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Get Better in 2012

Manage Package Oxygen **36**

Raise Your Bottling IQ **42**

Wow Visitors With Design **64**

Know Your Winery's Value **76**

Embrace High-Tech Harvest **86**

PLUS

2011 Vintage **116**

Deacidify With
Membranes **137**

Vineyard Size &
Sustainability **145**



John Davis says the Nitrodose Easy Dose liquid nitrogen injection system (above) fits easily into AT Mobile Bottling Line's compact setup.

Test Your Bottling Device IQ

Mobile bottlers share favorite new packaging items

By Jane Firstenfeld

Of all the necessary tasks required to bring wine from vineyard to shelf, bottling is probably the one most often farmed out to specialists: the mobile bottlers.

In an increasingly competitive market, mobile bottlers are motivated to maintain their rigs to the highest standards, offer a multitude of packaging capabilities and protect their clients' wines from oxidation during bottling.

Unlike cellar crews, instead of being pulled from other winery duties to work the complex, expensive equipment, mobile bottling crews work with the technology year-round, becoming efficiency experts for their specialized lines. So to find out what's new in bottling, it was logical to ask the mobile bottlers and their suppliers.

Benefits for wineries

"Each crew has a manager and an assistant; the manager has at least seven years

of experience," said Tom Nulman, owner of The Bottle Meister Inc. in San Luis Obispo, Calif., which operates three mobile bottling trucks in the Central Coast. "We modify our equipment constantly and have zero oxygen pick-up."

Bottle Meister, he said, was a pioneer using Velcorin dosing, which he considers a cheaper, more effective alternative to sterile filtration—at least for Brettanomyces problems. "All the things we invest in benefit the wineries," he said.

“If you screw up— don’t sanitize properly, or not pull any vacuum into the bottle—you can ruin or impair a vintage.”

—Tom Nulman,
The Bottle Meister Inc.

Even inexpensive wine needs good-looking packaging, Nulman noted. To that end, Bottle Meister has added a new, multi-head screwcapping machine from AROL, which handles 100 cases per hour of LUX-style screwcaps. These more closely resemble cork-and-capsule closures, because the screwtop threads are concealed.

Nulman emphasized that mobile bottling is economical. “Unless you’re making 100,000 cases a year, you’re probably bottling only 12 weeks. At our typical charge of \$2 per case, even if you got your equipment for free, you’d have to insure it and pay taxes on it.”

Bottle Meister applies heat-shrink polyvinyl capsules for several high-end wineries. Although at about a penny apiece these are substantially cheaper than tin or polylam capsules, Nulman said. “You can make them look great.”

At a minimal savings of 20 cents per bottle compared with other materials, “Essentially, you get free bottling,” he

said. Heat-shrink capsules are especially well suited to unusual bottles, including those with drip-bead tops. “They look nice,” he affirmed.

Clean, green and sparkling

Sanitation is a priority at Bottle Meister, as it should be for every bottling line. “If you screw up—don’t sanitize properly, or not pull any vacuum into the bottle—you can ruin or impair a vintage,” Nulman noted.

Thomas Jordan, CEO, described the set-up at Peregrine Mobile Bottling LLC in Napa: First, a McBrady Orbit Rinsers cleans bottles with sterilized, compressed air before they enter the Krones/Kosme counter-pressure filler-bloc equipped with 24 filling valves, a four-head AROL corker and three-head screwcapper, working at speeds up to 75 bottles per minute. The unit seals the bottle on the filler carousel, evacuates it with a minus-850mbar or minus-12psi vacuum, sparges with nitrogen gas and repeats twice before filling. The process “results in superior oxygen pick-up values,” Jordan said, as documented by various wineries.

Jordan said Peregrine’s counter-pressure filler is the only one on a mobile bottling line, allowing it to run carbonated as well as still wines. “Slightly carbonated wines such as Moscato or certain white wines that have a carbonation level sometimes up to 1,200ppm,” he specified. “The pressurized filler ring-bowl is adjustable according to the CO₂ level in the wine. The pressure is set so the CO₂ stays in solution,” in contrast to vacuum gravity fillers.

Napa-based AT Mobile Bottling Line (ATMBL) most recently added Vacuum Barrier’s Nitrodose Easy Dose liquid nitrogen injection system, “a compact design that easily fits into our very compact mobile line,” said John Davis, owner/operator at ATMBL. “It has a cleaner, more hygienic design, and system set-up and operation was much easier than other systems we compared it with.”

And for those who’d like to try this at home, “Overall operation was very simple, and no special training was required,” he said.

