North Carolina’s
Value Added Wood Products

Opportunities in Contract Furniture Manufacturing

Recent history has shown that the offshoring of furniture manufacturing can successfully deliver less expensive furniture items that are attractive to American customers. The availability of cheap furniture fits well with domestic trends of spending less on furniture today than 40 years ago, and buying disposable furniture rather than furniture intended to last a lifetime. As pointed out in “Strategies for the New American Furniture Industry”, the remaining domestic furniture industry will need to focus on the quick delivery of a high-quality and customized product to regain market share.

Manufacturing contract furniture is one possible business model that could be used. Contract furniture manufacturers typically follow a focused business strategy that includes design, engineering, and manufacturing, but leaves distribution and retail sales to other companies. Unlike the traditional furniture manufacturer, the contract furniture manufacturer avoids the high marketing costs associated with selling directly to retailers, and instead, sells to distributors. Domestic contract furniture manufacturers today have an excellent opportunity to increase sales and profitability by targeting retailers and furniture distributors to replace imported furniture with domestically produced products. The contract furniture manufacturer could leverage their products in the following ways:

• Delivery in 2 weeks
• High quality
• Customized or semi-customized products
• Finished with waterborne finishes
• Made with sustainable American hardwoods
• Made in USA

Made in North Carolina
(Self Listing Web Page)

NC State University Wood Products Extension is promoting companies that manufacture wood products made in North Carolina. For maximum benefit to our industry, we encourage shops and manufacturers to self-register in our online directory. Please take a few minutes to fill out the form and list your company in the Directory of North Carolina’s Value Added Wood Products Manufacturers:

http://www4.ncsu.edu/~pmitchel/directory_email_form.htm

Access the most recent directory at:
http://www4.ncsu.edu/~pmitchel/vadirectory.htm
Local Value Added Wood Products

So much of our value added wood products industry is dependent on new home sales. The Commerce Department reported that for April 2009 annual construction rate for new homes and apartments fell 12.8% to 458,000 units. Much of this weakness was attributed to multifamily construction since single family construction and permits both increased. April single family home construction rose 2.8% (see Figure 1) while building permits for the same rose 3.6%. Given the current sluggish sales environment the glut of unsold homes will take almost 10 months to dissipate (down from 12 months back in January).

“Locavore” is a new term (at least to me) that describes a person interested in eating only locally grown foods. Recently the local newspaper had an article that described a new wave of college students as having this interest, as evidenced by the large number of them going to work on organic farms for the summer. The article notes that “for many students, farm life is a way to act on the growing enthusiasm for locally raised food and the increased concern over food safety and the environmental impact of agriculture.” It reminds me of the “back to nature” movement many of us older folks witnessed or participated in back in the ‘70’s. So, can this locavore movement have any positive implications for domestically grown and manufactured wood?

Think about the vast number of wood products that go in the home. In addition to the framing there is flooring, kitchen and bathroom cabinets, shelving, paneling, windows and doors, millwork, mantles. Each year the average American households spends $446 on furniture for the home. In 2008 it was estimated that North Carolina had a population of 9.2 million people, or 3.7 million households. On average then, a North Carolina county will have 37,000 households that will purchase $16.5 million of furniture (roughly 1/3 casegoods, 1/3 upholstery, and 1/3 mattresses and metal furniture). Local manufacturers can: offer more variety and customization; provide repair parts; have lower sales, marketing and distribution costs; sell at full retail price; provide value added services like interior design and installation; tell a better “story” for their locally manufactured product that supports the local economy and made of sustainable materials.

How Do You Measure Up?

To benchmark a company’s performance one measure of productivity is the Annual Sales in Dollars divided by the number of employees. Although this method of measuring productivity can be misused (management may reduce headcount rather than focus on getting product sold) it can be useful to see how a company compares to the wider industry, or compares to other industries. The Annual Survey of Manufacturers is compiled by the U.S. Census Bureau, and can be accessed at: http://www.census.gov/mcd/asmhome.html

Selected data comparing several industries (based on 4-digit NAICS code) from the Survey were obtained for the most recent year available (2006) and shown in the table at the bottom of this page.

