

PALLETS: FRONT AND CENTER

Playing a central role in the supply chain, the once-overlooked pallet is capturing the spotlight and evolving to keep up with rapidly changing demands and expectations. These pallet companies ensure standout performances.

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Pallets are so ubiquitous and modest in what they do that they can easily be overlooked amid the bells and whistles of the supply chain, particularly as the environment around them grows increasingly sophisticated and high-tech. Still, the supply chain depends on pallets—most products cannot be shipped between manufacturers, distribution centers, and retailers without them—and at no time has that been more apparent than during the supply chain disruptions that accompanied the pandemic.

“Until 2020, pallets were the most under-appreciated thing in the supply chain for a long time,” says John Vaccaro, president of Bettaway Supply Chain Services. “They were taken for granted. There have to be pallets for every load, every container, every truck, but they still have been overlooked.”

Pallet shortages caused by surges in e-commerce-fueled consumer demand for products reminded everyone of pallets’ essential nature. The pallet shortage brought heightened attention to the industry and made pallets more than “a second or third thought,” Vaccaro says.

“They’d always been there, readily available, but the shortage shined the spotlight on them,” Vaccaro says. “For the first time, when there weren’t enough pallets, everyone realized how important they were because you can’t ship a load if you don’t have a pallet to put beneath it.”

ONGOING ADJUSTMENTS

The surge in demand that accompanied the pandemic led to adjustments that have endured for the pallet industry and the supply chain at large.

For instance, Jeff Pepperworth, president and CEO of iGPS Logistics, says many of his company’s retail partners found that their main suppliers were unable to keep up with demand, driving them to secondary and tertiary suppliers.

For pallet suppliers, that meant extending their network and pallet availability to manufacturers that they may not have had relationships with prior to COVID. Now, some of those secondary suppliers have retained their foothold with the retailers who turned to them in a pinch and the partnerships have deepened.

“Those suppliers were key early on at the onset of the pandemic, and they’ve remained key as we’ve moved a couple of years down the road,” Pepperworth says. “They’ve led to some very strong relationships.”

Throughout, pallet suppliers such as iGPS worked hard to respond to their customers’ needs, no matter how difficult the task.

“We were focused on making sure that our customers had enough pallets to keep up with the demand,” Pepperworth says.

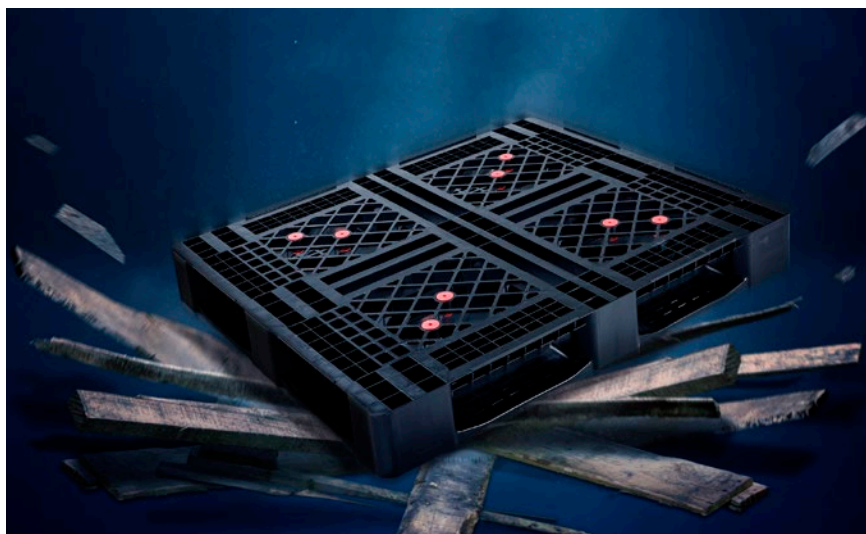
For pallet suppliers, that meant keeping a close eye on forecasts and ordering trends to anticipate the market and ensure customers always had sufficient pallets in their inventories to keep products moving.

