## WOODSHOP

www.woodshopnews.com

## Shaping the Successful Shop™ shopnews.com March 2014

## Location, **location**

The adage works for Hilton Head Kitchen & Bath

Making the case for dust collection

The carbide conundrum

Factory finishes for small shops

### NEW TOOLS

- Epilog's Fusion 40
- Legacy's 5-axis CNC
- Portamate saw stand
- Pocket screw machine

\$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: 1<sup>31</sup>/<sub>32</sub>" @ 90°, 1<sup>7</sup>/<sub>16</sub>" @ 45°
   Without track: 2<sup>5</sup>/<sub>22</sub>" @ 90°, 1<sup>5</sup>/<sub>8</sub>" @ 45°





Track Saw Master Pack Includes: Saw, Guide Rail, and Accessory Pack

W1835 Track Saw only D4363 Accessory Pack

D4362 Guide Rails

#### 14" BANDSAW

- 1 HP, 110V/220V
- Precision ground cast iron table measures 14" x 14" x 1½"
- Blade size: 93½"
   (½" to ¾" wide)
- Cutting capacity 131/2" (throat)
- Cast iron frame and wheels
- Ball bearing blade guides
- Includes fence and miter gauge

Feature packed, and an incredible value

W1706 14" Bandsaw



#### PLANER MOULDER with Stand

- Motor: 2 HP, 240V, single-phase, 10.8A, 3450 RPM
- Precision ground cast iron table measures 141/8" x 10" x 7/16"
- Max planing width: 7"
- Max planing height: 71/2"
- Cuts per minute: 14,000
- 2 HSS knives

PATENT OWNED BY WOODSTOCK INTERNATIONAL INC.



W1812 Planer Moulder with Stand

#### 10" TABLE SAWS with Riving Knife

- 3 HP, 220V, single-phase motor
- Cast iron table size:
   27" x 40½" (W1819) 53½" w/extension
   (W1820) 74" w/extension)
- Max. rip capacity: (W1819) 29½", (W1820) 50"
- Camlock fence with HDPE face

Free 10" Carbide-Tipped Blade



W1820 10" Table Saw w/ Long Ext. Table

#### **POCKET HOLE MACHINE**

- 1/2"-11/2" material thickness range
- Go from making face frames, casework, drawers etc. without stopping between operations.
- Two or more workers can share the same machine without interruption.
- · Approx. weight: 56 lbs.



U.S. Patent No. 7,140,813



#### 6" x 12" HEAVY-DUTY COMBINATION SANDER

- 11/2 HP, 120V, single-phase, 10.5A, 1725 RPM
- Precision-ground cast iron tables (2)
- Sanding belt size: 6" x 48"
- Belt Speed: 1066 FPM
- Disc size: 12"
- · Disc speed: 1725 RPM

Made in an ISO 9001 factory



W1712 Oscillating Benchtop Spindle Sander

### **OUTSTANDING SHOP FOX® DUST COLLECTORS**

## SHOP FOX

#### Motor: 3 HP, 220V, single-phase, TEFC Class F

- CFM: 1489
- Filter: 0.2-2 microns, Spun bond polyester
- 55 gal. steel collection drum with casters
- Intake: 8"
- Maximum static pressure: 10.2"
- Includes remote control
- Approx. weight: 396 lbs.

W1816 3HP Cyclone Dust Collector

sales@shopfox.biz



#### WALL DUST COLLECTOR

- 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



- 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.

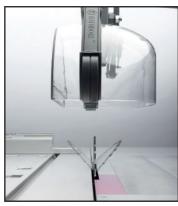
PLEASE VISIT OUR WEBSITE OR CALL TOLL FREE TO FIND AN AUTHORIZED DEALER NEAR YOU.

#### SHOPFOX.BIZ



## Do it right the first time...





Inroducing the Altendorf F45 Elmo 3D with a new universal blade tilting range from  $-46^{\circ}$  to  $46^{\circ}$ 



You need a saw that delivers exceptional miter cuts, consistent accuracy, and lasting performance. The ideal saw cuts mutiple materials, with a versatility that's unmatched by any other tool in your shop. Why wait? Your one saw, the ideal saw, is Altendorf.

Check out the full range of Altendorf Sliders® today at

#### www.stilesmachinery.com/altendorf

For more information on Altendorf, contact Aaron Brink at 616.698.7500 or abrink@stilesmachinery.com. Or visit us at www.stilesmachinery.com.

For information on how Stiles can put new technology and new thinking to work for you, contact Stephan Waltman, VP of Marketing and Communications, at 616.698.7500 or swaltman@stilesmachinery.com.



#### The T75 PreX sliding table saw with a cutting height of 8" and a cutting angle of 2 x 46°. Available at MARTIN since 2006



#### **T75 Prex Premium sliding table saw**

- cutting height 8" (205 mm)
- saw blade tilting -46° to +46°
- cutting lenght 63" 16.4" (1900 -5200 mm)
- swing away overhead guard
- cross cut fence with "digital compensation"
- up to 5 controlled axes motorised 3 axes controlled scoring saw unit
  - tool memory for up to 100 tools cuttting lists
- connection to optimization software
- overhead colour touch screen 10.4"
- pneumatic lowering of the rip fence
- mitre cross cut table with digital lenght compensation for all angles
- digital compensation of the plate side that is not pushed to the cross cut fence





#### Industrial ZERO glue line for all workshops

Hebrock AKV 3007 DK F "Airtronic"

- "Airtronic" zero glue line aggregate
- glue pott as additional option
- tape thickness 0,4 3 mm (0.016" 3/8")
- workpiece 8 60 mm (0.31" 2.36")
- minimum work piece lenght 200 mm (7.87")
- machine lenght only 9.84"
- premilling unit
- work program storage space
- colour touch screen
- glue pot for EVA and PUR glue
- automatic positioning of the units
- for solid wood of up to 8 mm
- also available with grove saw, casters possible
- also available with spraying device and nesting setup
- radius, bevel or flush tool
- finishing of the workpiece with the radius and flush scraper and buffer unit



















**MARTIN Woodworking Machines Corp.,** 8715 Sidney Circle, Ste. 100, Charlotte, NC 28269, Fon (704)-921-0360, www.martin-usa.com

Hebrock





#### Save up to 60% assembly time

The topseller! This model convices with a solid basic frame and cutting-edge hydraulic cylinders.

The Multi Press RP has proven to be outstanding and has now even been upgraded by the new hydraulic cylinders. Unrivalled: the pressure units generate a pressure of 3x 2,000 kg with a stroke of 100 m.

This press can even be upgraded to a multi-functional press - another great advantage. A lateral pressure unit for frame pressing, hold-down unit, joint gluing device, work plate and eccentric upper clamping fixtures can also be mounted. Gluing jobs on frames, drawers, etc. can be done quickly and easily on one individual press with only one employee.





### A Barth VMP vaccuum membrane press is a perfect substitute for a hydraulic veneer press. Advantages at a glance:

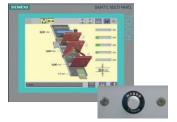
- pressing time of 5 to 6 minutes due to lower boiling point of water under pressure
- lower power consumption 100-150 watt per hour, no heating necessary.
   Two dimensional coating of profiles.
- · perfect for veneering surfaces
- edge banding
- gluing of surfaces and edges
- for more information view www.barth-maschinenbau.de



- the all in one solid wood, veneer and lacquer sander
- working with up to 53" (1350 mm)
- working height up to x" (300 mm)
- automatic work piece thickness measure device
- 1st aggregt: steel calibrating roller
- 2st aggregat: combined sanding head with patented CBF (cross belt running in the length belt) segment head plus 22 mm wide segment pads



**Weber LCE Compact** 





#### Your agvantages:

- almost no cross sanding hand sanding not necessary anymore
- colour touch screen with program storage time saving and easy to use
- standard program for solid wood
- standard program for cabinet kitchen doors
- standard program for veneer sanding
- · standard program for lacquer sanding
- · heavy duty construction
- time saving no hand sanding necessary
- · continuously high sanding quality

MARTIN



MARTIN Woodworking Machines Corp., 8715 Sidney Circle, Ste. 100, Charlotte, NC 28269, Fon (704)-921-0360, www.martin-usa.com









THE

## TS 55 REQ

FESTOOL.

Tools for the toughest demands

## THE FIRST CUT IS THE FINISH CUT.

Achieve clean, splinter-free, glue-ready, straight, precise cuts every time. The TS 55 REQ track saw does the work of a circular saw, table saw, miter saw, panel saw and radial arm saw in one unbelievable, take-anywhere power tool. Learn more at tracksaw.com



### **Table of Contents**



#### **Features**

- **RIGHT WHERE HE WANTS TO BE:** With a burgeoning business in a waterfront community, Kelley Huppertz finds plenty of motivation to keep his customers happy.
- THREE LAWSUITS AND A CLOUD OF DUST:

  Dust control in your shop can mean the difference between a thriving business and one that's facing legal action for years to come.
- **BED OF ROSES:** Ingenuity spurred Charles Kurak to focus on building Murphy fold-up beds after the recession hit and his Florida shop is sitting pretty because of it.

#### News Desk

- Study says artists aren't prepared for emergencies.
- **12** Survey finds changing kitchen trends.
- **12** Massachusetts guild seeks scholarship applicants.
- **25** WOOD MARKETS: Smart buyers are switching to soft maple.

## Router Spindle Repair

PDS repairs all brands; HSD, Omlat, FM Euro, Perske, Colombo, and MORE... We can fix yours!

- ✓ Free spindle inspection and evaluation
- ✓ Standard repair service completed in 3 business days
- ✓ Expert customer focused failure analysis
- ✓ Written factory warranty for rebuilds and spindle upgrades
- ✓ Emergency 24-hour spindle service available



Visit our website: www.pdscolombo.com



#### **Precision Drive Systems**



We repair high-speed electric spindles

- Any spindle
- Any brand
- Any repair
- Any time

## Pentco Industries Inc. speaks out about great products and great relationships

We traveled to Surrey, just outside of Vancouver, BC, Canada to talk with Pentco about why they like working with Chemcraft products and with their Chemcraft distributor, Omega Coatings.

Pentco Industries Inc. was founded in 1979 and is one of Western Canada's largest manufacturers and distributors of cabinet doors. They produce industry leading products for single/multi residential developments, and commercial and institutional projects.

"We do a lot of multi-family high rises," said John McNulty, one of Pentco's two owners, "You can't have inconsistent colors rolling through hundreds of units. That's when we started using Chemcraft."



"Every company has a good, better, best product. Chemcraft has the greatest -Chemlife 24."

Chemlife® 24 Conversion Varnish

"Chemlife 24 has great fill, you can use it as a self-seal and it has higher solids than most products out there." continued McNulty.

"It's a go-to product. Very user friendly and cost effective. Using this product, you can cut waste by up to 30%. Consistent. Sprays the same every time." said McNulty.

"Pentco is known for quality products. We have to feel confident that every cabinet door lives up to what we say it will. That's why we have to use good coatings - and that's why we have to have good support. We can't wait a 'couple of days' for someone to show up."

"Our Chemcraft distributor representative is in here all the time." McNulty said, "Having



Front, L to R: Dallas McNulty - Manager, Pentco Industries. John McNulty - Owner, Pentco Industries. Sandra Filosof-Schipper - President, Omega Coatings. Back, L to R: Frank Brams - Sales Representative, Omega Coatings. Ian Jackson - Owner, Pentco Industries.

someone like Frank (Brams) to bounce problems off of and bring you solutions is key."

"We have sales reps in here constantly trying to get us to switch," said Dallas McNulty, Pentco's Manager. "So I asked one rep, how many changes of clothes do you have in your car? And he said to me, 'what are you talking about?' I said, 'Exactly!' Frank will stick his head in a machine and get dirty to insure our products are 100%, so he keeps a couple of changes of clothes in his car."

"That's the difference Omega and Chemcraft bring; you're buying insurance when you buy good coatings and work with good people."

Visit chemcraft.com to locate your nearest distributor.







### **Columns**

- FINISHING: Hands-on finishing that machines can't touch. By Bob Flexner
- BITS & BLADES: Carbide cutters aren't always what they seem. By John English
- **22 PRO SHOP:** Inspiration and ideas are all around you. By John English

#### **Tools & Techniques**

- Safety Speed Mfg. offers new screw pocket machine.
- **15** Portamate rolls out new miter saw stand.
- Epilog Laser debuts its Fuion 40 system.
- Legacy CNC machine offers an array of options..

#### **Departments**

- **Taking Stock**
- New Products
- 48 At the Galleries
- **50** Calendar
- Classified
- 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
- 2014 Online Resource Guide http://resourceguide.woodshopnews.com



Tired of constantly emptying your dust drum? A Rotary Air Lock can eliminate this hassle and save you time and money!



This compact, 8" rotary air lock was designed with smaller systems in mind. Quality, made in the USA construction.

- Volume per minute at 100% loading = 3.75 Ft.3 / Min.
- Easily replaceable seals.
- 1/4hp, 230V, 3 phase.
- 8" dia. inlet. Weighs only 72 lbs.

Made in America **Industrial Dust Collectors** from 1.5 - 20hp. Finest Filtration Full line of ductwork and accessories.

## 

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



A fast and easy research tool to help you determine which companies can supply the products and services you are looking for.

Over 300 companies listed, covering well over 250 product and service categories.

If you are looking for it, we can help you find it.

Link through our web site www.WoodshopNews.com



or go direct resourceguide.woodshopnews.com



#### **Resource Guide Showcase Sponsors**

cabinet vision















If you are supplying products or services to woodworking professionals, make sure you are listed!

Already listed? Make sure it's up to date!

For marketing information, sales @ woodshopnews.com



## **TAKING STOCK**

with TOD RIGGIO

## Ideas keep swirling through my mind

h, the joys of being a magazine editor. As I write this, it's two days before our print deadline and a major snowstorm is forecast for the next day. If you're reading this, we got the magazine to the printer in time, no doubt the result of my extraordinary leadership and steadiness at the helm. Oh yeah. Perhaps, and more likely, it was due to the efforts of our talented team and superior technology. If you're not reading this — and how would you know? — we failed miserably and I'm looking for work.

Let's assume we conquered the elements, avoided a major power outage and were handsomely rewarded for our heroism. Now I can start thinking about what lays ahead. I've got two dates circled on my calendar.

In April, I'm off to Puerto Rico for the Woodworking Industry Conference. This annual event, held at different locations, is where the movers and shakers in the woodworking industry gather to do a little business, network and enjoy each other's company. Since I try not to move or shake - especially at the same time - I'll be there to get the pulse of the industry and report back to you. You're welcome.

Then there's the IWF from Aug. 20-23 in Atlanta. I won't do the whole song and dance (see my previous reference to moving and shaking) about why you should attend the year's biggest trade show. It's simply worth your time and effort. Online registration and housing deals began in January. Book now and save at www.iwfatlanta.com.

Otherwise, here's what I got this month. I used to work with a guy who was always coming up with ideas. He'd share them frequently. Most were too ambitious or required major funding that was never going to materialize, but a few were home runs. I don't think he slept much, what with all of these ideas swimming around in his head.

But then I got a couple of those ideas sitting in my doctor's office. The waiting room displays paintings by a local artist. They're nice to look at, depicting familiar local landscapes, and give the office a bit of prestige. I got up for a closer view and noticed they were for sale. I thought: what a genius marketing plan. The doctor is probably happy to have some free artwork and the artist gets his work seen by a large and captive audience. So, after returning to my uncomfortable waiting room chair, I thought this is a great place to display custom furniture. It would certainly stand out. Maybe a TV stand or occasional table. Taking it a step farther, how about the waiting room of a specialist who sees the same high-end clients you're going after.

But wait, there's more. I finally get in the exam room and the doctor rolls in this Walmart-special computer cart. Embarrassing, actually. He'd be beyond pleased to tell his patients (and doctor friends) about the wonderful computer stand handcrafted by his favorite patient. Now think about the other well-traveled spaces in your town to display your talents. The library, law offices, banks ... add a nice plaque from the maker and the customers will come calling.