The value of shipments per employee for the broad category of Household & Institutional furniture and Kitchen Cabinet Manufacturers averaged $143,000. Although this is low compared to the other industries shown, it provides a benchmark and a method to measure your company over time. Note that this is an average having a wide range of variation. Economics of scale also have a role, with smaller companies likely having a much lower productivity (as measured by Value of Shipments / Employee) compared to large corporations. Keep in mind that smaller companies can react faster to the market and provide custom or semi-custom products. If we examine the

<table>
<thead>
<tr>
<th>NAICS</th>
<th>Industry Name</th>
<th>Value of Shipments/Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>3371</td>
<td>Household &amp; institutional furniture &amp; kitchen cabinet mfg</td>
<td>$143,000</td>
</tr>
<tr>
<td>3211</td>
<td>Sawmills &amp; wood preservation</td>
<td>$310,000</td>
</tr>
<tr>
<td>3221</td>
<td>Pulp, paper, &amp; paperboard mills</td>
<td>$617,000</td>
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<tr>
<td>3122</td>
<td>Tobacco manufacturing</td>
<td>$2,117,000</td>
</tr>
<tr>
<td>3133</td>
<td>Textile &amp; fabric finishing &amp; fabric coating mills</td>
<td>$221,000</td>
</tr>
<tr>
<td>3254</td>
<td>Pharmaceutical &amp; medicine mfg</td>
<td>$775,000</td>
</tr>
</tbody>
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Species has a new web site that is somewhat easier to navigate and identify the status of the species of interest. The Red List web site can be found at: http://www.iucnredlist.org/ Or, if you have difficulty, contact Phil Mitchell at 919-515-5581 or phil_mitchell@ncsu.edu

Slow Times Can Be Bug Time

Slow business can mean building inventories. This can be problematic for producers or manufacturers that store quantities of dry but unfinished woods. Powderpost beetles can do a lot of damage to air dried and kiln dried wood, and often the attack is not evident for a year or more. Practicing First-In First-Out with the lumber or unfinished wood product is the best control method, thus avoiding the development of an active infestation in your inventory area. Good housekeeping is also important since hardwood holsters, stickers, pallets, and other hardwood debris may become infested and be a source of continuing infestation of untreated lumber in the area. By finishing goods with paint, varnish, shellac, sealer, or wax, the females are prevented from laying eggs in the wood pores thus preventing a new infestation. Finishing, however, will not kill larvae already in the wood. The control methods for wood already infested with powderpost beetles is either to use a heat sterilization schedule in the dry kiln to kill the larvae, or fumigate under a gas tight tarpaulin (which is relatively expensive).

There are two types of powderpost beetles – anobiids and lyctids. The anobiids leave surface exit holes that are 1/16 to 1/8 inch in diameter, with pellets and fine powder (frass) accumulating on horizontal surfaces around and below the holes. Anobiids are attracted to the sapwood of ashes, maples, oaks, yellow-pines, pines, and others, and only rarely attacks the heartwood. Lyctid exit holes are smaller (1/32 to 1/16 inch in diameter), with powdery frass accumulating around and below exit holes. Lyctid powderpost beetles attack only the sapwood of hardwoods, especially ashes, cherry, hickory, oaks, pecan, and sycamore.

FDM 300 list (FDM Magazine, February 2009), for the top ten companies the average Value of Shipments / Employee was $197,000 with a range of $127,000 to $296,000. If we then examining the bottom ten companies (of the 300 listed) the average was $122,000 with a range of $71,000 to $215,000. The first point is that even medium sized companies (about 100 employees) at the bottom of the 300 list can have higher productivity than some of the corporations at the top of the list. Similarly, small companies can easily have high productivities. Secondly, measure your productivity from year to year to insure your performance improves.

What is an Endangered Wood?

This question came to me from a furniture distributor after a customer visiting their High Point showroom asked if they used any endangered woods in their imported furniture products. The distributor did not know the exact wood content of the furniture and did not know what woods are defined as endangered.

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between countries. The goal of CITES is to ensure that the international trade of animals and plants does not threaten their survival. The species covered by CITES are listed in three Appendices:

• Appendix I includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances.
• Appendix II includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival.
• Appendix III contains species that are protected in at least one country, which has asked other CITES Parties (countries) for assistance in controlling the trade.

Although CITES has a web site that can help determine if a species is on one of the three lists, IUCN (International Union for Conservation of Nature and Natural Resources) Red List of Threatened

Upcoming Wood Products Workshops from NC State University

For more information, contact Harry Watt at 704-880-5034 or harry_watt@ncsu.edu
• 3-D Design & Software for Improved Efficiency and Profitability; June 12 in Hickory, NC. This workshop focuses on prospective and new uses of solid modelers like Solid Edge.
• Profitable Business Opportunities for Solid Lumber Cabinets, Furniture, and Millwork, June 18, Princeton, WV

New Publication Now Available

Examine why there may be opportunities for innovative furniture manufacturers by downloading Strategies for the New American Furniture Industry by Phil Mitchell and Harry Watt available at: http://www4.ncsu.edu/~pmitchel/publication.htm

Wood Products Extension

The mission of Wood Products Extension within the Department of Wood and Paper Science at NC State is to increase the competitiveness and profitability of North Carolina’s wood products industry, improve markets, and increase consumer understanding of wood products and their proper use. Find us on the web at: http://www.ces.ncsu.edu/nreos/wood/

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