TURNING TO TECHNOLOGY

Technology tools that can help anticipate customer needs in the supply chain became particularly coveted for the support they could provide trying to decipher the signs of what lay ahead. No one wanted a lack of pallets to bring trade to a standstill or even hold up deliveries one extra day in an e-commerce-driven environment that has raised customer expectations for rapid delivery of orders. Many pallet manufacturers upped production as much as they could.

Against the backdrop of high demand, wood pallets have faced ongoing cost challenges caused by stiff competition for lumber with other industries, such as furniture and construction.

Meanwhile, plastic pallets have seen price pressures in 2022 due to rising oil prices. For many who need



Plastic Pallet Pros provides new, used, and recycled plastic pallets to businesses throughout the United States. Placing an emphasis on customer service, the pallet supplier takes the time to understand customers’ operations to provide optimal solutions.



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the pallets, however, the high costs are understandable in the current climate—and the pressing need makes them more likely to pay without pause.

“This is the first time since I’ve been in the industry that companies are accepting the increases in pallet costs the way that they are,” says Bryon Robbins, chief operating officer of Plastic Pallet Pros.

Although pallets remain relatively low-tech, they increasingly play a role in supply chain connectivity by being equipped with RFID tags, barcodes, and other technologies. The addition of these smart technologies gives pallets a larger role to play in the widespread push to end-to-end visibility of shipments.

NEW NORMAL FOR PALLETS

The concept of a new normal that permeates so much of business and life extends to the pallet industry. For instance, growing emphasis on

environmental responsibility across industries means companies expect their pallet companies to play an active role in improving the sustainability of their supply chain.

“There’s a big trend away from the send-it-and-forget-it mentality and more toward determining how to get the maximum use and life out of this product,” says Sam Dunham, director of operations, Plastic Pallet Pros. “That is a more sustainable option.”

In addition, the widespread labor shortage that has affected every corner of the supply chain has led to increased adoption of automation in manufacturer facilities and distribution centers that appears likely to continue to grow.

For automation to work in that environment, pallets must be reliable and consistent for the robotic tools that handle them.

“We’re in a dynamic phase of explosion in automation,” Pepperworth says. “The pandemic has shown us that the necessity

of workers and laborers can be a challenge, and that has forced a lot of companies to move to automating their environments.”

In light of that changing environment, here are some standout players in the pallet industry that are leading the field in meeting the supply chain’s complex, evolving challenges.

IGPS EMBRACES ITS PROMINENT PLACE AS AN INDUSTRY LEADER IN SUSTAINABILITY

For iGPS Logistics, sustainability is far from anything new. The Florida-based company, which provides plastic pallet pooling solutions throughout the United States, has long placed a distinctive emphasis on environmental responsibility, ensuring that it is ingrained into the organization’s culture.

“Sustainability has been a part of our mission and business model since the beginning,” says Jeff Pepperworth, president and CEO.

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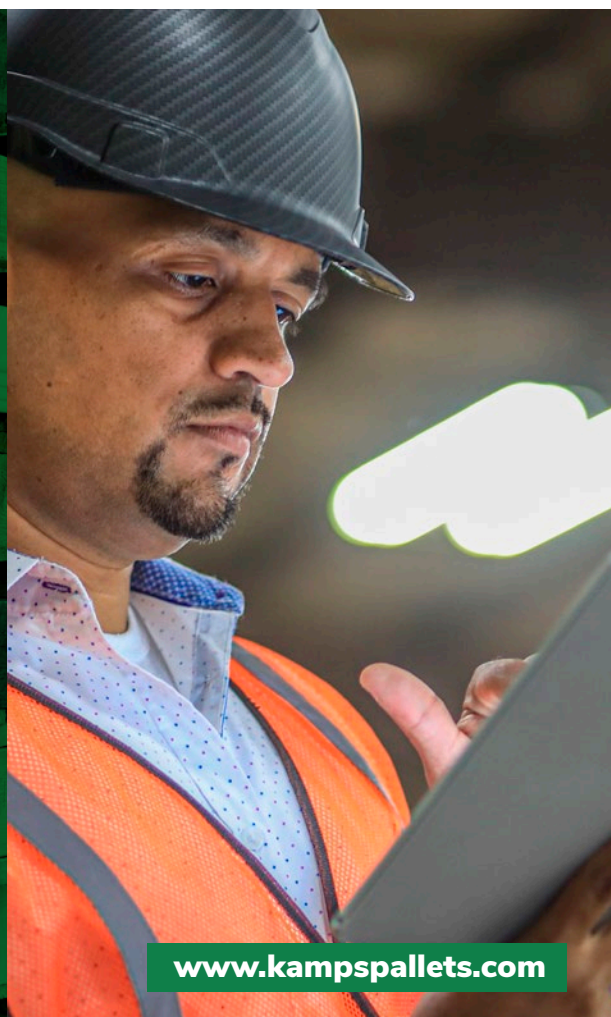


