





MATERIAL HANDLING OPTIONS IN THE BEVERAGE INDUSTRY:

Choosing Right and Staying Efficient

In recent years, the beverage industry has been experiencing an evolution as consumers are experimenting with new beverage categories, ingredients and flavors. With this evolution, beverage warehouses and distribution centers are challenged by the growing number of new product launches, new packaging designs and sizes, and the storage and retrieval operations for all of these products. Often running several shifts throughout the day, many beverage facilities are looking to optimize their operations and work flows.

Because many of these facilities have limited square-footage in which to store product, they have begun to find value in vertical growth via racking solutions and the use of forklifts. Forklifts provide a solution for a variety of operational challenges and unique applications, but finding



to ensuring a safe and efficient workplace.

"It starts with using the right piece of equipment for that application," explains Rick Pfeiffer, account manager at Toyota Material Handling Northern California, a company that partners with many beverage distributors and wineries in the western United States. "Every business is a little different, so a company that bottles wine may need a different piece of equipment than a company that bottles beer or soda. It starts with getting the right piece of equipment, the right lift heights, the racking [and] making sure the equipment fits in their aisles."

MAKING THE RIGHT CHOICE

Although it might seem more affordable in the short run to use the same forklift for various operations, using the right tool for the job from the right manufacturer and working it to capacity can create more efficient operations, leading to savings in the long term. Having the right size fleet and utilizing it to its capacity also is essential for achieving long-term savings.

"The reality is that we need to start looking at more automation, bringing the product to the picker, not the picker to the product, because with the size of warehouses and the SKUs that they're faced with, you need to look at it with a different approach and invest in that arena," explains Jeremy Copeland, warehouse product territory manager at Toyota Material Handling U.S.A. "What you might find out is that you need less labor, which then with less labor, less forklifts are needed. So Toyota focuses on right-sizing fleets, making sure that they're using [their fleets] optimally. Just like in lean manufacturing, ... we want operations

to utilize 100 percent of that time for that truck throughout the day. A lot of places do 50 percent of it, ... so we're trying to get them into seeing that as a benefit for them. It helps lower their costs, too."

Regardless of which type of forklift is chosen, selecting a product from a notable, high-quality manufacturer is key to getting the most bang for your buck.

"Don't walk over a dollar to pick up a dime," Pfeiffer says. "Don't purchase a less expensive forklift thinking you are going to save money, as the maintenance costs will be higher and it possibly won't last as long. Toyota is going to be the lowest overall cost of ownership."

When in the market for forklifts, beverage companies should consider several factors. Among them is the choice between electric-powered and internal-combustion forklifts. According to Pfeifer, total cost of ownership also should be considered when deciding between the fuel sources, highlighting that some facilities utilize both types to optimize their operations.

"Overall, the cost of purchasing a propane-powered forklift is going to be less up front but electric overall is going to be less because you don't have to buy propane," Pfeiffer says. "When you buy an electric, you have to buy the battery, the charger and the forklift, so you have the upfront cost of all that, but then the actual cost to run it is less than what the propane would be. But the propane is less expensive up front to purchase."

Although the choice between electric and internal combustion can be simple, other choices can be more difficult for a beverage company to make. Copeland says that many operators have more difficulty deciding between stand-up and sit-down models.

"One of the things that I really focus on with customers is to put together the pros and cons of stand-up versus sitdown. I think that's the biggest debate," Copeland says. "... Stand-up is great if you're on and off the truck a lot, but you have to be on and off the truck quite a bit to be able to get the labor savings to be able to outperform, from a cost standpoint, a sit-down truck. So, there's a back-and-forth debate — standing up all day versus sitting down all day. We really like educating the customer and



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having them make the decision, but we're ready to sell either one.

"Most everywhere you go in the beverage industry, it's still predominantly sit-down trucks," he adds. "It's just easier to drive and therefore presents good opportunities for onboarding and training. It goes forward and reverse and drives like a car, where a stand-up, a lot of operators are not rehearsed in it. So, when you have any high turnover or if you bring in temps, you can train them more quickly on the sit-down truck."

When it comes to moving product, many operational challenges can be solved with the use of forklift attachments. These products can provide more customized solutions for a beverage facility's needs.

"Single-doubles and clamps can help with productivity and in some cases save money by getting away from using pallets," explains Bill Parks, account manager at Toyota Material Handling Northern California. "Warehouse space can be more fully utilized and loading of trucks streamlined."

Carton clamps, single-doubles, barrel clamps and layer pickers are the most commonly used forklift attachments in beverage facilities, and they allow operators to do more in less time, increasing productivity.

"Make sure you start with the right capacity lift, as the weight of the attachment will de-rate the lift capacity," Parks advises. "Look to a quality



manufacturer that has evolved in their development."

With a plethora of options available, Copeland notes that many beverage facilities are using the right style forklift for the job, but could be more innovative in the way they're using them by adding attachments or using different styles of forklifts that can do a job more efficiently, thus maximizing labor costs.

"The majority of places that I've been to, they're using the right style equipment, walkie/walkie-riders. They could use a different thought process. When picking more orders, maybe you can put a train together and use a tugger. That's taking the philosophy of going through the system one time and picking 10 orders versus going through the system 10 times picking one order at a time," Copeland says. "... Toyota pretty much handles every bit of capacity that's needed for any environment."

Storage methods and facility layout also can have an impact on which lift truck is right for a beverage facility. "Racking can determine which lift should be used in the application and if any modifications are needed, such as a drive-in overhead guard," says Pfeiffer.

