



PRODUCT FOCUS

Forklifts

How wineries make do with older machines, and the latest models unveiled by vendors

By Stacy Briscoe

Cary Roulet, vice president of material handling for Holt of California, a company that provides forklifts for some of the largest wineries in the industry, says that regular maintenance and pre-season inspections are so important that Holt mechanics will run checks on machines regardless of where they were purchased. “Nothing takes the air out of a small startup winery than a machine that doesn’t work,” he said, adding that his crew will also pre-inspect any used machine a winery is considering purchasing.

When asked about the latest forklift innovations, Roulet spoke highly about the expanding capability and efficiency of electric machines: The newest electric forklifts run on lithium-ion batteries, which are easily charged and require less input energy; they’re easier to operate; they can perform both inside and outside jobs; and they don’t pollute or let off excess heat or fumes.

“What we’ve discovered about the business is that the evolution of winemaking and storage is in a huge transition,” Roulet said. Without naming names, Roulet mentioned one client who was struggling with storage space inside the winery. The Holt team was able to reconfigure the space by stacking materials higher and narrowing the aisles and provide a forklift that could reach higher and maneuver more tightly. “It saved them from having to invest in another storage facility,” he said.

Though Roulet said electric models are both more efficient and more versatile, he understands that some winemakers still use propane machines — and Holt has an emissions expert on staff to assist those clients. For those who own, or are thinking of buying, a used propane machine, Roulet cautioned that those machines need to meet the California Air Resources Board’s emission requirements based on where the grower or winery operates.

Roulet’s advice to the wine industry is to lease forklifts instead of buy. “Leases on lift trucks are so inexpensive,” he said, “and the technology is changing all the time.”

Yet many winemakers seem to inherit their lift trucks, holding on to older, used models way past their prime.

Small-scale electric lift

“We have a Yale forklift that is pretty old, and it’s been at the winery longer than I have,” said Tim Telli, winemaker and proprietor of Betwixt Wines in San Francisco. The 1979 Yale forklift is battery-operated, which Telli said is perfect for his small indoor workspace, as it “doesn’t have any stinky exhaust fumes.”

Because Telli sources his grapes from vineyards throughout California, including Sonoma and Santa Cruz counties and Lodi, his forklift gets the most use during harvest season, as grapes are transferred from trucks and dumped from bins into their respective fermentation receptacles. Knowing that he uses the machine for only a small window of time every year, Telli said he conducts his own pre-harvest inspection, ensuring that the battery is fully charged and all controls fully functional.

So he doesn’t know what happened during harvest 2017 when his forklift shut down on the wrong side of the warehouse’s roll-up door. After trying in earnest to recharge the machine, Telli ultimately called Cromer Material Handling in Oakland, Calif., for a rental. “It’s always hard to find a rental forklift with a rotator,” Telli said. “Most businesses don’t need it.”

Jason White, the corporate used and rental manager for Cromer, agreed and said he doesn’t see a lot of requests

Experts say leasing forklifts can be an affordable way for a winery to stay up to date with improved lift truck technology.

for rotators on the rental side of his business — even within the wine industry. Instead, typical seasonal requests are for lifts with side shifts with forks or bin dumpers attached.

When the replacement machine arrived and didn't include the rotating function that Telli needed to dump his grape bins, he and the Cromer repairman swapped out the rotating forks from the old Yale machine onto the loaner. "If we had a bin-dumper attachment, then we wouldn't need a rotator. But that is another expense, and quite a large footprint when not in use," Telli said, again referring to his small workspace.

Telli's machine took about a week to repair and seems to be ready for the harvest ahead.

However, Betwixt is expanding to include an additional warehouse space across the street from its current location, so Telli is currently looking into another forklift — one for each location.

When asked what kind of machine he's looking to buy and where he'll get it, Telli's answer was simple: Buy one from a winemaker down the street who's leaving his warehouse space. "It's also pretty old. But a new one is a substantial piece of equipment to buy," Telli said. "Besides, they do last forever — if you maintain them."

Propane proves multifunctional

Crux Winery in Sonoma, Calif., also uses a Yale forklift — what co-owner and winemaker Brian Callahan describes as "an old beater that was new in 1982." Like Betwixt, Crux Winery is in a confined space, a 2,700-square-foot warehouse off Lytton Springs Road.

Yet Crux uses a propane forklift. According to Callahan, 60% of the warehouse is the barrel room, so he and his co-owner and fellow winemaker, Steven Gower, rarely take the machine inside their winery, as it gives off a lot of fumes. Instead, Callahan and Gower bring things out of the barrel room when they need to use the forklift.

Inside the barrel room, the two winemakers use what Callahan calls "a poor man's forklift": a walk-behind electric straddle stacker. "It doesn't have the lifting capacity of a forklift but can handle a lot of jobs and is easier to maneuver in our small space," he said.

Callahan and Gower use their forklift the most during harvest season to unload arriving grapes, dump grapes onto the sorting table or into the press, and to load bins of stems and skins that they send back to the source vineyards to compost.



