



iGPS benefits from shippers' interest in pallets that demonstrate longevity and contribute to the efficiency of supply chains.

Picking plastic

iGPS's pallets rapidly take hold in shipper market dominated by wood.

BY CHRIS GILLIS

It was about a year and a half ago when a private equity investor tapped the former chief executive officer of a large wood pallet provider to introduce shippers to a new type of lightweight plastic pallet.

This would be no easy task, considering wood pallets have dominated shipping in the United States for decades. There are now more than a billion wood pallets circulating throughout the country, making them reasonably cheap to obtain.

But shippers' attitudes toward wood pallets have started to change. They want their pallets to demonstrate longevity in use and contribute to efficiency and cost savings in their supply chains. This has raised an interest among shippers in alternative materials to wood.

"You can't go anywhere without people in the shipping business today talking about sustainability," said Bob Moore, chief executive officer of Intelligent Global Pooling Systems (iGPS), the plastic pallet pool operator started with funds from Pegasus Capital Advisors.

Moore's knowledge of pallet use and manufacture goes back 30 years. He spent about 20 years with PepsiCo North America before becoming CEO of wood pallet provider CHEP International from

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1995 to 2002. He's credited with taking CHEP from a \$300 million operator to a \$2.5 billion international giant.

Also included among iGPS's senior leadership are Rex Lowe, former president at CHEP USA from 2000 to 2003, and Jack Sparn, chief information officer, who's credited with developing the framework for CHEP's pallet pooling system.

Together, this trio has started to convert some of the country's largest domestic shippers over to plastic pallets. This has occurred despite the fact plastic pallets cost up to \$30 more than the average multiuse

wood pallets on the market. "Our customers have come up with a lot of reasons why they want to use them," Moore said.

"Being green is important to the world and our customers," said Joshua Jones, procurement manager of rigid packaging for Pittsburg, Texas-based Pilgrim's Pride, the world's largest poultry processor.

In March, Pilgrim's Pride began introducing the iGPS pallet to its shipping operations. The first load of 3,000 pallets arrived at its Live Oak, Fla. plant, followed by the introduction of 2,100 additional pallets a week. "That will grow as we bring more plants up," Jones said.

The poultry company owns some plastic pallets, but they have been only used for internal transportation purposes or "closed loop" moves. Pilgrim's Pride still spends about \$21 million a year on wooden pallets for shipments to its customers. "We've never tried to lease plastic pallets until now," Jones said.

Food product shippers, in particular, are attracted to the iGPS plastic pallet pool concept for its traceability. Each iGPS pallet has four radio frequency identification tags incased within the plastic frame. All tags are three-way readable via RFID bar code or alphanumerically. Each pallet carries a unique serial number that is tracked throughout the supply chain. Most importantly to food shippers, this tells them where the pallet had last been.

"With iGPS, we have a clear pedigree of each pallet and what had been previously stored on it," said John Sheptor, CEO of Imperial Sugar, based in Sugar Land, Texas. "It helps to ensure we aren't following a product that we don't want to."

Food shippers pointed out that wood pallets tend to absorb high rates of moisture, which make them heavier and susceptible to harboring potentially harmful bacteria and molds. "Antimicrobial is a big deal for us. The less we have to worry about that the better," Jones said.

While wood pallets may be treated through heat and methyl bromide fumigation, plastic pallets can be steam cleaned much quicker and cheaper, Moore said.

RFID tracking capability of the pallet pool also reduces administrative costs and facilitates billing reconciliation, Moore explained. iGPS assesses no extra charge for use of RFID.

Wal-Mart Stores and other large retailers are demanding that their suppliers use RFID tracking technologies. A Sam's Club distribution center in De Soto, Texas, which is a fully RFID-enabled operation, assesses suppliers a \$2 per pallet load without an RFID tag.

Sheptor credited the smooth operational

transition to plastic pallets to iGPS staff support. "They helped us install the product software in our system and trained our people," he said.

Imperial Sugar is iGPS's largest customer in its pool, taking in about 20,000 pallets a month. "We view this as a partnership and it has been from the start," Sheptor said.

Another aspect of iGPS's pallets that's attractive to shippers is their lighter shipping weight. Each iGPS pallet weighs just 48 pounds, 27 pounds lighter than the average wood pallet. A truck trailer loaded with 540 iGPS pallets saves about 15,390 pounds of weight on the road, generating a substantial savings in transportation fuel burn, Moore said.



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If it were possible to convert the country's entire wood pallet pool over to plastic, it would remove more than 28 billion pounds of "non-value freight" off the roads. That would generate a huge fuel savings for shippers and carriers with oil prices now eclipsing \$100 a barrel, Moore said.

Shippers interviewed for this article appreciated the iGPS pallets for their ruggedness and improvement to warehouse operations and product safety.

"Wooden pallets often arrive with broken boards and protruding nails that could rip our paper sugar bags," Sheptor said. "We received a lot of complaints about sugar residue left behind in trucks and in the warehouses of our customers."

Broken pallets with loads are also a risk to forklift operators and warehouse workers, he added.

Wood pallets need repair on average after every three to five trips. General repairs

cost about \$3 per pallet, Moore said.

If a plastic pallet is damaged, it's returned to iGPS's manufacturer, shredded and re-processed into new pallets, as allowed by Underwriters Laboratories. Moore said iGPS pallets are 100 percent recyclable, whereas more than 4 million tons of wood pallet materials end up in landfills each year.

According to iGPS, in nearly two years of operation, only 0.1 percent of its pallets has been reported damaged by shippers, and not a single truckload of iGPS pallets has been rejected.

The company also uses minute amounts of decabromine, encapsulated in plastic resin, as a fire retardant. Decabromine, which is government approved for household and workplace products such as upholstery, carpet, drapery, televisions and computer cabinets, and electrical wire insulation, is accepted for use in pallets without restriction in the United States, Canada, Europe and Latin America. In January, the European Union publicly confirmed the safety of decabromine after years of testing.

In an effort to improve pallet-handling efficiency between customers, iGPS in July introduced iDepots to its national pallet rental program.

Pallet receivers who choose to become iDepots agree to sort and inspect iGPS pallets and have them ready for pickup and shipment to another user. In exchange, iDepot operators receive a per-pallet handling and inspection fee from iGPS.

"Because our revolutionary all-plastic pallets are so durable, it is unnecessary to transport them to an inspection and repair facility after each use, as is required for wood pallets," Moore said. "This extra leg in the supply chain is costly, inefficient and generates large quantities of greenhouse gases.

"Participating retailers and distributors not only help their bottom lines but also help the environment as well," he said.

iGPS started manufacturing its 48-inch-by-40-inch plastic pallets at a plant in Detroit, followed by new production sites in Missouri and Kentucky. The company plans to open manufacturing facilities in Southern and Northern California this year.

Moore said iGPS makes about 7,000 RFID-enabled pallets a day, and should raise output to 12,000 a day by July to accommodate shipper demand. This would give iGPS a pool of 2 million pallets by the end of 2008 with a goal of reaching upwards of 7 million pallets by 2011.

For now, iGPS remains busy keeping up with domestic shipper demand. "I honestly didn't think we would get here as quickly as we have," Moore said. ■