutting height: 12"

· Cutting capacity/throat: 181/4"

Blade size: 143" L (1/8"-11/4" W)

Approx. shipping weight:

Blade speeds: 1700 & 3500 FPM

iron table size: 263/4" x 19" (G0514X ONLY)

\$1425⁰⁰ SALE \$1375⁰⁰

14" EXTREME SERIES BANDSAW



- Motor: 1½ HP, 110V/220V, single-phase, TEFC, 1725 RPM
- Amps: 15/7.5
- Precision-ground cast iron table size: 201/2" x 14" x 11/2"
- Floor to table height: 44"
- Table tilt: 15° L, 45° R
- Cutting capacity/throat: 13½"
- · Max. cutting height: 6"
- Blade size: 92½"–93½" L (½"–¾" W) · Approx. shipping weight: 262 lbs.

MADE IN ISO 9001 FACTORY!





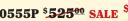
G0555X \$82500 SALE \$79500 =



ULTIMATE 14" BANDSAW

- Motor: 1 HP, 110V/220V, single-phase, TEFC
- Precision-ground cast iron table size: 14" sq.
- Table tilt: 45° R. 15° L
- Cutting capacity/throat: 13½"
- Max. cutting height: 6"
- Blade size: 92½"–93½" L (1/8"-3/4" W)
- Blade speeds: 1500 & 3200 FPM
- Approx. shipping weight: 196 lbs.









G0555P \$52500 SALE \$49500

460 lbs.

DELUXE RE-SAW FENCE

G0514X \$149500 ONLY \$139500

ALSO AVAILABLE G0514XF w/ FOOT BRAKE ONLY \$139500







TECHNICAL SERVICE: 570-546-9663 FAX: 800-438-5901

3 GREAT SHOWROOMS! BELLINGHAM, WA • MUNCY, PA • SPRINGFIELD, MO

Junner Sale

Starts April 1st - Ends September 21st PLEASE GO TO GRIZZLY.COM® TO SEE ALL SALE PRICES



FREE CATALOG

764 PAGES OF HIGH QUALITY TOOLS AND **MACHINERY AT INCREDIBLE PRICES**

12" JOINTER/PLANER **COMBINATION MACHINES**

- Motor: 5 HP, 220V, single-phase
- Jointer table size: 14" x 59½"
- · Cutterhead dia.: 31/8"
- · Cutterhead speed: 5034 RPM
- Max. jointer depth of cut: 1/8"
- Max. width of cut: 12"
- · Planer feed rate: 22 FPM
- Max. planer depth of cut: 1/8"
- . Max. planer cutting height: 8"
- Planer table size: 12½" x 23½" · Approx. shipping weight: 734 lbs.

G0634XP ONLY \$2

ALSO AVAILABLE IN GRIZZLY GREEN G0633 JOINTER/PLANER ONLY \$199500 G0634Z SPIRAL CUTTERHEAD MODEL ONLY \$259500



CYCLONE DUST COLLECTOR

- Motor: 11/2 HP, 110V/220V, single-phase, TEFC, 3450 RPM
- Air suction capacity: 775 CFM
- Static pressure at rated CFM: 1.08"
- Intake port: 6" with included 5" optional port
- Impeller: 131/2"
- Height: 651/2"
- Built-in remote control switch
- Approx. shipping weight: 210 lbs.

BEAUTIFUL WHITE COLOR!

MADE IN TAIWAN



PLEATED FILTER IS PROTECTED BY A STEEL CAGE

FULLY MOBILE WITH BUILT-IN **CASTERS**



G0703P ONLY \$795⁰⁰

8" JOINTERS [· Motor: 3 HP, 220V, single-phase, TEFC

- Precision-ground cast iron table size: 9" x 72½"
- . Max. depth of cut: 1/8" Max. rabbeting depth: ½"
- · Cutterhead dia.: 3"
- Cutterhead speed: 4800 RPM
- Cuts per minute: 20,000 (G0656P), 21,400 (G0656PX
- Approx. shipping 500 lbs.

CHOOSE EITHER 4 HSS KNIVES OR SPIRAL CUTTERHEAD MODEL

4 KNIFE CUTTERHEAD G0656P ONLY

SPIRAL CUTTERHEAD

G0656PX ONLY \$122500



Cutterhead speed: 4950 RPM

Max. depth of cut: 1/8"

weight: 832 lbs. MADE IN

PARALLELOGRAM TABLE

G0706 ONLY \$249500

15" DISC SANDER with Stand

Motor: 11/2 HP, 220V, single-phase, 1720 RPM

Cast iron sanding disc size: 15"

Cast iron table size: 12" x 20"

Table tilt: +15° to -45°

Floor to table height: 37"

Dust port: 21/21

Approx. shipping weight: 232 lbs.

> **FEATURES BUILT-IN MOTOR BRAKE & STORAGE CABINET** WITH SHELF



MADE IN TAIWAN

INCLUDES MITER GAUG



3 HP DUST COLLECTOR

- Motor: 3 HP, 240V, single-phase, 12A
- Blower/impeller: 12¾ balanced cast aluminum
- · Airflow capacity: 2320 CFM
- Max. static pressure: 16.9"
- Sound rating: 87dB
- 7" inlet has removable "Y" fitting with three 4" inlets
- Canister filter size (dia. x depth): 195/8" x 235/8" (2)
- Bag capacity: 11.4 cubic feet
- Overall dimensions: 57%" long x 32" wide x 71" high
- Approx. shipping weight: 232 lbs.
- CSA certified



G0562ZP \$67500 SALE \$62500



\$150 T

















CARBIDE INSERT SPIRAL



Motor: 3 HP, 220V, single-phase Precision-ground cast iron table size:

15" PLANERS

- Min. stock thickness: 3/16
- . Min. stock length: 8"
- Max. cutting depth: 1/8"
- Feed rate: 16 & 30 FPM
- Cutterhead speed: 4800 RPM

15" x 20"

Approx. shipping weight: 660 lbs.



G0453P

\$109500 SALE \$105000

WITH SPIRAL CUTTERHEAD

G0453PX ONLY \$169500



18" OPEN END DRUM SANDER

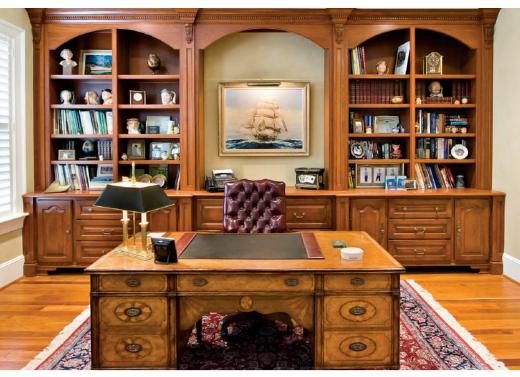
- Sanding motor: 11/2 HP, 110V, single-phase, 15A
- Drum surface speed: 4000 FPM · Convevor feed rate:
- Variable, 2-12 FPM Max. stock dimensions: 36" W x 41/2" H
- . Min. board length: 6"
- Min. board thickness: 1/8" Sanding drum size: 4" • 21/2" dust collection port
- Overall size: 35" W x 50" H x 24" D Approx. shipping





OVER 15,000 PRODUCTS ONLINE!









Charleston CHARM

Father-and-son duo have built a custom cabinetry niche in South Carolina that has weathered tough economic conditions

By Jennifer Hicks

ostetler Custom Cabinetry is a small business in Charleston, S.C., that has been serving the needs of homeowners for more than 30 years.

The family-owned shop is run by Dale Hostetler and his youngest son Chris. The two have opposite personalities. Essentially, the father is the brakes and the son is the gas of the operation. These traits complement one another by keeping business spending under control while assuring reasonable growth to keep up with today's competitive economy.

Specializing in high-end residential cabinetry, the two work with the region's top architects, designers and builders and pride themselves on their ability to execute the challenging projects. Given today's economic climate, they are trying to remain diversified while continuing to offer the highest quality product possible.

"I would say that for a long time we were one of the best quality shops around, but now there are more quality shops in the area. We've adapted to that by trying to show clients we have things like modern machinery, new glazes for finishing and that we will create whatever they want us to," Dale says.

continued on next page



Dale moved to Charleston from Iowa in 1979 while working for

Habitat for Humanity. He was also installing for local cabinet compa-

nies and, as those businesses grew, he started building cabinets on job sites. After two years, he decided to stay in the area and start his own

"At that time I was working out of the back of my truck and eventu-

ally had to find a shop to put stuff in. I was doing interior trim and

cabinetry for builders, but the builders didn't want to give me that much time in the house, so I dropped interior trim and then went to

He rented a small garage-sized building until he purchased his cur-

and continued to do so steadily until the economy went south in 2008.