It's also essential to take a facility's aisle width into account. With this consideration comes a series of questions about a facility's layout and operations: Is there enough room to turn the lifts

they're using? Are they going to have more than one lift in an aisle at a time? Could there be two lifts passing each other? What is the heaviest load they could be lifting? How high will they be lifting? Are you going from dock to stock or to a staging area? The answers to these questions will help determine the ideal fleet of forklifts for an operation.

Although outright purchasing of forklifts is an option, Copeland suggests that beverage companies consider leasing the equipment.

"The advice I would give them is to look at leasing. A lot of companies think that if they buy a forklift then they get more value from the truck. But in reality, it's all about uptime," he advises. "But if I lease a truck, I'm going to get the most value out of the truck, the most current engineering — the most current design improvements."

MAKING THE IDEAL FORKLIFT

Ideal for beverage operations, Toyota designs its forklifts with safety and efficiency in mind, continually delivering the best forklifts to beverage warehouses and distribution centers as the No. 1 selling forklift brand worldwide, and rated the safest for the past 15 years. With a full portfolio of stand-up, sit-down, propane-fueled and electric forklifts, Toyota offers a wide array of solutions fit for the various operations within a beverage facility — from loading finished product onto trucks for distribution or storing in a racking system to bringing in empty packaging from a supplier's truck or hauling kegs.

"When it comes to forklifts, you get what you pay for," says Pfeiffer. "We are going to go the extra mile to survey the site and understand the operation, as this is essential in quoting the right lift."

Toyota representatives pride themselves on their hands-on approach, getting to know each facility's operations in order to determine the best solutions — whether it's a beer distributor looking for a truck with a bottler's tilt to keep their glass bottles safe in distribution, or a non-alcohol beverage manufacturer looking to move the most finished product at once with a double or triple end-rider pallet jack, which allows them to move two or three pallets at the same time.

In fact, Toyota builds its trucks specifically for the jobs that the trucks do, utilizing patented and unique methods to create high-quality, safe forklifts that are ideal for beverage warehousing and distribution operations because of their long lives and dependability.

"It's a lot like cars. With Toyota forklifts, your overall cost of ownership is less," Pfeiffer explains. "For example, on a lot of our propane forklifts, we design the engine ourselves. Most of our competitors stick to only car engines. This works, but no car engine is built to be driven eight hours a day, and some of these companies are running two or three shifts, so it's not going to last long. Many Toyotas last longer because the engine is



built for a forklift."

"When it comes to a propane forklift, our hosing [and] our hose connectors are all a heavier gauge. Our hose reel is bigger; it puts less wear and tear on the hoses."

Toyota's electric forklifts are also built to run longer. Its electric trucks are designed to prevent overheating when running during several shifts throughout a workday.

"On our electric lifts, we do a lot of things different, too, just as far as where we place things so they don't overheat," Pfeiffer explains. "The heat comes from the battery, and if you have all the electronics right by the battery, then that can cause damage because of the heat. So, we place things strategically so that they don't overheat."

Product safety is essential in the beverage industry, as breakage results in lost revenue, lost product and a big mess — and a dangerous one if glass packaging is broken. To ensure that product remains safe, Toyota forklifts are available with a variety of features. Among them, recessed bolts on the sides of the load backrest prevent snagging on trailers or product, Pfeiffer says.

To further ensure product safety, Toyota has maximized the operators' visibility when operating its forklifts. The slats of the overhead guard on Toyota's lifts are angled at 45 degrees to provide better visibility to the operator when spotting their load from below it. Additionally, the load backrest is tilted down at a 45-degree angle to allow the operator to see their load from above it without any obstructions. These measures ensure that the product is always within sight and handled safely.

Another compelling feature of Toyota Forklifts' trucks is the System of Active Stability (SAS), a Toyota-exclusive feature that helps reduce tip-overs, Pfeiffer says. Available on most but not all Toyota models, the SAS system can be most beneficial in beverage facilities when moving finished products, as beverages tend to be heavier, especially when packaged in glass bottles. And, product damage is more than just lost product and revenue, but it also can result in down time due to the cleanup that can be necessary when beverage products are damaged.

"On our forklifts, there are 10 sensors throughout the truck and the mast, and at



3,000 times per second, the truck analyzes the load and itself," he explains. "So, if an operator is driving fast and he tries to turn sharply, our rear axle will adjust to try to reduce the chance of the truck rolling. We have a patent on that, nobody else has that.

"Another feature of ours is that if an operator puts too heavy of a load on the forks, and he raises it and tries to tilt forward, our truck recognizes that it is too heavy and it'll limit the forks to a 1-degree tilt to try to reduce the chance of the truck from tipping," he adds. "And then standard on our trucks is an automatic fork leveler. Sometimes, as an operator, if you have the forks lifted high, and you're going to pick up a pallet off of racking, it's hard to tell if your forks are level when you're going in and out of that pallet because it's so high up. On our tilt lever, we have a button at the top, and if you just pull back and then push that button and push forward, the forks will automatically stop at level for the operator, and that comes standard on our lifts."

Because every beverage operation has different requirements, Toyota offers a portfolio of options from which companies can choose. For those interested in electric forklifts, Toyota offers its Three-Wheel Electric Forklift and its Stand-Up Ride Forklift; both have a lifting capacity between 3,000 and 4,000 pounds and are AC powered. When it comes to internal-combustion lifts, Toyota offers its Core IC Cushion Forklifts, one of the most popular forklifts in North America, and its Core IC Pneumatic Forklifts. Both internalcombustion forklifts have a lift capacity between 3,000 and 6,500 pounds.

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