FRANKLIN

FURNITURE

INSTITUTE HIGHLIGHTS

MISSISSIPPI STATE UNIVERSITY

Container Shipping Goes Global

Containerization has revolutionized cargo shipping today and offers an economical method to ship products worldwide. Containers can literally be transferred in minutes between rail or truck and barges. With 90 percent of cargo shipped via container, inland waterways have noticed an increased interest from manufacturers who wish to avoid congested highways and rail. Companies can take advantage of lower transportation cost by sharing expenses with other companies who ship products to overseas markets. Containers can also be filled to capacity when loaded on barges and ships. Weight restrictions limit the capacity on containers carried by truck.

Groups located around Mississippi and Alabama are utilizing towboats and barges to deliver shipping containers to ports along inland waterways. This reduces traffic on roads and rail lines and is the most environmentally-friendly method of shipping. It takes less fuel to move freight by water than any other method of transportation. Containers can

be transferred onto barges throughout local waterways and shipped around the world to major ports. The Tennessee Tombigbee and Warrior Tombigbee inland waterways accommodate much of this water traffic. While the volume of shipments in the past year has been affected by the deepening slump in housing, low unemployment rates, and high gas prices at the pump, new orders for goods manufactured in the U.S. rose 1.9 percent in May 2011. Home sales affect products such as furniture which accounts for more than 10 percent of total U.S. containerized shipments. One leading indicator of manufacturing health is durable goods orders and these orders are watched closely in the transportation industry as they are used to estimate freight demand in the future.

U.S. companies continue to expand globally to reach new markets. As they tackle the issues of sourcing and selling in the global marketplace, containerized shipping offers an efficient method to transport products.





7 inside this issue

Director's Letter

Impressions from China

Statewide Furniture
Facts

Industry Spotlight:
Tupelo Laser

staff profile:
Jeffrey Rupp

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The Franklin Furniture Institute is an institute of the Forest and Wildlife Research Center, Mississippi State University. The Institute is a collaborative effort involving the College of Forest Resources; College of Business; Bagley College of Engineering; and the College of Architecture, Art and Design. George M. Hopper is Director of the Forest and Wildlife Research Center.

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director's corner

Furniture Highlights

Bill Martin, Director

We have just completed fiscal year 2011 and are collecting results of our efforts in helping the industry sustain its competitiveness. In all, it appears we had another productive year as we continue to expand our outreach effort.

The Management Training program continues to be one of the most requested services offered by the Institute. Training was provided to six companies with more than 125 employees in attendance this last year. Preliminary results



indicate that there is a 99 percent employment retention rate for those participating in the training and the average income of participants increased by \$2,032 annually. The program was initially funded through a grant from the Mississippi Department of Employment Security. While the grant funding has expired, the training program will be continued during 2012 through individual company grants and other state agency grants, as available.

Over the past two years, efforts have been increased to attract college students to the furniture and home furnishings industry. This past year, the Institute was instrumental in assisting two students in the Interior Design program receive full annual scholarships from the Celia Moh Foundation. Additionally, three \$11,000 scholarships were secured from the American Home Furnishings Alliance and two \$1,000 scholarships from the Southeastern Home Furnishings Association. These scholarships will be awarded over the next 12 months. In addition to providing scholarships, the Institute has teamed up with the MSU Career Center to host a "Furniture and Home Furnishings Career Day." The career day will provide space for companies to display information and interact with students representing numerous majors on campus who are interested in furniture. Companies may also schedule interviews the following day. The career fair is scheduled for November 3-4, in conjunction with MSU's homecoming football game. For information on the career day and to participate, please contact Amy Garrard at agarrard@cfr.msstate.edu.

Also, during the 2011 fiscal year, the Institute initiated 28 separate outreach projects directly affecting over 250 employees and indirectly affecting over 1,500. The economic impact of these programs is estimated at \$1.2 million, which does not include the impact of website development and companies investing in human capital training.

For the upcoming year the Institute will continue to solicit your input for program development and other ways in which we can meet our mission of "helping to sustain and increase the competitiveness of the furniture industry..." Please contact us with your comments and suggestions.

Impressions from China

Forest products professor Jilei Zhang recently returned from a 2 month sabbatical in China. Zhang attended the China International Furniture Fair at Guangzhou and visited several furniture factories in nearby regions. Zhang also taught a seminar on furniture design, process, manufacturing, and testing at the Nanjing Forestry University. Mississippi State University and Nanjing Forestry University are working to develop an exchange program for research scientists and graduate students to enhance research and innovations in the furniture arena.