Dale says his son's college education has been an asset to the com-

responsibilities include designing, operating the CNC router and gen-

main builders went out of business and he was providing about 75 percent of our work at that point. But just prior to that we had installed

our CNC. When Chris came on board, he helped with the CNC router

and that has helped us win jobs and be more competitive."

on business management with an emphasis on entrepreneurship.

Growing the business

business.

strictly cabinets."

erating sales leads.

rent 9,000-sq.-ft. shop in 1997. Business grew mostly by word of mouth In 2007, Chris, who's been working with wood since he was 10, signed on. He's a college graduate of Clemson University, where he focused pany as sales have improved and the business is more competitive. His "We were hit pretty hard by the crash in the economy. One of our ain builders went out of business and he was providing about 75 Aside from the Omnitech Eco CNC router, other machinery includes a Holz-Her 1405 edgebander; SCMI Uno 36" wide belt sander, shaper,

Scan Here

Dale & Chris Hostetler

Owners of: Hostetler **Custom Cabinetry**

Location: Charleston, S.C.

Number of employees: Five

Size of facility: 9,000 sq. ft.

About: Designs, manufactures, finishes and installs work in high-end residential

homes located in South Carolina's coastal areas.

Quotable: "Treat people fairly and give yourself an opportunity to succeed. Follow through with what you tell them. Give them a goal, such as a quote by Wednesday, and make sure you follow through with what you say."





Can Your Old Dust Collector Work Better Than A New One? We Design & Fabricate Custom Filter Bags That REALLY WORK! JULY 24-27, 2013 LAS VEGAS CONVENTION CENTER www.awfsfair.org Yes, With Optimized Filters From... **Optimum Performance** Low Maintenance Custom Designs · Cleaner Air · Longer Life Economical · Best Size & Fit Proudly Made In USA Baghouses & more -Micron Filtration

American Fabric Filter Co

(800) 367-3591 americanfabricfilter.com

Bainbridge Manufacturing, Inc. Plastic Hardware for Cabinets, Closets and Furniture Cabinet Master Plastic Hardware AT BAINBRIDGE, WE MAKE **PLASTIC HARDWARE! ROUND AND SOUARE VENT GRILLS** Over 500 items • Order Online at www.Bainbridgemfg.com or call 800-255-4702 actual people answer our phones. Delivering Excellent Customer Service Since 1960 237 W. 3rd Street • P.O. Box 487 • Waterville, WA 98858 (509) 745-9555 • 1-800-255-4702 • Fax (509) 745-9666





line-boring machine, planer and jointer; Altendorf sliding table saw with Tigerstop fences; Hoffman face-frame notching machine with dovetailing inserts; 10" Powermatic table saw; and Oakley edge sander.

High-end preferences

The company has done commercial work in the past, but is currently focusing on high-end residential work as its primary niche.

The Charleston area is a good market for that kind of work and the Hostetlers are noticing an uptick in construction activity, particularly on the private islands that dot the coastline.

"Most of the time we try to market directly to architects, builders and designers and we're looking for repeat work with them," says Chris. "But a couple of summers ago, we got involved with a house on Hilton continued on next page





HOSTETLER CUSTOM CABINETRY from previous page

Head and started working directly with the homeowners.

"Our goal is to offer whole home packages in the future. We don't often do interior trim unless it's like a mahogany-paneled office because it's more cost effective to hire outside. So we do little millwork, but we do kitchens, baths, bars and basically anything else made out of wood."

The market favors traditional design and the shop goes through quite a bit of cherry, maple and walnut.

"We don't do anything super modern. If anything, its transitional work that's still elegant looking. We do lots of distressing and lots of antique finishing. We're seeing lots of whites and gray finishes right now. There's no real style. We have a really broad range of offerings. Show us a picture of anything you like and we can do it," Chris says.

Meeting goals

The company backlog is about six months for a bigger project and about eight weeks for a small remodel.

"Right now, we're busier than we've been in a long time. When you work on these big projects there's a tendency for a drop off, but we've been lucky. A lot of the homes we work in are around 6,000 to 10,000 sq. ft. and some can take two-years to complete," Chris says.

He says that if company were to grow, he'd like to have as many as 10 employees.

"We have had up to seven in the past, before the recession. And although we don't count the CNC as one, it really is like a person-and-a-half out there. Where we are right now is I've taken a lot of the shop management responsibilities off my dad's shoulders and on a day-to-day basis have been selling and meeting with clients. So I'm trying to learn how to manage all that if I'm going to grow this business so I







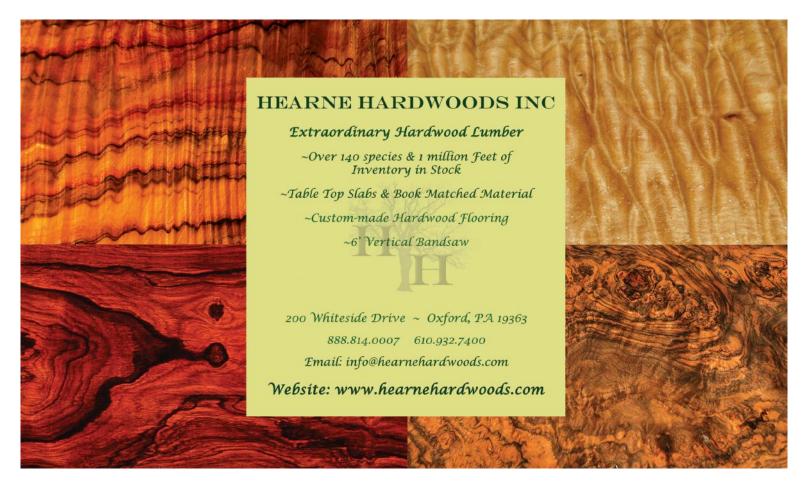


don't overwork myself. I'm putting all of the puzzle pieces together."

In the future, the two plan to put more effort into planning their high-end custom projects, the biggest challenge being in multimilliondollar homes with complex architecture.

"You have to comb all the details of any room to make sure we integrate our cabinetry right with all of the appliance and fixtures," Dale says. "It requires a lot of careful engineering, making sure everything is

Contact: Hostetler Custom Cabinetry, 445 Fleming Road, Charleston, SC 29412. Tel: 843-795-0946. www.hostetlercustom.com



PERFECT STRANGERS





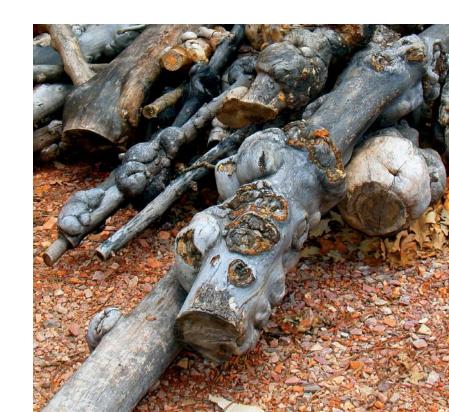
Two artists who live just miles from each other in South Dakota and Wyoming found out they have much more in common than locales

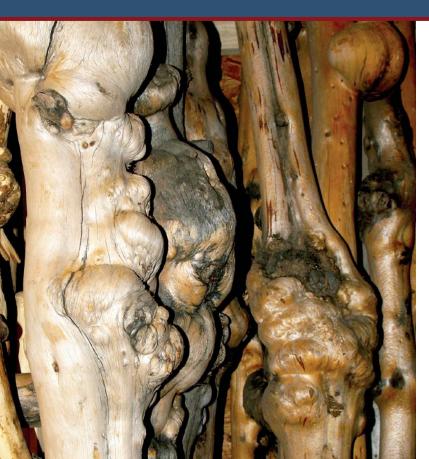
By John English

ind your niche.

