

# PACKAGING SOLUTIONS

THE PALLET FACTORY PROVIDES TOTAL PACKAGING SOLUTIONS FOR ITS CLIENTS AND GAINS NEW MARKET SHARE. BY BROOKE INFUSINO



THE PALLET FACTORY IS A PALLET MANUFACTURING AND RECYCLING COMPANY, AND TRANSPORTATION SOLUTIONS PROVIDER.

**Businesses that coordinate the shipping and handling of materials require innovative packaging and shipping services to distribute their manufactured goods efficiently and effectively. In many cases, manufacturers call on third-party consultants and vendors to provide these various services.**

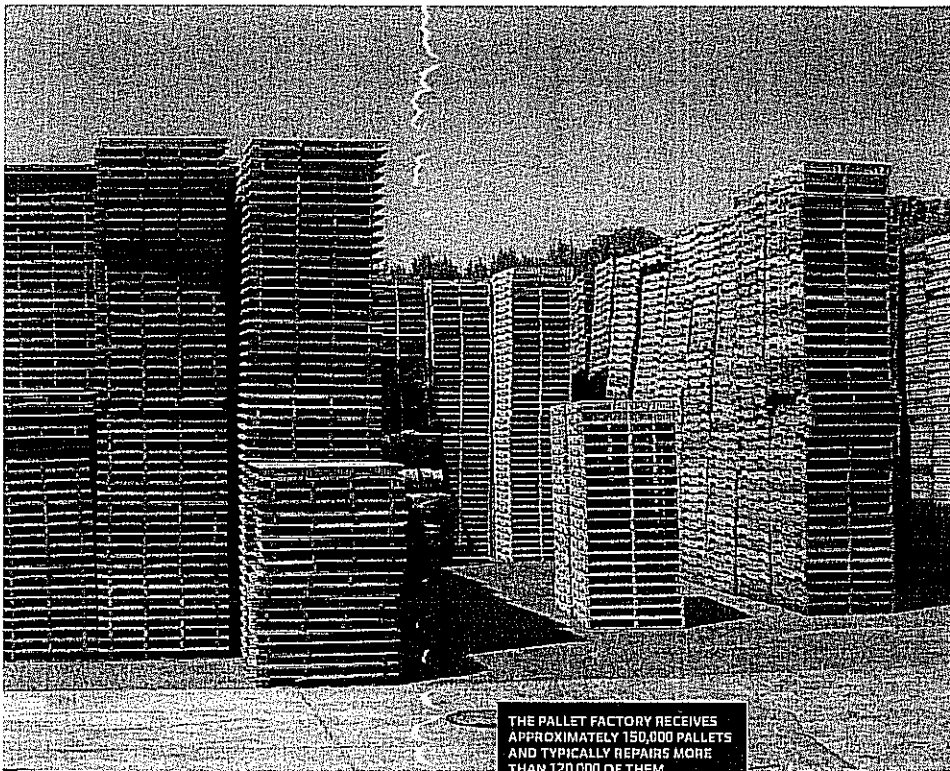
By truly understanding the shipping requirements of its manufacturing clients, The Pallet Factory has gained new market share through added services and by producing quality products, President Mike Doyle says. The Memphis, Tenn.-based firm provides transport packaging products and services with a

focus on wood pallets and containers and heat-treated products.

The Pallet Factory has been providing wood pallets, wood packaging and industrial packaging products since 1977, when Doyle founded the business. Through the years, The Pallet Factory's business evolved its services and product line, as well as its geographic reach. "In the business I had in the foodservice industry, I kept seeing these mountains of pallets that people were having problems with figuring out what to do with, so I just put two and two together and I found a way to pick up some of the excess pallets, repair them and sell them," Doyle recalls. "One thing led

to another and the company just sort of evolved into pallet recycling, manufacturing and management."

By the mid-1980s, the company had added a facility in Nashville, Tenn., and Lexington, Ky., and today is a pallet manufacturing company and transportation solutions provider. The Pallet Factory operates a fleet of tractors and more than 400 trailers with a network of transportation companies delivering throughout the Midsouth. The Pallet Factory services a 200-mile radius around each of its facilities, including the following states: Arkansas, Mississippi, Tennessee, Alabama, Kentucky, Missouri, Indiana, Ohio, Virginia,



THE PALLET FACTORY RECEIVES APPROXIMATELY 150,000 PALLETS AND TYPICALLY REPAIRS MORE THAN 120,000 OF THEM.

» West Virginia and Georgia. On a weekly basis, The Pallet Factory receives approximately 150,000 pallets and typically repairs more than 120,000 of them. These pallets are recycled back into the marketplace to be reused.

Additionally, more than 20,000 pallets are disassembled by machinery to reuse the various components, and 40,000 new pallets are manufactured weekly.