These are the kind of ideas that make me a legend in my own mind. Again, you're wel-

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



MARCH 2014 VOL. XXVIII. NO. 4

#### **EDITOR** TOD RIGGIO

ART DIRECTOR DAVID POLLARD STAFF WRITER JENNIFER HICKS **ONLINE EDITOR MIKE TROCCHI FDITORIAL ASSISTANT FSTHER POPE** 

#### **SALES & MARKETING**

#### ASSOCIATE PUBLISHER

RORY BEGLIN 860-767-3200 EXT. 242; rbeglin@aimmedia.com

#### ADVERTISING & BUSINESS DEVELOPMENT MANAGER

ALEX ROBERTSON

860-767-3200 EXT. 284; alex@woodshopnews.com

#### CLASSIFIED MARKETPLACE ADVERTISING

860-767-3200 EXT. 284; FAX: 860-767-1048 marketplace@woodshopnews.com



**GROUP PUBLISHER, GENERAL MANAGER GARY DE SANCTIS** VP. GROUP EDITORIAL DIRECTOR GEORGE SASS JR. VP, MARKETING AND EVENTS JENNIFER JONES VP DIGITAL CHRIS KELLY DIGITAL DIRECTOR IAN BOWEN PRODUCTION MANAGER SUNITA PATEL
SR. PRODUCTION COORDINATOR BRIANA SMITH PRODUCTION COORDINATORS IENNIFER MAURITZ JASON I ALIBERTE TRAFFIC COORDINATORS

LAURA BECKHAM, LAUREN EGAN
BUSINESS MANAGER DEBRA DAVIDOWSKY **BUSINESS OFFICE MANAGER KATHY MOISA** GROUP CIRCULATION DIRECTOR STEPHANIE FLANAGAN GROUP CIRCULATION MANAGER CLAIRE F. BRAYFIELD CIRCULATION MARKETING MANAGER MATTHEW BOYLES
IT MANAGER ELAINE CIRILLO IT SUPPORT COLLIN DEHNERT



ACTIVE INTEREST MEDIA

#### **CHAIRMAN & CEO** EFREM ZIMBALIST III

PRESIDENT & COO ANDREW W CLURMAN SENIOR VP & CFO BRIAN J. SELLSTROM SENIOR VP, OPERATIONS PATRICIA B. FOX VP. CONTROLLER JOSEPH COHEN VP, RESEARCH KRISTY KAUS VP IT NELSON SAFNZ DIRECTOR OF RETAIL SALES SUSAN ROSE





**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

#### SUBSCRIPTION SERVICES:

For questions, problems, or changes to your *Woodshop News* subscription, **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. **WRITE:** Woodshop News, PO Box 433212, Palm Coast, FL 32143-3212 Canada Post Return Address undeliverable to: APC-PLI, PO. Box 503, RPO West Beaver Creek, Richmond Hill, ON L48 4R6. Canada Post Publication Mail Agreement No 40624074. E-MAIL: circulation@woodshopnews.com Please include name, address, and phone number on any inquiries

Woodshop News, (ISSN 0894-5403, U.S.P.S. 000-966) Vol. XXVIII, No. 4. 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: \$3.59 for two years (Canadian subscribers add \$12 per year for postage; U.S. furnds, foreign subscribers add \$14 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. **Postmaster:** Send address changes t WOODSHOP NEWS, PO Box 433212, Palm Coast, FL 32143-3212. Printed in the U.S.A

MARCH 2014 WWW.WOODSHOPNEWS.COM

## NEWS DESK

### Study says artists aren't prepared for mishaps

#### **By Jennifer Hicks**

he Craft Emergency Relief Fund recently released the results of a national research study called "Sustaining Careers: A Study of the Status of U.S. Craft Artists." The study reveals artists' attitudes about trends affecting the field, sales and income, insurance, emergency preparedness and recovery and legacy planning. It also provides updates and comparison data to a 2004 study.

The study found that 72 percent of full-time craft artists net less than \$25,000 per year from their art-related income, while 45 percent net under \$10,000.

"I found that number surprisingly low. I think too few people are able to make careers making work in the studio," Craft Emergency Relief Fund executive director Cornelia Carey says.

The study determined that 60 percent of craft artists remain uninsured for business-related losses. Craig Nutt, a studio furniture maker in Kingston Springs, Tenn., who helped with the study, says there is still a common misconception that homeowner's insurance provides coverage for art-related losses.

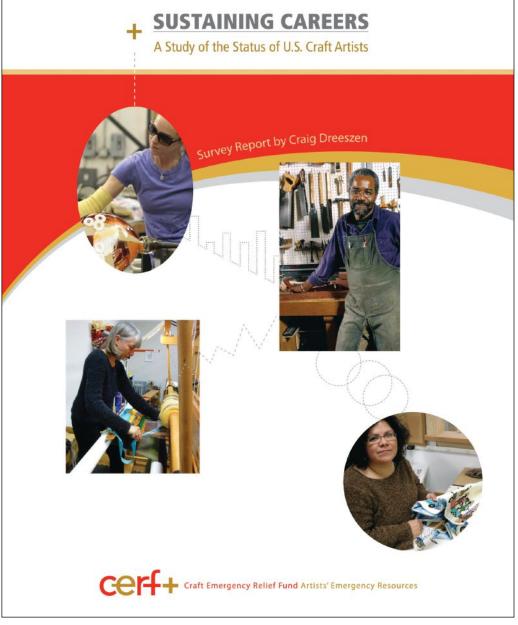
"With this survey, we're really pushing the idea of business insurance. Even if you have a home-based business, the idea of having business insurance is important. Too many artists are now operating without it or operating with the assumption that their homeowner's policy is covering their studio and they find out after a fire that it doesn't," Nutt says.

The study also revealed craft artists familiar with Craft Emergency Relief Fund programs are about 10 percent more likely to have taken safety and preparedness precautions than those who had not heard of the group. A quarter of the respondents said they have suffered an injury or illness that has significantly reduced their capacity to work, while nearly half said they do not have sufficient cash reserves to meet household expenses for even one month.

"The findings reveal that American craft artists are underprepared to meet an emergency, whether it's personal, weather-related or financial. While 96 percent of all artists have some college education, many describe being hindered by a lack of business training,"

Carey says.

Complete results are available at www.crafte-mergency.org.



The recent study by CERF offers income and insurance details about American craft artists.



35,000+

#### **ACTIVE USERS WORLDWIDE**

According to the latest CMA
Benchmark Study, more woodworkers
choose Cabinet Vision than any other
software system. In fact, it's not even
close.

## **30 YEARS**

### HOW LONG WE'VE BEEN DEVELOPING SOFTWARE

We've learned a thing or two since we started offering software for woodworkers in 1983.

, i

#### COMPANY WIDE MISSION

Our goal, as it has been for over 30 years, is to develop products and services that help our customers become more successful and profitable. 52/13

#### **COUNTRIES/LANGUAGES**

Cabinet Vision can be found all over the world and it's available in 13 languages.

97% SATISFIED WITH OUR SUPPORT

Whether via phone, email, or our online forums, our technicians aim to please.

17,007

### (AND COUNTING) DIFFERENT MACHINES WE'VE LINKED TO

As the leader in CNC software, our Screen-to-Machine™ technology works with more brands and types of machinery than any other software.

117,950,504

DATA ITEMS WE TEST EVERY SINGLE WEEK

We run our software through test after rigorous test to ensure that we only release the most stable products to our customers.

173 PEOPLE ON YOUR SIDE

Number of staff within our company dedicated to Cabinet Vision customers.

15,012

# OF MEMBERS IN OUR ONLINE COMMUNITY

87

### POSSIBLE COMBINATIONS OF PRODUCTS

No matter your budget, or whether you are running CNC or not, we have a solution that's right for you. Our unique mix of products can truly grow with your business.

#### THE NUMBERS SPEAK FOR THEMSELVES.

Cabinet Vision is the industry leading 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

### Kitchen trends revealed at KBIS

#### By Jennifer Hicks

itchen trends favor a contemporary feel and ample storage, according to a survey of design professionals and released at the 2014 Kitchen and Bath Industry Show, which was held Feb. 2-4 at the Las Vegas Convention Center.

"While transitional styles are still No. 1, we see kitchen design trending more contemporary this year with clean, simple lines, less clutter and little ornamentation," National Kitchen & Bath Association president John Petrie says. The association conducted the survey.

The survey included the following results:

- Contemporary will be the fastest growing kitchen style in 2014 with 62 percent of respondents saying it's on the upswing after ending 2013 in second place. Transitional maintained a very small lead as the most popular style. Shaker placed third.
- More than half of respondents say they incorporate universal design and easy-maintenance features in their kitchens and demand is expected to continue.
- Two-thirds of respondents incorporate docking and charging stations and a desk or home office area. Flat-screen TVs are another popular feature.
- Energy-saving appliances are most often specified. An increase in demand is predicted for water-saving faucets.
- Eighty percent of the respondents say furniture-style components are extremely popular in the kitchen.
- Seventy percent predict demand for quartz countertops will rise in 2014, followed by countertops made of recycled materials.
- Wood continues to be the most popular flooring choice.
- Satin nickel is the most popular faucet finish, followed by polished chrome.
- Stainless steel is the most popular sink material, followed by porcelain enamel and granite composite.

Other kitchen features in demand include induction cooktops, steam ovens, French-door refrigerators, bottom freezer refrigerators, touch-activated faucets, electric faucets and LED lighting.

#### Furnitire-style components, seen on this pullout from Rev-A-Shelf, continue to be popular.





## Mass. guild seeks entries for scholarships

#### By Jennifer Hicks

he Berkshire Woodworkers Guild is accepting scholarship applications from students pursuing a career in woodworking or architecture. The guild, a group of professional woodworkers who live and work in the vicinity of Berkshire County in western Massachusetts, will be giving away two \$500 scholarships. Although the amount isn't terribly high, every little bit counts, according to guild president Will Beemer.

"Each year we raise money for the scholarship fund through a silent auction that we have at our annual show at the Berkshire Botanical Garden every July. Everyone makes an item for the silent auction and all the money goes into the scholarship fund. This year we have \$1,000 total to divide up and give away," Beemer says.

"The applicants must be under 25 and they need to be pursuing a course of study in either woodworking, architecture or a related field. Last year, they were awarded to a woman who was taking a summer's worth of courses at Taconic High School in Pittsfield, Mass., and another in preservation carpentry at the North Bennet St. School in Boston.

"We're also trying to encourage people to support the schools themselves. They may pay \$5,000 to \$10,000 a year for an eight-month program and our goal is to help then alleviate that financial burden. It's also something that might make students aware that there are careers in woodworking."

Preference is given to applicants from the Berkshire County and the neighboring region enrolled in a long-term continuous program that leads to certification or a degree. The application deadline is April 1.

Contact: Berkshire Woodworkers Guild. Tel: 413-623-6677. http://berkshirewoodworkers.org



#### **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
- TRAINED SERVICE TECHNICIANS AT ALL 3 LOCATIONS MOST ORDERS SHIP THE SAME DAY

#### 14" DELUXE BANDSAW

- Motor: 1 HP, 110V/220V, single-phase, TEFC
- Precision-ground cast iron table size: 14" sq.
- Table tilt: 10° L, 45° R
- Cutting capacity/throat: 131/21
- Max. cutting height: 6"
- Blade speeds: 1800 & 3100 FPM
- Approx. shipping weight: 246 lbs.



SALE \$525<sup>00</sup>



### **HEAVY-DUTY BANDSAW**

- RPM: 1725
- cast iron table



SALE \$82500

COLLECTOR

#### 14" ANNIVERSARY BANDSAW Motor: 1 HP. 110V/220V.

- single-phase, TEFC
- Precision-ground cast iron table size: 14" sq.
- Table tilt: 45° R, 10° L Cutting capacity/throat: 131/2'
- Max. cutting height: 6"
- Blade size: 921/2"-931/2" L (1/8"-3/4" W)
- Blade speeds: 1800 & 3100 FPM MADE IN TAIWAN
- Approx. shipping weight: 247 lbs.



\$54500 SALE



#### **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: 131/2"
- Max. cutting height: 6"
- Blade size: 921/2"-931/2" L (1/8"-3/4" W)
- Blade speeds: 1500 & 3200 FPM
- Approx. shipping weight: 196 lbs.



G0555P ONLY \$54500



### 30<sup>TH</sup> ANNIVERSARY 17"

- Motor: 2 HP, 110V/220V, single-phase, TEFC, prewired 220V
- Amps: 20A at 110V, 10A at 220V
- **MADE IN TAIWAN** Precision-ground
- size: 17" x 17" x 1½" thick Table tilt: 10° left, 45° right
- Floor to table height: 371/2"
- Cutting capacity/throat: 161/4" left
- Blade size: 1311/2" long
- Approx. shipping weight: 342 lbs.

G0513ANV \$89500



#### 17" HEAVY-DUTY BANDSAW

- Motor: 2 HP, 110V/220V, prewired to 220V, single-phase, TEFC
- Precision-ground cast iron table size: 17" sq.
- Table tilt: 45° R, 10° L
- Cutting capacity/throat: 161/4"
- Max. cutting height: 121/8"
- Blade size: 1311/2" L (1/8"-1" W)
- Blade speeds: 1700 & 3500 FPM
- · Quick release blade tension lever
- Approx. shipping weight: 346 lbs.



MADE IN ISO 9001 FACTORY!



G0513P ONLY \$89500

#### 17" 2 HP BANDSAWS

#### w/ Cast Iron Wheels & Trunnion

- Motor: 2 HP, 110V/220V, prewired 220V, single-phase, TEFC
- Amps: 20A at 110V, 10A at 220V
- RPM: 1725
- Precision-ground cast iron table size: 235/8" x 171/4" x 11/2" thick
- Table tilt: 5° left, 45° right
- Cutting capacity/throat: 161/4" left
- Maximum cutting height: 12"
- Blade size: 1311/2" long
- · Approx. shipping weight: 418 lbs.



\$99 T

**MADE IN ISO** 9001 FACTORY!

G0513X2 ONLY \$109500 WITH CAST IRON WHEELS AND MOTOR BRAKE G0513X2B ONLY \$132500



#### 11/2 HP CYCLONE DUST

- Motor: 11/2 HP, 110V/220V, single-phase, TEFC, 3450 RPM
- Air suction capacity: 775 CFM Static pressure at rated CFM: 1.80"
- Intake port: 6" with included 5" optional port
- Impeller: 131/2"
- Height: 651/2"
- Built-in remote control switch
- Approx. shipping weight: 210 lbs.

#### MADE IN TAIWAN

**FULLY MOBILE WITH BUILT-IN** CASTERS



#### 11/2 HP CYCLONE DUST COLLECTOR

- Motor: TEFC Class "F", 1½ HP, 110V/220V, singlephase, prewired 110V, 18.8A/9.4A
- Cycle/RPM: 60 Hz/3450 RPM Switch: Remote controlled magnetic • Intake hole size: 6"
- Impeller: 121/2" steel radial fin
- Suction capacity: 1025 CFM @ 2.6" SP
- Max. static pressure (inches of water): 10.3"
- Filter: 0.2-2 micron
- Collection drum: Steel, 35 gallons
- Overall dimensions: 551/2" wide x 871/2" high x 361/4" deep
- Approx. shipping weight: 312 lbs. Shown with optional stand

G0443 ONLY \$99500



#### 24" WIDE-BELT SANDER

- 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: 2565 FPM Conveyor speed:
- Variable, 15-49 FPM Maximum board dimensions:
- 24" W x 6" H Minimum board dimensions:
- 14"L x 1/8" H Approximate shipping weight: 1573 lbs.



G0582

aritzziu-com







**VIEW VIDEOS AT** 

grizzly.com

G0703P ONLY \$82500 = \$79 in

























BELLINGHAM, WA • MUNCY, PA • SPRINGFIELD, MO













65½" TALL!



3 GREAT SHOWROOMS!

**⊠**Bill MeLater • PayPal

















## TOOLS VIECHNIQUES

## Stiles Machinery has a new owner

#### By Tod Riggio

he Homag Group recently increased its share in the voting capital of Stiles Machinery from 26.7 to 100 percent.

The shares were purchased from Peter Kleinschmidt, who owned Stiles for the last 39 years and is retiring from active business. He will be available to provide advice as a member of the su-

pervisory board of Stiles, according Homag.

"Within our industry, the U.S. is one of the dynamic markets with growth opportunities and is for us of strategic importance. As market leader in the US, we are acquiring the leading distribution and service organization in this industry. Increasing our interest in Stiles, which we have held since 1992, is the only logical step. This measure allows us to benefit directly from the anticipated re-industrialization in the U.S. in

which we will now play a role on account of our direct market access," Homag Group CEO Markus Flik said in a statement.

Having a relevant market share in excess of 35 percent, Stiles is the leading distribution and service organization for machines and production lines for the U.S. woodworking industry, according to Homag. With more than 290 employees, Stiles generated annual sales revenue of about \$158 million in 2013. This constitutes a rise on 2012 of 22 percent.

The company will continue to trade as Stiles Machinery.

Kleinschmidt said he is pleased that his business is being acquired by the Homag Group. "I know that my life's achievement is being placed in good hands. I have been cooperating closely with the Homag Group for more than 30 years. It is the ideal partner to write the next chapter in Stiles' success story."

## Safety Speed offers new screw pocket machine

#### By Jennifer Hicks

afety Speed Mfg. recently introduced the model SPM301 screw pocket machine with a cam-driven action for smooth cutting performance under complete mechanical control throughout the machine cycle, according to the company.

"The product is designed for any application where pocket-hole joinery can increase productivity or efficiency in joining operations in furniture or cabinetmaking," product manager Shawn Larkin says.

The machine features a 2-1/4-hp router motor and mechanical linkage, allowing the pilot drill and router bit to cut at the same time, reducing cycle time without sacrificing quality of cut, the company explains.

The machine plugs into a standard 110-volt outlet and requires only 1 to 2 cfm of compressed air at 80 psi.