That's the mantra to which every business aspires. And a couple of woodworkers out West seem to have done just that. Bill Pridgeon and Denny Zimmerman only met each other in April, but they have been doing remarkably similar work on opposite sides of a state line for about seven years. That's when Pridgeon retired from Wyoming's oil fields to a secluded cabin in the gentle valleys west of South Dakota's ancient Black Hills. He's just a mile or two from the state line, which allows him to enjoy low Wyoming property taxes. The Black Hills here are mere drumlins, laced with tiny streams that funnel snowmelt to the Missouri. The sometimes-harsh climate — high winds and intermittent drought — has produced an abundance of burls in the ash, walnut, cottonwood and scrub oak that cling to the valley floors and the pine trees that scale the surrounding hillsides.

About 10 miles east of Pridgeon's cabin, there's a high plain located just across the state line that offers views for 50 miles in every direction. Here, Zimmerman, a retired mining execu-





PERFECT STRANGERS from previous page

tive, occasionally shatters the silence of his subdivision with the roar of a chainsaw. Zimmerman took up woodworking about the time that Pridgeon started harvesting burls. Soon after retiring, Zimmerman enrolled in one-on-one furniture-building classes and eventually tried his hand at turning, too. But he has a passion for the outdoors and, on frequent fishing trips throughout the Hills he began to notice the preponderance of burls. What was most interesting was that they were not confined to one altitude, one area or even one species. Out on the plains just north of the Black Hills, the riverbeds are lined with white oak and cottonwood, some of which produce burls the size of beer kegs. He began to wonder how he could carve them into bowls.

The harvest

As a lifelong resident of this sparsely populated area, Zimmerman knows just about every landowner for miles around, so he asked their permission to harvest burls from standing dead trees. He won't take a chainsaw to a living one, even though foresters have assured him that the trauma won't kill the tree. There's simply no need: he can harvest all he wants without going down that road.

Back home in his one-stall garage workshop, he begins the process of hollowing. Much of the work actually takes place outside, weather permitting. He uses a combination of tools. It begins with a chainsaw, which he uses to remove as much of the waste as possible. He then switches to an old-fashioned hammer and a set of very sharp wood chisels to remove excess material between the scored kerfs that were left by the saw. From there, he switches to a side grinder equipped with one of several grits of Holey Galahad 4" carving disks (available through <code>www.kvwoodcarvingsupplies.com</code>). Designed for fast removal,

they have several windows cut into them, so a woodworker doesn't have to stop and lift the grinder and check progress: it's always visible.

The final step is a seemingly endless regimen of sanding. Given the grain directions inside a burl, there's no simple way to attack scratches. It's a matter of slapping one grit after another on the orbital sander, working all the way down from 40 to 400. There are no short cuts.

The finish on the bowls is an oil-based polyurethane laid down in numerous thin coats. These large, porous vessels will never be used for cereal or salad. Their primary function is as art — a melding of natural form and the restrictive organization that men can force upon it. They are sometimes put to work holding large volumes of fruit or used for knitting or to hold TV remotes. But, for the most part, they are set upon a pedestal, well lit and admired for their tamed ferocity. Most retail in a range from roughly \$150 to about \$400.

Creative uses

Ten miles west of Zimmerman's shop, Pridgeon has been building a lot of pine burl beds lately. His acreage is densely wooded and he, too, is an avid outdoorsman. Fishing and hunting trips are only somewhat dedicated to filling the freezer: one eye is always on the surrounding flora, locating burls that he can come back to later and haul to the shop. Most of Pridgeon's burls are pine, although he oc-



casionally finds some interesting juniper. There are more than 50 species of this member of the cypress family and many of them are native to the American West. They tend to grow low and lean, often in places where wind eliminates their competition. The wood is similar to a highly figured version of aromatic red cedar. Pridgeon often uses this colorful, knotty wood as milled boards to complement the graceful drama of pine burls. He will incorporate it, for example, as shelves supported by burled log legs.

Webster defines a burl as "a hard, woody, often flattened hemispherical outgrowth on a tree." There are various schools of thought on what causes them, but there is general agreement that they are abnormal growth. Possible causes include insect- or weather-related damage, fungi, genetics and the chemical composition of the soil. Burls are one result of the tree repairing itself after suffering some kind of trauma, which in many cases can be physical (such as storm damage). Quite often, the biggest burls are underground and these are sometimes visible where the root system meets the trunk.

Pridgeon makes a lot of burl beds. He's branching into other types of furniture (pun intended) and he has also produced a lot of railings, shelves and lamps. But he's mostly known for beds that retail in the continued on next page







Stainless Steel Wetted Parts

PERFORMANCE

Brilliant performance backed by exceptional customer service and technical expertise.

ATOMIZATION

Patented "LV Technology" split tip nozzles create unmatched transfer efficiency and material savings.

COMMITMENT

Tireless dedication and enduring commitment to your ideas finished to perfection.

www.ANESTIWATA.com







PERFECT STRANGERS from previous page

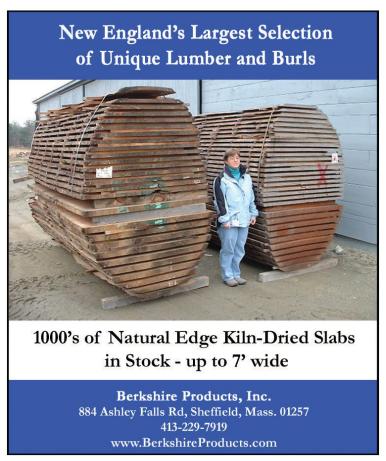
\$3,500 range. Half the process takes place before the wood ever enters his shop. Finding, harvesting, transporting, sawing and stripping the logs that host the burls all takes place outdoors. While Zimmerman works only with the actual burl, Pridgeon's forte is creating art by using the burl along with its host (a log or limb) to create work that combines several pieces of wood. Much of his joinery is standard round mortise and tenon, the type used in most log furniture. But he also uses screws and then hides their heads with colored putty that he shades to match. He then works the putty with the sharp point of a nail or an awl to create blended and virtually invisible texture. Among their folds and crevices, burls offer myriad places to naturally hide screw heads without the need for putty.

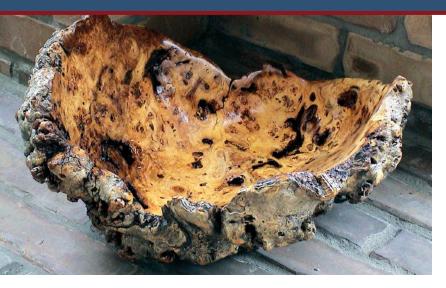


Here, there and everywhere

Walking up to Pridgeon's cabin is an interesting experience. The entire front façade is draped in decking and the stair rails and newel posts are all fashioned from burled logs and limbs. A couple of welcoming carriage lamps at the base of the stairs are supported by a log post that's capped by a burl. A huge burl anchors a post to the right of the door, while a host of smaller ones hug the spindles of the railing, looking like so many beads on an abacus. The irregular rails give an impression of whimsy: at first glance, one thinks of hobbits and Hogwarts. But a second look reveals that the construction is solid, reliable and beautifully executed.

The shop is new, so Pridgeon hasn't had a chance yet to decorate it with his own personal flair. The exterior is simple log siding: not a burl in evidence. But a few feet away, there's a pile







of weathering, drying dark-colored burls, many showing golden sap where the bark has peeled. These he allows to age naturally. When needed, they are taken into the shop and sanded partially through the weathering, allowing a small amount of the gray to remain as a texturing contrast to the freshly revealed, clear fibers below.

Everywhere one looks in the shop, burls abound. One pile in particular draws attention: it looks like limbs — femurs and tibias and kneecaps all lined up and waiting their turn in the surgery.

On this particular day, Zimmerman and Pridgeon have just met for the first time. They immediately hit it off, sharing interests in hunting, fishing, the Western way of life, retirement from similar industries, several mutual acquaintances and, of course, a passion for burls. They pour water over a slab of pine burl and get way too excited over the figure that is revealed. It's only wood, guys.

Up on the porch is a big box covered in pine log siding with wrought-iron hardware and burl corners. There are four found horseshoes decorating the top. Lift the lid (the handle is a shed deer antler) and inside is a plastic, foam-lined cooler. Taking a Chinese import made of oil and dressing it in native wood makes a statement about the way these guys live, what they remember and how they want things to be. \square

To see more work by bowl maker Dennis Zimmerman, visit him online at *www.denniszimmermanburlsculptor.com*. If you'd like to know more about Bill Pridgeon's burl beds and furniture, he can be reached at 307-283-1537.