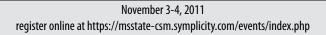
Several research projects have resulted from Zhang's collaboration with the Nanjing Forestry University. The decision process that consumers go through before making furniture purchases as well as the variables contributing to the decision have been studied. Zhang and colleagues at Nanjing will publish the results soon in American journals. This will help to assist U.S. companies in the export of their furniture products to the international market. Interestingly, researchers found that Chinese male decisionmakers are driven by quality and status of furniture whereas, Chinese females prefer style and the use of "green" materials as determining factors when purchasing furniture. Another collaborative project is quality testing and assessment of rattan furniture. This type of furniture is being evaluated for strength, design, and quality characteristics. Staff in forest products are also evaluating a new alternative compressed wood product developed in China for use in case goods, door facings, and wall panels. This product, made from scrap wood, may potentially be a substitute for particleboard and medium-density fiberboard and has particularly good acoustical qualities. Two other projects in which the two universities are collaborating include seating evaluation of upholstered furniture and load distribution and ergonomics of different types of bedding products.

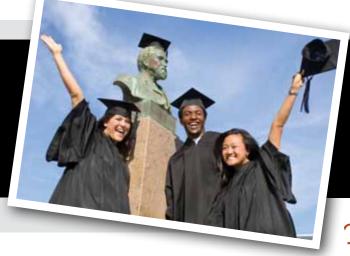
Zhang observed that furniture exports to the U.S. from China are slowing down, primarily because of the increased costs of manufacturing due to the government's push for higher wages for laborers. Another result of the rise in labor rates is an increase in production automation. Zhang reports that orders for machinery and robotics are up considerably as manufacturers move towards mass customization through automation. Another trend is the migration of many factory workers from the cities back inland where they are realizing opportunities for entrepreneurship. A report in the The Chicago Tribune concurs, stating that China's strong currency, higher wages and the use of robots are all driving companies to move manufacturing operations inland or even out of the country to other parts of southeast Asia. China has historically been one of the cheapest countries for labor, however, as costs of raw materials increase and labor shortages occur, this may soon change. Labor shortages are already occurring as the population ages and skilled laborers seek higher paying jobs. Chinese manufacturers also experience lower payments for their exports because of China's strong currency. Although exports may be down, Zhang reports a strong domestic market in China for furniture and furniture-related products as the rapidly growing middle class seeks a higher standard of living and are able to afford more goods and services due to rising wages. This creates opportunities for U.S. home furnishings exports into China as these goods can deliver the status that many Chinese citizens desire.

The Franklin Furniture Institute and the MSU Career Center invite you to participate in

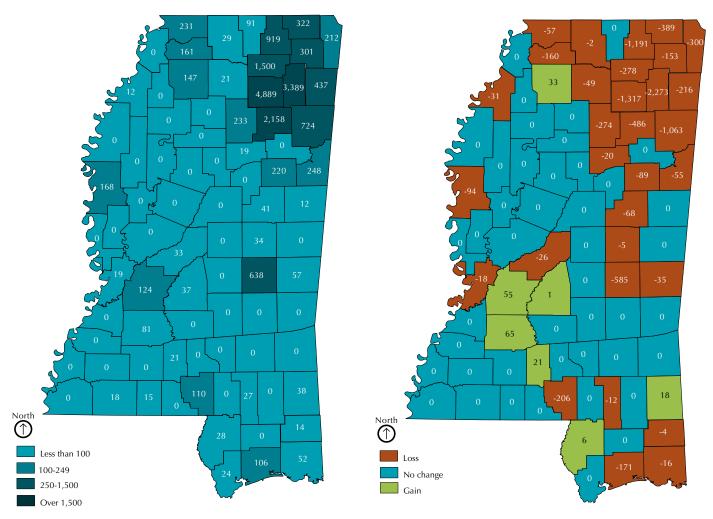
EVERYTHING FURNITURE

2011 Furniture Manufacturing and Design Career Fair at Mississippi State University





furniture industry



Map 1. Furniture Manufacturing Jobs in Mississippi, 2010 (left).

Map 2. Change in Furniture Manufacturing Jobs, 2005-2010 (below).

Statewide Furniture Facts

The National Strategic Planning and Analysis Research Center at Mississippi State recently compiled furniture industry employment and wage data for the Franklin Furniture Institute. The data shows that 9,624 jobs in the furniture industry were lost from 2005 to 2010. Furniture industry employment dropped from 27,647 workers in 335 firms to 18,023 workers in 279 firms or a 35% decrease over the past five years. The average annual wage for Mississippi furniture employees in 2010 was \$37,542.

Data for furniture suppliers in Mississippi from 2005 to 2010 shows a decrease in the number of firms from 580 to 523 and a decrease in the number of employees from 33,152 to 23,496 or a 29% decrease. The average annual wage for workers employed by furniture suppliers was \$45,862 per year. While furniture employment in the state is down, the industry still supplies 31% of the upholstered furniture sold domestically in the U.S. and provides 1.4 billion dollars in employee compensation, \$5.5 billion in total output and \$2.1 billion in value-added to the Mississippi economy.