It also features an adjustable back fence and stop rail, an analog depth gauge and top-down access for quick bit changes and adjustments.

The compact machine measures 44" high, 22" wide and 26" deep. It ships at 350 lbs. Model SPM301 is manufactured in the U.S. and sells for \$5,299, according to Safety Speed .

Contact: Safety Speed Mfg. Tel: 800-772-2327. www.safetyspeed.com



## **Portamate** rolls out new saw stand

By Jennifer Hicks

ortamate, a brand of Affinity Tool Works, announced the launch of its new model PM-7500 deluxe miter saw stand in January. Product manager Todd Gluski says custom woodworkers will benefit from the size and portability of product.

"Work site space is always at a premium and this saw stand doesn't take up much space while allowing the user to easily move the stand from site to site. In addition it takes up very little space in a workshop," Gluski says.

Designed to roll to the jobsite and set up quickly, the miter saw stand and its universal machinery mounts can also be used with a benchtop planer or band saw, for example.

The aluminum stand measures 49" wide and expands to 8' feet for cutting long moldings, siding or deck boards. It also features a four-outlet power strip, LED worklight and



32" working height.

It comes with 6" wheels, a storage compartment for pencils and other small items and two adjustable work supports that have fold-down rollers. The stand's four legs fold up for storage and transport. It's backed by a one-year limited warranty.

The PM-7500 is compatible with just about any type of saw on the market and retails for \$259, according to the company.

Affinity acquired the Portamate brand from HTC Products Inc. in 2012. W

Contact: Affinity Tool Works. Tel: 248-588-0395. www.affinitytool.com

### Fine Woodworking Machinery

Quality Made in Sweden for Professional Production – Ideal for Small to Medium-Size Shops

Professional Production & Increased Profits Begin with the Right Machine!

The perfect production machine for professional small to medium-size flooring, cabinetry and custom furniture shops!

- Quickly and easily produce deep custom mouldings (100s of profiles to choose from), tongue & groove flooring, paneling and more.
- Mould and plane 4 sides in one pass up to 14" wide
- Powerful each cutter has its own engine
- 1-sided planing up to 20" wide
- Sturdy cast-iron table with feeding tables
- Changing profiles from small mouldings, such as flooring or crown mouldings, to a six inch log house timber can be done in less than 20 minutes!
- Standard feed rate adjustable from 11-52 ft/min with optional feed rate of 20-98 ft/min

PH360 4-Sided Planer / Moulder (up to 14")

Keycode: WSN14



FREE Catalog • 1-877-LOGOSOL (564-6765) • www.logosol.us

## **Epilog Laser debuts Fusion 40 system**

#### By Jennifer Hicks

pilog Laser recently added the new Fusion 40 Laser System to its C02 product line. The machine, which does both ras-

The machine, which does both raster and vector cutting, was created to maximize engraving space, while maintaining the physical footprint of comparable laser systems with a smaller bed. The machine also offers wattage configurations up to 120 for quicker speeds using industrial DC servo motors, according to the company.



### More suction, longer life, same vacuum



Our Dust Right® Separator collects dust before it enters your shop vacuum, preventing the vacuum's filter from clogging. This allows your vacuum to continue to operate at full efficiency with maximum suction. Get the most out of your vacuum with the Dust Right® Separator – another Rockler® innovation to help you *Create with Confidence*.

Order your Dust Right® Separator (45556) today for just \$79.99. Call 1-800-279-4441, go to www.rockler.com or dial 1-877-Rockler to find a store near you!

Materials code 595



For a store near you or free catalog:

Rockler.com | 1-877-ROCKLER

The new system features a larger work area than its predecessor, the Fusion 32, with a 40" x 20" engraving table. Woodworkers can now put an entire cabinet door inside of the machine so they can engrave a full design on it, such as the popular grape vines or other earthly patterns.

"The performance and features of the original Fusion 32 are so popular with customers, we decided to create a bigger system that offers users the same amazing results and benefits and will allow them to increase throughput and production volumes," Epilog vice president of marketing Mike Dean says.

"What's even better is that we're offering this impressive 40" x 28" table in the same physical frame work as other systems with smaller 36" x 24" beds, so operators are getting more room for engraving and cutting without taking up any extra space in their shops."

Dean explains that the machine's vector cutting methodology has been changed within both the mechanical and software realms of it to product much better cuts at a much higher speed. The company has also added job management software to the line, along with other software updates.

"A Mac Driver has been included with the new Fusion line. The entire industry is PC-based so any Windows software could be always be used. But there are a lot of graphics-oriented people that use Macs and couldn't print to our lasers. We think this will be a good fit."

It also features an intuitive joystick control that allows operators to move the table, fire the laser directly, and more. A drop-down front door allows for easy access and convenient part loading.

The Fusion 40 ranges in price from \$23,000 to \$42,000. Prices are based on various wattage options that relate to the speed of the cut.

Contact: Epilog Laser. Tel: 888-437-4564. www.epiloglaser.com

## Legacy CNC offers an array of options

#### By Jennifer Hicks

egacy Woodworking Machinery recently introduced the Artisan II Hybrid CNC System, a complete furniture-building system that allows woodworkers to take full advantage of all that CNC technology has to offer. Where the industry standard CNC router table is designed for sheet processing on a flat bed, Legacy's full line of 5-axis hybrid CNCs are different by design, says the company.

The bed can be configured for sheet processing using any number of clamping systems including a vacuum table. The open-frame construction allows the operator to fixture parts using a wide variety of options including clamping the stock vertically to machine precision joinery on the face, edges or ends of the parts.

The Artisan II CNC features Legacy's exclusive 5-axis turning system that allows the user to turn, carve or machine between centers up to 10 times faster than a 4-axis system while producing a superior finish, according to the company.

Product manager Tracy Anderson says that while most CNC machines have vacuum tables on a flat bed, the Artisan II is designed differently, offering turning abilities and joinery capabilities as a complete system that can do every aspect of furniture manufacturing, even inlay.

"It has an extra axis that allows for turning and, with our open frame, woodworkers can mount stock on the end or edge and not just the table so we can cut dovetails or other joints on the edge of boards rather than just on the face panels."

The machine also features Legacy's Smart Tool technology that eliminates the need to manually touch off parts or set up tool libraries with offsets and optional Auto Tool Change.

The Artisan II is available in sizes ranging from 30" x 48" to 48" x 96", with prices ranging from \$30,000 up to \$45,000, depending on size and whether the machine has auto tool changers or a manual change setup. All customers receive two days of free hands-on training and are offered weekly live online training for life at no additional charge.

Contact: Legacy Woodworking Machinery. Tel: 800-279-4570. www.legacycnc-woodworking.com







## **FINISHING**

with BOB FLEXNER

## Hands-on finishing that machines can't touch

Some things are still best done by you and me with a focused attention to every little detail

Toodworking skills in furniture factories have been largely replaced by computerized equipment, but this hasn't happened nearly as much with decorative finishing. While the simple spraying of clear coats is often done by robots or in flat-line assemblies, coloring steps are still done largely by hand. These steps can produce quite sophisticated results and you don't have to be a factory to take advantage of them. They work just as well in smaller shops. Some of the steps are applied directly to the wood, while others are done within the finish.

#### **COLOR EQUALIZING**

The randomness of factory assembling lines typically results in mixed heartwood and sapwood — and even different species of wood — in the same object. The various colors need to be brought close or "equalized" and this is easiest to do directly on the wood.

The best way to lighten the darker parts is with a two-part bleach, but it's usually better to go the other way and darken the lighter parts. If the wood is to be stained dark, equalizing can be accomplished fairly well with just a dye stain applied to the entire object. Equalizing is less effective when using lighter-colored dyes. It is also much less effective using stains that contain binders and pigment, such as oil, water-based and lacquer stains, because the coloring effectiveness of these stains is much less.

A more sophisticated method of equalizing is to stain just the sapwood or just the lighter-colored woods to bring them close in color to the heartwood. This is usually called "sap staining" and involves application of dye just to the sapwood, best done by spraying.

#### **UNDERTONE STAINING**

Another color-enhancing step applied di-

rectly to the wood, beyond simple staining, is undertone staining. This is done after equalizing, if that is necessary, and can be used to further equalize uneven coloring. It can be done with either a dye or pigment stain.

A common example of undertoning, especially effective on mahogany, is to first apply a bright yellow dye. Then follow with a darkbrown pigment stain or, better yet, with a dark brown glaze after applying a sealer or washcoat.

#### **STRIKEOUT**

Strikeout can be done directly on the wood at the stain level or later between coats using a glaze. It involves removing some of the color using steel wool, abrasive pad or sandpaper to accentuate the figure or even create the appearance of figure where none existed.

Think of the cathedral pattern on crotch mahogany. After applying a stain or glaze, "strikeout" some of the color in the lighter areas. This will highlight the pattern.

#### FILLING

Sophistication is added to medium-porous woods such as mahogany, walnut and quartersawn oak by filling the pores. (Plain sawn oak is a coarse wood that I don't think is improved with filled pores.) Filling is done using a pore filler after the wood has been colored and after a sealer or washcoat has been applied.

There are at least three reasons why it's best to apply the pore filler over a washcoat or sealer (meaning a first coat of finish, not necessarily a special product) rather than directly over stained or unstained wood.

First, the washcoat (which is a finish or sealer thinned to about 5 percent solids) blocks the colored filler from coloring the wood overall rather than just in the pores. So better contrast is achieved. Second, removing

the filler by wiping is made easier because of the slicker and harder surface. Third, adhesion with the next coat of finish (or washcoat) is improved because the two knit together incorporating the filler.

#### **GLAZING**

Glazing is probably the most versatile and useful step for adding modifications to the color of the object. It is always done over a sealed (or washcoated) surface and always protected with an additional coat of finish.

The glaze product is a dispersion of pigment in a slow-setting, easy-to-wipe vehicle. The thinners, usually petroleum distillates, have a low enough solvency so they don't bite into the underlying finish.

The glaze can therefore be manipulated (moved around or selectively wiped or brushed off) for a short time after applying with a rag, brush or spray gun.

There are a great number of effects that can be accomplished with glaze, limited only by your imagination. Here are a few:

- > Adjust the overall color without significantly obscuring the wood.
- > Add depth or the appearance of age by leaving more glaze in recesses.
- > Accentuate the structural details of molded trim or raised-panel doors.
- > Add imitation grain using special tools.
- > Highlight and emphasize figure by "striking out" glaze in the areas you want to be lighter.
- > Add character to otherwise plain and boring painted surfaces.
- > Highlight the tops of 3-D surfaces such as carvings and turnings using a "dry-brush" technique, which involves dragging an almost dry brush over the surface.

#### **TONING AND SHADING**

Toning usually refers to a highly-thinned finish with pigment or dye added, sprayed evenly over the entire surface to tweak the overall color. Shading usually refers to the same thinned and colored finish sprayed selectively. When shading, a dye colorant is usually best because pigment can cause a noticeable muddying on the areas sprayed.

Shading can be used to further equalize uneven coloring in the wood or to create interesting effects such as a darkening near the edges of tabletops.

Both toning and shading need to be protected with an additional coat of finish.

#### **PAD STAINING**

This is a highly skilled color-enhancing or color-blending technique that selectively

adjusts the color by padding an NGR dye thinned with alcohol, to which a little water is added to reduce the "bite." The pad used is similar to a traditional French-polishing pad.

Like toning and shading, and unlike glazing, pad staining is fairly irreversible if you don't like the results. You can abrade off the added color, but doing this often makes the problem worse.

#### **RUBBING OUT**

Rubbing out involves first leveling the finish with sandpaper, then rubbing with finer and finer abrasives until you get the sheen and perfection you want. It's usually done just to tabletops.

The only way to achieve a "perfect" finish, no matter what you might read or hear in marketing and editorial hype, is by rubbing out.

#### **ONE MORE THOUGHT**

The methods discussed here work best with lacquer-type finishes. Most could be done with shellac. But they are difficult to do and many adjustments would have to be made using varnish or water-based finish.

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

#### **MULTICAM NAMES NEW MANUFACTURING MANAGER**

Mike Boyte has been appointed manufacturing manager at MultiCam Inc., according to the company. He has over 20 years of manufacturing and quality control experience in industries related to factory automation. In 2008, Mike received his MBA from Texas A & M University. In addition, he is a certified Lean Six Sigma Black Belt and will continue to lead MultiCam's efforts in lean manufacturing, implemented in 2012.

MultiCam has been manufacturing CNC cutting solutions for more than 25 years in Dallas.

#### **WOODCRAFT PROJECT RAISES OVER \$6,000 FOR FRESH WOOD**

Woodcraft and its customers donated more than \$6,000 in 2013 to support Fresh Wood, a student competition at the AWFS fair, according to the retailor.

In April 2012 Woodcraft invited customers to join the company in supporting Fresh Wood by making donations that Woodcraft would match up to \$10,000, and in January 2013, Woodcraft said it gave Fresh Wood a check for \$4,260.

"Woodcraft is pleased to be able to give Fresh Wood a larger check this year – \$6,186 from 2013 donations," said Woodcraft president Jody Garrett in a release. "Woodcraft will continue the Fresh Wood project in 2014 in an effort to keep woodworking as a viable career choice for future generations."

Founded by the Association of Woodworking & Furnishings Suppliers in 1999, Fresh Wood promotes woodworking and design education programs, as well as students pursuing careers in these fields. Held in conjunction with the AWFS fair every two years, the Fresh Wood competition offers a place for students to showcase their work, be introduced to the industry as artists, designers and woodworkers, and be exposed to industry career opportunities. In addition, winners take home monetary and tool awards.

"We awarded over \$19,000 in prize money for Fresh Wood 2013, and thanks to Woodcraft contributions, we were able to increase all prize check amounts by over 25 percent per prize level. A portion of the funds was also used to offset the costs of travel and hotel allowances for the Fresh Wood finalists and their instructors attending the AWFS fair," Adria Torrez, AWFS assistant director of education, said.





## **Bits & Blades**

with JOHN ENGLISH

## Carbide cutters aren't always what they seem

outer bits, shaper cutters, molder/planer knives and saw blades are constantly being asked to cut, mill or shape new products in new ways. From plastics and resins to manufactured sheet cores, the tooling that we use is continually facing new challenges as material technology advances. Most of the tools we use in woodshops are carbide-tipped, carbide inserts or milled from solid carbide. Knowing something about the way that carbide is produced and graded might help a shop owner make more informed choices when buying bits and blades.

To begin with, tungsten carbide is generally described in terms of impact resistance, longevity and corrosion resistance.

If a table saw blade is traveling at 4,600 rpm, then each tooth will impact (crash into) the material being cut 4,600 times every minute. OK, the density of the material might slow it down a bit and the electric current can deviate a hair, but the bottom line is that each carbide tip smashes into resins and wood several thousand times during even a short cut on a table saw.

Take a look at a combination blade and it quickly becomes apparent that carbide tips are designed to abrade more than shear. That is, they force their way through the stock more than slicing it. The tips are hard and tough rather than razor sharp. And when the face of the cutter meets the wood, it usually does so at

a slight angle, rather than a severe one. That is, the teeth lean slightly, but not very much. Because of that, the stress of impact can be spread over the entire front face of the tip, rather than concentrating along the top edge.

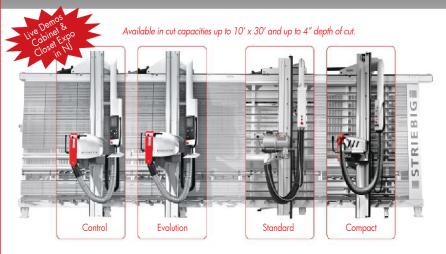
There is a direct tradeoff in carbide technology between hardness and sharpness. The harder the carbide, the better edge it will take. But that edge will not last long because hard carbide is very brittle. Upon impact, the fine edge will chip away very quickly. A tooth that is too soft, on the other hand, will not take a good edge to begin with. It can't be properly sharpened. So, as with most things in life, the bits and blades we buy are a compromise. We give up a little sharpness so that the cutter can have relatively long intervals between sharpening. That concept has created a set of standards for tungsten carbide bits and blades where the inserts and tips don't need to be formed to the shape of a knife edge, because they are not being asked to do the work of a knife. Rather than a knife or sword, the cutter works more like an ax where power replaces finesse.

#### WHAT GRADES MEAN

Tom Walz is the president of Carbide Processors in Tacoma, Wash. The company has been supplying American industry with carbide solutions since 1981. Walz and his crew provide high-performance tooling for sawmills, major manufactur-



STRIEBIG focuses on continuous product improvement. Day after day, year after year. For five decades this legendary Swiss-made vertical panel saw has offered fast quality cuts-all in a safe, simple, space-saving machine. Whether upgrading your cutting capabilities or as a compliment to your CNC machine STRIEBIG is machine for many shops. More than two dozen new features recently introduced make now a great time to upgrade your old STRIEBIG or buy your first on



STRIEBIG Vertical Panel Saws, the solution for:

■ Small Shops

Faster and safer than a table saw or slider.