MORE FOR YOUR

Financing your next equipment purchase requires a serious analysis of all the options available to your shop

BUY

MONEY

By John English

few decades ago, financing equipment was pretty simple. Call the banker and then place the order. But in the early 1980s, the auto industry began leasing fleets of cars to rental companies on a large scale and leasing soon became a viable option for everything from table saws to household furniture.

Today, leasing is the most popular way to finance both used and new machinery. Lease payments are normally considered rent, so they're treated as an expense. (That might or might not have implications for taxes, depending on where you live, so check with your accountant.) Of course, you don't own the equipment and the fees involved in leasing often exceed the interest on a loan. But leases aren't tied to variable interest rates, so the payment won't change. And the upfront cost (that "due on signing" fee) is normally lower for a lease than a loan — in fact, it's often no more than an extra monthly payment — so there isn't such a big bite taken out of the bank account.

When looking at whether to lease or borrow, that fixed payment amount is something to consider seriously in the current market. The Federal Reserve has said that it will keep a lid on interest rates until unemployment dips to 6.5 percent. Well, from a peak of roughly 10 percent in October 2009, the jobless rate has now dropped by about a quarter and has done so in a relatively steady and predictable manner. Through 43 months, it has fallen by an average of somewhere close to 0.06 percent per month to its current 7.6 percent. If the U.S. manages to continue the trend, we should break that magical 6.5 percent marker in about 18 more months (around the end of 2014).

Does that mean that a relaxation on the part of the Fed's control over the money supply will lead to inflation?

Maybe.

It will almost certainly lead to higher interest rates and, as most equipment loans have



variable rates, it will lead to higher monthly payments. So if a company is considering adding to its machine assets, this could be an awfully good time to do so. Demand for physical plant is definitely ramping up, but it's still sluggish and manufacturers are still willing to be a little flexible on price or options or both. If inflation kicks in, the dollar cost of machines will rise. (You'll spend more dollars, but they'll be worth less.) However, if interest rates are going to rise, then borrowing to buy machinery will be a lot more expensive. And, if interest rates rise, leasing costs will rise, too. Timing is everything.

The buy or lease question is very subjective. Every situation is different because continued on next page



FINANCING from previous page

each woodshop is different. The decision really needs to be analyzed by an accountant, in part, because upgrading some machines will have a better payback than upgrading others. If there's a notable lag in some phase of production, the solution might not be as simple as "let's buy a faster machine." Perhaps the process is flawed or the operator needs more training.

Once the numbers have been crunched and it's obvious that some new machinery really is needed, then the lifespan of that equipment is the pivotal question: How long will it take to wear out or become obsolete? Will new technologies replace it before long-term financing is paid off? For example, will laser printing take over the manufacturing of parts that you now make on a CNC router? So far, printer technology can produce a plastic wrench. In six years, will it be able to make realistic plastic versions of the walnut automobile dashboards or gunstocks or chair parts that now occupy 20 or 30 percent of your manufacturing capacity? It sounds like science fiction and a very rapid time frame, but just a decade ago almost nobody had a cellphone and hybrid cars were still mystical beasts.



Risky business

One factor to consider when financing used or new machinery is the ability to spread risk. If your shop mortgage and your operating loan and your checking accounts and current equipment financing are all done through one bank, you're leaving an awful lot to the

discretion of your business banker. By separating a new equipment purchase and running it through a lease at a different lender, you broaden your risk basis and preserve some of your borrowing power at the bank. You are, in effect, leaving yourself with more options if things don't go exactly as planned.

Leasing sometimes offers another advantage, too. If the equipment supplier handles the lease, they might be willing to let you trade in your equipment halfway through the lease term and upgrade again if state-ofthe-art advances change significantly. If you borrow and buy, you'll need to sell what you have (if you can) and then borrow again to buy again.

There is also the residual clause. In many leases, you can buy the equipment at a set price when the term expires. If your specific machine works well for you and the industry has moved on to something else, your machine could now be difficult to find. Buying it for the residual price could be a very attractive option. On the other hand, if your business has evolved and you need to phase out this piece of equipment, handing it back to the leasing company might be a lot simpler than trying to sell it if you had purchased it with a loan.

When a banker looks at equipment financing, he or she is looking at two parts of the equation. Beyond your credit rating and past history, the banker will look first at whether or not the machine is good collateral for the loan (if he needs to sell it, will it fetch enough to get his money back?). But he's also looking at the machine's earning potential — its return on investment. In other words, exactly what difference will having this machine in your shop

CUSTOM PROFILE KNIVES For Shapers and Moulders

Fast Quotes / Delivery **Competitive Pricing**

Corrugated Back • Lock-edge Jet/Powermatic • Woodmaster Williams & Hussey

We will make an **EXACT MATCH** to your wood samples, CAD or Faxed Drawings





Stock & Custom Moulder & Shaper Heads Moulder Knife Steel

Freeborn Tool Shaper Cutters In Stock 35% Off In-Stock Cutters





ORDER ONLINE NOW CTSAW.COM

Router Bits • Solid Carbide Router Bits Saw Blades • Collets & Toolholders • Shaper Cutters Boring & Driling Bits • Planer & Jointer Knives • Profile Knives

800-404-1220

140 Avon St., Stratford, CT 06615 Fax: (203) 378-7346 • EMail: info@ctsaw.com make to your monthly cash flow and, more importantly, to your annual net profit?

When leasing companies look at equipment funding, their primary concern is your credit-worthiness. That's because they already own the machine. They retain title to the equipment, unless you do a buyout at the end of the lease. So getting a lease could be easier than getting a loan.

Shopping habits

Feel out three bankers before borrowing for equipment. Just because your dad always used a certain bank when he ran the shop doesn't mean you can't shop around. Your banker won't call in every loan if he hears you visited the opposition. As long as you have a good history, he will be more likely to ask you what he can do to make it easier for you to stay with him.

The same holds true for leasing companies. Identify the machines you need, the suppliers and the best service options, get some numbers from the salesperson, ask your accountant about the ROI and then talk to several leasing companies about terms. These include upfront fees, monthly payments, length of the lease and the residual purchase price. Create a spreadsheet, so you can compare apples to

full story.

apples. Get as much information together as you can, talk over how the equipment will augment production with your shop guys, take a couple of long walks to clear your head and get rid of the "it's shiny so I want it" syndrome and then sit down once more with the

If the equipment supplier handles the lease, they might be willing to let you trade in your equipment halfway through the lease term and upgrade again if state-of-the-art advances change significantly.

accountant and crunch the numbers before making a decision. With leasing companies (as opposed to equipment manufacturers who offer various versions of machines and lots of options to go with them), the decision is almost entirely a numbers-based one.

In your quest for financing, don't over-

look the Small Business Administration. This branch of the federal government can help facilitate a loan for you with a third-party lender, guarantee a bond or help you find venture capital. In other words, there might be ways to finance growth without using the equipment as security. Keep in mind that the SBA doesn't make direct loans to small businesses. Rather, it sets the guidelines for loans, which are then made by partners that include lenders, community development organizations and other entities such as private parties (venture capitalists, private investors and so on). The SBA guarantees that these loans will be repaid, thus eliminating some of the risk to the lending partners.

Another avenue that might be open to some shops is to work with a major client to secure financing. If your shop is the sole supplier of foil doors to a big-box store, they might be willing to partner with you on equipment that will reduce their cost or increase volume or eradicate shipping delays. They might guarantee a loan or provide one or even buy the equipment and lease it to you. That will all depend on volume and your history as a reliable supplier. But you've spent a lifetime being creative with wood. Why not do the same with financing?



at no additional cost. Visit us at booth 6218 to get the

STATES HARDWOOD PANEL PRODUCTS

800.203.1686 • States Industries LLC • Eugene, OR • StatesInd.com

800.422.9881 • Drawer Box Specialties • Orange, CA • DBSdrawers.com

DRAWER BOX SPECIALTIES



NEW PRODUCTS

has introduced a new portable dust collector, model 10-030CF M1. Mounted on a steel base with one swivel caster and two 7" wheels, the collector also features 1-hp motor and a 10" precision spin-balanced impeller for smooth and quiet operation. It has a maximum 506 cfm airflow capacity with a static pressure of 6-3/4" of water, according to the company. The 10-030CFM1 retails for \$399.99 until Aug. 31. For a list of retail distributors, visit www.general.ca.



