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## TECHNOLOGY ISSUE

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#### **TECHNICAL SPOTLIGHT**

### Riboli Family Winery

Paso Robles winery designed to be flexible and require little manpower

#### By Andrew Adams

he new Riboli Family Winery is equipped with a set of sophisticated crush pad equipment, brand new tanks and all the technology and infrastructure one would expect in a well-funded, high-capacity winery.

It was also designed to accommodate future growth while accounting for the growing cost and scarcity of water and labor. Throughout the large winery located east of downtown Paso Robles, Calif., are equipment and design touches to save resources and make it easier for fewer workers to do more.

Completed in time for the 2016 harvest, the winery is one of the newest in the Paso Robles region, but the owners have been in the industry for a century. The Riboli family produces more than 500,000 cases of wine under a variety of labels including San Simeon, Opaque, Maddalena, La Quinta and others. In addition to domestic wines, the Ribolis also produce and import wines from Italy including the brand Stella Rosa.

The company started in 1917, when Italian immigrant Santo Cambianica founded San Antonio Winery in Los Angeles, Calif. A contract to supply the Catholic Church with sacramental wine helped the family-run business survive Prohibition, and it continued growing even as a revived California wine industry found its focus in the northern half of the state.

#### A new winery for new estate vineyards

To supply the growing winery with grapes, the Ribolis purchased

vineyards in Monterey County and Napa Valley and began buying grapes from growers in the Paso Robles region in the 1970s. Starting in 2015, the family began buying land in Paso Robles for vineyards and now own five of them: three in the El Pomar District and two in the Creston AVA, for a total of 400 acres of vineyards with about 250 acres bearing. The family has plans to plant several hundred additional acres during the next few years. The existing vineyards mostly are planted to Cabernet Sauvignon along with other red Bordeaux varieties and Sauvignon Blanc.

In tandem with the vineyard investment, winemaker and part-owner Anthony Riboli said the family wanted to build a new winery to have even more control of its production process. From the start, he said the plan was for the winery to have a flexible design that could handle all kinds of varieties and winemaking styles and be set up to run with minimal labor while conserving resources.

According to the Wines Vines Analytics winery database, the company is producing around 550,000 cases of wine per year and was No. 29 on *Wine Business Monthly's* 2016 Top 30 list, which is produced in part with those same database figures. Riboli declined to confirm the company's current case production, but the new winery is definitely equipped for high-capacity, high-quality winemaking.

The company's winemaking team is comprised of Riboli, who holds a master's degree in viticulture from the University

#### **KEY POINTS**

Completed in 2016, the Riboli family's 90,000-square-foot winery features design elements to reduce the use of resources and labor.

The crush pad is designed to quickly and efficiently process machine-harvested and hand-picked grapes.

An on-site wastewater system produces water that can be used for irrigation.

of California, Davis; Arnaud Debons, who worked for wineries in France before coming to the United States, where he worked at Newton Vineyards before joining San Antonio Winery in 2003; and Ben Mayo, who has more than 15 years of winemaking experience in the Central Coast and is the former winemaker and partner at Eberle Winery.

Riboli worked with architect Shana Reiss and general contractor JW Design & Construction. which are both located in the Central Coast and have winery experience, as well as winery design consultant Joel Crosbie. Much of the winery was inspired by the nearby Justin Vineyards & Winery facility completed in 2012.

The winery encompasses 90,000 square feet, and the crush pad is set up to receive grapes in half-ton MacroBins, valley bins or gondolas. For the half-ton bins, the winery has a Carlsen & Associates hopper with an elevated conveyor that can be used as a sorting line and dumps into a Pellenc Selectiv' Process Winery L destemmer. The must is either pumped directly to tanks or collected into bins that are then dumped into open-top tanks with a forklift. Used for small lots or hand-picked grapes, this crush setup can be moved where needed on the winery's expansive covered crush pad.

For future harvests, Riboli said he wants to complement this line with an optical sorter to eliminate the need for any hand sorting. He said he held off on buying one because he wanted to make sure the machines could deliver an efficient throughput rate, be worth the cost and have technology that is sustainable. "The technology is evolving so quickly the other question is: Will it be obsolete the year after you buy it?"