- Space & Safety Conscious Shops Legendary for precision, safety and space savings.
- Shops Cutting Oversized Panels Small investment and easy handling of panels to 10 x 30 ft.
- Medium & High Volume Shops Offline saw for rework, short custom runs, or to free up a CNC for more complicated parts!

"We cut everything on a STRIEBIG and love it." (Sartini Woodworking)



saws@csaw.com • 888-777-2729 • www.csaw.com



ing plants and custom shops. Their first big customer was Weyerhaeuser Timber's research and development team and the task back then was simple: make better saw blades for less money.

Asked about the different grades of carbide, Walz's answer was surprising.

"There's no comprehensive comparison of tungsten carbide between and among tungsten carbide suppliers," he said. In other words, there is no industry standard. His website (www.carbideprocessors.com) explains: "A big part of the problem is the huge number of suppliers, grades and trade names. There are at least 5,000 different grades of tungsten carbide sold under more than 1,500 different trade names by more than 1,500 different companies. Tungsten carbide from two different manufacturers might have identical designation, but vary widely in almost every imaginable way including performance."

So, when a woodworker orders a blade and looks on the packaging for a carbide grade, the C-3 or C-4 printed there is, well, subjective. Here's the Carbide Processors website again, talking about the C grades that are commonly used in the United States:

"The original concept was to rate tungsten carbides according to the job that they had to do. If you had a particular job you would specify a 'C' grade of tungsten carbide and you could buy from anybody. This has lead to a situation where a C-7 tungsten carbide can be almost anything as long as it does C-7 style work. According to Machinery's Handbook (an industry standards volume), it can range from 0 to 75 percent tungsten carbide, 8 to 80 percent titanium tungsten carbide, 0 to 10 percent cobalt and 0 to 15 percent nickel. The problem is that two C-7 tips from two manufacturers will almost certainly work very differently in two different applications."

Most of us also assume that there is a straightline progression from C-1 to C-14 and that each grade is a little harder than the previous one. That's not exactly true. The grades are based on what the cutter can do rather than how hard it is (the grading curve is function rather than ingredients). Sharpeners often tell us that the higher grades have less cobalt in them and that makes each grade a little harder and more susceptible to shattering. (We've all seen the brittle corners knocked off a router bit when it hits an especially hard knot or drops on the floor.) But, again, it's just not that simple.

"Following this line of thought," Walz says on his website, "leads one to believe that the higher C number is harder and better for wear resistance. This is like classifying automobiles by size from a moped to an 18-wheel semi. This is clear and handy, but unfortunately it is not true."

#### THE SECRET RECIPE

The thing to understand about carbide bits and blades is that the tips and inserts are not

solid tungsten carbide. The material is actually cooked up using several different ingredients. The core elements are tungsten (a metal) and carbon grains or powder, but these need to be held together in a matrix, a sort of molten soup that is usually either cobalt or nickel-based.

Atoms of tungsten arrange themselves into a pattern that looks like the weave of a chain-link fence, only in three dimensions. As heat and pressure are applied to the soup, the carbon atoms become lodged in the square holes of the fence. This means that the two materials are interwoven, rather than merely existing beside each other. This bonding is called carburizing and the result after cooling is tungsten carbide powder.

The powder is then blended with wax and cobalt in very specific quantities. The ratios will determine various properties that need to be incorporated in the final product such as longevity and impact resistance. The resulting product (the blended powder) is then pressed into a mold to shape it and heated (this process is called pre-sintering). The result is a putty-like substance reminiscent of soft chalk. This is then machined to its final shape and subjected to intense heat (about 2,600 degrees) and pressure (15 to 30 tons). The process actually shrinks the material up to 15 percent in any dimension, and up to 35 percent in volume, until it becomes exceedingly hard.

Sounds easy, right? Kind of thing one could do on a rainy Saturday in the garage.

According to Carbide Processors, the reason that cobalt is the most commonly used binder for tungsten is that "it has a high melting point (2,719 degrees), is strong at high temperatures, and forms a liquid phase with tungsten carbide grains at 1,275 degrees Celsius, which draws tungsten carbide in on itself by surface tension and helps eliminate voids and porosity."

Because of the intricate manufacturing process, it's easy to see why carbide inserts aren't all alike. And because the grading system depends on the purpose of the product rather than the ingredients, it's easy to see why all grades aren't alike. That might sound daunting and confusing for somebody buying tooling, but there are some guidelines. For example, history is a good guide. If a shop has had success with a specific brand or product line, then sticking with that manufacturer is a comfortable decision. If the tungsten carbide is part of an over-the-counter product line that has been manufactured in the United States, one can call the manufacturer and discuss specific needs (for example, a shop might do a lot of work in solid-surface material or MDF). The company that sharpens a shop's cutters can tell a lot about the quality of the tungsten carbide and its suitability to the type of work the woodshop does.

For sources of carbide bits and blades, visit the Woodshop News online resource guide at www. woodshopnews.com.



### **PRO SHOP**

with JOHN ENGLISH

## Inspiration and ideas are all around you

When a customer asks for a look that you haven't crafted before, the answer is usually right in front of you

t's beautiful," she said. "But it's just so 'samey.' "

The client was a retired tax judge in Minnesota and we were remodeling her bath-

Minnesota and we were remodeling her bathroom. She was paging through a brochure of top-end cabinets and looking for a design that caught her eye. There was everything from flat- to raised-panel doors, crown moldings, milk washes and foil — a really comprehensive catalog of standard, traditional, timetested designs.

What she wanted was something that made these cabinets distinctly hers. The quest here was not so much for customization as it was for personalization. Even though this was a custom job, the stark truth was that other people already owned these same doors and boxes, albeit in a slightly different size or stain.

So how does a shop go that extra few feet (we're not talking a whole mile here) to create something that is distinctive, unique and very personal?

#### **DESIGN INSPIRATION**

There are three sources of inspiration that immediately come to mind. The first is obvious: just look around the room and pick up some architectural detail that can be incorporated into the casework. For example, the 16 divided lights in the front door might suggest cubbyholes or the natural edges on the dining table could be reflected in a creative crown that runs along the tops of the cabinets. Perhaps there are ebony plugs in the furniture that can be imitated or a color in the carpet that can be used as a wash, dye, stain or even a milk paint?

The second source of inspiration is the customer's personal life. What hobbies do they have? Is a golf or sailing theme appropriate? Do they want to carry those images as far as hiring somebody to do a couple of marquetry panels for doors? Hobbies aren't the only aspect of a personal life that might provide inspiration. People present mementoes of their private histories for public viewing in all sorts of ways. The type of art they hang or the books and magazines they read are clues. Photographs always tell stories: the most sophisticated, urbane demeanor might be a thin cloak





automatic length measuring

Exposed and highlighted joinery on a drawer shows off the mahogany with ebony accents and showcases the artist's talents.

laid over a childhood on a farm and a furniture builder might just hit a home run by adding a smidgen of grayed, ancient barn wood to a sleek lacquered sofa table.

#### **HIDDEN TALENTS**

The third inspiration for distinctive decoration might be closer than you think. Your shop might have hidden potential. Is one of your crew a woodturner? If so, it's relatively easy to tape two pieces of stock together, turn a spindle and then separate the halves to create a pair of impressive, one-of-a-kind appliques. These add a very distinctive design element to almost any project. A similar technique can be used to turn solid Grecian vases/urns, acorns, darts and other themes. Because the turning is done as two halves taped together, the backs are flat so attaching them to casework, doors or even table legs is as simple as glue and clamps.

If you don't have an in-house turner, finding one is not a challenge. The American Association of Woodturners (www.woodturner.org) has about 14,000 members in 319 local chapters spread all across the United States.

philosophical quote (make it a short one) to a door or a wide cabinet rail can enliven the wood and personify a project. The quote should probably have a somewhat universal appeal or the point could be lost. A phrase from a well-known poem or speech works well. Greek symbols from an old sorority or fraternity, carved in floating panels, seem to be popular in the offices of lawyers and other professionals. And finding a carver is relatively easy, too. Do an online search for 'wood carvers association' and the results will reveal organizations in several states and regions. There is also a National Wood Carvers Association (www.chipchats.org) based in Cincinnati.

#### **OUTSOURCED INSPIRATION**

If carving and turning doesn't appeal to your client, perhaps something as simple as unusual hardware will do the trick. In 1999, Roy Prange created a company in Portland, Ore., named the House of Antique Hardware (www.houseofantiquehardware.com). The firm has been featured on This Old House and in The New York Times and, through the years, Prange's people



tion and restoration projects for federal and state entities, as well as some notable commercial clients. With a mix of authentic antiques and impeccable reproductions, they could have exactly what you need to add some distinctive design and detail to your work. Plus, they offer sales consultation. This is one of the few corporations where a woodworker can have a conversation with a real live salesperson.

Another company in the same vein is Minneapolis-based Architectural Antiques (www. archantiques.com), although here the range of product isn't limited to hardware. It offers stained glass panels, period lighting, doors, corbels, ironwork and a dizzying array of accents that can be incorporated into a furniture or cabinet project to give it a unique look and feel. If the thought of shipping from Minneapolis to your job site is daunting, then an online search for 'architectural antiques' and a ZIP code will probably yield a source closer to home. But having walked through the Minneapolis facility, it's hard to imagine there is another one quite like it anywhere else.

#### STRICTLY WOODWORKING

Beyond hardware and applied accents, a woodshop can turn to its own trade practices to add distinctive design and detail to its work. For example, revealing some elements of joinery can bring a deep sense of craft to an otherwise run-of-the-mill project.

There's nobody in our industry who understands the impact of exposed joinery more than Darrell Peart, a master craftsman based in Seattle. Peart draws his inspiration from the work of past masters such as James Krenov, John Ruskin and William Morris. But he is recognized internationally for his own masterpieces, many of which are executed in the spirit of the Pasadena architects, Charles and Henry Greene. Building on their legacy, he has created an instantly recognizable and often imitated style and an hour spent wandering through his website (www.furnituremaker.com) might inspire accents and elements that can bring a distinctive note to any shop's work.

Krenov was a master of distinction, too. Any woodworker who has read even rudimentary texts in this field will recognize a Krenov piece across a crowded room. Two of his books, "A Cabinetmaker's Notebook" and "The Fine Art of Cabinetmaking" combine to describe a design philosophy that was both unique and extremely innovative. Reading such works and also familiarizing oneself with the portfolios of designers such as Tage Frid, Sam Maloof and George Nakashima will open up possi-



Laser engraving from photographs makes it easy to add personal artwork.

bilities and introduce notions that might not immediately occur to woodworkers, especially those of us who were trained as cabinetmakers and feel most comfortable with straight lines and rectangles. Before there were sheet goods and table saws, there were intricately shaped pieces of furniture and casework by the likes of Chippendale, Hepplewhite and Sheraton.

Perhaps our best inspiration for moving forward is to occasionally glance backwards.

# What are you building today?

Whatever you're building, outsourcing your drawer boxes and other components has never been easier. Talk to us about solutions that can grow your business and your bottom line.







#### YOUR PARTNER FOR OUTSOURCE SOLUTIONS



**Drawers. Doors. Components.** 





## WOOD MARKETS

## Smart buyers are switching to soft maple

By Jennifer Hicks

Buying soft maple will save you about 60 cents/bf at the retail level over hard maple, enough to sway many shops, according to lumber dealers interviewed by Woodshop News.

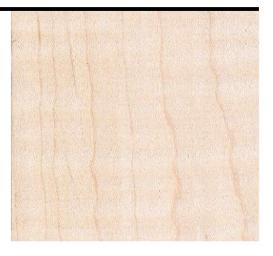
"Price is important," says Rocky Mehta of west Penn Hardwoods in Olean, N.Y. "Unless they need to use hard maple for a specific project, people are using soft maple right now because it's less expensive."

Several years ago, hard maple was at its peak of its popularity, making it difficult and expensive to get. The smart buyers switched to soft maple while the hard maple cooled. Those market conditions are repeating in 2014, Mehta explains.

"Now the bigger furniture companies are using a cherry stain on soft maple and making it look like cherry, so they're killing three birds by buying soft maple," Mehta says.

Soft maple (Acer rebrum) resembles hard maple (Acer saccharum) but is not as heavy and is much easier to work. Hard maple is a tougher wood and can display a whiter and more figured appearance.

Bob Laurie, who does most of the purchasing for L.L. Johnson Lumber Mfg. in Charlotte, Mich., says hard maple is usually more popular than soft maple. But when the prices for hard maple get too high, customers routinely shift to buying soft maple. Happens every time, he says.



"It's interesting. You don't see that with other species. Prices for walnut and red oak are going up right now, but nobody's switching."

Laurie says soft maple is a better wood to finish. "The grain is different than hard maple, and it can be sorted for white, unselected, or even brown because a lot of people will buy it to paint it.

"Another thing about soft maple is you can also get the wormy look out of it. That's also popular right now. I'm seeing a strong interest in things like rustic hickory and rustic maple, so there's a lot of interest in rustic things right now. We're definitely moving quite a bit of soft maple right now, but sales of that and hard maple are both pretty good."





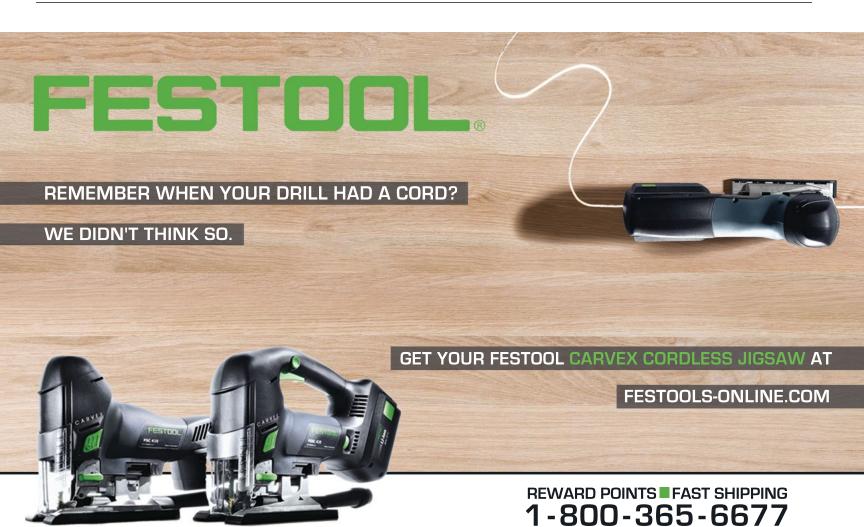




HARDWARE RESOURCES debuts a new line of functional hardware directed at commercial cabinetmakers. The offerings include heavy-duty ball-bearing slides and European hinges in addition to panel connectors, shelf brackets and grommets. www.hardwareresources.com.

CAMFIL AIR'S new Touch Screen Controller provides full monitoring and control of all functions of an industrial dust collector and associated equipment. The controller is equipped with a touch-screen interface that allows ready access to all of its functions. It is designed for use with Farr Gold Series dust collectors or other types of collectors if integrated with a motor starter or variable frequency drive package. A built-in differential pressure sensor monitors the primary filter pressure drop. Four analog inputs can be used to monitor the secondary filter as well as other devices such as leak detectors, flow meters and compressed air pressure monitors. Six digital inputs are also included to monitor hopper level, smoke detection, remote cleaning and other functions. Four relay outputs are provided to signal faults from any of the digital or analog inputs or from internal device faults. The 4-20 milliamp output will remotely monitor air flow or pass through any analog input to a remote location. The controller can also monitor fan power consumption and can provide data logging of system performance with multi-language capability, according to the company. www.camfilapc.com





**BOSCH** says its CSW41 worm drive saw answers user demands for a lightweight saw without compromising durability and power. Featuring all-magnesium construction, an advanced oil lubrication system and a 15-amp motor, the tool weighs 13.2 lbs. and has a bevel capacity of up to 53 degrees. It sells for \$219. www.boschtools.com





MULTICAM offers a new, heavy-duty version of its 3000 Series nested based CNC router for the woodworking and cabinet industries. The machine features a tubular steel, welded and stress-relieved frame, 25mm linear bearings and custom engineered steel castings supporting the gantry. A variety of vacuum tables (up to 80" x 120") and a 100 percent duty cycle, 13-hp automatic tool change spindle are standard. All machines can be equipped with either a four- or nine-spindle optional 32mm drill bank and feature a high-speed simultaneous 3-axis motion control system, MultiCam's handheld operator interface and EZ-G code software, and are fully compatible with any of the popular cabinet software packages, according to the company. www.multicam.com





## Grizzalu Industriale

#### 10" CONTRACTOR-STYLE TABLE SAW with Riving Knife

- Motor: 1½ HP, 110V/220V, single-phase, prewired to 110V
- Precision-ground cast iron table with wings
- Table size: 251/4" x 40" Arbor: 5/8"
- Arbor speed: 4000 RPM FREE 10"
- Capacity: 31/4" @ 90° 21/4" @ 45°

CARBIDE-TIPPED BLADE







Approx. shipping weight: 208 lbs.