DEWALT is offering three new versions of the 31-piece Compact Tough Case for storing and organizing bits. They each measure 3" x 4" and come with an adjustable belt clip. Model DWAX100IR includes the company's most common Impact Ready bits in a screwdriving set. The DWAX200 set contains security bits, while DWAX100 contains S2 modified bits. The sets also have a magnet bit tip holder for 1" bit tips. They retail for about \$10 to \$12. For information, visit www.dewalt.com.



SELF-SET®

JOINTER / PLANER KNIFE

The Worlds Only Affordable

Self-Setting Knife for your Jointer or Planer

Precisely Located Stops on the SELF-SET Holder Ensure Perfect Set-Ups

Every Time —

Fast and Accurate Knife Changes in Every Machine Ever Made - Every Time



Forrest Blades

Experienced woodworkers know that Forrest blades are ideal for remodeling high-end kitchens and baths.

Forrest blades deliver smooth, quiet cuts without splintering, scratching, or tearouts. Our proprietary manufacturing process, hand straightening, and unique grade of C-4 micrograin carbide are perfect for cabinets, countertops, and flooring. In fact, independent tests rate us #1 for rip cuts and crosscuts.

"Your blades are without question the best by miles, and I have tried them all."

Bob Jensen, Fridley, MN

Forrest Quality Shows

Duraline Hi-AT—Great for cutting two-sided veneers and low pressure laminates.

Woodworker II—Best rated, all-purpose blade for rips and crosscuts.

Woodworker II
Fine Woodworking

BEST OVERALL

Chop Master Woodshop News





Order from any Forrest dealer or retailer, online, or by calling directly. Our blades are manufactured in the U.S.A. and backed by our 30-day, money-back guarantee.

-ORRES

The First Choice of Serious Woodworkers Since 1946

www.ForrestBlades.com 1-800-733-7111 (In NJ, call 973-473-5236)

Duraline Hi-AT Woodshop News

nop News Wo



WWW.WOODSHOPNEWS.COM JULY 2013



KERN LASERS offers a new large format HSE laser system, featuring a vacuum bed hold-down that secures materials flat to the bed while the laser-cutting process is under way. A high-performance computer, LCD monitor and software are included with each machine. Kern includes two days of personalized laser training with each laser system purchase. For information, visit www.kernlasers.com.



SKIL TOOLS has reduced the weight of its new worm-drive circular saw, model MAG77LT, to 13.2 lbs. The 15-amp saw features a 53-degree bevel capacity with a positive stop at 45 degrees. The foot conveniently stores a multifunction wrench that is used for the oil plug, brush cap, adjusting bevel nuts and removing the blade diamond knockouts. Other features include a soft grip handle, spindle lock and the company's Cut Ready depth-of-cut system. The saw sells for a suggested retail price of \$219. For information, visit www.skiltools.com.



New Hampshire Furniture Masters Association wraps up local exhibit, while the Society of Arts and Crafts seeks award entries

By Jennifer Hicks

he Fuller Craft Museum in Brockton, Mass., is currently presenting "Across the Grain; Turned and Carved Wood," that reveals the scope of its permanent and private collections. The exhibition, which opened in April and runs through Sept. 22, features furniture by George Nakashima, Kristina Madsen, Wendell Castle and Sam Maloof, along with work by Charles Faucher, winner of the 2013 Smithsonian Craft Show award for excellence in w ood, selected by members of the Collectors of Wood Art.

"This exhibition represents a rich cross-section of contemporary woodcarving/woodturning movements, while also giving a retrospective nod to 20th century artists who bridged the gap between fine art and the contemporary craft world," the museum said in a statement.

Furniture Masters' exhibit

Members of the New Hampshire Furniture Masters Association exhibited new works in June at the Sharon Arts Center of the



hall table by Bill Truslow, an ash desk by Ted Blachly, Richard Oedel's "Wild Rose" console table and "Two Energies" by Brian Sargent.

New Hampshire Institute of Art in Peterborough, N.H. The exhibition, "Design Perspectives: Work by the New Hampshire Furniture Masters," featured work by 12 furniture masters and two emerging artists.

Exhibitors included Ted Blachly, Aurelio Bolgnesi, Jon Brooks, Greg Brown, John Cameron, Jeff Cooper, David Leach, David Lamb, Richard Oedel, Jeff Robers, Brian Sargent, Bill Thomas, A. Thomas Walsh and Bradley Wolcott.

REMANUFACTURED

SandingmasterWideBelt Sander Model 2075–C 37" x 75" Belt. This machine also has Veneer sanding capabilities. Combination Head allows for light thicknessing as well as fine sanding.

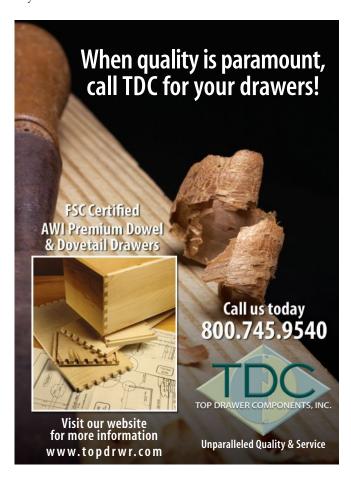
Professional Quality At The Right Price

Remember the line of Sandingmaster Wide Belt Sanders we sold from the mid 80's to the mid 90's? We now sell them remanufactured to new specifications (subject to availability), along with many fine, accurate woodworking machines new and remanufactured.

Call us for parts, service, and advise on your woodworking needs.



P.O. Box 70, Rutland, Vermont 05701 (802) 773-3240 www.woodshopspecialties.org





Call for entries

The Society of Arts and Crafts, the oldest non-profit craft organization in the United States, issued a call for entries to its 2014 Artist Awards program.

Initiated in 1994, the Artist Awards encourage and support the work of New England craft artists who demonstrate a mastery of their media and create original and innovative work. A panel of jurors will select three artists to receive a \$3,000 cash award. Winners will participate in a group exhibition at the society's Newbury Street

gallery from May 2 through July 19, 2014.

The awards are open to craft artists working in clay, fiber, glass, metal, wood or mixed media. Artists must reside in New England and proof of residency is required from each award winner. Students enrolled in a full-time art study program and past Artist Awards recipients are not eligible.

The jurors are Dale Broholm from the Department of Furniture Design at Rhode Island School of Design; Janet Koplos, a freelance critic and author, and Kate Lydon, director of exhibitions at the Society for Contemporary Craft in Pittsburgh.

The entry deadline is Sept. 25. W



Fuller Craft Museum, 455 Oak St., Brockton, MA. Tel: 508-588-6000. www.fullercraft.org.

New Hampshire Furniture Masters Association. www.furnituremasters.org

Society of Arts & Crafts, 175 Newbury St., Boston, MA 02116. Tel: 617-266-1810. www.societyofcrafts.org



93 Spencer Plain Road, Old Saybrook, CT 06475 www.ctriverlumberco.com

Specializing in Reclaimed Lumber/ Live Edge Slabs/ Native Lumber/ Hardwood & Softwood Lumber/ Specialty Plywood/ Veneer/ Hardware and Woodworker Supplies

Open Weekdays: 7:30-5PM, Thursdays until 7PM, Sat 8-12 PH: 860-391-0425 info@ctriverlumberco.com

New Glue Pot Edge Banders

Tapes of up to 3mm+Laminate strips, speed & temperature control, glue spread control, tape feed control, adjustable tape exit, glue dosage control and many new features - PEB250TRC







Speed & Temperature Control. Glue Dosage and Spread Control

Make it portable for large counter top. PVC, Wood Laminate strips



Door Tools Lock Mortiser Hinge Router Door Lifter



Edge Lipping Planer

www.virutex.com

50 Hill Street, Southampton, NY 11968 800-868-9663 - virutex@aol.com



CALENDAR

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

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

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

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

*Refers to contact list at end of calendar.