The winery has 10 open-top fermentation tanks by Santa Rosa Stainless Steel.



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#### **Riboli Family Winery**

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#### OWNERS Riboli family

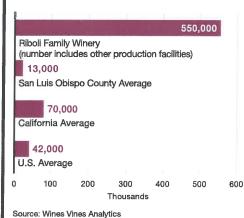
#### WINEMAKERS nthony Riboli

Anthony Riboli Arnaud Debons Ben Mayo

> YEAR BONDED 1917

VINEYARD ACREAGE 1,200

#### **WINERY CASE PRODUCTION**



#### **WINERY AVERAGE BOTTLE PRICE**



Source: Wines Vines Analytics

The Technical Spotlight is a regular feature highlighting wineries in North America that have recently opened or undergone major renovations and improvements. *Wines & Vines* seeks to report how facility design and winemaking equipment is used to achieve a particular winemaking style while also exploring new trends and techniques being used in the industry. If you think your winery would be a good candidate for the feature, contact us at edit@winesandvines.com.

#### **BUILDING THE WINERY**

Contractor	JW Design & Construction Inc., jwdci.com
Winery design	Joel Crosbie, Coast Winery Systems, (805) 714-3770
Land use consultant	Kirk Consulting, (805) 461-5765
Engineering	BMA Mechanical+, bmaslo.com; Wallace Group, wallacegroup.us
Wastewater	Cleacina Inc., cloacina.com
HVAC	APCCO, apcco.net
Flooring	Polytek Surface Coatings, mypolytek.com
Metal building	CBC Steel Buildings, cbcsteelbuildings.com
Metal fabrication	Hank's Welding Service Inc., hwsinc.net
Air compressor	Gardner Denver, gardnerdenver.com
Barrel room humidification	Smart Fog, smartfog.com
Architect	Shana Reiss, <b>Reiss Design Studio</b> , reissdesignstudio.com
Glycol	York Chiller, Johnson Controls, johnsoncontrols.com
Solar power	REC Solar Inc., recsolar.com

#### PACKAGING AND OTHER SERVICES

Glass	Encore Glass, encoreglass.com
Closures	<b>G3 Enterprises</b> , g3enterprises.com; Portocork America, portocork.com
Capsules	Ramondin USA Inc., ramondin.com
Labels	WS Packaging Group Inc. wspackaging.com; Multi-Color Corp. (MCC), mcclabel.com

#### **MAKING THE WINE**

Receiving hoppers	Brix Buddy, <b>P&amp;L Specialties</b> , pnlspecialties.com; <b>Carlsen &amp; Associates</b> , carlsenassociates.com
Destemming	Pellenc Optimum harvester and Pellenc Selectiv' Process Winery L, <b>Pellenc America inc.</b> , pellenc.com
Presses	Velvet 150, Diemme Enologia and Puleo SF70, <b>Carlsen &amp; Associates</b> , carlsenassociates.com
Fermentation tanks	Ten 19-ton open-top tanks with lids; forty 40-ton closed top tanks, Santa Rosa Stainless Steel, srss.com
Barrel washer	Tom Beard Co., tombeard.com
Steam	Electro-Steam Generator Corp., electrosteam.com
Ozone	Carlsen & Associates, carlsenassociates.com
Pumpover pumps	SPX/Waukeshau, Carlsen & Associates
Winemaking monitoring/control	TankNet, Acrolon Technologies Inc., acrolon.com
Pneumatic punchdown device	R.S. Randali and Co., rsrandallandco.com
Barrels	Vicard, Bouchard Cooperages, bouchardcooperages.com; Tonnellerie Radoux, radouxcooperage.com; Tonnellerie Remond, (707) 935-2176; Tonnellerie Billon, Bouchard Cooperages; Tonnellerie Berger & Fils, tonnellerie-berger.com; Tonnellerie Marques, Bastos LLC, bastosllc.com; Tonnellerie Saint Martin North America, tonnelleriesaintmartin.com; Tonnellerie Sirugue, sirugueusa.com; Tonnellerie Mercier, tonnellerie-mercier.com; Francois Freres Tonnellerie, francoisfreres.com

While most of the grapes processed at the winery will be machine harvested, some of the Riboli family's vineyards are planted on hillsides too steep for even the latest generation of harvesters. "The machine harvesting will end up being hopefully 80% to 90%, but certain hills are too steep, and all our vineyards here are hills," he said.