Yale

YALE

The Yale GP050MX can be used on indoor or outdoor jobs and features a PSI engine available in LPG or dual fuel. The forklift can lift approximately 5,000 pounds and comes with Yale Flex Performance Technology that is designed to maximize fuel use for longer run times. An optional side-shifting fork positioner enables the operator to quickly change fork position.

yale.com

BYD

Exclusively sold through Cromer Material Handling, the new line of BYD FE electric lift trucks features a lithium-ion battery that charges within one hour and lasts for eight to 10 hours. Unlike with traditional lead-acid batteries, there's no need for regular maintenance, thus reducing the risk of chemical exposure to both wines and winery workers. Various BYD models are available in different sizes with lift capacities ranging from 3,000 to 10,000 pounds. All models come with pneumatic tires, to accommodate indoor and outdoor jobs. Cromer is offering free demos and an on-site survey to match the appropriate model to a winery's needs.

cromer.com

TOYOTA

The propane-powered Toyota 8FG35U is designed specifically for outdoor use and is one of Toyota's recommended harvest rentals. Because it's fitted with a rotator attachment, users can lift, rotate and dump bins or pressed pomace. The 5,000-pound capacity forklifts are equipped with solid, pneumatic tires that are bigger with more ground clearance and can handle loose gravel and uneven surfaces. Geared for indoor use, the electric, four-wheel Toyota 7FBCU35 features cushion tires and can lift up to four-barrel racks, or eight barrels at a time. The forklift has a 6,000 to 8,000-pound capacity and a 12-foot clearance radius. Toyota also manufactures three-wheel forklifts with 3,000 to 4,000 pound capacity. These provide a smaller footprint and are able to turn inside their own radius, needing only about 10-foot clearance.

tmhnc.com



BYD

“During racking and bottling, it becomes our little gravity machine,” Callahan said. “We lift barrels and tanks and let gravity move the wine to its new location, whether it’s a new barrel or the bottling machine.”

Callahan said this “forklift method” is generally gentler than using a pump to move wine from one place to another. By using the lift to raise up barrels and tanks and attaching a racking cane and hose to start a siphon using nitrogen, the wine is pushed out of the raised receptacle to the grounded receptacle. “It takes a little longer, uses less energy, and is less upsetting to the juice,” Callahan said.

The machine is owned by the warehouse landlord and is included as part of the winery’s lease as long as Callahan and Gower maintain it. And they do — by themselves. Callahan said much of the maintenance — which mainly revolves around the machine’s hydraulic system (repairing the lines, topping the fluids) as well as brake adjustments and battery recharge — is similar to that of the tractor used on their home vineyard.

“We do have access to people in our complex who run a heavy-equipment rental company, and they seem to be able to fix anything that moves,” Callahan said. “Trading for wine is usually an easy proposition.”

Multiple lifts for multiple jobs

Wine Foundry, a 30,000-square-foot custom crush facility in Napa, Calif., produces an average of 35,000 cases of wine annually, so the forklift story is an eclectic mix. According to general manager Steve Ryan, the facility is home to three forklifts: one propane and one electric, purchased through Holt of

California in Pleasant Grove, Calif., for \$12,000 and \$9,000, respectively, and an additional electric machine that is a part of the building lease.

Ryan said the propane forklift, a four-wheel Caterpillar that can lift about 3 tons, is the winery’s main workhorse during harvest season. Though it gives up a little on maneuverability, Ryan said, it makes up for it by how much it can haul and by moving around tanks or large stacks of case goods. And because they do have a bin-dumper attachment, the Foundry team can use the forklift for loading grapes into the hopper during crush. “This is our most versatile lift because of that and the higher weight load to move large equipment when needed,” Ryan said.

The two electrics, a Clark and a Toyota, are both three-wheel lifts, so they are able to move around in tight spaces and stay inside the barrel room. “With a tighter turn radius, it’s less of a bull in a china shop,” Ryan said. Each electric machine can load up to 2 tons, and they are most commonly used to move barrels, small cases and supplies and for loading and unloading half-ton bins of grapes.

All three of the forklifts were procured used. “As long as the batteries on the electric lifts are in good shape, it’s a big savings as opposed to purchasing new,” Ryan said. The most common maintenance problems he and his team have encountered are the battery cells going down on the electric forklifts or the hydraulic lines clogging on the propane machine. “It’s easily managed with preventative maintenance, though,” he said. The Foundry’s forklifts are all regularly serviced by Holt mechanics. 🍷



Jungheinrich

JUNGHEINRICH

The ETR 340 by Jungheinrich is a single-reach lift truck that uses a hydraulic system that can reach a lifting speed of up to 160 feet per minute. The battery-powered forklift has a load capacity of 4,000 to 4,500 pounds, and the supplier claims the machine can run for up to two consecutive shifts on one charge. The machine was designed to operate in tight spaces such as narrow aisles requiring high lift heights.

holtlift.com

CROWN

The recently redesigned FC Series of forklifts by Crown feature a near-zero turning radius and allow for a larger battery, providing longer run time with up to 40% more loads per battery charge and up to 10% more loads per shift. The hydraulic system has been optimized to provide greater lift and tilt and lower speeds, resulting in increased productivity and savings of time, energy and effort. Models in this series can load from 4,000 to 5,500 pounds.

crown.com

CAT

A three-wheel electric forklift with 2,500- to 4,000-pound load capacity, the 2ET4000 by Caterpillar uses an energy-efficient AC electrical system that the manufacturer claims requires only one charge to last two full work shifts. The machine also features curve control that automatically reduces the speed of the forklift when it’s taking corners. The mast, overhead guard and counterweight are designed in such a way to provide operators with optimum visibility in all directions, and a display panel provides information on service icons, directional indicators and performance modes. With AC power steering, operators can control the forklift with standard fingertip controls that include a travel directional switch and horn.

holtlift.com



Cat

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