

Lightening the load

Former CHEP CEO tapped to launch plastic pallet pool tracked by RFID tags.

BY CHRIS GILLIS

Rising fuel costs have shippers scrambling to find ways to lighten their freight loads, even down to the pallets they use for transportation.

Realizing this trend, an investment group recently hired the former chief executive officer of a large wood pallet provider to build what they envision will become the world's biggest pool of lightweight plastic pallets.

"The use of plastic can knock down the average pallet weight from 75 pounds to 50 pounds or less," said Bob Moore, president of Cos Cob, Conn.-based Intelligent Global Pooling Systems (iGPS), initially funded through private equity investor Pegasus Capital Advisors. "That translates to fuel savings."



Moore

There's nearly a billion wood pallets circulating throughout the United States today. Moore said replacing this pool with plastic would remove more than 28 billion pounds of "non-value freight" off America's highways.

Moore's knowledge of pallet use and manufacture traces back nearly 30 years. He spent about 20 years with the beverage company Pepsi before becoming CEO of pallet provider CHEP International from 1995 to 2002. He's credited with taking CHEP public and turning it into a \$2.5 billion company with more than 230 million wood pallets in 42 countries.

While plastic pallets have been around for many years, they've never reached large-scale use among shippers. The reason for this big disparity between wood and plastic pallets has traditionally been price driven.

So-called "white pallets," or single-use wood pallets, cost about \$4 to \$11 apiece. High-quality, multi-use wood pallets generally range in price from \$22 to \$25 each, whereas a similar quality plastic pallet costs about \$50 each.

"A shipper can't afford to buy a plastic pallet for one trip," said Moore, who estimated that plastic pallets make up only 2 percent to 3 percent of the global pallet market.

However, with oil prices exceeding \$70 a barrel and lumber availability tightening after last year's Gulf Coast hurricanes, plastic pallets are becoming an enticing option for large shippers.

Plastic pallets are also not subject to the routine repairs that wood pallets require. Moore explained that most high-quality wood pallets require repairs about every third trip. The broken pallets end up in repair yards for months before they're recirculated. General repairs for wood pallets cost about \$3 per pallet.

On the other hand, a plastic pallet is either broken or it isn't. If it's broken, it doesn't end up in a repair yard. Instead, the pallet is returned to the manufacturer, shredded and reprocessed into new pallets. "It's 47 pounds of resin that can be completely recycled," Moore said.

Another problem with wood pallets is keeping track of them. Many pallets are lost each year and "cannibalized" by repair yards. CHEP bought about 3 million replacement pallets in the United States alone last year. Globally, the industry adds about 600 million new wood pallets a year.

To track its pallet pool, iGPS will embed radio-frequency identification tags into each pallet. "With an RFID pallet, you know when it went in and out the door, because you have a record," Moore said. "And if it does get lost, you know with credibility who's responsible."

iGPS will ensure that its entire pallet pool is RFID enabled. "The only way tagged pallets work for your customer is to have them all tagged," Moore said. "If one pallet is not tagged you defeat the whole purpose of tracking."

There have been some recent tests of RFID tags on wood pallets. However, Moore explained that wood tends to interfere with the range to electronically detect and read RFID tags.

The pressure is also on pallet makers

to provide pristine product to those large shippers with highly automated warehouses. "Shippers like Nestle and Procter & Gamble will only accept pallets when they're new," Moore said. "Their systems don't tolerate imperfect pallets."

Other problems facing the wood pallet industry are the increasing regulatory constraints to prevent the spread of pests, such as beetles and nematodes. In March 2002, the United Nations Food and Agriculture Organization's International Plant Protection Convention (IPPC) adopted a universal treatment standard for solid wood packaging to reduce the movement of pests. Many trading nations, such as the United States and European Union, have included the IPPC in their trade regulations. Plastic pallets are immune to pest infestations.

In certain consumer industries, such as meatpacking and distribution, wood pallets must be discarded after one use because of contamination. Perishable shippers can reuse plastic pallets after adequate steam cleaning, Moore said.

There are basically three standard sizes of pallets used in the international supply chain: the 1,165 cm-by-1,165 cm pallet used in Australia, New Zealand and Asia; the 1,000 cm-by-1,200 cm pallet in Europe; and the 48 inch-by-40 inch pallet in North America.

Moore said a "real challenge" with pallets is the constant source imbalance, because they're generally used by shippers in one direction. Pallets often stack up at import destinations until they're returned to origin in bulk loads. This severely restricts the number of turns that a shipper can get from a pallet each year.

There are opportunities for some global consumer goods shippers to find ways to take advantage of two-directional pallet



use. For example, a shipper with European imports may be able to use those same pallets to load export goods to Europe. "That's why highly integrated businesses are ideal for a plastic pallet pool," Moore said.

iGPS will first focus its business on the U.S. freight market. The company will source standardized 48 inch-by-40 inch plastic pallets from six manufacturers — three domestically and three from overseas.

Moore would not reveal how many pallets iGPS will initially acquire, but did say the company has a 10-year business plan and has been "given the green light" by Pegasus to buy as many pallets as required to meet customer needs. ■