For clients, Davis said, “Pricing depends upon quantity, but in most cases, there is an up-charge for this option. It does not take more time, but adds a new area that we have to



The Krones/Kosme counter pressure filler carousel is equipped with 24 filling valves.

watch/measure for quality control—the head-space pressure as well as torque pressure of the screwcap.”

A disadvantage of nitrogen sparging, he explained, comes with the necessity to employ low-pressure nitrogen dewars, the insulated containers used to store liquefied gases. An onboard nitrogen generator alleviates this burden.

“We started with a nitrogen generator where ATMBL was able to eliminate the dewars for sparging the bottling. This in itself was a great big ‘green.’ When bottling, most wineries go through a dewar-plus every day, and the dewars leak about 5% every day.”

Since ATMBL began using the process three years ago, “We have done almost 1 million cases,” Davis said. “That represents about 1,000 dewars, which is one large savings in itself. But more to the green factor: How many trips up and down the road have we saved on deliveries of the dewars from the big trucks and trailers that make that delivery? What is the carbon footprint we’ve saved? Huge.”

ATMBL is also keen on clean water. It added a water-filtration system to deal with “some pretty ugly water” with a pre-filter to remove particulates, two carbon blocks with different compositions to remove metals, sulfur smell, chlorine, magnesium chemicals and other unpalatable elements, and

Highlights

- Equipment for applying screwcaps leads the list of trends in bottling line advances, according to mobile bottlers and their suppliers.
- Mobile bottlers stress scrupulousness in sanitation and recommend different techniques to achieve a squeaky-clean environment.
- If you want to stick with cold-glue labels, you’d better learn to apply them yourself.

then a final filter. The line, originally calibrated to 0.45mm, now uses a 0.65mm filter “because we plugged all the time, even on city water,” Davis said.

Adjust to change

For decades, cold glue was the norm for label application. Napa’s Ryan Mobile Bottling (formerly Ryan McGee Bottling) was “the last of the Mohicans” among mobile bottlers to offer that messy method, said principal Mary McCloughlin. “So few of our clients were using cold

glue” that the company eliminated the option, given the prevalence and convenience of self-adhesive labels.

Ryan recently added a new rotary labeler from Impresstik that optically orients the labels, allowing clients to use bottles without marker lugs. “It’s much easier and more accurate,” McCloughlin said. “We’re also working on expanding the sensor to read mold numbers on the bottles,” to locate the bottle seam when applying oversized labels.

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Farming out The headaches



PAMELA REED

Peregrine Mobile Bottling uses the Kosme Labeler with a bottle-orientation sensor.

For many winemakers, bottling brings headaches. It demands dedicated equipment that’s used only a few weeks or months per year but permanently takes up valuable floor space and requires technically skilled, mechanically inclined staff. It’s really noisy, it’s expensive, and if it’s not done right, it can ruin a perfectly good vintage. A relatively simple automatic bottling line, suitable for wineries producing fewer than 10,000 cases annually, can cost upwards of \$50,000. A high-quality, high-volume bottling line with up-to-date bells and whistles can exceed \$500,000.

Regions where wine production is concentrated are served by multiple mobile bottlers. Several operate on the East Coast and Midwest that are different from the West Coast bottlers in terms of scale and the equipment they use. Some groups of wineries have created their own bottling units that travel between wineries.

J.F.