The location of furniture manufacturers and employment is still heavily concentrated in northeast Mississippi as shown in Map 1. Map 2 shows the changes in furniture industry employment in the state by county from 2005 to 2010.

Tupelo Laser Can Cut It! dustry spotlight



Tupelo Manufacturing has been producing quality American-made furniture since 1962, specializing in seating for hotels, health care facilities, offices, dormitories, and restaurants. Owners Charles and Mary Werner have built a successful company by providing top quality products, detailed customization, and exemplary customer service. Now they are bringing the same principles to their newest venture, Tupelo Laser.

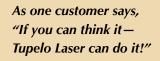
As is often the case, Tupelo Laser came about almost by chance. Charles happened upon a 2,200 watt laser at a High Point auction and simply couldn't resist bringing it home. What started out as simply a way to increase efficiency and precision of parts cut for the furniture manufacturing operation, has turned into a business with limitless possibilities, both for the industrial and consumer markets. Technology offered by the company includes precision laser cutting, engraving or marking on a wide variety of components and materials, both for industrial customers and for customized consumer products. As one customer says, "If you can think it—Tupelo Laser can do it!" In fact, Charles and general manager Will Bohn have found very few materials that the state-of-the-art laser can't cut, mark, or engrave. They have worked with plastic, acrylic, ceramic, steel, cork, denim, fiberglass, foam, glass, granite, carpet, leather, limestone, mirror, rubber, stainless steel, tile, cardboard, polyester, plywood, and wood.

Virtually any product can be designed or customized using this laser technology. The engineering and design team at Tupelo Laser works closely with client companies throughout the entire process from conception to production to make sure the project is a success. Services offered include production manufacturing, custom design, fabrication or prototype design, and individual customized cutting or engraving. Products include custom furniture and cabinet engraving, custom 2-D or 3-D designs, signage in wood, marble, plastic, or granite, interior and exterior art, memorials, and custom gift engraving. Using reverse gasket engineering, Tupelo Laser can create a gasket from the old worn gasket or simply from multiple file formats which they can interpret.

For industrial customers, Tupelo Laser guarantees custom-built quality and value with short lead times. The laser shop is large enough to handle volume but small enough to provide personal service. By providing turn-key solutions, as well as individual components with extremely tight tolerances and intricate designs, Tupelo Laser is a one stop solution for manufacturers offering custom manufacturing, fabrication, and labeling on parts and components.

Tupelo Laser continues the tradition of excellence in product quality, customization options, and quick turnaround time that the owners, management, and employees at Tupelo Manufacturing have developed over the years. For more information on the products and services available through Tupelo Laser, visit their website at www. tupelolaser.com or on FaceBook at facebook.com/tupelolaser.







Virtually any product can be designed or customized using laser

technology.





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Jeffrey Rupp

Jeffrey Rupp is director of the Technology Resource Institute at Mississippi State University, a federally funded center that leverages university resources to help businesses across the state. The center often partners with the Franklin Furniture Institute to provide business services and entrepreneurial guidance to the furniture industry and its suppliers. Rupp also oversees the MBA graduate student strategy projects which have benefited several furniture companies in Mississippi.

Rupp received his bachelor's in communications from Temple University and a master's degree in public policy and administration from Mississippi State. He has also completed programs of study at the University of Oklahoma and the John F. Kennedy School of Government at Harvard. Rupp is a certified facilitator of the Kauffman Foundation's Fastrac New Venture, and has directed two Fastrac programs.

Rupp is the former mayor of Columbus, Mississippi. Before being elected mayor he was vice president of news for Imes Communications. In that capacity he reported and anchored daily newscasts at the CBS affiliate in Columbus and oversaw news operations for several other television stations around the country. Rupp has vast experience covering politics on the local, state

staff profile

and national level, including facilitating presidential primary debates in New Hampshire. He also produced mayoral, congressional, lieutenant governor and gubernatorial debates in Mississippi.

In addition to his many talents, Rupp is known throughout the Golden Triangle for his musical abilities. You might find him on a weekend playing guitar and performing



alone, along with Jeff Cummings as the other half of "Jeff and Jeff" or playing oldies but goodies with the "BBQ Boys." His hobbies include tennis, racquetball and reading political biographies. Married to the former Donna Boatwright of Starkville, Rupp is the proud Dad to two beautiful daughters, Taylor and Ellie.

For more information on the Technology Resource Institute or if you would like to utilize an MBA consulting team, please contact Rupp at 662.325.8122 or jeffrey. rupp@msstate.edu.