

## Winery Projects

### Scheid Vineyards

Location: Greenfield, CA

Architect: Belli Architectural Group

Winery Type: Production, Crush & Fermentation

Capacity: 2,200,000 Gallons, 5,400 Acres

This winery, built in the Southern Salinas Valley for Scheid Winery Group, combines commercial, large volume grape and wine handling with low maceration and gentle handling techniques usually found in much smaller wineries. The 45,000 square foot winery features open top Pinot fermenters with punch down rails along side commercial 25 and 35 ton red sloped bottom fermenters which feed a traveling pomace press. The winery also has a substantial white fermentation facility served by three Diemee 430 bladder presses. AXIOM ENGINEERS<sup>SM</sup> efforts included facility layout, process engineering, industrial waste system, site utility systems including fire protection, field built ammonia refrigeration, compressed air and gas and all wine/must piping. Additional cooperage and presses have been added bringing the facility to 25,000 tons crushing/fermentation capacity.



### Napa Valley Reserve

Location: St. Helena, CA

Winery Type: Membership

Napa Valley Reserve, a membership-only vineyard and winery in St. Helena, CA, consists of multiple buildings for Member Services and Winery Operations. A 50,000 square foot cave includes a fermentation room and private wine libraries for Members is currently under construction. AXIOM ENGINEERS<sup>SM</sup> designed utility piping, refrigeration and compressed air systems, air conditioning system for fermentation and hospitality buildings, ventilation and exhaust system for cave and private wine libraries, as well as a unique radiant ceiling cooling installation for the cave to maintain humidity and temperature constant. The winery fermentation tanks are truncated style (Delestage) with dedicated automatic gentle variable speed pump overs. AXIOM ENGINEERS<sup>SM</sup> provided design and engineering services for a 195 kW Natural gas fired microturbine cogeneration system with a 90 ton waste heat Adsorption chiller for complete facility power, heating and cooling needs.



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### JS Estates Winery/Acorn Hill

Location: Madison, VA

Winery Type: Table Wine

Architect: Hayes Seay Mattern & Mattern Inc.

AXIOM ENGINEERS<sup>SM</sup> designed wine process equipment, winery cooling and heating, barrel room, tanks and fermentation room, space conditioning, case goods, lab and bottling, process boiler and chiller systems, compressed air and inert gas systems, CO<sup>2</sup> ventilation, work areas ventilation, barrel work, bottling, process piping, wine, must, and juice, process controls, process waste consultation, and fire protection sprinkler consultation.



### Paraiso Winery

Location: Santa Lucia Highlands, CA

Winery Type: Reds, Small Lot

Architect: Belli Architectural Group

Capacity: 20,000 Cases 200 Acres

Paraiso Winery, located in the Western foothills of the Salinas Valley in the Soledad area, is designed to handle the wine grapes currently farmed by Paraiso Springs Vineyard; as well as a limited amount of custom crush capabilities for other local growers. The winery capitalized on using existing portable pressing and contract bottling equipment for the crush and bottling companies. The facility is a complete winery with both tank, bin and barrel fermentation as well as barrel storage. AXIOM ENGINEERS<sup>SM</sup> designed the site utilities, refrigeration, utilities to nestle this winery into one of the many canyons on the Paraiso Springs Vineyards.



### Conundrum Winery

Location: Salinas Valley, CA

Winery Type: Table Wine

Architect: Belli Architectural Group

Capacity: 60,000 Cases

A new 26,000 square foot barrel storage facility was designed and built with plans to build a future 27,000 square foot wine processing building. AXIOM ENGINEERS<sup>SM</sup> designed the process waste, site, water distribution and process hot water system.