

The Newsletter of the Minnesota Woodworkers Guild

NORTHERN WOODS

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14 foot guillotine at Navy Island Plywood cuts stacks of veneers to within 0.001" prior to edge gluing into panels.

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Membership

To become a member, fill out the coupon below, write check to MN Woodworkers Guild, mail both to:

MN Woodworkers Guild
1950 Park Rd. Ct.
Chaska, Mn 55318

You will receive your membership card by return mail.

Address Changes

Please forward address and contact change information to Carole Magnuson at the email address shown to your left.

Newsletter

Send articles, "Buy & Sell" submissions and letters to the editor to:

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We have now entered the warmer season, even though it doesn't quite seem like summer. Many of you have opened up shop and are busy creating and building while others slow down during the summer months. I have seen many of you at the most recent monthly meetings which were held at Mike Siemsen's School, Navy Island Plywood and Industrial Electric. These have been excellent meetings and very well attended. Kudos to our program committee for all their efforts in organizing these sessions. These meetings are always a source of ideas and enjoyable socializing for me, and I hope you have had an opportunity to attend a meeting, workshop or seminar to add to your skill set. Next month we will be meeting at Youngblood's Lumber. The last time we met there it was a great meeting with over 100 people in attendance.

The board is constantly striving to improve the guild by making changes to meet the needs of its members. You are encouraged to contact us with suggestions and feedback that will help us to maintain our guild as one of the best in the country. We are currently considering delivering this newsletter by email and subscribing to an online service which would allow us to contact our members electronically and provide you with the ability to pay yearly dues online. Let us know what you think.. Our phone numbers and email addresses are all listed on this page. See you soon and don't forget to think about what you can do for the guild. We depend on you.

Dick Schultz

New Membership Coupon

Name _____

Business Name (if any) _____

Address _____

City _____

State _____

Zip Code _____

Phone _____

E-mail Address _____

Navy Island Plywood Tour

By David Mitchell

Photos by Bob Bridigum

The June meeting of the Minnesota Woodworkers Guild was held at the Navy Island Plywood facility in St Paul. Navy Island Plywood manufactures wood veneer panels from exotic and domestic wood species. Their panels can be seen at the new Twins stadium, the TCF stadium, many court rooms, concert halls, retail outlets such as Nordstrom's and upscale homes. They mainly sell thru project contractors and high-end cabinet shops. Jeff Stone started the company in 1983 and he along with Hans Mouritzen were our tours leaders on this evening. Hans is a seven year employee, working in sales.

Until 1991 Navy Island focused on the refurbishing, restoring, and refinishing of furniture. From 1991 through 1995 they produced painted door products. Their first veneer plywood products were made in 1995 and since then they have produced only veneer plywood products. In 2002 they moved to their current facility at 275 Marie Ave E. in St Paul.

Navy Island's expertise is in the manufacturing of finished panels and they choose to purchase veneer sheets from suppliers, most of whom are located in Indiana. For core substrates They use primarily MDF (medium density fiberboard) and PB (particle board) because of their uniformity and flatness.



A sampling of the 100+ panels on display in the Navy Island Plywood showroom.
Jeff Stone, company president (inset)

Navy Island Plywood Tour -cont'd

The existing methods for veneer grading are inexact and leave much to interpretation, resulting in large variations in quality. As a result, Jeff Stone has developed a new veneer grading scale system called Trugrade. Navy Island is continually working with veneer suppliers to use and to refine this grading system and he has obtained patent protection on the grading system.

Navy Island uses very few rotary cut veneers. Rotary cut can be used on a few grain patterns. An example is birds eye maple, where the desired pattern is preserved with a tangential cut. The majority of the veneers used are plain sliced, rift sliced, or quarter sliced. Still, depending on the wood variety, the best grain pattern is the determining factor in the selection of slicing technique.



Jeff Stone describes different methods of veneer slicing. Stacks of veneer visible on the racks behind him

Veneer Slicing

Although Navy Island Plywood does not do any veneer slicing, Hans described the process to us and recommended that we visit or tour a veneer slicing operation if we ever get a chance. The veneer slicing process begins with a grader studying the log for the best grain pattern in preparation for the next step—the initial cut with the bandsaw. The bandsaw is used to square up the log; depending on the intended slicing pattern, the log may be halved, quartered, or squared up. The bandsaw used for the initial log cut is huge. The blade is approximately 12 inches wide in a bandsaw frame approximately two stories high.