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iGPS pallets are 100% recyclable. When a pallet reaches the end of its useful life, iGPS regrinds it and makes a new one. The company recycled more than 32 million pounds of plastic into pallets in 2021. The result is an infinite life cycle loop—“cradle to cradle,” Pepperworth says—that keeps waste to a minimum.

A COMMITMENT TO SUSTAINABILITY

The company's commitment to sustainability aligns with the growing emphasis on environmental responsibility in the supply chain field. “We see tremendous engagement from our customers right now,” Pepperworth says.

Customers also appreciate that iGPS plastic pallets are lighter than their wood-block counterparts. “That not only makes our pallets safer and easier for workers to manage, but they're also lighter when being shipped,” Pepperworth says.

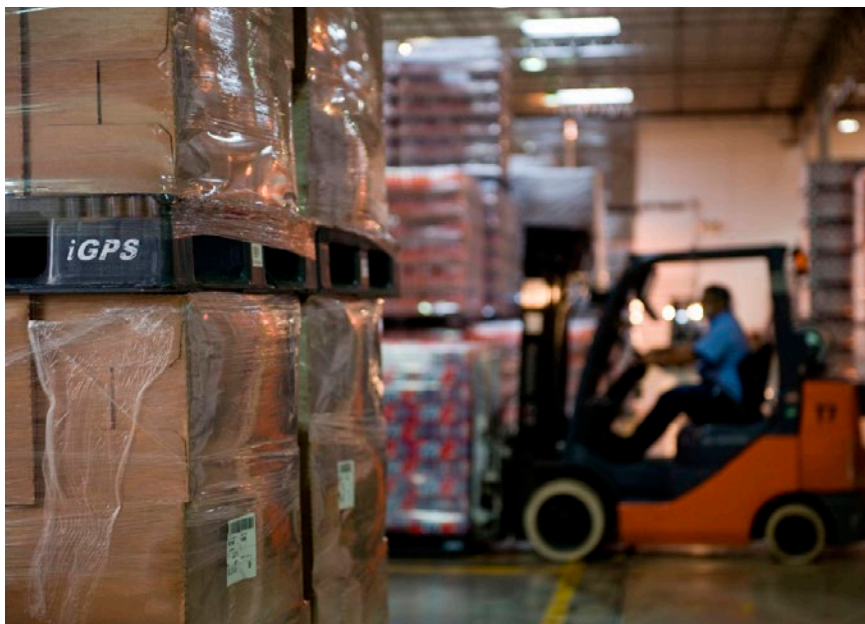
“Each pallet also is encoded with RFID chips that can be scanned throughout their journey,” he adds. “That not only gives us visibility to the pallets, but it also gives our customers visibility into their supply chains.”

In addition, because iGPS pallets are lighter than wood-block pallets, trucks loaded with them carry less weight on the road—leading to lower fuel needs. The company estimates the use of its pallets kept approximately 28 million pounds of greenhouse emissions out of the atmosphere last year.

The ongoing shift to automation has made the uniformity of iGPS's plastic pallets a particularly appealing asset.

“Our pallets are very consistent and uniform,” Pepperworth says. “They don't swell up, they don't absorb moisture, and they don't have any kind of nails or splinters. They flow through automation equipment easily and that is becoming a big topic right now as more operations move to automation.”

A central component of iGPS's offerings is its iDepot model. Retail stores that receive pallets and become



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iDepots sort and inspect iGPS pallets and have them ready for shipment to the next user, which streamlines logistics.