For the machine-harvested grapes, Riboli invested in a new Pellenc Optimum machine that he views as an extension of the winery's crush pad. "You're spending all this money on a really expensive harvester that does a good job," he said. "Why run the grapes back through another destemmer and beat up your fruit more?"

#### From half-ton bins to gondola loads

For even larger loads of grapes—Chardonnay from Monterey County, for example-the winery has a Brix Buddy auger from P&L Specialties that can be used to load a Diemme Velvet 150 press. The winery also has a Puleo SF70 press, which is used mainly for reds. "We wanted to make sure we could do all of it, all sizes," Riboli said of the crush pad's functionality.

The crush pad, just like the rest of the winery, was designed with room to grow. "What we did really from the layout is we're expandable," Riboli said. "We have 2 more acres in the back, so we can either put in a second crush pad or expand the tank room, expand the barrel room, and that was all part of the architectural plan."

Inside, the winery is a gleaming expanse of Polytek flooring, white walls and brand-new stainless steel tanks from Santa Rosa Stainless Steel. The winery has 10 open-top tanks with 19-ton capacity that can also be fitted with lids



A large crane and auger are used for the largest grape deliveries to the winery.

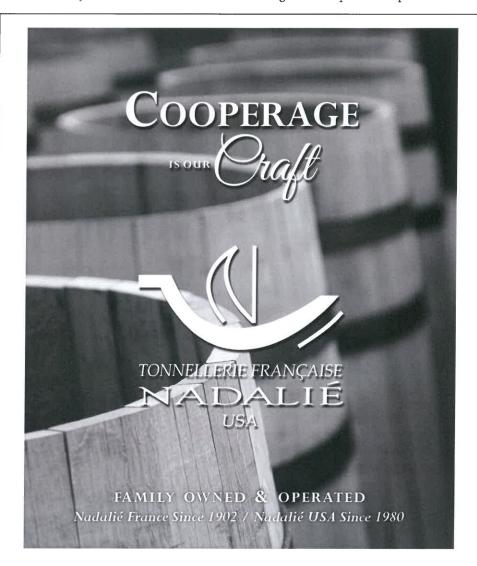
to be used for storage and 40 closed-top tanks with 40-ton capacity. The tanks are fully jacketed from top to bottom so they can be utilized for any size grape lot. All of the closed-top tanks are fitted with pumpover pumps, screened intake valves and a dedicated irrigator.

The tanks are also monitored and controlled by a TankNet system that enables the cellar team to run shorter pumpovers more frequently, and it also spares them the labor of having to go from tank to tank setting up pumpovers. "Not many people on the Central Coast have that," Riboli said of the dedicated

pumpover system. "But when you look at the efficiency of labor, we just felt in the long run it would be efficient, and this year (2016) it did prove very, very useful."

For its inaugural harvest, the winery was staffed by Mayo, cellar master Raul Uribe and another full-time cellar worker as well as a part-time winemaker and two interns who processed more than 1.000 tons. "Overall I was really pleased with the harvest," Riboli said. "Now it's just a matter of fine tuning."

Fermentations in the open-top tanks are managed with a pneumatic punchdown de-



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A pneumatic punchdown device is used to manage caps in the open-top tanks.

vice from R.S. Randall and Co. set on rails above the tanks. While large enough to break up the cap of a 19-ton fermentation, the device glides along the rails easily with just a light push. Multiple fixed, stainless steel wine lines make it easy to transfer must from the crush pad or wine and juice from tank to tank. A mechanical hoist between two large bays of closed-top tanks also eliminates the need to haul up any additions by hand.