The logs are sliced at full (saturation) moisture content. This requires that the logs soak in a heated water bath for several days. Once fully saturated, the veneer is sliced from the log with a large knife. The slicing knife is completely adjustable; each end is individually movable; even the camber is adjustable. The sliced veneer leaves are only 1/32 to 1/42 inch thick. The precision control of the cutting edge is critical. When the slicing knife is not in use, infrared heat is used to maintain the continuity of its temperature. Fluctuating temperatures

Navy Island Plywood Tour -cont'd

will result in a warped knife, which can produce uneven veneer thicknesses.

Once sliced, the veneer leaves are stacked and dried in a huge kiln. Placed on a moving conveyer, the stickered leaves travel through a stationary drying oven. The veneers are tracked by flitch numbers, sequence numbers, grade rating, and traced back to the original log from which they were cut. In the past, samples of the veneer at 25%, 50%, and 75% of the log were sent to customers. If the customer was satisfied, they kept the samples and the complete order was shipped to them. This sample process has pretty much been replaced by high quality photos today.

Receipt and Storage

Each bundle of veneer has 24 leaves, kept in the original cutting order. Navy Island has approximately 4 million square feet of veneer in inventory. They turn their entire inventory three times a year. The storage and manufacturing space at Navy Island is not climate controlled. Since the facilities of most of Navy Islands' customers are not climate controlled, this avoids the issues of moving from a temperature and humidity controlled environment to an uncontrolled one.

Manufacturing Process

The major steps in Navy Island's process include: the trimming and jointing of veneer bundles; the splicing of leaves to form a face; the bonding of faces to substrate core; trimming, labeling, and sanding of the plywood. The veneer bundles are trimmed to length and jointed on the long-grain edges. The edges are then coated with an adhesive. Too much adhesive leaves bumps of glue squeeze out, too little creates voids or glue line failures.

Navy Island has two splicer methodologies. The first splicer method feeds two leaves the long way, joining at the long-grain edge. This is then fed through again and a third leaf is joined to the long-grain edge. This repeats until the face has the necessary width. The second splicer method feeds the leaves cross-grain. An entire bundle is fed one leaf at a time, sideways, each joining to its adjacent neighbor. When the leaves are fed without reversal it is called a slip match. When each veneer is turned over, the grain pattern in the leaves form a mirror image or a book-match pattern. The book-match pattern may exhibit a barber-pole effect because the reversed grain may reflect light differently. The slip-match pattern may exhibit a jail-bar effect when the color at the left/right edge abruptly meets the variation across the width of the leaf.

Each face is then inspected individually. A light snap of the sheet will locate weak seams. A light table is used to detect any light passing through the seams. In addition, overall quality is also checked by the inspector for knife marks, figure, grade, and order sequence. Any defect is cause for rejection. Knife marks from nicked knives is the most common problem found.

The rest of the assembly process is highly automated. At the press station a core substrate is spread with glue while a robot positions veneer faces below and above, making a sandwich. This is moved into the press where, 200 lb. per square inch of pressure is applied.

After the press, another robot trims all four edges at a stationary circular saw, and prints the product information on the edge of the completed plywood sheet. After trimming, the sheets are passed through a five foot wide, five head sander. Successively finer grits are used, finishing with 180 grit sandpaper. Manual inspection immediately follows sanding.

Navy Island Plywood Tour -cont'd

Distribution and Customers

Navy Island does not utilize distributors or retailers for their products. Most of their business is direct to high-end cabinet shops or project contractors. Their minimum order is five sheets of plywood (at least three sheets being the same) and \$500 minimum invoice cost. For more information, please call Hans Mouritzen at Navy Island, 651.451.4454.

Tool Rental Available To Guild Members

The Guild has a number of tools available for a nominal rental fee. This is a valuable resource that is included with your membership. Here is the listing of what is currently available:

- Drill bit sharpener for standard twist and brad point bits (professional grade system)
- HVLP sprayer (American Turbine AT-3000)
- Benchtop mortising machine (Jet JBM-5, donation courtesy of Steve Holzgräfe)
- Photography light and backdrop kit (professional grade)
- Starrett 36" machinist straight edge (used for machine setup and alignment)
- Veneering kit (vacuum bag)
- Veritas power sharpening system

Rental Fee is \$10 per use.

Rental Time a tool may be rented depends on demand, however it is typically at least a week or more...

The HVLP sprayer and Veritas sharpening system both require a \$20 Refundable Deposit to ensure that they come back clean. The deposit will not be refunded if cleaning is required.

Contact Craig, the Tool Meister, at 612-922-0734, or by e-mail cj0734@msn.com to reserve the equipment. Tools are to be picked up and dropped off from Craig's home, located a few blocks south of Lake Harriet in south Minneapolis.