— Compiled by Jennifer Hicks

CALIFORNIA

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

FLORIDA

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

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

HAWAII

Aug. 31-Sept. 2 — Marquetry for the Islands with Paul Schürch. Class will focus on using local indigenous wood and veneer, scrap lumber, urban downfall and sustainable non-commercial sources of solid wood to create art, or patterns and pictures made of wood. Location: Wood Show in Ohau. https://woodshow.hawaiiforest.org

IOWA

Aug. 23-25 — Woodfest, sponsored by Amana Arts Guild. Location: Amana Colonies RV Park in Amana. www.amanaartsguild.com

MAINE

Sept. 9-20 — Intermediate Furniture Making

with Peter Shepard. Participants hone their joinery skills by designing and building small tables. Fee: \$1,280. www.woodschool.org

Sept. 23-Oct. 4 — Chair Design and Construction with Jeff Miller. Instruction covers a wide range of chairmaking techniques, including angled mortise-and-tenon joinery, joinery on curves, laminated and tapered curves, carved seats and options for upholstering. Fee: \$1,280. www.woodschool.org

MASSACHUSETTS

Aug. 12-16, Oct. 16-20 — Five-Day Bare Bones of Wood Carving Classes with David Calvo in Gloucester, Mass. www. davidcalvo.com

Sept. 15 — Furniture Made in Massachusetts: 1620 to the Present. Lecture by Fuller Craft Museum director Jonathan Fairbanks. Location: Fuller Craft Museum, Brockton. www.fullercraft.org

Sept. 25-29 — Traditional Timber Framing with Jack Sobon and Dave Carlon. Fee \$480. Location: Hancock Shaker Village, Pittsfield, Mass. Contact: Jack Sobon at 413-684-3223, jacksobon@verizon.net.

Oct. 6 — Marquetry: Does an Old European craft have any relevance for 21st century American furniture? Lecture by furniture maker Silas Kopf. Location: Fuller Craft Mu-





seum, Brockton. www.fullercraft.org

Nov. 3 — The Cabinetmaker and the Carver: Boston Furniture from Private Collections. Lecture by curator Gerald Ward of the Massachusetts Historical Society. Location: Fuller Craft Museum, Brockton. www.fullercraft.org

Nov. 20 — Bus tour to Mass Historical Society and Fort Point Cabinetmakers. Location: Fuller Craft Museum, Brockton. *www.fullercraft.org*

Dec. 1 — The Best Workman in the Shop: William Munroe and Concord Federal Furniture. Lecture by curator David Wood, Fuller Craft Museum. Location: Brockton. *www.fullercraft.org*

Dec. 1 — The Best Workman in the Shop: William Munroe and Concord Federal Furniture. Lecture by curator David Wood, Concord (Mass.) Museum. Location: Fuller Craft Museum, Brockton. www.fullercraft.org

NEVADA

July 24-27— AWFS fair at the Las Vegas Convention Center. www.afwsfair.org

July 29-Aug. 2 — Summer Las Vegas Market, an international furniture trade show. Location: World Market Center in Las Vegas. www.lasvegasmarket.com

NEW JERSEY

Sept. 21-22 — 30th annual Fine Art and Crafts at Anderson Park in Upper Montclair. www.rosesquared.com

Oct. 19-20 — 14th annual Fall Fine Art and Crafts at Brookdale Park in Montclair. www. rosesquared.com

Nov. 9-10 — Fourth annual Fine Art and Crafts at the Westfield Armory in Westfield. *www.rosesquared.com*

NEW YORK

Monthly — Sawdust and Woodchips Woodworking Association meetings are held on the first Thursday of each month at 6:30 p.m. at the Canton Woods Center in Baldwinsville. www.sawdustwoodchips.org

NORTH CAROLINA

July 29- Aug. 3 — Ladderback chair class with Drew Langser. Students will make a bent-back, double slat, post-and-rung chair in this six-day summer workshop. Fee: \$975. www.countryworkshops.org

Oct. 19-24 — Fall High Point Market. One of the largest furniture industry trade shows in the world, bringing more than 70,000 people to High Point every six months. The market includes 2,500 exhibitors spread out across 1.2 million sq. ft. of show space in 120 buildings. Location: High Point. www.high pointmarket.org

OREGON

Aug. 5-9 — Greene & Greene Side Table with Gary Rogowski at the Northwest Woodworking School in Portland. Fee: \$893. www. northwestwoodworking.com

Aug. 12-17 — Continuous Arm Windsor Chair with Elia Bizzarri at the Northwest Woodworking School in Portland. Fee: \$998 plus materials. www.northwestwoodworking.

Aug. 19-23 — Masterworks: Joinery Concentration in Frames with Gary Rogowski at the Northwest Woodworking School in Portland. Fee: \$893 plus materials. www. northwestwoodworking.com

Sept. 16-20 — Masterworks: The Rogowski Stool with Gary Rogowski at the Northwest Woodworking School in Portland. Fee: \$893 plus materials. www.northwestwoodworking.

Sept. 23-27 — Finishes and Finishing with Roland Johnson at the Northwest Woodworking School in Portland. Fee: \$893 plus materials. www.northwestwoodworking.com

RHODE ISLAND

Nov. 1-3 — Fine Furnishings Show for exhibitors handcrafted furniture and accessories. Location: Pawtucket Armory Arts Center. www.finefurnishingsshows.com

SOUTH DAKOTA

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

VERMONT

Sept. 28-29 — 10th annual Vermont Fine Furniture, Woodworking & Forest Festival. Browse unique items from fine furniture to hand turned bowls. Location: Union Arena in Woodstock. *www.vermontwoodfestival.org*

WISCONSIN

Oct. 4-6 — Fine Furnishings Show for exhibitors of handcrafted furniture and accessories. Location: The Garage at the Harley-Davidson Museum in Milwaukee. www.finefurnishingsshows.com

WYOMING

Sept. 5-8 — Western Design Conference. Annual exhibit and sale show featuring the finest western-influenced works by artists and designers from across the country. Location: Snow King Resort in Jackson Hole. www.westerndesignconference.com

CONSUMER ALERT!

BEWARE OF UNAUTHORIZED SUBSCRIPTION OFFERS!

SEVERAL SUBSCRIBERS TO WOODSHOP NEWS HAVE NOTIFIED US THAT THEY HAVE RECEIVED "RENEWAL/NEW SUBSCRIPTION" NOTICES OR OTHER OFFERS IN THE MAIL FROM EITHER UNNAMED GROUPS OR GROUPS NAMED:

PUBLISHERS PERIODICAL SERVICE (PPS)
READERS PAYMENT SERVICE (RPS)
ABD INC. • SUBSCRIPTION BILLING
NATIONAL MAGAZINE SERVICES (NMS)
UNITED PUBLISHERS SERVICES
PUBLISHERS BILLING EXCHANGE (PBE)

Please do not order subscriptions through these groups

HOW CAN YOU TELL IF AN OFFER IS FROM WOODSHOP NEWS?

- Notices from Woodshop News will have our distinctive logo on the piece or may include the line "From the Publisher's Office."
- Our publishing office address is 10 Bokum Road, Essex, CT 06426. Our subscription mailing address is:
 P.O. Box 433212, Palm Coast, FL 32143.
- We nearly always provide return envelopes to one of the addresses listed above.
 Checks are normally payable to Woodshop News.

If you are ever in doubt whether you received an offer from an approved company...

Call the publisher's office at 860-767-3200 ext. 238, Monday through Friday, or e-mail us at circulation@woodshopnews.com.

Our toll-free customer service number at 800-243-9177 may also be helpful.



PUBLISHED BY SOUNDINGS PUBLICATIONS LLC

WARNING: PROTECT YOURSELF – KNOW WITH WHOM YOU ARE DOING BUSINESS!

CLASSIFIED MARKETPLACE

Call 860-767-3200 ext. 284 for Advertising Information

Band Saws

Band Saw Blades Swedish Silicon Steel Timber Wolf® 1/8" Through 2" call: Suffolk Machinery 800-234-7297 **Now Order Online**

Branding Irons

CUSTOM BRANDING IRONS

FREE-FREE-FREE

information & sample brandings contact:

NORCRAFT

P.O. Box 606, New Boston, NH 03070 Phone/Fax (800) 538-4831 Names, initials, monograms, signatures and logos faithfully reproduced.

ANY SIZE or DESIGN

Professional quality tool, electric or torch heated-can be used both hand-held or drill press mounted.



"Hallmarks of distinction worthy of your labor."



Drawers

CNC Machine Cut **Dovetails That Look Hand Cut!** * Call for Sample & Price * Thru & Blind * Thru & Blind * Drawers & Pullouts * Prefinishing * Adjustable Tail Spa * Undermount Prep * Prompt & Reliable

stratton Creek Wood Works

330-876-0032 Fax www.strattoncreek.com

Fasteners



applications, machining tips & color options online. Call toll-free for support, expert advice, info on machines and samples.

HOFFMANN

See pricing and technical details on our website.