#### 10" HYBRID TABLE SAW with Riving Knife

- Motor: 2 HP, 110V/220V, single-phase, prewired to 220V
- Precision-ground cast iron table with wings measures: 27" x 40"
- Arbor: 5/8"
- · Arbor speed: 3850 RPM
- Capacity: 31/8" @ 90°, 23/16" @ 45°
- Rip capacity: 30" R, 12" L
- · Quick change riving knife
- Cast iron trunnions
- Approx. shipping weight: 404 lbs.

**BEAUTIFUL WHITE COLOR!** 

G0715P ONLY \$79500



G0732 \$7950 SALE \$65000

#### 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"
- Arbor: 5/8"
- Cutting capacity: 25%" R, 8" L
- Max. depth of cut: 3" @ 90°, 21/8" @ 45°
- Approx. shipping weight: 550 lbs.

G1023RLW 3 HP ONLY \$1360000 G1023RLWX 5 HP ONLY \$139500



10" CARBIDE-TIPPED BLADE

MADE IN TAIWAN

#### 10" CABINET TABLE SAW

#### with Riving Knife & Extension Rails

- Motor: 3 HP, 220V, single-phase
- · Precision-ground cast iron table
- Table size with extension: 27" x 743/4"
- Arbor: 1/8" Arbor speed: 4300 RPM Capacity:
- 31/8" @ 90°, 23/16" @ 45°
- Rip capacity: 50"R, 12"L
- Max. dado width: 13/16"
- Approx. shipping weight: 557 lbs.



FREE 10"

CARBIDE-TIPPED BLADE

#### 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: 341/8"
- Arbor: 5/4" Arbor speed: 4000 RPM Max. dado width: 3/4"
- Capacity@ 90°: 33/16", @ 45°: 23/16"
- Max. rip capacity: 52"R, 18"L
- Approx. shipping weight: 716 lbs.







#### **6" JOINTER**

- · Motor: 1 HP, 120V, single-phase
- Precision-ground cast iron table size: 7½" x 46"
- Cutterhead diameter: 2½"
- Cutterhead knives: 3
- Cutterhead speed: 4800 RPM
- Approx. shipping weight: 266 lbs.



G0452P ONLY \$52500 =

#### **8" JOINTERS**

Motor: 3 HP, 220V, single-phase, TEFC

G0652 ONLY \$215000

- Precision-ground cast iron table size: 9" x 721/2"
- Max. depth of cut: 1/8"
- Max. rabbeting depth: 1/2"
- Cutterhead dia.: 3"
- Cutterhead speed: 4800 RPM
- Cuts per minute: 20,000 (G0656P), 21,400 (G0656PX)
- Approx. shipping weight: 500 lbs.

4 KNIFE CUTTERHEAD







CHOOSE EITHER 4 HSS KNIVES OF

#### 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 76%" Cutterhead diameter:
- 33/16" (G0490), 33%" (G0490X) Cutterhead speed: 4800 RPM
- Approximate shipping weight: 564 lbs.

4 KNIFE CUTTERHEAD

G0490 ONLY \$99500

SPIRAL CUTTERHEAD

G0490X ONLY \$132500



\*To maintain machine warranty, 440V operation requires additional conversion time and a \$250 fee. Please contact technical service for complete information before ordering.



**VIEW VIDEOS AT** grizzly.com

**3 GREAT SHOWROOMS!** 

BELLINGHAM, WA • MUNCY, PA • SPRINGFIELD, MO

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

#### **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
- TRAINED SERVICE TECHNICIANS AT ALL 3 LOCATIONS MOST ORDERS SHIP THE SAME DAY



#### **FREE 2014 760 PAGES OF HIGH**

**QUALITY MACHINES & TOOLS** AT INCREDIBLE PRICES

#### 12" JOINTER/PLANER COMBINATION MACHINE

NEW

- Motor: 5 HP, 220V, single-phase
- Jointer table size: 14" x 591/2"
- 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 END-MOUNTED **FENCE**
- Max. planer depth of cut: 1/8"
- Max. planer cutting height: 8"
- Planer table size: 121/4" x 231/8"
- Approx. shipping weight: 734 lbs.

G0634XP ONLY \$235000



#### 15" PLANERS

- · Motor: 3 HP, 220V, single-phase
- Precision-ground cast iron table size: 15" x 20"
- Min. stock thickness: 3/16"
- . Min. stock length: 8"
- Max. cutting depth: 1/8"
- Feed rate: 16 & 30 FPM
- Cutterhead speed: 4800 RPM

· Approx. shipping weight: 660 lbs.

3 KNIFE CUTTERHEAD G0453P ONLY \$112500

SPIRAL CUTTERHEAD G0453PX ONLY \$175000



#### **20" PLANERS**

- Motor: 5 HP, 240V, single-phase
- Max. cutting width: 20" Min. stock length: 8"
- Max. cutting depth: 1/8" Feed rate: 16 FPM & 20 FPM
- Cutterhead diameter: 31/8"
- Number of knives: 4 HSS
- Cutterhead speed: 4800 RPM
- Table size: 20" x 253/4" (20" x 551/2" with extension)
- Overall dimensions: 551/2"L x 391/2"W x 457/8"H
- Approx. shipping weight: 920 lbs.

4 KNIFE CUTTERHEAD G0454 ONLY \$169500 SPIRAL CUTTERHEAD

G0454Z ONLY \$257500





PRECISION-GROUND **CAST IRON BED & INFEED** 

AND OUTFEED TABLES

#### 15" PLANERS with Spiral Cutterhead andBuilt-in Mobile Base

- · Motor: 3 HP, 240V, single-phase
- 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: 675 lbs.

GRIZZLY GREEN & TAN G0453Z ONLY \$185000 POLAR BEAR SERIES WHITE

G0453PX ONLY \$175000

**COMBINATION SANDER** 

Motor: 3/4 HP, 110V/220V, single-phase,







#### 11/2 HP SHAPER

- Motor: 11/2 HP, 120V/240V, single-phase
- Precision-ground cast iron table size: 201/4" x 18"
- Spindle travel: 3"
- 2 interchangeable spindles: 1/2" & 3/4"
- Spindle speeds: 7000 & 10,000 RPM
- Max. cutter dia.: 5"
- Approx. shipping weight: 246 lbs.





61035p



#### 3450 RPM, 12A/6A Cast iron table, disc and body

6" x 48" Belt, 9" Disc

- Quick belt release mechanism
- · Dual voltage motor prewired for 110V
- Dust ports 2" for belt, 21/2" for disc
- 2300 SFPM belt speed
- Belt driven
- · Approximate shipping weight: 122 lbs.

Static pressure: 16.7"

G1014Z ONLY \$39800

Air suction capacity: 2300 CFM

Impeller: 12¾" cast aluminum

Bag capacity: 11.4 cubic feet

Portable base size: 21½" x 49½"

Height with bags inflated: 78"

Approximate shipping weight: 170 lbs.

Standard bag filtration: 2.5 micron

## MADE IN TAIWAN SERIES **EXCLUSIVE QUICK RELEASE BELT SYSTEM**

Motor: 3 HP, 240V, single-phase, 3450 RPM,12A

7" inlet has removable "Y" fitting with three 4" openings

3 HP DUST COLLECTOR

#### **18" OPEN END DRUM SANDER**

Sanding motor: 11/2 HP, 110V, single-phase, 15A

G1035P ONLY \$59500 =

- Drum surface speed: 4000 FPM
- Conveyor 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 weight: 328 lbs.







MADE IN ISO 9001 FACTORY

#### MADE IN TAIWAN



G1030Z2P ONLY \$43995





✓ BillMeLater









# right Wants

With a burgeoning business in a waterfront community, Kelley Huppertz finds plenty of motivation to keep his customers happy.

f you could have your pick of locations to open a cabinet shop, Hilton Head, S.C., would be a pretty good choice. It offers 12 miles of beachfront property, at least 17,000 second homes, a bevy of gated communities, immensely popular tourist destinations and favorable year-long weather conditions.

We're not suggesting you move. The island is served by several well-established shops, including Hilton Head Kitchen & Bath, an eight-person operation guided by president Kelley Huppertz with an extensive background in residential and commercial cabinet installations, design and fabrication of custom cabinetry, furniture and retail store fixtures, and as a remodeler.

"What separates us from our competition is the full-service aspect of our business and that we're a lot more specialized. I don't think there are too many companies like that around," Huppertz says.

#### Diverse background

Originally from Fort Worth, Texas, Huppertz moved around a lot as the son of an Air Force veteran.

"I was always interested in woodworking. I loved shop class in junior high school and taking on challenges with my hands. As I got older, while I was in high school, I took a job installing cabinetry for a custom cabinet shop back in the late '70s in Atlanta where my father retired."

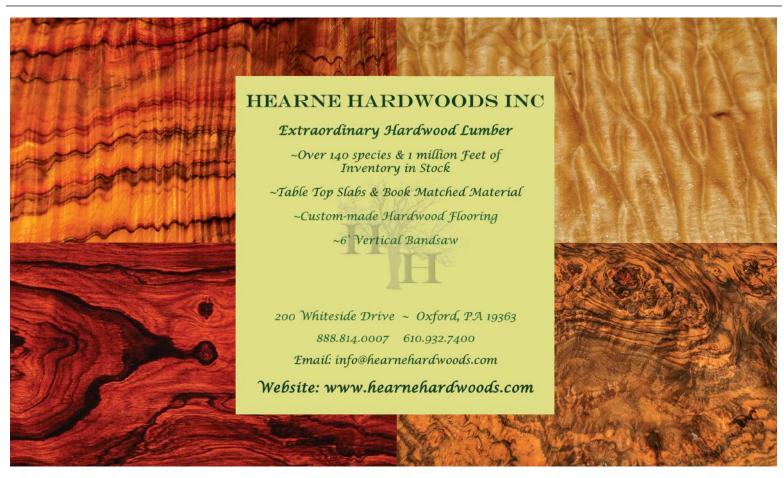
He also worked for a fixture business that built displays for department stores and eventually started his first business.

"I hired a few guys and we'd get hired by Macy's to build a set of displays for a campaign like Levis to display a new line of jeans or shirts, working with the visual merchandising departments."

After a time serving the video gaming industry, he made the move to Hilton Head in the mid-1990s at a business partner's suggestion.

"I came down here and liked the place. I saw lots of resorts, nice





Island life on Hilton Head requires a custom kitchen and wet bar. The shop completes about 30 to 40 jobs per year.

homes and numerous plantations. The buildings were all very dated and people were putting a lot of money into them, so I put a started a new business refacing kitchens and basically worked out of my pickup truck and home office. Then people wanted more done to their homes and I realized there was some business I was missing out on."

In 1999, he established Hilton Head Kitchen & Bath, which has grown steadily through the years.

#### Fortunate location

Huppertz says local work opportunities are sufficient to keep the business profitable.

"We stay on Hilton Head Island primarily because there's just plenty of opportunity right here without having to cross the bridge back onto the mainland. However, there are some plantations, subdivisions and gated communities with high-end homes just over the bridge with the same makeup as some of the properties here, so we sometimes go beyond the island but not much further."

There are usually about five large residential projects in the pipeline. The shop completes 30 to 40 jobs per, which range from bathroom updates to whole home remodeling. The company isn't currently involved in commercial work, but Huppertz is licensed to work on condominiums as required in South Carolina.

The shop and showroom is only 3,500 sq. ft., but there's an additional warehouse for storage. The showroom has a wide range of semicustom cabinetry lines, as well as tile and other decorative items on display. The company also works with subcontractors offering plumbing and electrical supplies so clients can have a one-stop shopping experience.

"We build custom cabinetry in our shop without using any factory line



for about 30 percent of our clients. We have several factory lines we show in our showroom. It just depends on the client," says Huppertz, who doubles as the shop's designer.

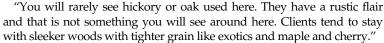
#### Client preferences

Hilton Head has a rather homogenous design style. Huppertz says Shaker architecture is most prevalent because it's so flexible in terms of how clients can decorate around it.









Looking back, Huppertz says he's learned from many mistakes and has been successful because he's corrected them.

"One of the biggest mistakes I've learned from is not saying no. Now, we don't take every job like it's the only one out there. We select our clients similar to how clients select their contractor. We don't want every person that's willing to spend money with us because we aren't young go-



Pauli Alfano and Mike Fletcher work in the shop, which has been producing high-end kitchens like the one above since 1999.

getters willing to take every opportunity presented."

Currently, the shop is extremely busy, but Huppertz describes the economy as a revolving circle of highs and lows.

"Our workload is never middle of the road. It's always either none or a ton. It's a roller coaster. Right now we're seeing more work after six years of fluctuation because there are younger people with money moving in to buy homes as investments or second properties. We're not seeing nearly as much retiree old money as before. And the people that have lived here a while are remodeling their own personal spaces."

Huppertz recently spent a lot of money on a website overhaul to try to keep it up to date and increase the number of hits in searches for custom cabinetry and remodeling. Through the years, the company has

greatly reduced its print advertising efforts.

"We're doing less and less print advertising. The trend used to be that you always wanted a big fat ad in the Yellow Pages and if you didn't have that you could not compete with the competition. Then there were a lot of magazines that were specific to home living and a lot of those died and went away in the bad economy."

#### Keeping with the flow

Huppertz says he'd like to expand, but doesn't anticipate the necessary growth any time soon. His biggest challenge is managing personnel and finding good help.

"I look for people who will do the work and do what they say. We don't have a high turnover, but this is not like any other industry. Keeping a steady flow of business coming in tends to be a roller coaster and I need reliable help."

He's also learned the importance of building long-term relationships with clients, something that definitely keeps his business a success.

"We are upgrading and increasing value of some of the most important investments people have and that is their home. We want to build relationships with those people. You definitely have to have people skills in this business. You have to have a lot of knowledge of the trends and designs and you've got to be able to manage people."

Contact: Hilton Head Kitchen & Bath, 5 Hunter Road, Suite A-2, Hilton Head Island, SC 29926. Tel: 843-689-3528



800-367-3828 • www.airhand.com

Call us for a Free

**Catalog or Shop Online** 

## MAKING the BEST CABINETS & FURNITURE

#### Complied by BHSW Inc



As the construction industry responds to warmer weather, woodshops everywhere are sharpening their competitive edge. And, coincidentally, sharpening can be a big part of that. Burns Power Tools in Fall River, Mass., has been sharpening woodworkers' blades, bits and planer knives for eighty years, so it's no surprise that they're pretty good at it. Their precision diamond machines are only one element in a five-point process that has shop managers from Hawaii to Maine singing their praises.

Making the best cabinets and furniture also calls for exceptional components. Elias Woodwork has our backs, there. The company not only offers Ready-To-Assemble traditional face-frame cabinets, it now supplies frameless European boxes and doors. Both lines are completely customizable, so a woodshop can deliver astounding quality at very affordable prices.

And to add something very special to those custom jobs, Epilog Laser has a new, large format model that is absolutely ideal

for cabinet doors and panels. The generous work area  $(40'' \times 28'')$  can handle just about any job a woodshop might ask of it, and the machine's impressive engineering delivers the best image quality, speed, reliability and ease-of-use in the industry.

So, gear up for warmer weather because, with a little help from these suppliers, it's time to start building the very best cabinets and furniture.



www.burnstools.com.....38



www.eliaswoodwork.com.....36



www.epiloglaser.com......45

#### **Custom Cabinetry Solutions**

Located at the geographical center of North America, Elias Woodwork has just released a new line of frameless European style RTA (ready-to-assemble) cabinet boxes. These give shops an alternative to the company's RTA face frame cabinet boxes that feature the Cabinotch<sup>TM</sup> cabinet box system. Both lines are completely customizable and designed to work well in a full kitchen or bath remodel, or a refacing project when add-on cabinetry is needed. Additional benefits include fast assembly, with no need for clamps or fasteners.

Elias face frame cabinet boxes feature woodon-wood locking joints for solid, high quality construction and assembly. They offer 1/2" thick sides, back, bottom and top, and are sprayed with a durable UV finish inside. They are available in numerous wood species.

The company's new frameless RTA cabinet boxes feature dowels and screws for quick assembly. They come with 5/8" thick sides, back, bottom, top and shelves, and they're edgebanded in standard black but can be ordered with white or matching wood-grain edge banding. This line is available in an economical white melamine, or UV finished quality birch-plywood.

Finishing is a big part of what Elias offers with their products. They manufacture cabinet doors with a choice of stain, paint, lacquer and glaze, on numerous wood species. Rigid ther-

mofoil, decorative laminate veneers and acrylic doors are also available, along with a full line of supporting products, and the company's vast array of colors and styles keep stride with the fast pace of today's kitchen and bath industry.

Elias cabinetry and components allow the convenience of custom cabinet sizing without having to pay

custom pricing. Having a product prefinished and shipped flat-packed to the shop or jobsite, ready to assemble, saves on extra shipping, finishing and assembly costs. Send a sketch or an

idea to the designers at Elias Woodwork and they will create a high quality 3D rendering. Matched with their diverse selection of doors, corbels, drawer boxes and millwork, a woodshop can find everything for its next kitchen or bath masterpiece in one place.