Guild Meeting, July 21st – Wood Turning with Jim Jacobs

By Bob Bridigum

Photos by Paul Schalakamp and Bob Bridigum

The July meeting was hosted by Barry Novak at Industrial Electric. We were set up in the warehouse next to a wall size door that was open letting in plenty of light, which we were to find was very important to turning.

Jim Jacobs was our presenter and joke teller for the evening. Jim has been a woodworker for 32 years and an accomplished wood turner for the past 15. His first experience turning was a project in 7th grade, which was almost as frustrating as the time he broke the casting on his Shop Smith turning a piece that took flight.

Jim talked a lot about getting started since most of the audience members were “flat woodworkers.” You can pay anywhere from \$400 - \$5,000 for a good lathe. You can pay less than \$400 for a lathe but it won’t have the word “good” in it. Jim says don’t buy a lathe built on a steel tube frame, it is not stiff enough resulting in a lot of vibration. This night Jim’s demonstration was on a Jet Mini, weighing 78 lbs, with 10” swing, and 14” between centers. It goes for about \$380. The hollow spindle is a great feature. Your first accessory should be a \$40 live center. If you feel rich and want to correct that situation you can also buy the self centering chuck for \$250. Jet also makes a lathe with a 12” swing and 20” between centers if you just have to spend more money.



Jim Jacobs set up to begin his talk and demo

Jim recommended two sources of supply for woodturners besides our local sponsors:

- Craft Supplies: woodturnerscatalog.com
- Packard Woodworks: packardwoodworks.com

The Jet mini has six speeds that are selected by changing the position of the drive belt. When asked how fast to turn Jim had this advice, “turn the speed up until you start to sweat and then back off until you are comfortable.”



Lazy Susan style holder keeps turning tools within easy reach

This guarantees you'll be turning as fast as you can.

"Do not buy a set of turning tools", said Jim. Though they are cheap and may look pretty they won't hold an edge long enough to keep you safe. Dull tools cause accidents so you want good steel in your tools. Since it doesn't take many tools to get started, make the investment. Here is Jim's starter list:

- ½" Bowl Gouge \$60
- ¾" Radius/Round Point scraper \$35
- Diamond Parting Tool \$45
- 3/8" Spindle Gouge \$20
- ½" Skew \$40

That adds up to \$200 for tools and \$380 for the lathe. Not bad for getting started. Jim's tools all have a different handle. That is on purpose since it makes it really easy to tell them apart when they are in the tool holder. Jim showed the lazy-susan tool holder he designed. It sits right beside the lathe within easy reach. Jim offered plans for the tools holder to anyone that was interested.

When asked "where is the best place to set up a wood lathe", Jim answered "ask your wife". Wood turning creates lots of

dust and shavings and no matter how well your dust collection works, you will always be blamed for the dust in the house, even the grey stuff. Jim can't ever remember turning grey wood, but there you have it. Ask the wife.

A good slow speed grinder is the last essential tool to getting started in woodturning. Jim uses a no-name grinder with two 8" wheels, 60 grit and 120 grit. The unit costs \$110. So now we are at \$690 for those keeping track. Oh, plus you should buy the Veritas tool rest for \$50, oh, and a diamond dresser for the wheels, another \$40.



The chips begin to fly as Jim demonstrates the use of each tool

The grinder should be located within easy reach of the lathe unless you want to include exercise as part of your woodturning activity. You want to keep the tools sharp so frequent touch up grinding makes everything go better. When asked when to sharpen Jim said, "it depends on what you are turning and on the feel of the tool and wood". Actually he said, "when the tool is dull" as his first answer.



The July meeting location received high praise. The large open door admitted ample light and fresh air on a pleasant evening while the AV setup provided the equivalent of front row seating to everyone in attendance.

Jim demonstrated some spindle turning by making a candle holder. Always turn down hill, that is toward the center of the wood. Jim mostly did that and got away with it when he didn't. The great video projection system in use for the meeting shows all. The tool rest should be set up from the center when using gouges and skewers and on center when using scrapers. We were really able to see what "rubbing the bevel" means to tool positioning thanks to great camera work.

The last thing Jim showed was his wood finishing technique that uses the rotisserie motor from a gas grill. He prefers Deft semi gloss Clear Wood Finish but his trick is to soak the spray can in hot water to warm it up before using. This really helps the atomizing and sprays better.

So, for less than \$1,000 you can get started turning wood, and that includes the chuck you don't need. Jim assured us that there are so many things you don't need in woodturning that there are plenty of buying opportunities for us tool hounds.