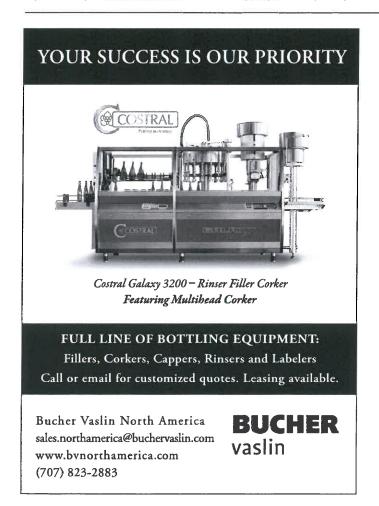
Barrels are stored in a 50,000-square-foot room adjacent to the fermentation cellar. The room is kept at the right humidity with a SmartFogg system, and temperature is monitored through the TankNet system. Barrels are washed with a Tom Beard unit and treated with an Electro-Steam Generator and Carlsen & Associates ozone generator.

The temperature in the barrel room and cellar are controlled through a night cooling system that takes advantage of the cold Paso Robles nights. Just as the large diurnal shift makes for good grapegrowing conditions, it can also be used as free air conditioning.

Riboli said when the barrel room is set to 50° to 55° F, the system will suck in cold air at night to maintain that temperature through the day. When outside temperatures begin to rise past that set point, the system shuts off and temperatures are maintained with HVAC powered by non-evaporative coolers. With the night cooling and non-evaporative chillers, Riboli said temperature control is maintained by using less water and energy.

#### On-site wastewater treatment

A solar array by REC Solar will be installed this year, and another key element of sustainable design is a Cloacina bio-reactor system for treating the winery's process wastewater. The membrane bioreactor produces water that is clean enough for reuse. "We store water for landscaping irrigation





onsite or use it in our vineyards," Riboli said. "We blend with rainwater captured from the building's roof. We can release into the city sewer but have not needed to do so."

Bottling occurs at the company's other winemaking facility in Los Angeles, but Riboli said the Paso Robles winery was designed to easily accommodate a mobile bottling rig.

Located in the city of Paso Robles, the winery has access to water (treated for chlorine) and sewer lines. Riboli said the winery could have been built closer to the estate vineyards, but the urban location provides the municipal services, dependable and ample supply of water (invaluable in a region where many wells went dry during the drought) and is close to major highways.

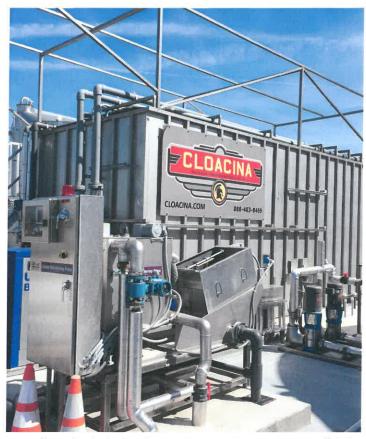
The Paso region has also achieved consumer recognition for producing quality wines. Riboli was a featured speaker during this year's Central Coast Insights conference, and he said

the company wanted to take advantage of Paso's enhanced reputation. "People want to get excited about Rutherford dust and Russian River Pinot, and that will happen here in Paso," he said. "Consumers want that and a story, a real story."

The Ribolis own and operate a tasting room and restaurant down the road from the winery. A restaurant was pivotal to the winery's success in Los Angeles, and the Ribolis hope it will help build the direct-to-consumer side of their Paso Robles operation.

While the many smaller appellations and districts of the larger Paso Robles AVA have earned some criticism for potentially confusing consumers, Riboli argues they will allow his family's company and other wineries to further establish their stories using the unique characteristics of the regions where they grow their grapes.

Now the Riboli family has a new winery to tell its own Paso Robles story. @



An on-site wastewater treatment system is one way the winery is water efficient.







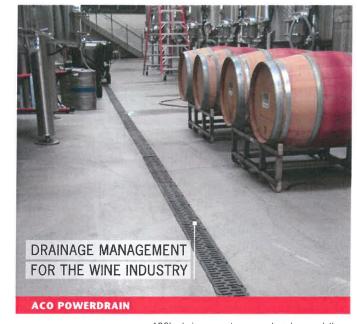
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