PLAY VIDEO



#### Elias Woodwork

Phone: 800-665-0623

E-mail: sales@eliaswoodwork.com Web: www.eliaswoodwork.com Video: http://www.youtube.com/ watch?v=kKC9hVKKfGU



#### **Large Format Laser is Ideal for Woodshops**

There's a difference between custom and personal. For woodshops that wish to bring a little personalized magic to their custom cabinet and furniture options, Epilog has the answer. The company

has added a large format model to its Fusion™ line of laser systems. The new Fusion 40, made in the USA, has an enormous 40″ x 28″ work area that holds even the largest engraving projects. And its state-of-the-art engineering delivers the best image quality, speed, reliability and ease-of-use in the industry.

An oversized door on top of this amazingly quiet

laser provides a large viewing area, and the incredibly strong, rigid chassis supports the fastest lasering speeds on the market. There's no problem seeing what you're working on because the Fusion 40 comes with a brilliantly lit LED enclosure, and it also provides the operator with the ability to drive the laser directly from joystick controls located on the control panel.

The Fusion 40 is all about superior builtin quality, and with Epilog's Radiance<sup>TM</sup> Optics on board there are no additional,

expensive lens packages needed to achieve the highest resolution engraving. There's even a visible laser beam for setting up projects, so a woodworker can determine exactly where the laser will fire. The Fusion 40's motorized table is easy to adjust up and down to fit a wide variety of projects (up to 14-1/4" thick). There's automatic focus, true Ethernet capability (USB, too),

and on this model work can start at any point on the engraving table, not just the upper left corner. The laser's power options are 30, 40, 50, 60, 75, or 120 watts, and Epilog has developed a Mac driver for the Fusion Laser Series in addition to the standard PC driver.

Ease-of-use was a paramount design concern, and Epilog's print manager software reflects that. It estimates job run time, records the data and provides advanced positioning features. The Fusion 40 comes with a printed manual, and the company provides a complete video training site and an online technical library, too.





PLAY VIDEO



#### **Epilog Laser**

Phone: 888-437-4564
E-mail: sales@epiloglaser.com
Web: www.epiloglaser.com
Video: http://www.youtube.com/

watch?v=p-z-bJFuFbM&feature=c4-overvi ew&list=UUyiGuCTxEhUdHAl9tyfRnKA



#### **Historically Sharp Solutions**

Superior sharpening has a direct impact on a woodshop's bottom line. Nobody knows that better than Burns Power Tools in Fall River, Mass. In 2014, the company celebrates 80 years as a premier sharpening partner for cabinetmakers and furniture builders. Burns' signature SuperSharp<sup>TM</sup> process produces an edge that lasts lon-

ger, cuts better and saves wear and tear, extending a tool's total service life. The company's sharpening experts perform highend, industrial sharpening of most cutters, knives and saw blades, specializing in carbide tips.

"You can't teach experience," says CEO Zach Burns. "The quality of our

sharpening derives from our history, plus lots of trial and error. Part of our sharpening process was adopted from the optical industry, and some of it came from a major saw blade manufacturer in Japan when my grandfather, Marshall Burns, traveled there in the 1980s." Each blade is cleaned and examined to determine what is needed

to restore it to optimal cutting efficiency. After sharpening, it must pass Burns' rigorous five-point inspection before it's dipped in protective coating and returned to the woodshop.

"We've put so much effort into improving our processes, which in turn improve our customers' productivity," says Burns.

"Whether it's eliminating downtime because their blades are now lasting longer, saving money because they're getting more cuts per sharpening, or reducing sanding because of the improved quality of cut, it all goes right to a woodshop's bottom line."

For eight decades, professionals all over the country

have been appreciating Burns' exacting attention to detail. "I've been in architectural woodworking for thirty-five years," says Ron McFadden of Boston, Mass. "And I would not use anybody else for my sharpening. And Kris Resendes of Orion Retail Exhibit Display in Smithfield, R.I, expresses similar sentiments: "We entrust all of

our saw blades, shaper cutters and CNC tooling totheir sharpening department. Their quality of work has improved the performance and life of our tooling."

Burns also offers expert service repairs and parts for most major brands of power tools, and the company has service technicians available for road repair jobs on woodshop machinery.





PLAY VIDEO



#### **Burns Tools**

Phone: 800-341-2200 Web: burnstools.com

Video: http://www.elocallink.tv/vp6/sponfcsa\_a.php?fvm=1&sponid=BDtXZQFnVT8

=&vivid=VmJQaQVjVjoAOwM1





The quality of our sharpening derives from our history, through five generations of sawmen from Nova Scotia and the lumbermills deep in the woods of Maine, to today's modern CNC machinery, and a commitment to continuous improvement since 1934...

"Burns' sharpening is, by far, the best we've ever had. Being in the plastics industry we need a perfect cut, and Burns' saw blade sharpening gets us the quality of cut that we require. When we upgraded our saw blades our previous service could not achieve an acceptable result. We went hunting and found Burns Tools. The router bits even cut better than new after their sharpening! I highly recommend Burns' sharpening service." - C. Oberste, Arkansas

"WOW! I sent in one blade for trial and I am floored. I heard that I should expect the sharpened blade to be sharper than the original, but WOW, I can't believe how effortless it is to cut now. I have never experienced such a sharp and easy cut. I will be sending more." - D. Sudano, Louisiana

"I cut plexi, styrene, wood, aluminum, acrylic - probably at least 10,000 cuts a day. SuperSharp gives my blades a longer lifespan. We used to have to sharpen every 3-4 days. With this sharpening I can go a week and a half. The difference is phenomenal. Cutting is everything - if the cut's no good the display won't go together right." - R. Turcotte, Rhode Island

"Just got back my sharpening order from you folks last week and put the first blade in service this morning. Man, what a job you folks did!! I'm sure this blade didn't cut this well even when it was new. And the planer blades look GREAT!! THANKS!! I'll be sending more blades soon." - D. Foster, New York

"I send my blades to Burns for sharpening because they are the best around. I even have them sharpen the NEW blades that I purchase for my Festool Kapex Miter Saw...The process that they use truly makes the re-sharpened blade cut BETTER than it cuts new out of the box!" - F. Dexter, Illinois

"I am absolutely delighted with the job you did sharpening my circular saw blades. They cut through wood like butter and give me a cleaner edge than even a new blade. WELL DONE! - D. Mozgala, North Carolina

Ready to experience SuperSharp for yourself?

GO TO **SHARPENINGOFFER.COM** TO GET **10% OFF** YOUR FIRST SHARPENING!

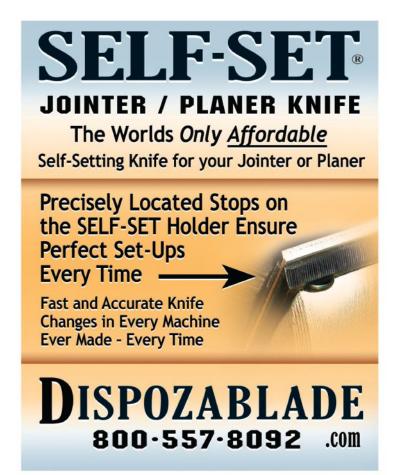
Or send in your blades and simply mention this ad! Blades must be sent by March 31, 2014 to qualify.

BURNS SHARPENING | 315 MAIN RD. | TIVERTON, RI 02878

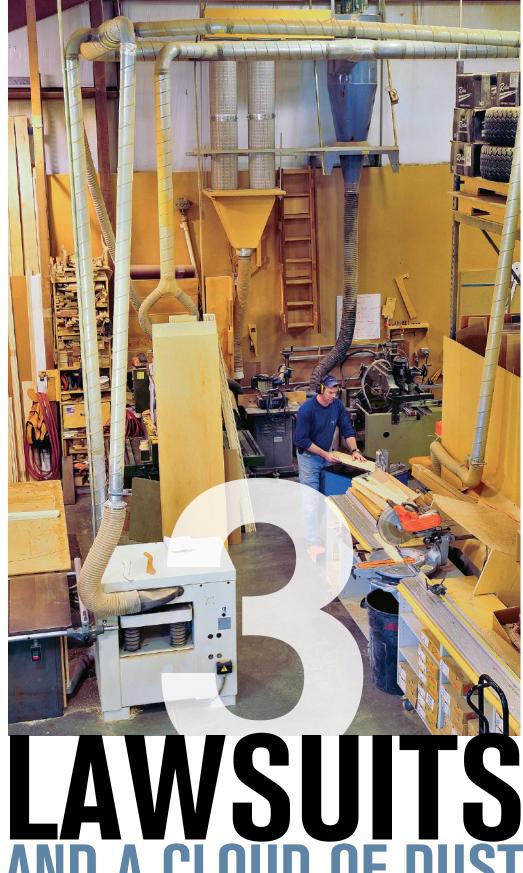
PHONE 800-341-2200 | WWW.BURNSTOOLS.COM











## LASSIITS AND A CLOUD OF DUST

Dust control in your shop can mean the difference between a thriving business and one that's facing legal action for years to come

BY JOHN ENGLISH

o, this isn't another how-to article on designing and assembling a dust collection system. The companies that install systems or sell bags or ductwork can help there. This is something a little more fundamental — a quick look at some changing reasons for talking to those system designers. In fact, dust control could soon be as important to woodshops as malpractice insurance is to doctors.

There are two reasons to control dust in the woodshop: people and products. The products part comes into play around spray booths, where dust can contaminate a finish. That's annoying and it's certainly important to the bottom line, but it's hardly a matter of life and death.

The people part is a matter of life and death. And beyond shortening lifespans, dust can also destroy the quality of a woodworker's remaining years. It doesn't have to. A conscientious effort to curtail the impact of fine particles can be extremely effective. A shop owner can do a great deal to protect his/her people and, in doing so, can also be protecting the shop from lawsuits.

#### PRECEDENTS SET

On Dec. 18, 2010, the State of California added wood dust to the list of products that it says are known to cause cancer. It's now a crime in that state to "knowingly and intentionally expose an individual to wood dust" without sufficient warning. By adding wood dust to its Proposition 65 list, California has created an environment for lawsuits in other states: a plaintiff could, for example, cite California as an expert wit-

ness that has done due diligence in its research.

Also in 2010, a woodworker named James Lemley brought a suit in Alabama against a woodshop that installs kitchens and bathroom cabinetry. After working for the shop for 17 years, he contracted sinonasal cancer. He also sued the companies that made the sanders and the respiratory equipment being used and several of them settled out of court. Lemley's case is only one of many in the last few years that take companies to task for not sufficiently warning and protecting workers from the dangers of dust. Not all of these suits are successful: in a case against Thomasville Furniture Co. in 2009, the finding was that there was insufficient evidence to award in favor of a plaintiff. What is notable here is that the court didn't deny a link between wood dust and the plaintiff's death (from, in this case, multi-organ failure): it just said that the link hadn't been established in this specific case.

As a reaction to the California law, the Lumber Association of California & Nevada and the Western Wood Products Association got together and worked out warning sign language that reads: "Drilling, sawing, sanding or machining wood products generates wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. California Health and Safety Code Section 25249.6."

#### A SCARY THOUGHT

One of the most common grounds for suits against woodshops and woodworking equipment manufacturers is the occurrence of sinonasal adenocarcinoma. This is a very rare form of nose cancer that is far more common among furniture and cabinet shop workers than it is in the gen-







eral population. Some estimates are that woodworkers have a 500-times-greater chance of contracting it than non-woodworkers. From there, it's a logical step to say that wood dust causes it and courts are beginning to agree. There are several grades of the disease: some are aggressively malignant, while others are slow-growing and treatable.

Not all wood dust ailments are carcinogenic. In 2009, a case was filed in Indiana by a group of residents of a neighborhood that was downwind of a wood-chipping facility. The plaintiffs claimed that the wood dust caused many of them to seek medical help for asthma, nosebleeds and breathing difficulties.

And dust can also cause another set of problems when it ignites. According to a 2012 report published by the Ohio law firm Slater & Zurz LLP, "at least 34 workers have died in combustible dust explosions in the United States" since 2003. Explosions are actually not that uncommon. In February, the Vancouver Sun ran a story that stated "at least five explosions linked to wood dust have rocked B.C. wood manufac-

Whether it's a downdraft table, portable or central system, or partitions, the goal is to protect your employees.

turing plants since 2009. None of the earlier explosions resulted in injuries, unlike the two fatal incidents that killed four workers at Lakeland Mills in Prince George and Babine Forest Products mills in Burns Lake this year."

#### WHAT TO DO

So wood dust can cause allergies, breathing problems, nasal cancer, explosions and lawsuits, just to name a few of the consequences. Woodshops have a problem here: it's impossible to work with wood without creating dust. How does a shop owner or manager know what's legal, responsible, in the best interests of employees and even possible?

The best place to begin looking for answers is the latest set of Occupational Safety & Health Administration regulation and guidelines. OSHA is a branch of the U.S. Department of Labor. Because of that, courts will generally accept its interpretations of laws, rules and practices as a standard to be met by employers.

On its website (www.osha.gov), a shop owner can do a search for wood dust and find comprehensive coverage of the issue. In one of its reports (the 1989 Final Rule on Air Contaminants Project), OSHA says, "exposure to wood dust has long been associated with a variety of adverse health effects, including dermatitis, allergic respiratory effects, mucosal and non-allergic respiratory effects, and cancer." The report goes on to say that "a large number of studies have demonstrated that occupational exposure to wood dust causes both statistically significant and non-significant increases in respiratory symptoms at exposure levels as low as 2 mg/m3. These symptoms range from irritation to bleeding, wheezing, sinusitis and prolonged colds. In addition, chronic

wood dust exposure causes mucociliary stasis (i.e., the absence of effective clearance) in the nose and, in some workers, also causes changes in the nasal mucosa. Several studies have demonstrated decreased pulmonary function among wood-dust-exposed workers, although other studies have not confirmed these findings."

One thing that is worth noting is that, despite so many court cases in recent years, OSHA has not updated its opinion of the link between lung cancer and wood dust. The agency's current position is still: "The association between lung cancer and occupational wood dust exposure is inconclusive, although several epidemiological studies have reported increases in lung cancer among wood-dust-exposed workers." However, OSHA does state that "the literature clearly demonstrates an association between occupational wood dust exposure and nasal cancer."

If the federal government says there is an association and California says that wood dust is known to cause cancer, then woodshops need to figure out what the government requires of them in terms of protecting their workers.

#### MONITOR THE AIR

The first thing a shop should do is start monitoring the air in the building and measuring the amount of airborne dust. There are lots of air quality monitors on the market, but not all









of them measure dust. Many are designed to detect only harmful gases.

Dylos Corp. in Riverside, Calif., suggests the DC1100-PRO monitor for woodworkers. This unit is a true laser particle counter with two size ranges, so it's calibrated to detect particulates down to 0.5 micron (small particles) and up to 2.5 microns (large particles). Results show up on an LCD screen. A shop can measure by the minute, hour or day, and evaluate air quality with up to 30 days of history. The unit sells for \$260.99 on the company's website (www.dylosproducts.com), but most professional units cost about ten times that.

Minnesota-based TSI Inc. (www.tsi.com/dust-monitors) offers a comprehensive line of high-end monitors for larger shops. Its DustTrak DRX unit simultaneously measures both mass and size fraction, which is something no other dust monitor can do.

Hiring an environmental engineering company to do a limited air quality study can be an affordable option. They simply place one or more of their machines in the shop and start recording data. A woodshop manager needs to be very specific about the fact that the only test required is for dust particles. Otherwise, the company might bill for all kinds of other tests including mold, asbestos, carbon monoxide and so on.

Testing is going to yield different results in different parts of the building. And those results are going to suggest changes in the way a woodshop goes about its business. Those can include upgrading all abrasive tools to models that have superior dust collection built in (such as Festool), or working with a supplier such as American Fabric Filter Co. to redesign collector bags by changing both their size and their filtration (micron) rating. It could also be time to look at changing materials, investing in new processes (perhaps introducing a sealed CNC station) and writing up a new shop policy on what masks to wear and when.

If a woodshop has a demonstrable history of caring for its workers, that can serve well if dust control, or the lack of it, ever lands the owner in court.



#### 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

# New England's Largest Selection of Unique Lumber and Burls 1000's of Natural Edge Kiln-Dried Slabs in Stock - up to 7' wide Berkshire Products, Inc.

884 Ashley Falls Rd, Sheffield, Mass. 01257

413-229-7919

www.BerkshireProducts.com



## Bed of Contract of the Contrac

Ingenuity spurred Charles Kurak to focus on building Murphy fold-up beds after the recession hit and his Florida shop is sitting pretty because of it

By Jennifer Hicks

illiam Lawrence Murphy is credited with inventing the Murphy bed more than 100 years ago. It's a bed that is hinged at one end to store vertically against a wall or inside a closet or cabinet. The design is said to be making a comeback, particularly among city dwellers living in tight quarters or as an extra bedroom in downsized family homes.