Updated Suppliers List!

MNWWG board member Denny Swartz recently contacted all of our discount suppliers. He updated their address and contact information and verified the discount provided to the MNW-WG. Be sure to take advantage of these special offers to members of our guild (one of the benefits of your membership) and don't forget to let the suppliers know we appreciate the discounts.

DISCOUNT SUPPLIERS

The following suppliers offer special discounts to Guild members. To receive a discount you must be a member in good standing and show the merchant your current membership card.

Abrasive Resources

2451 15th St. N.W., Suite A, New Brighton, MN 55112
763-586-9595, 800-814-7358
www.abrasiveresource.com
Sandpaper, coated abrasives, rolls, clearance items – 10% discount

Acme Tools

4150 Berkshire Lane N, Plymouth, MN 55446 (Hwy. 494 & Rockford Rd.)
763-559-8665
www.acmetools.com
10% off accessories & hand tools

Betterley Industries Inc.

11161 Ulysses St. N.E., Blaine, MN 55434
763-755-3425
www.betterleytools.com
Various discounts depending on product.

Eide Saw and Tool Service

950 13th Ave NE (Behind Youngblood Lbr.) Minneapolis
612-789-3288 Jane Burmaster
<janeb@eidesaw.com>
Saw blades, router bits, planer knives, and band saw blades welded to length. 10% discount on all items, sharpening included.

Forest Products Supply

2650 Hwy 61, Maplewood, MN 55109 (651) 770-2834. 10% discount on all lumber purchases.
www.forestproductssupply.com

Hirshfield/Lathrop Decorating Centers

20+ metro locations, Rochester, St. Cloud. Discounts on all items including stains, varnishes, application tools, etc. Must show membership card. Ask for MN Woodworkers Guild account. www.hirshfields.com

Holdahl Company

1925 Annapolis Lane, Plymouth MN. 55441. 763 231-3130 or (800) 777-8992. www.holdahlcompany.com. Router bits, saw blades, abrasives, tools for laminating, laminate, decorative and functional hardware at wholesale prices.

logs To lumber

(651)387-5647
Inver Grove Heights
By appointment only.
10% discount to guild members
Domestic and exotic kiln dried rough sawn hardwood lumber.

Rockler Woodworking and Hardware

Minneapolis, 3025 Lyndale Ave S (612) 822-3338; Burnsville, 2020 W Cty Rd 42 (952) 892-7999; Maplewood, 1935 Beam Ave (651) 773-5285; Minnetonka, 12995 Ridgedale Drive (952) 542-0111
10% discount on all regularly priced items except power tools.
www.rockler.com

Savitt Brothers

1515 Nicollet Ave., Minneapolis 55403 (612) 871-1155. www.savittpaint.com

Everything in paints & stains, accessory items. Contractor discount.

Swanson Hardware Company

7501 W 27th St, St. Louis Park 55426. 952 925-4083. www.swansonhardwareco.com
Cabinet shop supplies, hinges, handles - Wholesale prices

Valspar Paint

Plymouth, 2984 Niagara Lane (763) 557-1361; St. Paul, 106 Water St W (651) 222-8435; 20% discount to Guild members.
www.valspar.com

Woodcraft

9125 Lyndale Ave S, Bloomington 55420. 952 884-3634. www.woodcraft.com
10% on all items except power tools.

Woodcarvers Store & School

3056 Excelsior Blvd, Minneapolis (612) 927-7491. Books, tools, classes, supplies. 10% discount on all items (except electrics 5%).
www.woodcarversstore.com

Youngblood Lumber Co.

1335 Central Ave., Minneapolis 55413. 612 789-3521, or 800 933-1335. www.youngbloodlumber.com. Wholesale prices to Guild members.

THE CLASSIFIEDS

Lumber

200 b.f. of Pine Barnwood from a Lake Elmo 1870s barn. Most is 14 - 16 Feet long and already cleaned, planed and de-nailed. 7/8" thick. \$8.00 per b.f. Call Gerri Summerville 612 282 7363

Black Walnut, suitable for small craft projects. Trunk stems resulting from improving growing forest. Blanks up-to 8' in length, 1" 4" diameters. Wood is highly dense as a result of slow growth. Contact: Brian 218-327-0814 or outpost@2z.net

Black locust lumber. Originally purchased about 4 years ago in Wisconsin green and has been air dried since Black locust is hard, durable, and is very very rot resistance, hence common in boat construction. Nice grain and coloring. I can email pics of some furniture made from the locust that I've done. The wood is available for pick up at zip code 55407. The size varies: approximately 80 bf S3S 1x6-1x8 - 9' long (S3S was milled to 1" actual), 375 bf rough, 1x4 to 1x8 7-9' long (rough varies from 1-1/8" to 1-1/4" in some boards), 800 bf 1x6 to 2x8 7-9' long (again, nominal sizes). Can

be purchased in any quantity.