EFFICIENCY AND OPTIMIZATION

Introduced in 2008, iDepots have led to new levels of efficiency and optimization within the supply chain for participants, leading to lower costs and reduced deadhead miles, Pepperworth says.

“We shortened the work-in-process timeline and that became a tremendous benefit, not only to retailers getting product faster but also to manufacturers having pallets sent directly back to them so they could utilize them in their system,” he says. “It eliminates a transportation leg in the journey of a pallet, creating an efficient closed-loop ecosystem.”

Today, the iDepot retail network is stronger than ever.

“As we see surges in the marketplace, or in demand, we can partner with those retailers to essentially become a node of the network,” Pepperworth says. “We've grown to well over 200 participating retail locations nationwide, and it has become an effective model for the entire pallet industry.”

ORBIS: REUSABLE PLASTIC PALLETS FOR EVERY STEP IN THE SUPPLY CHAIN

As businesses increasingly embrace sustainability and search for efficiencies and cost savings throughout their supply chain, more shippers are turning to reusable plastic pallets to protect their products, says Michael Del Vecchio, product manager at ORBIS. Reusable plastic pallets, which can be recycled and reprocessed into new packaging solutions at the end of their usefulness, are sustainable, efficient, and durable, and have high weight capacities and a long service life.

“The durability of reusable plastic pallets allows them to make many trips through the supply chain before being recycled, representing great savings over wood pallets on a cost-per-trip basis,” Del Vecchio says. “Eliminating corrugated packaging and wood pallets also reduces waste.”

ORBIS's reusable plastic pallets are particularly versatile, protecting products during production, assembly, processing, storage, and distribution for a wide variety of industries, including those that need their pallets to meet strict requirements.



MORE THAN A PALLET.

This looks like a simple plastic pallet. But it's so much more than that — **it's a critical component of a more sustainable and optimized supply chain.**

The 100% recyclable iGPS plastic pallet is lighter, cleaner, and more durable than wood. It's rackable, trackable, and compatible with all standard material-handling equipment.

There are no nails or splinters, making the pallet safer for workers and products while helping it flow through automated systems with ease.

Every pallet is equipped with RFID tags, to give you data-driven intelligence for better decision-making.

Combined with our nationwide pallet pooling rental program, the iGPS pallet is an extraordinary asset that reduces greenhouse gas emissions, minimizes fuel consumption, and **can save you up to \$4 per pallet load** while streamlining every aspect of your operation.

This is more than a pallet. It's the competitive advantage you need to meet the business challenges of today and tomorrow.

LEARN HOW THE iGPS PALLET CAN DO MORE FOR YOUR BUSINESS.

Call 855-918-3991 or visit igps.com today.

iGPS
PALLET POOLING SOLUTIONS



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ORBIS provides solutions, services, and expertise to create an effective reusable packaging program to meet supply chain needs. Its reusable plastic pallets allow for seamless integration with both manual and automated materials handling equipment.

A full-service provider, ORBIS specializes in offering the solutions, services, and expertise to create an effective and sustainable reusable packaging program that meets the unique needs of supply chains.

MEETING DIVERSE REQUIREMENTS

ORBIS provides a comprehensive selection of styles and footprints, resulting in the largest offering of plastic pallets in the industry, according to Del Vecchio. The Wisconsin-based company's pallets are manufactured to meet diverse application requirements, and ORBIS offers many different material features including X-ray compatibility, and metal detection, and ocean-bound plastic. They are also FDA-compliant and FM-approved.

"The all-plastic construction of reusable pallets makes them hygienic and easy to clean," Del Vecchio says. "This is especially important for industries such as food and beverages and pharmaceuticals where maintaining cleanliness in production is imperative.

"Certain reusable pallets are also manufactured in FDA-compliant plastic, adding to their hygienic benefits," he adds.

One of ORBIS's newest pallets, the

40 x 48 Odyssey, provides stability and durability with approximately 36 times the lifespan of a whitewood stringer pallet. In testing from the Virginia Tech Center for Packaging and Unit Load Design, the Odyssey plastic pallet completed 400 cycles without failure, while the wood pallet's average failure was 11 cycles.