It's a niche product that Charles Kurak has made the focus of his woodworking business, Murphy Beds of Florida in Fernandina Beach, Fla. Kurak has taken the concept a step further, tweaking a previous design for a study desk that folds down to a bed, while capitalizing on the Murphy bed's original hook as a space-saving solution.

"I get a very real sense of accomplishment by doing this. This is meeting someone's specific need right in their own home and making them something that's going to be around for decades. That you can't put a price on," Kurak says.

Kurak started the one-man shop in 2008. He has a comfortable 4,000-sq.-fit shop near his home with a showroom attached. His primary market extends about 200 miles. He generates about a third of his sales through a local home show and about half through his website.

"A Murphy bed is one of those tactile items where some customers know what it is, then see it on my website, and that's great. But other people want to look, touch and feel it. They want to see the quality, feel the wood and they want to see it operate themselves before they go further and that's hard to do over the Internet. I have a video on my website showing people how it opens and closes, but it's not the same as seeing it in person," Kurak says.

What's behind doors number three and four? A Murphy bed, of course, and maybe some surprise art work.

#### A computing background

Kurak has had a diverse career that spans more than 40 years. A native of New Jersey, he spent 14 years in the Navy as a data processing technician. He earned the rate of Chief Petty Officer (E-7) and qualified for Enlisted Surface Warfare Specialist during his sea duty tour on the USS Saratoga, stationed in Mayport, Fla.

Kurak also holds a Bachelor of Arts from Thomas A. Edison State College in New Jersey; a master's degree in computer science from University of North Florida in Jacksonville; and a master's degree in computer science from the University of North Carolina at Chapel Hill. After his military duty, he worked for several large IT companies during a 10-year span and as a purchasing agent and management consultant.



#### **TURNKEY SOLUTIONS**

INCLUDES: 

√ SHIPPING\* 

√ INSTALLATION 

√ TOOLING 

√ DUST COLLECTION 

√ SOFTWARE



SMARTSHOP I PRICE \$28,950



SMARTSHOP I MT PRICE STARTING FROM \$39,950



SMARTSHOP II PRICE \$44,950

#### For More Information Call Us at 800.234.1976



But Kurak wanted a new challenge and became a cabinetmaker, founding C. Kurak Custom Woodworking that served the high-end residential and commercial markets. Once the recession hit in 2008, Kurak identified a market need for a guest bedroom/home office combination. He began to reinvent his custom cabinetry business, building Murphy beds to solve this space issue. After honing his craft, Kurak introduced his design of a Murphy bed product line to the public. He then added the study bed, which gives the homeowner the option to turn an office desk into a guest bed without moving anything off the desk. Business has continued to grow in double-digits since revamping the business.

Initially, Kurak focused on a creating a high-end product. Now it's more about marketing. He exhibits twice a year at the Jacksonville Home and Patio Show, which attracts about 30,000 visitors.

"At the beginning. I spent a lot of emphasis on the technical end of things, making sure the products I made would last a long time. I didn't really have a good handle on the marketing end of it," Kurak says.

"Before the recession got bad, word of mouth was working and I was getting lots of work from designers. That was all I needed. Then the recession hit and the rules completely changed. I had to look for other ways to get work, learn about marketing, sales and advertising. If I were to do it over again, I'd still work hard at the technical end, but concentrate more on the marketing because you can have the greatest product in the world but if folks don't know about you, you don't have a business."

Styles, designs and pricing

Since clients are often newcomers to Florida, many from New England, they often bring their regional style with them.

"Typically maple is the most popular wood selection because it's a native hardwood for this part of the country," Kurak says. "We have about a dozen different stain colors. We do stain grade and paint grade. As far as styles go, we have what I call contemporary, some people call Scandinavian, with the flat-slab doors. We also offer a flat panel or Shaker de-





Why reinvent the wheel? Kurak has built a business around a familiar product, which he's expanded with a desk design (opposite page).



Add hand carved elegance with

Cabinetry Panels

Intricate Hand Carved Detail

Perfect for Cabinet Door Construction

Prices Starting at \$82.05

Order by phone at 866.963.5578 or visit www.osborneparts.com

Request a free catalog online or by phone

sign and a beadboard look, which some people call wainscoting."

Kurak says his asking price is a combination of time, material and what the market will bear. He will not underbid his worth and holds a firm policy not to negotiate his prices.

"I have to make a gross profit. Otherwise, the company goes under. You're not making money; you're just funding it. It's got to make a profit to sustain itself and grow."

He says it's important to know his competition, so he's constantly looking at their websites and visiting showrooms. And his computer skills come in handy for the shop's design and manufacturing software.

"[The software] helps me standardize production, but still be custom under the mass-customization concept," Kurak says. "My background in computer science makes me think very logically. I've also learned about parallel processing, not multitasking, where multiple things happen at the same time."

#### Ready to grow

Kurak, serving his second term as vice president of the Cabinet Makers Association, says



his volume of work has increased during the last year.

"I'm not sure about the economy overall, but the folks that are buying my products have the discretionary funds to do this. When the recession hit, people in general were pretty reserved, but now they're more relaxed in their spending. My demographic wants to have relatives visit them and use the Murphy beds. They know they're getting a top-quality product and don't try to talk me down in price."

Kurak adds the goal for 2014 is to double last year's sales.

"We have the fiscal capabilities of doing it. I've got the manpower available to do it. I've got the product refined quite well after doing this a number of years so I can build it quickly. I can handle an occasional rush project where someone needs me to get a bed to them immediately."

Contact: Murphy Beds of Florida, P.O. Box 15940, Fernandina Beach, FL 32035. Tel: 904-626-3977. www.murphybedsofflorida.com

#### **OLON ADDS ACCESSORY MOLDING PROGRAM**

Olon Industries, a manufacturer of moldings and components, introduces a new accessory molding program of nine trend profiles including new batten and baseboard models.

"We've focused on the needs of kitchen and cabinet manufacturer's and have made it really simple. Choose the profile, choose the TFL colour, order 2 boxes and they're ready in 10 days," sales director Sylvain Duchesne said in a statement.

For information, visit www.olon.com.

#### STORAGE SUPPLIER JOINS STANLEY

Vidmar is joining the storage and workspace systems business unit of Stanley Industrial & Automotive, LLC.

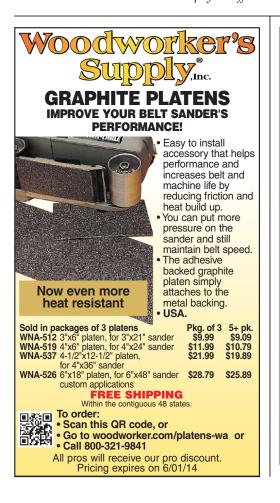
A division of Stanley Black & Decker, Vidmar offers storage solutions to all industries, with modular space-saving systems that provide quick, safe access to parts, tools, and supplies. For information, visit www.stanleyvidmar.com.

#### **COUNTERTOP GROUP ELECTS LEADER**

David Paxton, of Paxton Countertops in Eagle, Mich., is the new president of the International Surface Fabricators Association's board of directors. Paxton replaces Mike Langenderfer of The Countertop Shop in Holland, Ohio.

New officers also include vice president Mellisa Hill of Oldcastle Surfaces in Atlanta; treasurer Erica Hussey of JCW Countertops in Woburn, Mass., and Adam Albee of Lincoln Lamination in Lincoln, Neb.

New board members include Kate Dillenberg of Bisley Fabrication in Gresham, Wis.; Mike Woods of Creative Countertop Solutions in Nashville, Tenn., and Ryan Miller of VT Industries in Holstein, Iowa.





## Year-long guitar exhibit under way in New York

**By Jennifer Hicks** 

he Metropolitan Museum of Art in New York will host "Early American Guitars: The Instruments of C.F. Martin" through Dec. 7. The exhibition, which started in January, will be held at the Andre Mertens Galleries for Musical Instruments, Gallery 684, at the museum.

The exhibition features 35 rare guitars that illustrate the early history of the instrument in America, drawn from the museum's holdings as well as from the Martin Guitar Museum in Nazareth, Pa., and several private collections. It will trace the birth of the American guitar by shedding light on the contributions of Christian Frederick Martin, a German immigrant who invented a uniquely American form of the guitar in the first half of the 19th century.

This will be the largest collection of instruments by this famed guitar maker ever to be displayed publicly, including the earliest known guitar signed by Martin, the earliest established guitar with his famed X-braced construction and several extraordinary decorated examples of his work. Also on view will be a 1939 guitar made by Martin Guitar that was played by Eric Clapton on MTV's "Unplugged" series in 1992, representing the long trajectory of guitar building by the company, according to the museum.

Born in 1796 to a cabinetmaker in Markneukirchen, Saxony, Martin learned to build guitars in the style of Johann Georg Stauffer in Vienna. Because of the restrictive guilds in his birth country, Martin left it in 1833 and settled first in New York City, then moved to Nazareth.

The Met also has an exhibit exploring the evolution of the modern dressing table.

Both exhibitions are featured on the museum's website at *www.metmuseum.org*. **W** 

The early American guiltar exhibit at the Metropolitan Museum of Art in New York runs through Dec. 7.





#### DOUBLE-DIGIT GROWTH PREDICTED IN REMODELING SPENDING

The home remodeling market should see strong growth in 2014, according to the Leading Indicator of Remodeling Activity released by the Remodeling Futures Program at the Joint Center for Housing Studies of Harvard University.

The double-digit gains in annual home improvement spending projected for the first half of the year should moderate some to just under 10 percent by the third quarter.

"The ongoing growth that we've seen in home prices, housing starts, and existing home sales is also being reflected in home improvement activity," the center's managing director Eric S. Belsky said in a statement. "As owners gain more confidence in the housing market, they are likely to undertake home improvements that they have deferred."

"However, the strong growth for this cycle may start to ebb a bit beginning around midyear," Remodeling Futures Program director Kermit Baker said. "By that time, we'll be approaching the pre-recessionary levels of spending and, with borrowing costs starting to creep back up, growth rates are likely to slow some."

The Leading Indicator of Remodeling Activity is designed to estimate national homeowner spending on improvements for the current quarter and subsequent three quarters. The indicator, measured as an annual rate-of-change of its components, provides a short-term outlook of homeowner remodeling activity and is intended to help identify future turning points in the business cycle of the home improvement industry.

For information, visit www.jchs.harvard.edu.

#### **AMERICAN WOODSHOP BEGINS 21ST SEASON**

Co-hosts Scott and Suzy Phillips focus on American originality in furniture design and creativity in the use of hand tools as they begin American Woodshop's 21st season on public television.

"American handmade furniture captures our free thinking ways," Scott Phillips said in a statement. "Every woodworker puts a lot of who he or she is into their work, and most woodworkers are passionate about working with their hands. Free-form

designs, like the hard line, soft line ideas of Sam Maloof, break with tradition. Freedom of expression shines when people add their own unique touches to everything they make by hand in their own shop. This leads to uniquely original furniture. That's something to celebrate, and we do just that with Season 21 projects."

Woodcraft Supply, Kreg Tool Co., Easy Wood Tools, Gorilla Glue Co., and O'Keeffe's Working Hands provide funding for The American Woodshop, which is produced by WBGU-TV in Bowling Green, Ohio, and carried on 350 plus PBS stations.

In addition to furniture-making skills, several of the Season 21 projects incorporate specialized woodworking skills such as the Chippendale carvings found on the Philadelphia ball-and-claw armchair, the scroll sawing that produces scroll saw puzzles, the bending wood necessary to build the oval tray table, and the classic dovetail joints featured in the base of the Shaker-style secretary. Two other projects involve turning.

Three projects are designed for the woodshop: portable benches made from recycled hard maple, shop jigs, and a two-drawer tool tray.

Rounding out the lineup are a tiled marbletop washstand, 1930 relief-accented desk, scrolled leg stand, and a curio cabinet featuring willow columns.

"There are many guests from all over America who join us to present breakthroughs in details from carving, scrolling, workbench designs, and even dust collection," Phillips said. "We also dig into hand-tool use with planes, sharpening tools and jigs and apply these seriously sharp tools to ball and claw legs, a relief accented desk and even a tool tray."

#### **DELCAM ACCEPTS AUTODESK OFFER**

Shareholders in Delcam, a software supplier for the manufacturing industry, voted to accept an offer made by Autodesk to acquire the company. The acquisition is expected to be completed in February.

Autodesk and Delcam offer complementary ranges of software with Autodesk's programs for design, engineering and entertainment able to be combined with Delcam strengths in manufacturing.

Delcam will become a subsidiary of Autodesk.

#### **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.
They are not authorized to represent Woodshop News in any way
and we do not have a business relationship with them!

#### 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.
- We do not offer a 1 year subscription price of \$42.00 or 2 years @ \$94.95.

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!

## Had it with sanding dust? Bring in a pro. Sanding Tables Sanding Booths Sanding Booths

• Inspection Lighting



SANDMAN Products
Affordable Downdraft Sanding Stations
Ph: 800-265-2008 • info@sandmanproducts.com
www.sandmanproducts.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 fees, as listed, might not include materials or shop fees. Check with a specific class for further details.

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

— Compiled by Jennifer Hicks

#### **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

March 20-21 — West Coast One2One, hosted by Biesse and Intermac. An open house event for industry professionals to exchange

ideas, gain hands-on experience, and consult one-on-one with product managers. Location: Anaheim. Contact: *marketing@biesseamerica. com* or call 877-824-3773.

#### **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.

March 5-7 — World of Wood Convention. Location: St. Petersburg. www.iwpawood.org

#### **GEORGIA**

**Aug. 20-23** — IWF, the largest showcase of machinery, materials, supplies, and services in the Western Hemisphere for woodworking and related industries. Location: Georgia World Congress Center in Atlanta. www.iwfatlanta.com

March 7-9 — The Woodworking Show, Atlanta. Location: TBD. www.thewoodworkingshows.com

#### **MAINE**

June 9-Aug. 29; Oct. 27-Jan. 23 — Twelve-

week Furniture Making Intensives at the Center for Furniture Craftsmanship. Designed to meet the needs of aspiring professional furniture makers, curriculum focuses on design, lumber selection, joinery, traditional hand skills, machine techniques, surface preparation and finishing, shop maintenance, advanced techniques and professional practices. Tuition: \$7,230. Location: Rockport. www.woodschool.org

June 2-13 — Furniture Making Workshops with Peter Korn and Brian Persico. Tuition: \$1,310. Location: Center for Furniture Craftsmanship, Rockport. www.woodschool.org

June 9-13 — Just Joinery with David Upfill-Brown. Participants will get hands-on experience at cutting a full range of essential woodworking joints with power and hand tools. Tuition: \$730. Location: Center for Furniture Craftsmanship, Rockport. www.woodschool.org

June 16-27 — Next Steps in Furniture Making with Tim Rousseau. Each student designs and builds a small, simple case piece or table. Tuition: \$1,310. Location: Center for Furniture Craftsmanship, Rockport. www.woodschool.org

June 30-July 11 — Furniture Making Workshops with Peter Korn and Ian Kirk. Tutition: \$1,310. Location: Center for Furniture Craftsmanship, Rockport. www.woodschool.org

July 14-25 — Turning the Tables with Mason McBrien. Each participant designs and builds a small table with turned legs.



#### WEB: www.woodshopnews.com MAIL: WOODSHOP NEWS, PO BOX 433212 PALM COAST, FL 32143-3212 1 year with Hat \$21.95 2 years with Hat \$35.95 Name Address \_\_\_\_\_ City State Zip Daytime Phone\_\_\_\_ E-mail (for renewal purposes only) ☐ Check Enclosed ☐ Bill my credit card No "bill me" orders please. Credit Card # Exp. Date Canadian subscribers add \$12 per year; Foreign subscribers add \$14 per year. Offer valid with this coupon only and may not be used in combination with other offers. This offer is not retroactive. Valid on new subscriptions only. **O4WHAT**

CALL: 1-800-243-9177

Tuition: \$1,310. Location: Center for Furniture Craftsmanship, Rockport. www.woodschool.org

#### **LOUISIANA**

March 22 — Making Molding with Terry Landry and Reggie Troxclair. Demonstrating the use of the router table, table saw and hand-held router to make simple and complex moldings, both straight and curved. Location: Clinton. Tel: 225-683-9912.

#### **NEW JERSEY**

March 21-23 — Sugarloaf Crafts Festival. More than 250 artists and craftspeople will personally display their unique, handcrafted items. Location: Garden State Exhibit Center in Somerset. www.sugarloafcrafts.com

#### **NEW YORK**

March 29-30 — 23rd annual Northeast Woodworkers Association Showcase featuring more than 600 entries of custom woodwork to be judged and more than 75 vendors. Location: Saratoga Springs City Center. www. woodworker.org

May 17-20 — 26th annual International Contemporary Furniture Fair featuring the latest global designs by artisans from around the world. Location: Jacob K. Javits Convention Center in New York City. www.