866-248-0100 **Hoffmann-USA.com**

Bits, Cutters

www.timberwolfblades.com

RIDGE CARBIDE

EXPRESS CUSTOM CUTTERS & KNIVES

- · Custom Router Bits
- · CNC Router Bits
- · Corrugated Back Knives
- · Molder Planer Knives (William and Hussy, Shop Fox, Grizzly)
- · Groovers & Cutters
- · Profile Shaper Cutters

We deliver what others only promise with 2-3 day delivery.

Call Toll Free: 1-800-443-0992 Tool Free Fax: 1-888-728-8665 Email: rcttool@verizon.net

www.ridgecarbidetool.com 595 New York Ave Lyndhurst, NJ 07071

Custom Branding Irons



Electric or Flame Heated Custom Designs, Logos, Signatures

Ouality for over 20 Years!

BrandNew Industries, Inc.

(800) 964-8251 www.BrandNew.net

Cabinet Parts Drawer Slides All Major Brands Next Day Shipping www.cabinetparts.com

Finishes/Coatings

SAVES LEFTOVER BLOXYGEN Preserve expensive varnish. paint. bĺoxygen.com 888 810 8311

Business Opportunities

ELIMINATE SLOW TIMES Earn extra \$ making bunk beds



- 18-year proven program
- A+ Rank with the BBB

Visit our website for more information

1800BUNKBED.COM/WNC 1800BunkBed

It's Your Business!"

KITCHEN DOOR MANUFACTURING BUSINESS in Southern CA in the San Gabriel Valley area. Asking 45K. Open to best offer. Only serious offers considered, 626-826-4104

Industries

- Quality Drawers Added Selling Tool
- No Minimum Order Quick Delivery · Constructed of Solid Wood, Baltic Birch, White and Wood Grain Ultrafoil

Melamine on an MDF Core.

1-800-581-3683

Web address: www.ccfdrawers.com

Glass

Green Mountain Glass, LLC. 211 Main St • Charlestown NH 03603

Small Lite, Narrow Sight Line Insulated Glass Silicone Dual Seal, All types, from historic wavy to blast resistant glass. Argon fill and warm edge available.

603-826-4660

Hardwoods

STEVE WALL LUMBER CO. Quality Hardwoods and Woodworking Machine For The Craftsman and Educational Institution

The trusted supplier from the Heart

of North Carolina Furniture County.

• HARDWOODS • EXOTICS • THIN CRAFTWOOD • AROMATIC CEDAR HARDWOOD PLYWOOD • CUSTOM PANEL DOORS • HARDWOOD FLOORING

See Our Catalog on the WEB: walllumber.com

BOX 287 • MAYODAN, N.C. 27027 336-427-0637 • 1-800-633-4062 Email: wood@walllumber.com SEND \$1.00 FOR CATALOG

Freeborn Cope & Pattern Sets Now on Sale



Cope & Pattern 3/4" to 1-1/8"

Glass Panel 3/4" to 1"

Tongue & Groo 1/4"











Phone (888)344-5545 Fax (209) 835-9378

www.pmetooling.net For all your tooling needs

VISIT OUR ONLINE CLASSIFIED SECTION

at www.woodshopnews.com/classifieds



CLASSIFIED MARKETPLACE

E-Mail marketplace@woodshopnews.com for Advertising Information

Hardwoods



Good Hope Hardwoods (610)350-1556 www.goodhope.com

Kiln Dried Hardwoods and Millwork

Cherry & Figured Hardwoods

Quarter-sawn Lumber

Custom Flooring & Moldings

Thermally Modified Woods

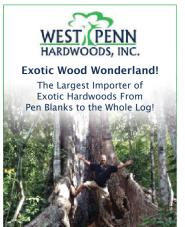
Sawmill, Kilns and Molder

at Our Location

Kempton, PA 19529

Ph: (610) 756-6827









CORMARK INTERNATIONAL **EXOTIC HARDWOODS**

- BEST PRICES DIRECT FROM SOURCE
 EXOTIC LUMBERS, BLANKS, BURLS, SI ARS
- TURNING BLOCKS AND MORE.

 NATIONWIDE DELIVERY
 WWW.CORMARKINT.COM / CORMARKINT@AOL.COM 181, REEMS CREEK RD, WEAVERVILLE, NC 28787 (828) 658-8455

Oregon Claro/Black Walnut

Slabs - Wide lumber - 4/4 through 16/4 Turning - Carving Stock - Gunstocks - Veneer Web Site www.gobywalnut.com







WALNUT PRODUCTS 5315 NW St. Helens Rd. Portland, OR 97210

M-F 7-4; Sat. 9-4 (503) 477-6744

NORTHWEST BAMB00_{Inc} LUMBER, PLYWOOD VENEERS, FLOORING 503-695-3283 WWW.NWBAMBOO.COM

Hardwoods



www.rarewoodsusa.com • (207) 364-1073 120 species of exotic & domestic woods Ebony, Olive, Rosewood, Satinwood, etc \$3 million inventory - buy 1 plank or 1000!

RARE HIGHLY FIGURED **CLARO WALNUT**

1"-3" thick lumber RWL, large slabs, turning blocks & gunstocks.
Wineland Walnut (530) 345-4012
Fax: (530) 345-0990 • Mon-Fri 8-3 9009 River Road, Chico, CA 95928 www.wineland-walnut.com

Knobs & Pulls



Hinges



www.cabinetparts.com

Instruction/Schools



The Furniture Institute Massachusetts

Phillip C. Lowe, Director

Two-Year hands-on Program with Master Furniture-Maker Summer Workshops Available

(978) 922-0615 www.furnituremakingclasses.com 116 Water St.

Jointers/Planers



KNIVES & CUTTERHEADS AT DISCOUNT PRICES

CALL 1-800-489-6694 OR E-MAIL: SIMANTEC@OPTONLINE.NET

CLASSIFIED ADVERTISING

Call 860-767-3200 ext. 284



Lumber

www.cabinetparts.com

West Coast Woods

VG Clears:

- Western Red Cedar
- Alakan Yellow Cedar
- Douglas Fir

Urban Forest Slabs:

- Monterey Cypress
- Claro Walnut
- And More!



1-800-711-WOOD www.WestCoastWoods.com ASKE 831-768-3880 FAX: 831-768-3883

Help Yourself to a Great Selection of Lumber!



- · Domestic & Exotic Hardwoods
- Mahogany
- Softwoods
- Plywood
- Túrning Squares
- · and much more!

Mon - Fri: 8:00 AM - 4:30 PM Sat: 7:00 AM - 11:30 AM

1-800-788-5568

60 Evans Dr. Stoughton, MA 02072 Visit us at downesandreader.com



CLASSIFIED MARKETPLACE

Call 860-767-3200 ext. 284 for Advertising Information

Lumber

RECLAIMED LUMBER

resawn to spec floorina wainscotina kiln drvina custom milling

- chestnut
- · heart pine
- white pine
- hemlock • oak

717-270-9900

Lebanon, PA

KeystoneVintageLumber.com

KEYSTONE VINTAGE LUMBER

L.L. JOHNSON LUMBER MFG. CO.

EVERYTHING FOR THE WOODWORKER

CHARLOTTE, MI SOUTH BEND, IN

HARDWOODS SOFTWOODS **EXOTICS PLYWOOD TOOLS**



theworkbench.com 800-292-5937

Machinery



around the world for over 20 years! See pricing and technical details on our website. HOFFMANN

866-248-0100 **Hoffmann-USA.com**

WE SUPPLY POWER FEED PARTS and wheels exchange program available. Rudolf Bass inc 201-433-3800, rbassmachy@aol.com Visit website for used stock machines: rudolfbassinc.net

Machinery



Services

CNC Router Bit Sharpening

Solid Carbide Router Bits To Factory Specifications



Spiral • Compression Plastic • Wood Cutting

Sales of Techniks Collets • Toolholders Accessories

Sales of Onsrud Router Bits Wood • Plastic

Composite

FREE RETURN SHIPPING On Sharpening Over \$100



Specializing In Tooling For The Woodworking Industry

140 Avon St., Stratford, CT 06615-6704 Phone: (800) 404-1220 • Fax: (203) 378-7346 EMail: Info@CTSaw.com

www.ctsaw.com

Veneers

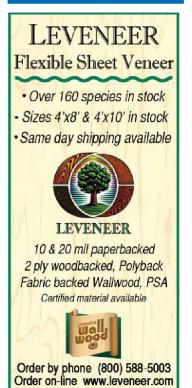


4 x 8 to 5 x 12 10, 20, 30 mil paperback 2-Ply woodback SuperBack hi-performance laminate PSA

