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NEWS & INFO FOR  
BOAT BUILDERS  
CONTRACTORS  
WOODWORKERS

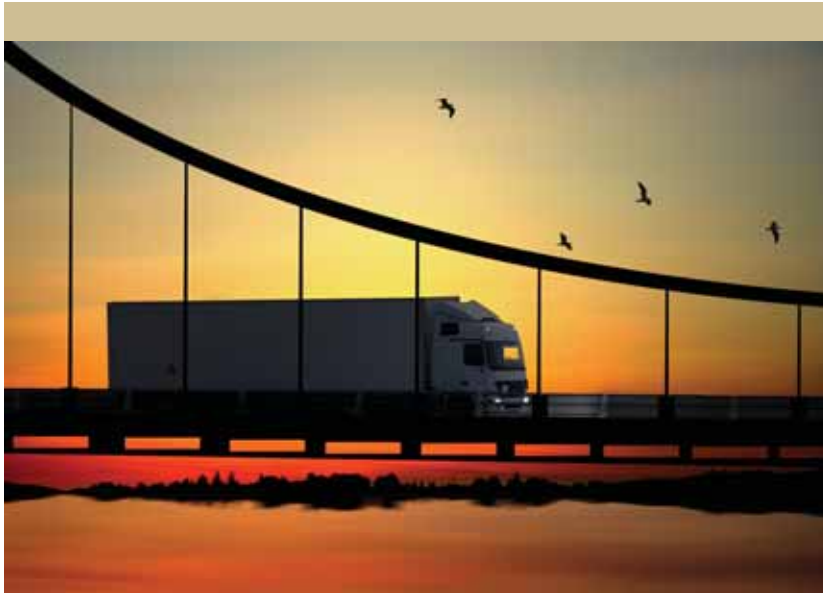
# BIRDSEYE VIEW

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## IWF 2008 HIGHLIGHTS

The International Woodworking Fair, (IWF), was held in Atlanta Georgia this past August 20<sup>th</sup> thru 23<sup>rd</sup>. Nearly 1000 exhibitors covered almost 800,000 square feet at the Georgia World Congress Center, attracting over 43,000 people traveling from over 80 countries, and representing every level of the industry. This show, occurring once every two years, is by far the largest collection of products and services for the woodworking industry in North America.



Companies are looking for creative ways to reduce the delivery cost of their products.



Having had the pleasure of attending this event for the last 8 years it has been immensely educational and tremendously helpful for keeping in touch with the leading edge of the woodworking industry. It is a well known fact that vendors and manufacturers time their launch of new products and innovations to coincide with the IWF.

With so many new designs and innovations it was very difficult to narrow it down to just a few... but here are a few of the highlights...

Delta introduced their new Unisaw that is slated to be available early 2009. The most unique difference from past models is the location of the height and tilt handles right up front on the face of the cabinet, as well as new trunion design and US built Marathon motor. Delta hopes this new offering will become the leader in US manufactured 10" table saws.

*(continued on page 3)*

## FIGHTING FUEL COSTS

The effect of rising fuel costs is touching all of our lives. With the average cost of diesel increasing over 64% in the last 12 months, everyone is looking for ways to lessen the impact including traveling less, trading gas guzzlers for fuel efficient vehicles and looking for goods closer to home.

In response to these historic fuel increases companies are looking for creative ways to reduce the delivery cost of their products.

Buying groups are growing in popularity as a way to minimize delivery charges when pooling orders with other buyers in their area. An example of the kinds of savings they are enjoying would be if three individuals in the Kalamazoo area were placing orders with Johnson Lumber, (1. Bill 150' 4/4 SB R Oak 2. Bob 100' 4/4 SB Cherry and 3. Mary 400' 4/4 SB Poplar) the cost for delivery would be \$49 each to the 3 different locations. If their orders were able to be delivered to one location, they would be able to split the \$49

delivery charge. Each would realize a savings of over \$32.

Some woodworkers are planning farther ahead for their projects by putting a combined materials list together that decreases the number of deliveries they receive.

