



Client:  
Geyser Peak Winery  
Geyserville, CA

Industry:  
Agriculture/Food  
Processing

- Technologies:
- New high bay fixtures
  - T8 & T5 lamps
  - Premium efficiency ballasts
  - Sensors

## Geyser Peak Winery

Geyser Peak was founded in 1880 as one of California's first wineries. This historic winery consistently wins some of the industry's most prestigious awards, including numerous Winery of the Year and Winemaker of the Year honors.

In order to increase profitability as well as environmental sustainability, Geyser Peak teamed with Energy Industries, a full-service energy solutions developer, to create a long-term energy management plan. The first step was to address the "low-hanging fruit" of energy measures by replacing their existing lighting and adding an integrated control system.

### Custom Lighting Design

Geyser Peak Winery's pre-existing lighting system consisted of high wattage (high intensity discharge or HID) fixtures, T12 linear fluorescent and incandescent lamps. The Energy Industries design team replaced this system with a series of LED, CFL, T5HO and T8 high-output linear fluorescents. Rather than just swapping out fixtures on a one-for-one basis, Geyser Peak opted for a design solution based on light levels rather than existing fixture placement. In the tank rooms and crush areas, fixture counts have been reduced in over lit areas, while in the cellars a multi-system approach was used by blending several lamp technologies. To achieve even greater savings, integrated occupancy sensors were installed on every high-bay fixture in both the east and west facilities.

Scott Wallace, Ascentia Wine Estates Vice President of Operations, reports "We were thoughtful about this project, and designed a complete system that was environmentally sound and practical, and most importantly, would have immediate energy savings impact."

### Energy & Cost Savings

Geyser Peak will start seeing a return in this investment in year two. Furthermore, the nearly 700,000 kWh annual savings that Geyser Peak will achieve from this lighting retrofit equates to roughly \$100,000 a year in electricity bill savings with current rate increases. Aside from direct energy savings, the project allowed the winery to earn utility rebates, tax incentives, and a longer lasting system requiring less change-outs.

"This is the amazing difference a lighting retrofit can make, you can achieve better quality light than ever before while reducing the impact on the environment and your pocket", explains Eric Leber, Energy Industries regional manager. "Even better, our combined design solution provided a system that will last 5 times longer, dramatically reducing long-term maintenance costs."

About Energy Industries:

Energy Industries has been implementing turn-key energy efficiency solutions since 1994. Services offered include Energy Feasibility Studies, financial planning, retrofit design and equipment installation. The technological expertise of the Energy Industries team includes whole building energy analysis, lighting, HVAC systems, motors, variable frequency drives, solar and other renewable energies.

“This winery has been here since 1880. We are more strongly committed than ever to being a part of this community for many more years. All of the projects will be the result of long-term thinking, community spirit, and global concern.”

Aaron Niderost  
Director of Operations



Case Study in Energy Efficiency

Better Light Quality

These before and after shots of the Geyser Peak Winery lighting retrofit show how lighting retrofits can do more than just save energy and money. Newer technologies tend to provide a higher lumen output and better quality light. As a result, lighting retrofits have been known to increase worker productivity.

Panoramic Shot of Warehouse Before Retrofit



Panoramic Shot of Warehouse After Retrofit



Tank Area Before



Tank Area After



Environmental Impact

The annual kWh savings that Geyser Peak will realize by installing state-of-the-art lighting technology with integrated controls is equivalent to:



1 million lbs of CO<sub>2</sub>  
12,000 trees planted  
100 cars off the road