ORBIS's reusable plastic pallets are designed to handle the demands associated with the growing use of automated supply chain processes. Reusable plastic pallets allow for seamless integration with both manual and automated materials handling equipment.

"As companies try to meet increased demand, automation will become an even more important tool for scaling their operation as it helps to streamline processes and save on labor costs in a competitive market," Del Vecchio says. "Reusable pallets provide dimensional consistency and repeatable performance for all types of automated systems including conveyors, AS/RS, eye-readers and more.

"Plastic pallets also eliminate the possibility of loose boards, broken boards, or exposed nails that can ultimately lead to automated system downtime as well as

damaged products," he says. "Additionally, sensors can easily read their standard sizes and smooth surfaces, leading to operational efficiencies throughout the supply chain."

Ultimately, because of their litany of benefits, ORBIS's reusable plastic pallets are seeing a sustained surge in interest.

"More and more companies today recognize that reusable plastic pallets are an economic, environmental, and efficient alternative to wooden pallets or skids," Del Vecchio says.

PALLETTRADER DEBUTS AS THE WORLD'S FIRST ONLINE PALLET MARKETPLACE

The idea made so much sense that John Vaccaro couldn't believe someone else hadn't already thought of it. When Vaccaro, president of New Jersey-based Bettaway Supply Chain Services, first began to develop the project three years ago, he told hardly anyone, worried that the idea would leak and someone would get there first.

The idea was PalletTrader, the world's first online pallet marketplace. Influenced by everything from eBay and Etsy to LinkedIn and the DAT Load Board, PalletTrader is a sophisticated yet user-friendly e-commerce solution designed for everyone associated with the buying and selling of pallets.

FILLING A GAP

Set to launch this summer, PalletTrader will fill a key gap in the marketplace that had gone unnoticed, but that seems rich with potential, particularly during a time when the pallet market has been so heated.

"It provides a new platform for buying and selling pallets where there clearly was a need for one," Vaccaro says, noting that the "white wood" pallet market for which PalletTrader is designed has some 500 million units in circulation.

PalletTrader is not meant to replace anyone or anything. It simply offers a new option for pallet businesses to consider—a true online marketplace for buying and selling pallets. The site will



Seventy-five percent of consumers expect businesses to support efforts to stop climate change. With reusable plastic packaging, you get a supply chain solution that not only reduces waste but also increases product protection, hygiene and material handling efficiency. Don't let the brown box hold you back from achieving **A Better Way** for your business. Switch to reusable packaging for a more sustainable supply chain with ORBIS®.



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be suited for all manners of transactions, and anyone can join.

“The beauty of it is it will be a fit for all sizes and varieties of buyers and sellers in the pallet marketplace,” Vaccaro says, ranging from large and mid-sized companies with national footprints to mom-and-pop businesses and individual operators.

A PLATFORM FOR EVERYONE

“I like the idea of creating a platform for everyone, taking down all the veils and just connecting buyers and sellers—everything is going to be between them,” Vaccaro says. “It allows for the creation of instant connections online, and it brings market connectivity to pallets that hasn’t been there before.”

Those who use the site will have an array of tools to manage their activity in the pallet marketplace, including email tracking notifications for pallets. PalletTrader will offer both public and private markets for its users to manage. Users who prefer to manage their transactions privately can create their own networks within PalletTrader where trades take place with selected partners.

For instance, if your company has a relationship with three local pallet depots and you want to broadcast your pallet needs only to them, you can manage it all via a private exchange with those depots.

Bettaway’s 35 years of operation in the supply chain and close relationships in the pallet industry will help them build PalletTrader in a way that a tech company from outside the industry could not, Vaccaro says. Bettaway can tailor the site and how it works to the specific needs, preferences, and behaviors of those navigating the pallet market every day.

PalletTrader users pay a monthly fee of \$79 and a 1.5% fee for each transaction, but Vaccaro says the company will waive the monthly fee for new users for the first six months

while the site gains traction.

“I believe in getting everybody in on this at the beginning and getting rolling with it,” Vaccaro says. “We’re creating a business network and a social network, knocking down barriers in the process. I’m excited to see what happens.”