Bottling Line and Mobile Bottling Suppliers

COMPANY	WEBSITE	BOTTLING LINE MOBILE BOTTLING	COMPANY	WEBSITE	BOTTLING LINE MOBILE BOTTLING
AROL North America Inc.	arol.com	●	KHS USA Inc.	khs.com/us	●
ARS/SWASH Cleaning and Sanitization	cleanwinery.com	●	Krones Inc.	kronesusa.com	●
AT Mobile Bottling Line	atmbll.net	●	Krueger Winery Technology LLC	kruegerwinetech.com	●
AWS/Prospero	prosperocorp.biz	●	Landmark Label Manufacturing Inc.	landmarklabel.com	●
Amcor Flexibles American Canyon	amcor.com	●	McBrady Engineering Inc.	mcbradyengineering.com	●
American Tartaric Products Inc.	americantartaric.com	●	McDowell Label & Screen Printing	mcdowelllabel.com	●
BevTrac Mobile Quality Systems	bevtracquality.com	●	Oceans of Wine Supply Inc.	oceansofwine.com	●
The Bottle Meister Inc.	thebottlemeister.com	●	Pacific Winemaking LLC	pacificwinemaking.com	●
Bravo Bottling	bravobottling.com	●	Parker Hannifin	balstonfilters.com	●
Bucher Vaslin North America	bvnorthamerica.com	●	Peregrine Mobile Bottling LLC	peregrinemobilebottling.com	●
Carolina Wine Supply	carolinawinesupply.com	●	Potdevin Machine Co.	potdevin.com	●
Castoro Bottling Co.	castorobottling.com	●	Primera Technology Inc.	primeralabel.com	●
Chart Inc.	chartdosers.com	●	Prospero Equipment Corp.	prosperocorp.biz	●
Chateau Labeling		●	QuickLabel Systems	quicklabel.com/wine	●
Criveller California Corp.	criveller.com	●	Ramondin USA Inc.	ramondin.com	●
Criveller Co.	criveller.com	●	Raynox 2000 Inc.	raynoxinc.com	●
Davison Winery Supplies	dwinesupplies.com	●	Ryan Mobile Bottling	ryanmcgeebottling.com	●
Della Toffola USA Ltd.	dellatoffola.us	●	Scott Laboratories Inc.	scottlab.com	●
Encore Glass	encoreglass.com	●	Scott Laboratories Ltd. (Canada)	scottlabsld.com	●
Estate Bottling		●	Select Mobile Bottlers Inc.	selectmobilebottlers.com	●
GEA Process Engineering Inc.	niroinc.com	●	Signature Mobile Bottlers Inc.	signaturebottlers.com	●
GW Kent Inc.	gwkent.com	●	St. Patricks of Texas	stpats.com	●
G3 Enterprises	g3enterprises.com	●	TCW Equipment	tcw-web.com	●
Great Engineering	greatengineering.com	●	Top It Off Bottling	topitoffbottling.com	●
Halsey Bottling LLC	halseybottling.com	●	Transition Equipment Co.	transitionequipment.com	●
Hankin Specialty Equipment Inc.	hankinspecialty.com	●	Vacuum Barrier Corp.	vacuumbarrier.com	●
Heyes Filters	heyesfilters.com	●	Vignerol Specialty Products	xpressfill.com	●
Hudson Equipment		●	WS Packaging Group Inc.	wspackaging.com	●
IDL Process Solutions Inc.	idlconsulting.com	●	Waterloo Container Co.	waterloocontainer.com	●
			AO Wilson Ltd.	aowilson.ca	●



For more on bottling line and mobile bottling suppliers, see Wines & Vines' 2012 Buyer's Guide in print or online at winesandvinesbuyersguide.com.

Principal engineer and operator Andy Ryan is now rebuilding another truck to include a rotary labeler and a screwcapper to meet “a segment that is growing,” McCloughlin affirmed. Ryan has received some client inquiries about short-runs using Zork all-in-one closures, but, “We would have to modify the spinner heads,” and currently don’t offer the service. The company has applied VinoSeal glass stoppers, virtually by hand, for one customer’s 500-case run.

“We’re waiting for the next trend.”

—Niels Udsen,
Castoro Bottling Co.

Shift to screwcapping

Suppliers also noted the increasing popularity of screwcapping equipment. Davide Criveller, whose father Bruno Criveller owns the Criveller California Corp. and its Ontario affiliate, supplies bottling equipment from basic to top-of-the-line. The most recognizable trend in bottling that he’s observed is the gradual shift to screwcapping in

the past three years. “It’s big right now: either stand-alone screwcappers or convertible equipment,” he said.

Even winery clients that remain loyal to cork-and-capsule are looking forward when updating their bottling lines. “Maybe they’re planning to go to screwcaps in the future—or use it for a different brand,” Criveller said. Just as with closures themselves, options abound for applying them. Criveller’s top-of-the-line closure equipment incorporates both corker and screwcap turrets: The smallest of these, manufactured in Italy by Fimer, with nine turrets, retails at \$130,000.

For smaller wineries that are producing less than 10,000 cases (in November, WinesVinesDATA listed 6,628 of these in North America) and want to set up their own bottling line, Criveller designed a microbloc unit that handles the process from empty bottles to labeling in 1,000-2,000-case runs. Introduced five years ago with nine-spouts, they are now more compact, with six spouts. In the past two years, Criveller said, the company has sold 15 of these to wineries across the continent, starting at \$55,000.

“We’re working on expanding the sensor to read mold numbers on the bottles.”

—Mary McCloughlin,
Ryan Mobile Bottling

At Castoro Bottling Co. in Paso Robles, Calif., owner Niels Udsen acquired a new three-head screwcapper from Stone-Bottling of France, which manufactures equipment specifically for mobile bottlers. It works with all brands of screwcap. “We are familiar with their equipment, and it’s made to last,” said Udsen, who also owns 70,000-case Castoro Cellars in San Miguel, Calif.

What’s coming next along the bottling line? Mobile bottlers will be among the first to incorporate the best new technology. “We’re waiting for the next trend,” Udsen said. **W&V**