Stock & Made to order No Minimum Order

order online: www.superiorveneer.com ph:812.941.8850 fax:812.941.8780

Veneer



Wood Turning

CUSTOM HAND WOODTURNING: Architectural/furniture components, prototyping, eproduction. Small-to-medium quantity, small scale to)'6". Jim Kephart Woodturning. Phone/fax 860-643-)431, www.jimkephartwoodturning.com



WANT TO MAKE SOME EXTRA CASH? SELL YOUR STUFF

CLASSIFIE

860-767-3200 ext. 284



ADVERTISING INDEX

1-800-Bunkbed, L.L.C	www.1800bunkbed.com	19	Grizzly Industrial, Inc	www.grizzly.com	9, 28-29
Amana Tool	www.amanatool.com.	C4		www.hearnehardwoods.com	
American Fabric Filter Co	www.americanfabricfilter.com	32	Hickory Saw & Tool Inc	www.hickorysawandtool.com	34, 50
ANEST IWATA USA	www.anestiwata.com	39	Highland Hardwoods	www.highlandhardwoods.com	16
ArtCAM by Delcam	www.artcam.com	40	Kreg Tool Company	www.kregtool.com	14
AWFS Fair 2013	www.awfsfair.org	11	Laguna Tools Inc	www.lagunatools.com	15
Bainbridge Manufacturing	www.Bainbridge M fg.com	32	Oliver Macninery Co	www.olivermachinery.net	41
Beaver Tools	www.beavertools.com	18, 27	Oneida Air Systems Inc	www.oneida-air.com	3
Berkshire Products	www.BerkProducts.com	40	Osborne Wood Products, Inc	www.osbornewood.com	23
cabinet vision / vero software	essential.cabinetvision.com	4	Outwater Plastics Industries	www.outwater.com	55
CabParts, Inc	www.cabparts.com	38	RIKON Power Tools	www.rikontools.com	C3
CAMaster	www.CAMaster.com	22	Sata Spray	www.satausa.com	34
Charles GG Schmidt & Co	www.cggschmidt.com	5	ShopBot Tools, Inc	www.shopbottools.com	21
Connecticut River Lumber Co	www.ctriverlumberco.com	49	States industries	www.statesind.com	45
Connecticut Saw & Tool	www.ctsaw.com	44	Stiles Machinery	www.stilesmachinery.com	1
DEWALT	www.DEWALT.com	2	SuperMax Tools	www.supermaxtools.com	45
Dispoz-A-Blade, L.L.C.	www.estausa.com	46	Top Drawer Components	www.topdrwr.com	48
Elias Woodwork and Manufacturing	www.eliaswoodwork.com	31	Vacuumpods.com, Inc	www.vacuumpods.com	25
Elmo Rietschle	www.vacuumpumps.com	47	Virutex	www.virutex.com	49
Felder USA	www.felderusa.com	17	W. Moore Profiles Ltd	www.wmooreprofiles.com	13
Festool USA	www.festoolusa.com	7	Williams & Hussey Machine Co	www.williamsnhussey.com	24
Forrest Manufacturing	www.ForrestBlades.com	46	Wood Werks Supply, Inc	www.WoodWerks.com	43
Goff's Enterprises, Inc	www.goffscurtainwalls.com ,	50	Woodshop Specialties	www.woodshopspecialties.org	48
Grex Power Tool	http://www.grexusa.com	33	Woodstock International	www.woodstockinternational.com.,	

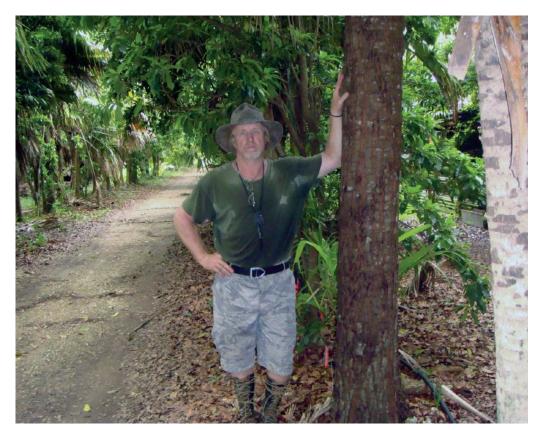
Backyard mahogany jungle

ichael Tisdale lives on a five-acre property in South Florida where he maintains his own self-cultivated Cuban mahogany grove in his backyard. He planted them as seeds about 20 years ago and is now telling others to visit his impressive forest on Google Earth at his address at 25100 Southwest 207 Ave., in Homestead, Fla. There are currently about 400 healthy trees to view on satellite imagery.

Originally from Georgia, Tisdale moved to Pretoria, South Africa in 1986 to source exotic timber for woodturners. He moved to Homestead in 1989 and, after Hurricane Andrew struck the area in 1992, he began salvaging fallen trees throughout Miami for miscellaneous projects at home. As he was searching, he noticed some Cuban mahogany trees left standing that were more structurally sound than any others he's seen. He believed they had good genetics for successful regrowth, so he removed several tree pods that contain about 75 seeds each. He planted about 700 seeds.

Cuban mahogany (Swietenia mahogani) is a





Michael Tisdale in his backyard jungle.

native species of South Florida and the Caribbean. It is a different species but the same genus as Honduran mahogany (*Swietenia macrophylla*). The former is much more difficult to obtain than the latter.

"I was well aware that Cuban mahogany had been commercially unavailable for the past 50plus years. They had logged it out in Cuba and

then overharvested it and depleted the species in the Caribbean. It was a premiere wood for fine antique furniture such as the Chippendale and Hepplewhite," says Tisdale.

Through the years, the trees have grown nicely, but he has endured his share of anticipated loss because of the weather. He lost 10 trees after Hurricane Katrina in August 2005 and about 100 more after Hurricane Wilma that same year. In January 2010, a deep freeze that affected many agricultural businesses in the state caused him to lose another 200 trees.

"The freeze caused the trees to go under stress from the cold and they produced a hormone that attracted ambrosia beetles," Tisdale says. "The beetles ruined the trees."

Still, he has continued to prune and maintain his remaining trees. The 400 still standing all average 30 feet in height and are roughly 8 to 9 inches in diameter.

Tisdale plans to keep the trees as healthy as he can for the next 10 to 15 years and then cut down some of them for commercial veneer sales. The forest also has a number of sapodilla fruit trees mixed throughout the property as well.

Jennifer Hicks



Eskimos have many names for "snow". Woodworkers have many names for "dust".



THE NEW 14" BANDSAW MODEL 10-321 IS EQUIPPED WITH A LARGE WORK TABLE MEASURING 15-3/4" X 20-3/8" WITH A 8" RE-SAWING CAPACITY AND 13-5/8" THROAT WHICH WILL ALLOW THE USER TO CUT THICKER MATERIAL ON A COMPACT SAW. THE 1 HP MOTOR WITH TWO BLADE SPEEDS OF 1620 FT/MIN, 3340 FT/MIN PROVIDES AMPLE POWER FOR RE-SAWING AND CUTTING OTHER MATERIALS SUCH AS NON FERROUS METAL, PLASTIC COMPOSITE AND FOAM MATERIALS.



www.rikontools.com Po

POWER TOOLS



SOLID CARBIDE BITS



CLEAN CUTS, SUPERIOR SURFACE FINISH & LONGER TOOL LIFE

For Use with

PLASTICS

#51404

Best for use with CNC machines Ultra high polish finish

High performance cutting

Super clean cuts

Highest quality sub-micrograin carbide

Available in many up-cut & down-cut sizes

Perfect for routing all types of plastic materials



Perfect for making

3D CARVINGS

#46280

Best for use with CNC machines

ZrN coating

High resistance to wear

Micro tool hardness of 80+ Rc (standard carbide 70-76 Rc)

Less friction & prevents heat buildup

Extended tool life



For Use with

ALUMINUM

#51402

Best for use with CNC machines

Ultra high polish finish

High performance cutting

Super clean cuts

Highest quality sub-micrograin carbide

Available in many up-cut & down-cut sizes

Perfect for routing aluminum, Alupanel®, brass, copper, Dibond® and other non-ferrous metals