Prices:

S3S 4/4 \$2.75 per bf
rough 4/4 \$2.50 per bf
rough 6/4 \$3.00 per bf
80+ BF, \$2.00 per bf
All, \$2,300.

email me (tan@nguyenarchitects.com) or call 612.644.4369.

Services

Plane soles milled flat, price ranges from \$12 for a block plane to \$40 for a #8. Sides can be milled square to the sole for \$15-\$20. Contact Chuck Pitschka at 952-935-0660, or by e-mail at cpitschka@mn.rr.com.

Mike Siemsen's School of Woodworking - We have a great line up of classes for 2009! Not only will you get to work with Mike but also some fantastic visiting instructors like Garrett Hack, Adam Cherubini, Mary May, and Tom Schrunk. Classes are held in my shop on a quiet rural setting 35 miles north of the Twin Cities. The shop is air conditioned. Visit my website at www.schoolofwood.com for more information. Phone: 651-257-9166 e-mail: mike@schoolofwood.com

Tools/Magazines

Workbench Magazine; Issues from 1978-1996. Hope to barter for anything reasonable. Steve 651-484-2211

New Members

Charles Bradley
Timothy Bayliff
Robert Boyajian
Brian Franzen
Sean Harrigan
Mina Jang
Arlene Kegley
Frank LaPlante
Ben Morrisette
Jeff Nielsen
Michael Olson
James Packard
Joel Peterson
Bill Robillard
Cliff Sprague
Willis D. Bowman
Glenn Elvig
Ted Gordon
Richard J Gotz
Wilfried Hein
John R Hoppe
Patrick Juettner
Bruce Kieffer
Richard Lagerstrom
Mark Laub
Steve Skoro
Jon L Stumbras
Barry Whiteaker
Jeff Zinsli

Advertising in The Classifieds is provided to members of the Minnesota Woodworkers Guild free of charge. The ads placed herein should be for goods or services that are of general interest to the crafts people who make up the membership of the guild. Ads for services will run until cancelled. Ads for tools and materials for sale will run for one issue unless renewed. For submissions, renewals and to cancel an ad, please contact Jerry Beutel e-mail jebeutel@gmail.com or snail mail to 3485 Trading Post Trail, Afton, Mn 55001

Minnesota Woodworkers Guild
1950 Park Rd. Ct.
Chaska, MN 55318
MNWWG.org

www.minnesotawoodworkersguild.com

Guild Meetings

Mark Your Calendars

August 18th: The Youngblood Lumber Tour

NOTE SPECIAL STARTING TIME and FREE FOOD!
Youngblood will provide hot dogs, chips and drinks at 6:00PM.
Tour starts promptly at 6:30.

When we toured Youngblood Lumber a few years ago it was the most well attended meeting we ever had. Don't miss this extremely popular and educational event! Come out and see their facilities including racks of hardwoods, softwoods, veneers, laminates and sheet goods. Learn tips on selecting and buying lumber. Youngblood is an Employee Owned and operated company serving the Twin Cities and surrounding area for over 100 years.

Location: 1335 Central Avenue NE Minneapolis, MN 55413 (612) 789-3521 For directions go to: <http://www.youngbloodlumber.com/directions.html> **REMEMBER START TIME IS 6:00 PM FOR THIS MTG.**

September 15th: Adjustable Height Workbench

Charlie Kocourek designed and built an adjustable height workbench that incorporates a built in mobile base. You may have seen it at the Northern Woods show. He will explain why he built it and how it works. He will also reveal the tricks involved in building this fantastic workbench. Learn more about it at his website: www.jack-bench.com

Location: Fridley Middle School 6100 West Moore Lake Dr. Fridley MN

October 6th: Garrett Hack

Yes, THE Garrett Hack! Please note this meeting will not be held on our "normal" meeting night. Location has not been determined. Watch for the next newsletter and check the Guild website for more information. A very special thanks to Mike Siemsen's School of Woodworking for sponsoring this special meeting. Space is still available in Garrett Hack's 6 day class at the School of Woodworking. Go to www.schoolofwood.com for more information.

Starting time for 9/15 and 10/6 events:

Show & Tell at 7:00 p.m.; Program starts at 7:15 p.m.

Check the guild website www.minnesotawoodworkersguild.com for updates.