PLASTIC PALLET PROS TAILORS SOLUTIONS TO CUSTOMERS’ UNIQUE NEEDS

When a large retailer reached out to Plastic Pallet Pros looking for a specific pallet at a specific price, the team at the Illinois-based pallet supplier could have simply taken the order. “Quite frankly, it was a high price,” says Bryon Robbins, sales manager.

That would not have been good for the customer, however, and for Plastic Pallet Pros, what’s best for the customer is what drives their decisions.

“It was the wrong pallet for their

needs, and we couldn’t let that happen,” Robbins says. “It wasn’t the right answer for them, and our objective is always to find the right solution for our customers.

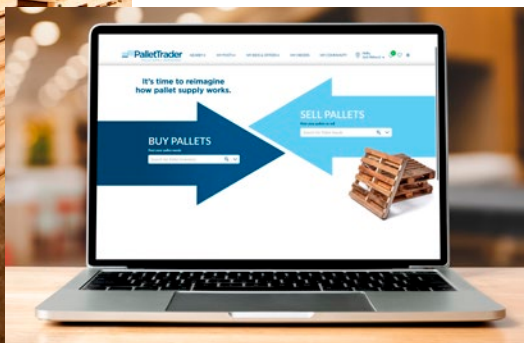
“Too many companies are quick to take an order without taking the time to consider if it’s what the customer actually needs,” he adds. “We’re going to find the best product to fit the customer’s situation and needs, and we’re going to go the extra mile to do it.”

As part of that commitment to tailoring services to their clients, Plastic Pallet Pros places a nonnegotiable emphasis on customer service, explains Sam Dunham, director of operations. That means not only being vigilant about answering the phone and returning messages, it also means making free visits to client and prospective client facilities to understand their operations inside and out so that Plastic Pallet Pros team members can provide the best possible solution for their circumstances.

A PROPENSITY FOR PLASTIC

Plastic Pallet Pros increasingly sees customers turn to plastic pallets for an array of reasons. For instance, Dunham notes that more companies are moving to a closed loop pallet system—a system that allows them to retrieve their pallets to use repeatedly or to use internally.

“This system allows companies to fully realize the benefit of a much more durable plastic pallet,” Dunham says. “The



Bettaway’s 35 years of operation in the supply chain and close relationships in the pallet industry helped the company build the PalletTrader platform in a way that a technology company could not. PalletTrader, a new online pallet marketplace, was influenced by everything from eBay and Etsy to LinkedIn and the DAT Load Board.

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average wood pallet lasts five to eight trips while you can expect to get between 150 and 200 trips from a quality plastic pallet.”

In addition, Robbins says, plastic pallets are worth the extra upfront cost for one-way shipping needs in an open loop due to the “true cost” of using plastic iterations.

“Plastic pallets weigh less than wood,” Robbins says. “This makes them easier for employees and customers to handle.

“They also reduce weight on the truck, which can increase the amount of product you can ship as well as reduce freight costs,” he adds. “If you use a nestable plastic pallet, you fit as many as 2,370 empty nestable 48 x 40 pallets in the same amount of space you need to store 540 empty wood pallets.