Here at Johnson Lumber we've tried to think creatively. We share cost savings with our customers by giving a 5% discount when their delivery stop is less than 15 minutes because they are able to assist in the unloading of their order. For instance if a customer has a lift truck, or staff that can help get their order off the truck.

Company executives don't anticipate fuel costs decreasing significantly anytime soon and are collaborating more with their customers to develop new ways to combat the increasing cost of doing business. We are interested in listening to any ideas you have to make the process more cost effective. Please give us a call. Together we should be able to survive these unprecedented hurdles. ■

-- Contributed by Bob Laurie



# INDUSTRY NEWS

## PROPER WOOD DRYING TECHNIQUES

**When wood is not properly dried, accelerated shrinking can occur. This stress can tear the wood fibers apart, causing internal defects in lumber such as checking, casehardening, and honeycomb.**

### Wood Moisture

You probably know wood has to be dried in order to be useful as lumber. Removing the water makes the material dimensionally stable, accepting of glues and finishes and much better machineability.

The moisture content of a piece of wood is the ratio of the weight of the water in it to the weight of the wood fibers if they were completely dry. Usable lumber is produced by reducing the moisture content of green wood (sometimes well over 200 percent) to 12 - 18 percent by air drying, or to 6 - 10 percent by kiln drying. Whether dried naturally, or in a kiln, wood dries to a certain percentage, and then stops. The relative humidity of the air around the wood determines this point, called equilibrium moisture content (EMC). This is why you always should let your wood acclimate to the conditions or relative humidity that is eventually desired before beginning any woodworking job... As a point of reference the guys at Gibson Guitars shared their recipe for humidity in the shop...

*"A Gibson acoustic guitar is built in a controlled environment. Gibson maintains a 40% to 50% level of*

*humidity at an average temperature of 70 degrees in the shop where each guitar is created. If a guitar is deprived of this level of humidity (lower than 40%) for an extended period, you may notice that the string height will lower, causing excess string buzzing. In extremely dry conditions, irreversible damage can occur (cracks or checks in the finish and or wood).*

To understand a little more about moisture in wood a simple anatomy of a wood cell may be helpful. The three basic types of moisture in wood cells are:

*Bound water - This water is held in cell walls, some typically remains behind in "dry" wood.*

*Free water - Water stored in the cell cavity. It is removed completely during the drying process.*

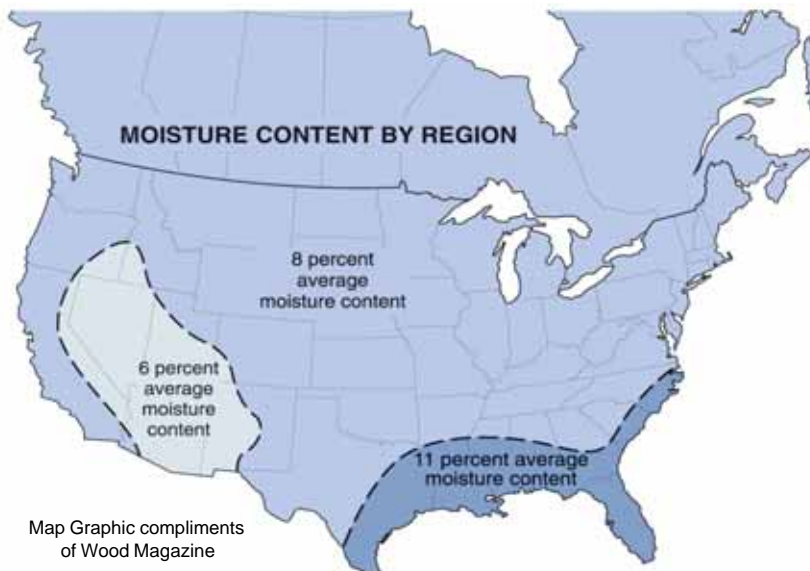
*Water vapor. - Small amounts may remain in the cell cavity, even in "dry" wood.*