Today, its wooden pallets are used in almost every commercial sector, including manufacturing, health-care, utilities/telecommunications, transportation and food services.

According to the American Wood Pallet Manufacturers Association, there are 1.2 billion pallets in circulation in the United States each day, 93 percent of which are wood. Wood pallets dominate the market because they are a cost-effective, safe and environmentally sustainable product. The Pallet Factory's pallets and containers can be customized to accom-

modate specialized loads. Pallets are constructed with reclaimed softwood lumber such as pine, fir and spruce, as well as hardwood such as oak, elm and beech.

#### AUTOMATED SOLUTIONS

Using the Pallet Design System (PDS) – a computer-aided design tool – the company can custom-design pallets at a low cost. PDS is used to analyze or design wood pallets. By analyzing the customer's operations and use of the pallet, the firm can design a pallet to meet specific load-carrying capacities of the top or bottom deck or in a racked environment.

Pallets are manufactured at the company's state-of-the-art, 40,000-square foot facility in Memphis using highly automated equipment, including Machine Specialists Inc. (MSI) for recycling pallets and Viking Engineering equipment for new pallet manufacturing.

"I personally believe in automation," Doyle notes. "I think the more

#### KNOCK ON WOOD

Wood pallets are still considered a star when it comes to the transportation, distribution and storage of manufactured products throughout the world, making the industry somewhat recession-proof for companies such as The Pallet Factory.

Cleveland-based The Freedonia Group forecasts U.S. demand for pallets will advance more than 1 percent annually through 2012 to 15 billion pallets valued at \$16.8 billion. Pallets made from wood will continue to account for the largest share of the U.S. pallet market, while plastic pallets will experience the most rapid gains in demand.

Wood pallets are forecast to account for almost 80 percent of demand in 2012. Demand for wood pallets is projected to increase at a rate just below that of the market average, however. Demand increases will be limited by the growth of pallet refurbishing services. These services prolong the lifespans of existing pallets, reducing demand for new pallets. Environmental concerns about the waste generated by damaged and discarded pallets will also drive continued use of pallet refurbishing, as users seek to reduce the environmental impact of pallet consumption by trying to reuse and refit pallets, rather than disposing of them at the earliest opportunity, the report claims.

The study projects that demand for plastic pallets will advance 2.4 percent per year to more than 130 million pallets in 2012. Plastic pallets are easy to clean, and meet U.S. and international sanitary requirements for shipping, which makes them ideal for product shippers with neither the time nor resources to continually sterilize pallets.

Plastic pallets can last a long time without requiring time-consuming repairs, and can be easily recycled once they have reached the end of their product lifespan. However, because they do not need to be replaced as often and because their costs tend to be higher than lumber, these pallets might not experience such strong demand down the road.

Manufacturers will continue to account for the largest share of demand for new pallets, totaling 78 percent of the market in 2012. Providers of warehousing and other storage services are expected to increase pallet demand by 2 percent annually through 2012.

automated our company is, the better off we are, and the more we can be a low-cost producer.”

Doyle says the MSI de-stacker is the cornerstone of the automated sort-and-repair systems. This machine can take entire stacks of either sorted or unsorted pallets and distribute them onto a conveyor for further processing. Several of these machines exist within its manufacturing facilities.

Pallets are repaired using an MSI automated sort and repair system that operates in an assembly line fashion. Unrepaired pallets are placed on the conveyor at the beginning of the line and end up stacked and repaired by the time they go through the system. These machines can sort in excess of 15,000 pallets per day. Because The Pallet Factory

deals with such huge volumes, it is imperative that they are sorted efficiently and effectively.

In addition, heat treating is becoming an increasing concern among companies shipping products on wooden pallets. The changes in the European Union Measures are just the beginning of regulatory changes that will affect every company shipping products on wooden pallets, the company says. The company has become a leader by addressing these types of issues early in their developmental stages.

In 2003, the Pallet Factory installed a high production heat treating kiln specifically designed for wooden pallets. This heat treating procedure is approved for all existing regulations and will be approved for future regulations as well.

#### RESPONSIBLE PLAYER

Recycling all possible material is a primary goal at The Pallet Factory. Unusable pallets enter the facilities on a daily basis. Instead of disposing of these pallets, it uses a MSI wood recovery system to dismantle the pallets and turn the lumber into reusable material. Large quantities of pallets are produced new with its Viking automatic nailing machines, while smaller, custom orders are produced manually with hand-held nail guns. Recycled pallets make up roughly 60 percent of the firm's business, while new pallets make up 40 percent.

In addition, Doyle created a pallet management service within the company. This system can produce itemized monthly reports, which include pallet bank balance, total pallets received and total pallets shipped. **mt**