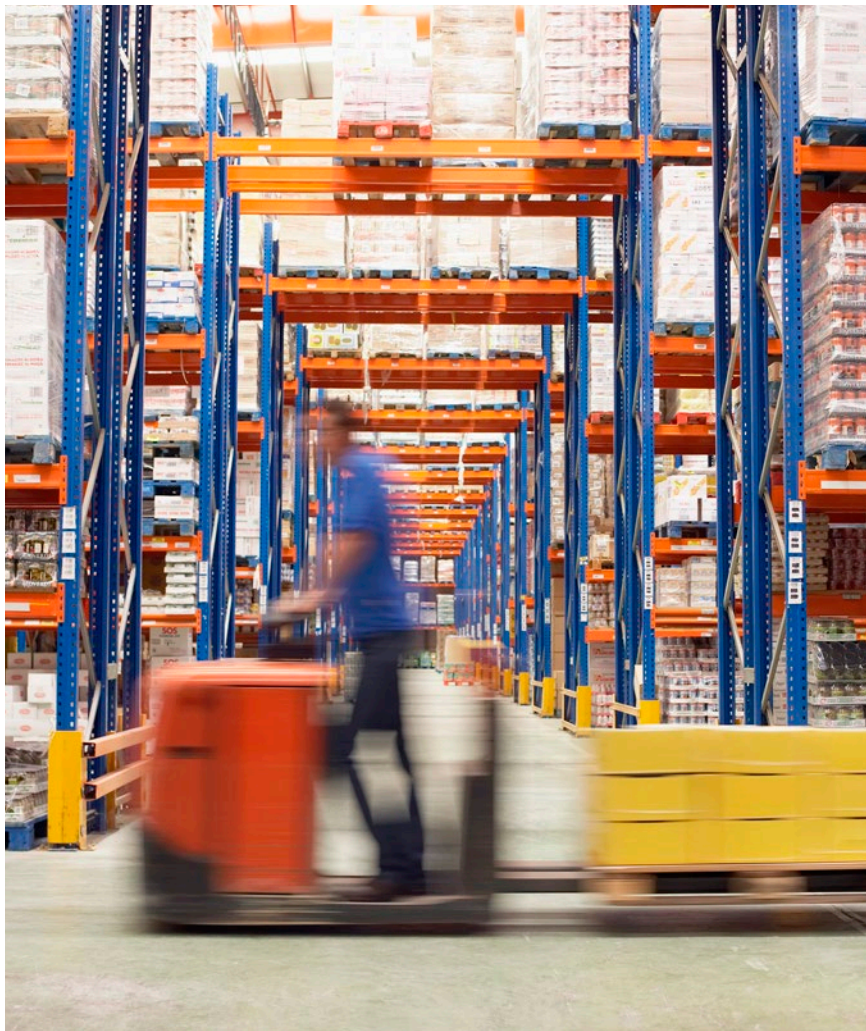
“Also, they look better and customers often end up using the pallet themselves and see more value than a wood pallet,” Robbins says. “There is also less chance of product damage.”

Companies are turning to plastic pallets in an effort to be more sustainable. Companies recognize that using 100% recycled plastic pallets that last 40 times longer than wood and that will be recycled again when their usefulness ends is “a sustainable solution that helps them achieve their environmental goals,” Dunham says.

PNEUMATICO MAKES BUILDING YOUR OWN PALLETS A FLEXIBLE, AFFORDABLE OPTION

Few companies consider the possibility of building their own pallets. When they do, however, they discover a straightforward, cost-effective solution that can be a particular blessing for businesses that require custom or large pallets on short notice.

Pneumatico nailing machines are a proven, reliable opportunity to build your own pallets, and the company is fast gaining clients around the world. In the past five years, Pneumatico, a brand of Polish-based Airfix, has installed its pallet-making machines for customers in Austria, Germany, France, Italy, Ireland,



Investing in pallets should align with a company's overall supply chain strategy, taking into account the full life-cycle return on investment.

the Czech Republic, Slovakia, Croatia, Belgium, Sweden, the Netherlands, Poland, Israel, and the United States. Clients include manufacturers, logistics companies, and pallet manufacturers.

The popularity of Pneumatico's machines can be attributed to several factors, including that they are easy to use and provide operators with newfound flexibility at an affordable rate, explains Bartosz Wojciechowski of Pneumatico USA.

Pneumatico machines allow an operator to build standard or custom pallets in either block or stringer format, including large pallets up to 130 inches wide. Building your own pallets with a Pneumatico machine can be done on a compact footprint and requires only a few minutes for changeovers.

One of the most appealing benefits

that Pneumatico machines provide is that they allow companies to build their pallets on short notice. Wojciechowski says lumber, labor and freight challenges have led to high prices and longer delivery times for pallet companies facing high demand from their customers.