As wood dries, the first to go is free water, second is the bound water. Eventually, moisture loss stops, leaving some bound water and, possibly some residual water vapor in the wood cell cavity. Once the free

water is removed and then the (tougher) bound water is reduced, the cell walls of the wood will shrink, causing the wood to change dimension. Because wood cells vary in size, density, and orientation, they can often shrink unevenly, causing boards to warp in many various ways. As well wood dries from the outside in, as the water it contains moves naturally from areas of highest to lowest concentration. This creates uneven pressures in the outer portion or shell and the inside of the board or core. Wood becomes most stable when it reaches EMC, as stated before, EMC is controlled by relative humidity. Wood is described as hygroscopic, (as the people at Gibson Guitar know very well) meaning it will continue to take on and shed moisture and, because of this, expand and contract. To minimize these problems, you can try and shy away from boards that show wild figure, or inconsistent growth-ring spacing. In addition when wood is not dried properly, accelerated shrinking can occur. If not properly relieved, this stress can tear the wood fibers apart, causing internal defects in lumber such as, checking, casehardening, and honeycomb.



Dealing with a reputable lumber supplier that practices proper drying techniques is the best defense against drying defects in any lumber you purchase.



Map Graphic compliments of Wood Magazine

Dealing with a reputable lumber supplier that practices proper drying techniques is the best defense against drying defects in any lumber you purchase. Next is safely storing your lumber prior to working with in your shop or factory with proper dehumidification and or humidification. All that being said the final and most important step is to always take into account wood movement when designing with wood. Experience has taught woodworkers of old how to deal with wood's dimensional changes due to moisture. The answer was joinery that allowed for seasonal wood movement. And despite today's super-strong glues and

moisture-resistant finishes, that's still the answer. Stile-rail-and-panel construction for cabinet and doors, wall panels, and sections of furniture, for instance, didn't come about by accident. Joiners, as woodworkers' centuries ago, figured out that a rectangular panel could be maintained in position with a solidly secured frame of wood. However, the panel must not be glued or nailed in place in the frame. Instead, it has to "float" in grooves, free to shrink and swell with changes in atmospheric moisture. Today, some professional woodworkers talk about "nickel and dime reveals" on flush-fitting cabinet doors and drawers. These refer to the space you should leave between the wood that you expect will shrink or swell — the doors or drawers — and the carcass or frame of the piece. "If you build in winter, make the reveal the thickness of a nickel." That leaves room for the wood to swell when the humidity

goes up. On the other hand, "Build in summer, use a dime," means that you're allowing for the shrinkage that will come in winter. If your woodworking tastes and designs are those of a fine quality "Gibson Guitar" then controlling humidity and temperature is key.

### Calculating Water Content

Moisture content (MC) tells us the ratio of the weight of water in a piece of wood compared to its weight completely dry. We express it as a percentage. To determine MC, first weigh a piece of wood. Then, dry it until it contains no water (determined when weight loss

stops). Next, compare the weights as follows:

$$\frac{(\text{wet weight} - \text{dry weight})}{\text{dry weight}} = \text{mc}$$

For example, if a piece weighs 25 lbs. wet and 20 lbs. dry, its MC equals 25 percent:  $(25-20)/20 = 5/20 = .25$  or 25%

Thankfully, there are quicker ways to determine MC with simple moisture meters, however, nothing beats the accuracy of a fine set of scales and oven, then utilizing the above procedure and formula.

-- Contributed by Tim Johnson

The saying, "Build in Winter, use a nickel" allows room for the wood to swell when the humidity rises in Spring.

Potential wood movement (inches) based on an 8% change in moisture content:								
Specie	Cherry	Douglas Fir	Mahogany	Hrd Maple	White Pine	Red Oak	Walnut	White Oak
Qrtrswn	0.118	0.154	0.096	0.154	0.131	0.128	0.176	0.176
Flatsawn	0.227	0.253	0.131	0.317	0.237	0.275	0.25	0.336

## EMPLOYEE SPOTLIGHT | MEET RON CAMPEAU

I think many Americans were spending the long Labor Day weekend working around their yards and relaxing with family and friends. But not 63-year-old, semi-retired Ron Campeau, a valued employee of ours.