#### **NORTH CAROLINA**

April 5-10 — High Point Market. The largest furnishings industry trade show in the world, bringing more than 75,000 people to High Point every six months. www.highpointmarket.org

April 10-11 — Charlotte One2One, hosted by Biesse and Intermac. An open house event for industry professionals to exchange ideas, gain hands-on experience, and consult one-onone with product managers. Contact: marketing@biesseamerica.com or call 877-824-3773.

#### **ONTARIO**

April 3-4 — Toronto One2One, hosted by Biesse and Intermac. An open house event for industry professionals to exchange ideas, gain hands-on experience, and consult one-on-one with product managers. Contact: marketing@ biesseamerica.com or call 877-824-3773.

#### **PENNSYLVANIA**

April 4-6 — The 20th annual Philadelphia Invitational Furniture Show featuring fine furniture and other handcrafted items from custom artisans around the country. Location: 23rd St. Armory downtown. www.philaifs.com

#### RHODE ISLAND

Nov. 7-9 — New England Fine Furnishings Show. Annual show offering handcrafted furniture and accessories. Location: Pawtucket. www.finefurnishingsshows.com

#### QUEBEC

April 24-25 — Montreal Coast One2One, hosted by Biesse and Intermac. An open house event for industry professionals to exchange ideas, gain hands-on experience, and consult one-on-one with product managers. Contact: marketing@biesseamerica.com or call 877-824-3773.

#### **TENNESSEE**

April 16-19 — National Wood Flooring Association's 2014 Wood Floor Expo. Location: Music City Center in Nashville. www.nwfa.org

#### **TEXAS**

March 28-30 - The Woodworking Show, Houston. Location: Montgomery County Fairgrounds in Conroe. www.thewoodworkingshows.com

#### **WISCONSIN**

Oct. 3-5 — Milwaukee Fine Furnishings Show. Annual show offering handcrafted furniture and accessories. Location: Harley-Davidson Museum. www.finefurnishingsshows.com

#### **WYOMING**

Sept. 4-7 — Annual Western Design Conference at Snow King Center in Jackson Hole, Wyo. Features furniture and other items from Westem-influenced designers and artists. www.westerndesignconference.com



#### Nanofiber eats the competition's dust!

(FREE with any Tempest Cyclone!)

#### The best value in dust collection is now the cleanest.

Our Tempest Cyclone Dust Collectors now include Nanofiber filters as a FREE upgrade (a \$54 value). Industry leading, Merv 15 rated Nanofiber filters combined with our cyclonic separation process captures 99.98% of wood chips and dust particles to below 1/2 micron. You achieve near surgical quality air and cleaner tools, while practically eliminating dust clean up forever! In addition, Tempest Cyclones never clog, require almost no maintenance and come with a 5 year warranty.

. 2.5 HP - 1450CFM - \$1095

• 3.5 HP - 1700CFM - \$1295

• 5.0 HP - 1800CFM - \$1495

• 2.0 HP - Portable 1025CFM - \$995

Ask about our solutions for smaller shops starting at ONLY \$295.

**SAVE on any system you buy!** PSI offers a variety of discounts and offers on dust collectors too numerous to list here. We're your complete resource for everything you need to get the job done right! To get the best deal on the system sized perfectly for your shop and number of tools, call Bill at (215) 676-7606 x16.

#### **Penn State Industries**

**Top Quality, Great Prices and Expert Advice!** 

1-800-377-7297 • www.pennstateind.com

#### CLASSIFIED MARKETPLACE

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

#### **Bits. Cutters**

#### Freeborn Cope & Pattern Sets Now on Sale



Cone & Pattern 3/4" to 1-1/8'

Glass Panel 3/4" to 1"

Tongue & Groove









Fax (209) 835-9378 www.pmetooling.net For all your tooling needs

#### 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

#### **Blades**



#### **Branding Irons**

#### **Custom Branding Irons**



Electric or Flame Heated Custom Designs, Logos, Signatures

Quality for over 20 Years!

#### BrandNew Industries, Inc.

(800) 964-8251 www.BrandNew.net

#### **CUSTOM BRANDING IRONS**

#### FREE-FREE-FREE information & sample brandinas

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."



#### **Business Opportunities**

NEW COMPANY seeks woodworking CNC 3D manufacturer for potential nationwide retail production. Call Jonathan: 512-206-6111

#### **Catalogs**

#### LOGOSOL

Distributed in the U.S. by 🔏 العنوانية



High-Quality Woodworking Machinery Made in Sweden

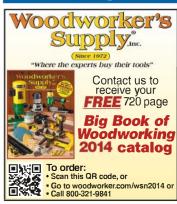
1-877-LOGOSOL (564-6765)

www.logosol.us Code: WSN142

CLASSIFIED ADVERTISING CALL 860-767-3200 ext. 284

WOODSHOP

#### Catalogs



#### **Drawers**

#### CNC Machine Cut Dovetails That Look **Hand Cut!**

- \* Call for Sample & Prices \* Thru & Blind
- \* Drawers & Pullouts \* Prefinishing
- \* Adjustable Tail Spacing
- \* Undermount Prep \* Prompt & Reliable \* 1-2 Week Turnaround

stratton Creek Wood Works

330-876-0005 Shop 330-876-0032 Fax www.strattoncreek.com

## **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

#### Angles? No Problem. ZIPBOLT UT ANGLED RAIL BOLT Part # 11.500 - Patents granted & pending ZIPBOLT For other sizes, styles and distributors please visit our website www.zipbolt.com.au

**Fasteners** 

#### Finishes/Coatings

phone: +61 8 8244 5757

email: milan@zipbolt.com.au

fax: +61 8 8345 1596

BLOXYGEN SAVES LEFTOVER paint. Preserve expensive varnish, bloxygen ... com 888-810-8311

#### 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**



The trusted supplier from the Heart of North Carolina Furniture County.

 HARDWOODS • EXOTICS • THIN **CRAFTWDDD • 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



#### **CLASSIFIED MARKETPLACE**

E-Mail marketplace@woodshopnews.com for Advertising Information

**Hardwoods** 



Hardwoods

(610)350-1556

www.goodhope.com

WEST PENN

HARDWOODS, INC.

**Exotic Wood Wonderland!** 

The Largest Importer of

Exotic Hardwoods From

Pen Blanks to the Whole Log!

#### **Hardwoods**

#### Oregon Claro/Black Walnut

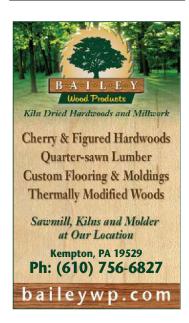
Slabs - Wide lumber - 4/4 through 16/4 Turning - Carving Stock - Gunstocks - Veneer Web Site www.gobywalnut.com

60Bx



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

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



### CORMARK INTERNATIONAL EXOTIC HARDWOODS BEST PRICES - DIRECT FROM SOURCE EXOTIC LUMBERS, BLANKS, BURLS, SLABS, SLABS, TIJBANIA STATE

- TURNING BLOCKS AND MORE.







#### **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

#### **Hinges**



#### Instruction



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

#### **Jointers/Planers**



**KNIVES & CUTTERHEADS** AT DISCOUNT PRICES

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



#### **Knobs/Pulls**



#### **Laminates**



Laminate/Laminate Sheets, from: Wilsonart, Formica, Nevamar and Laminati

> **Buy Online** Save time and money **Lowest Prices** Ships by UPS or Fed Ex anywhere in USA in 24-48 Hrs.

888-509-6883

www.topcabinethardware.com

#### Lumber

#### 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

#### **West Coast Woods**

#### **VG Clears:**

- Western Red Cedar
- Alakan Yellow Cedar
- Douglas Fir

#### **Urban Forest Slabs:**

- Monterey Cypress

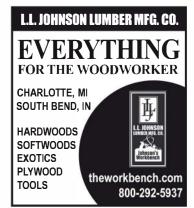






717-270-9900

www.KEYSTONEVINTAGELUMBER.com



#### 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-I220 • Fax: (203) 378-7346 EMail: Info@CTSaw.com

www.ctsaw.com

#### **Veneer Supplies**

#### Vacuum Press

www.qualityvak.com





Pneumatic

**Electric** 





Frame Presses Professional automatic pneumatic systems

with 4'6" x 8'6" bag from \$625

Toll Free 800 547-5484

Quality VAKuum Products, Inc. 74 Apsley St. Hudson, MA 01749 Phone (978) 562-4680 Fax: (978) 562-4681

#### Veneers



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

#### **Wood Turning**





#### **Wood Turning**

CUSTOM HAND WOODTURNING Architectural/furniture prototyping, components, reproduction. Small-to-medium quantity, small scale to 9'6". Jim Kephart Woodturning. Phone/fax 860-643-9431, www.jimkephartwoodturning.com



#### VISIT OUR ONLINE CLASSIFIED SECTION

www.woodshopnews.com/classifieds

**WOODSHOP** 



#### ADVERTISING INDEX

Air Handling Systems	www.airhand.com	34	Lignomat USA, LTD	www.moisture-problems.com	25
Amana Tool	www.amanatool.com	c4	LOGOSOL	www.logosol.us	15
American Fabric Filter Co	www.americanfabricfilter.com	filter.com		2, 3	
Bainbridge Manufacturing	www.BainbridgeMfg.com	41	Oliver Macninery Co	www.olivermachinery.net	27
Beaver Tools	www.beavertools.com	26, 48	Oneida Air Systems Inc	www.oneida-air.com	7
Berkshire Products	www.BerkProducts.com	43	Osborne Wood Products, Inc	www.osbornewood.com	46
Bioformix, Inc	www.nexabond.com	39	Outwater Plastics Industries	www.outwater.com	55
Burns Power Tools	www.burnstools.com	38	Penn State Industries	www.pennstateind.com	51
cabinet vision / vero software	essential.cabinetvision.com	11	PMK Family, L.L.C	www.pmksystems.com	22
Chemcraft	www.chemcraft.com	6	Precission Drive Systems	www.pdscolombo.com	5
CNC Warehouse	www.cnc-warehouse.com	42	Rockler Woodworking & Hardware	www.rockler.com	16
Colonial Saw	www.csaw.com	20	SandMan Products	www.sandmanproducts.com	49
Connecticut Saw & Tool	www.ctsaw.com	47	States industries	www.statesind.com	24
Dispoz-A-Blade, L.L.C	www.estausa.com	39	Stiles Machinery	www.stilesmachinery.com	1
Elias Woodwork and Manufacturing www.eliaswoodwork.com		36	TigerStop / SawGear	www.sawgear.com	23
Epilog Laser	www.epiloglaser.com	37	Vortex Tool Co., Inc	www.vortextool.com	19
Festool USA	www.festoolusa.com	4	W. Moore Profiles Ltd	www.wmooreprofiles.com	21
Forrest Manufacturing	www.ForrestBlades.com	41	White Dove International Inc	www.andreoumachinery.com	39
Freeborn Tool Company, Inc	www.freeborntool.com	33	Williams & Hussey Machine Co	www.williamsnhussey.com	17
Grizzly Industrial, Inc	www.grizzly.com	13, 28-29	Woodshop Specialties	www.woodshopspecialties.org	43
Hearne Hardwoods	www.hearnehardwoods.com	32	Woodstock International	www.woodstockinternational.com	c2
	www.KCDsoftware.com			www.woodworker.com	
Laguna Tools Inc	www.lagunatools.com	45	5.5.5		

#### Toy box specialist

Bob Beck of Bismarck, N.D., is the proud owner of Wood Creations Inc., a niche woodworking business that produces wooden toy boxes, blanket chests and memory boxes for clients around the world. Joined by his wife, Julie, and four employees, the company produces an average of 1,500 products annually for customers looking for a special keepsake for either a child's toys or their own precious mementos.

"I'm a woodworker myself. I've done it my whole life. This company started in 1999. Our oldest is a senior in high school right now. When she was 2, my wife asked me to build a toy box so that's how I got started," Beck says.

For the first couple of years in business, Beck made toy boxes directly for friends and family members, but then started selling through his website at *www.woodtoybox.com*. By 2005, he began to outsource many of the machined parts so he could focus on the products' custom laser engraving.

Once the parts arrive, the boxes are assembled in the workshop, engraved and finished. The company offers four finishing options. The espresso and cherry receive gold-colored paint in the engravings and the bamboo and oak feature a dark brown colored engraving.

"The bamboo is my favorite toy box. It's so well-built and incredibly durable. A lot of people request bamboo material for those reasons, beyond it being eco-friendly. Kids tend to abuse a toy box and throw toys in there, so it needs to be very heavy and durable."

The company ships its products in a ready-to-assemble package. Each toy box has a company logo stamped on the inside.

Beck has also established a sister business that offers memory chests at www.memorychests.com.

"We created them for people that had loved ones pass away, but all of a sudden we were making wedding and graduation memory chests for people to store their photos and other memorabilia."

Contact: Wood Creations Inc. Tel: 701-214-1520.

- Jennifer Hicks

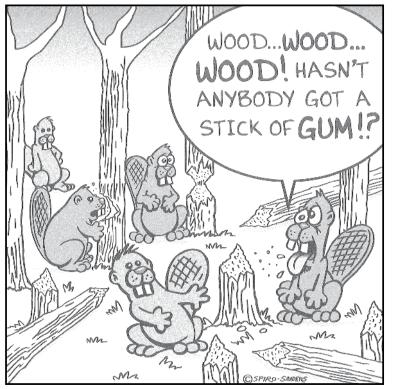


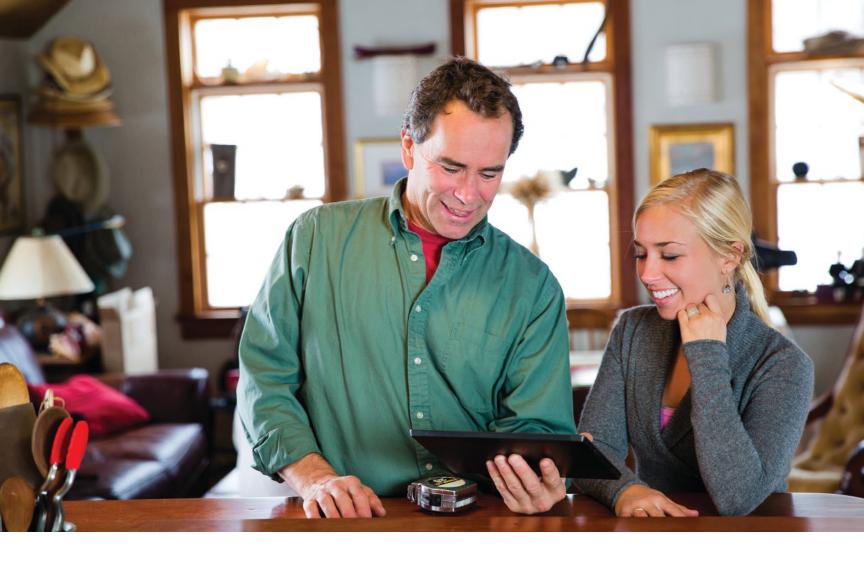


Clockwise: A cherry toy box engraved with a calligraphy alphabet; a bamboo version, and the espresso finish.



60 Grit Rough humor by Steve Spiro





#### Changing the way cabinet makers work.

#### **KCD Touch for custom cabinets & closets**

lets job details, design and pricing be completely mobile. It's easy to reduce meeting time and increase sales using KCD Touch.

#### **Easy on-site touch design.** Professionally engineered using

advanced touch screen technology.

This touch-friendly, powerful **design**program integrates new features like **JobsitePics** with

program integrates new features like **JobsitePics** with hand drawn notes to capture important details.

Impressive 3D. Meet, measure and custom-design quickly with KCD Touch. You can generate floor plans, elevations and select from a vast studio of materials, colors, styles, doors and drawers for immediate feedback from your client. Make changes quickly and show different styles and materials on the go.

Instant Price and Proposal. Approved design?

Review accurate pricing with your client – based on their choices – with **KCD Touch Pricer.** Easily modify

materials or design and tap to get revised prices.

Save files to the Cloud. Happy with the design, materials and price, your client can sign on the dotted line (with a stylus) and your design can be saved

to the Cloud for immediate and secure access by your production team – complete with notes, photos and all the critical job information for construction.

**Integrates with CNC and cut listing.** Streamline your construction with KCD's CNC Commander with One Button Machining or KCD Workshop for accurate and traditional cut lists for construction.

**Easy to use. Free technical support & training.** Give us a call at 508-760-1140 to learn more.







#### INDUSTRIAL

CNC ROUTER BIT

## SETS

FOR ALL YOUR NEEDS!

- Expand your creativity
- Superior cutting quality
- Exclusive micro-grain carbide grade
- Longer tool life

NEW

- Hardwood box with clear lid for dust-free storage
- Save Money when buying tools as a set

10-PC 3D, SIGNMAKING, LETTERING & ENGRAVING CNC ROUTER BIT SET #AMS-138



**VIEW ALL SETS ONLINE!** 



1-800-445-0077 www.amanatool.com