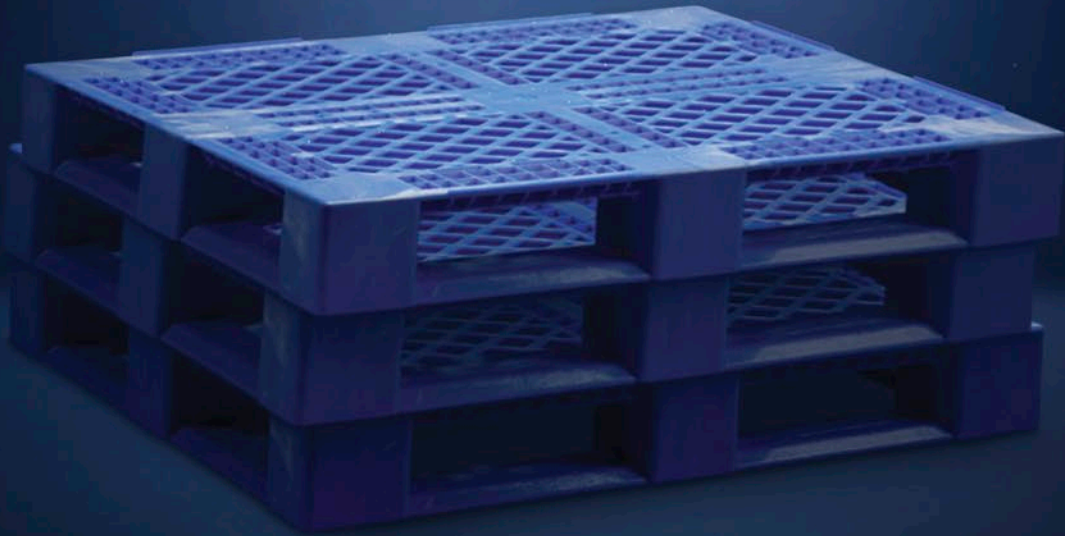
SUPPORTING MANY ADVANTAGES

Pneumatico's clients, on the other hand, can build their own pallets on demand, a boon for a variety of businesses, such as those who frequently encounter an immediate need for custom, large, or block pallets.

“A lack of pallets when you need them can result in shipping delays and a poor customer experience,” Wojciechowski says. “No pallets and shipping delays can also mean that those products consume valuable



PLASTIC
PALLET PROS



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- **Sustainability:** Plastic pallets are recyclable.

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warehouse space, requiring costly multiple handlings and increasing the likelihood of damage.”

The increasing price of pallets in recent years has particularly affected buyers of large pallets and modest orders of custom pallets, which are not as attractive to pallet producers focused on more economical longer runs on automated pallet nailing lines, Wojciechowski says.

“By building your own pallets on a Pneumatico pallet machine, you avoid the pallet company markup,” says Wojciechowski, who notes the average payback period for a Pneumatico machine is approximately six to 12 months.

“And if you have any underutilized labor hours due to the ebbs and flows of your business, they can be utilized for pallet building,” he adds.

Custom pallets, in particular, have long been a challenge for pallet buyers due to the inconvenience they cause



Pneumatico nailing machines are a proven, reliable opportunity to build your own pallets. Pneumatico is fast gaining clients around the world and has installed its machines for customers in Austria, Germany, France, Italy, and the United States, among others.

pallet companies, who typically either decline to build them or quote the job at a high rate.

“Pneumatico is perfect for businesses facing that challenge,” Wojciechowski says. “Our machines can be changed over in mere minutes to build stringer or block pallets, as well as standard

pallets that are not often available from U.S. manufacturers, such as Euro-pallets and CP pallets.”

Businesses facing a pallet supply crunch can work with Pneumatico to explore if the “build your own” approach can address their pressing pallet needs. ■

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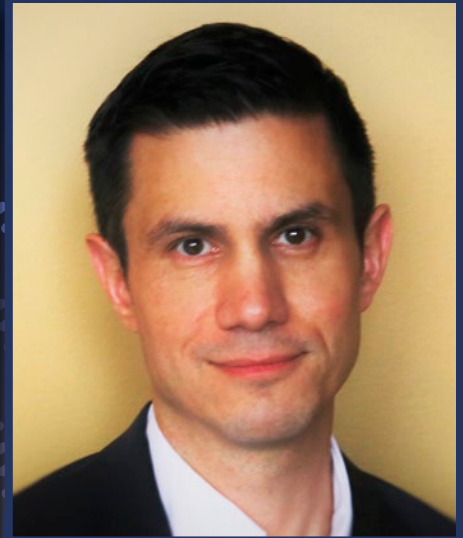
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