An accomplished cyclist, Ron has participated in the Dick Allen Lansing to Mackinaw (DALMAC) bicycle tour for more than 15 years. This grueling 5-day 330 mile bicycle ride from Lansing MI to the Mackinaw Bridge requires riding distances between 50-100 miles a day. Ron has enjoyed the trip every Labor Day, the past few years, riding with his son Mike on the tour.

worked as a licensed contractor for years and still maintains his license to this today. Many of you who have visited one of our retail stores probably have met Ron. A long time customer of L.L. Johnson Lumber and Johnson's Workbench, Ron expressed a strong interest in coming to work for the company. So in 1997 he was hired on full time as an assistant manager of our Charlotte store. In 2001 Ron became Manager of our Charlotte location. Five years later, he decided to cut back on his role and responsibilities' here at LLJ and take more time for himself and his family. Once again, Ron entered into semi-retirement working part-time at our Charlotte store and helping out at either of our other two locations during our wood shows and busy times. Thank you Ron for all you do at LL Johnson. ■

-- Contributed by Tim Johnson

Ron and his wife Betty live just outside of Charlotte in the small town of Vermontville. Their two boys, Mike and Jeff, both married now, have blessed Ron and Betty with eight grandchildren. Mike and Jeff still live in the area so Ron gets to spend a lot of time with his greatest love and joy, his family.

Ron, a Veteran of the Navy and Naval Reserves, spent the majority of his life working in Lansing MI for the Board of Water and Light. After retiring from there Ron looked back to one of his other passions construction and woodworking. He

### IWF Highlights (continued)

Over in the WMH Tool booth, Jet was displaying their new 22-44 oscillating drum sander as well as their newly designed 16" and 18" Band saws. Powermatic was showcasing a prototype 18" "Industrial Quality" band saw with many new features. Their date for its launch is mid 2009.

Steel City increased their offering of Granite machinery, with prototypes of a new 16" Granite Bed Planer, new 8" Granite bed and fence Jointer, as well as new mid sized Granite bench top lathes. Steel City also teamed up with Teknatool (a.k.a. Nova Lathe) and developed a large 20" Wood Lathe with a Nova DVR headstock, it looked rather intriguing.

Over at Freud they were unveiling many new router bit and saw blade innovations but more revolutionary was the new Freud Doweling Joiner a hand held unit that offers the ability to perform precision doweling along with line boring applications.

This is a quick overview of some of the unveilings at IWF 2008. We will be watching carefully during the ensuing months for the Manufacturers to produce their new innovations for public debut and bring you more information. ■

- Contributed by Tim Johnson

Freud's revolutionary new offering is their Doweling Joiner, a hand held unit offering precision doweling.



# CUSTOMER SPOTLIGHT

## LAKELAND BOATWORKS

**Lakeland Boatworks manufactures low-maintenance, wood and epoxy recreational boats from 16' to 32' in both power and sail models.**



*The 22' Isle Royale dashboard, also crafted from solid mahogany, features an LED readout on the trim, tachometer and speedometer gauges (if equipped with an OEM Nissan outboard) and a mahogany four-spoke steering wheel.*

Lakeland Boatworks is making a name for themselves in the wooden boat industry. Whether a restoration or a new boat of Lakeland's design, the quality and craftsmanship are lending themselves to heirlooms of the future. Lakeland has six designs to choose from, two row boats, a 32-foot sailboat, two runabouts, and a 22-foot cruiser, with a new design (super-sizing the cruiser) coming this fall.

Owner Joe Rahn opened in 2000 in Middleville Michigan and with the local workforce has been able to put out about thirty projects a year. That output of high-end wooden boats



*The 22' Isle Royale hull is a full 1-1/8" thick with three layers of strip planking sealed with epoxy for added strength. Solid 3D4" mahogany is used for the deck, side rails and trim.*

and restorations has given Joe the opportunity to expand his operation to the Finger Lakes region in central New York State, which like Michigan, is a natural for these classics.

Unlike their predecessors of the '40s and '50s that were expected to last six years, today's wooden boats

have the advantage of adhesives and finishes that were only dreams in the past.

If Grandpa's boat is beyond restoration but you still have that desire for a classic, check these guys out at [www.lakelandboat.com](http://www.lakelandboat.com) ■

-- Contributed by Chris Fletcher

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