Southern Wine and Spirits of Northern California, Union City, California

Estimates Show Southern Wine and Spirits Will Save 55% in Lighting Costs

Before initiating a comprehensive lighting retrofit, Southern Wine and Spirits' warehouse lights often remained lit day and night. In order to save energy at the large facility, Southern Wine and Spirits of Northern California incorporated a number of The Watt Stopper's occupancy sensors, lighting control panels, digital time switches, and daylighting controls, in addition to energy efficient T5 HO and T8 lamps, and electronic ballasts.

A nationwide distributor of wine and spirits, the 14 year old, 300,000 sq ft facility operates around the clock Monday morning to Friday evening, with some operation on weekends. Although there are workers in the facility 24 hours a day, many areas are only occupied during certain shifts. These areas, as well as areas that see sporadic traffic throughout the day and night, were lit constantly.

Don Laroche, Southern Wine and Spirits' Northern California Operations Manager, saw the need for a lighting retrofit that not only decreased operating costs through the use of controls, but that also improved lighting quality.

After conducting a feasibility study, Robert Ofsevit of Alamo Lighting, who oversaw the retrofit, helped design a project that met the specific needs of the facility. After success using The Watt Stopper's occupancy sensors on previous jobs, Ofsevit specified a variety of The Watt Stopper's lighting control products for the project.

Occupancy sensors, installed throughout the facility, ensure that lighting remains off during times of vacancy. A CB Low Temp passive infrared (PIR) occupancy sensor was used to control lighting in the cold storage room, where lights previously remained on continuously. Approximately 210 CI-205 360 degree PIR sensors and 62 CX-105 PIR sensors were used to control main overhead lighting and lighting in areas such as rack aisles and shipping conveyors. For instance, in one conveyor area, where there is occasional but not scheduled traffic throughout the day, CI-205 sensors were installed to ensure that lights are only on when needed.

Three LS-100 light level sensors were placed near skylights to keep lamps off when adequate daylight is present. The LS-100 constantly reads incoming daylight levels and controls lighting based on preset light levels.

In mezzanine areas, Basic Control Lighting Control Panels sweep lights on and off to coincide with overnight shifts. Occupants working off shift can easily override settings using TS-200 digital time switches. The switches feature flexible control options, allowing users to select a time out setting. A minute before timing out, lights blink to warn occupants of impending shut-off. If no one overrides the switch, the lighting automatically shuts off.

The retrofit also replaced 400W metal halide and T12 fixtures with energy efficient T5 HO and T8 lamps and electronic ballasts. The new lighting systems use about half the watts as the old systems.

Satisfaction with the project is high. Lights are off when they are not needed, and the workers' lighting concerns have been addressed.

All in all, estimates show that the project could save 55% in lighting KWH in retrofit areas, and 22% KWH for the entire site. These numbers exceed projections. Southern Wine and Spirits expects about a two and a half year simple payback on the project.