



Case Study

The Bilbul Winery of renowned De Bortoli Family Winemakers was ripe for an upgrade to energy-efficient lighting. The result was an exceptionally full-bodied saving to their bottom line.



primo
FIRST FOR HIGH PERFORMANCE
LED HIGHBAYS

CORSO
by tigerlight

ESTD 1928
De BORTOLI
FAMILY WINEMAKERS

Summary

The purpose of the upgrade was to significantly reduce the operating costs of the 400W metal halide lighting used throughout the plant.

Winery management were not only impressed by the advanced output and efficiency offered by the Primo highbays but also by the colour rendering and the suitability of the fittings for a food-grade environment without the need for additional lenses.

Challenge Faced

The main challenge was to determine which fitting was most suited to the existing lighting layout at differing ceiling heights throughout the site.

Also, daylight harvesting was made possible by adding light sensors to the dimmable Primo highbays to take advantage of the skylights in many areas.

Solution

The upgrade involved the replacement of over 149 x 400W metal halide highbays and 1 x 400W floodlight with:

- 54 x Primo 12K 80W dimmable lowbays
- 95 x Primo 17K 115W dimmable highbays
- 1 x Tiger 120W MegaFlood floodlight
- 149 x light sensors attached to each Primo lowbay and highbay.

As there were skylights throughout the majority of the complex, it was beneficial to add a light sensor to each highbay to take advantage of the long hours of daylight. As the power consumption drops by as much as 90% in full sunlight, the sensors dramatically reduced power consumption well over and above the expected LED power saving.



ABOVE LEFT: Primo 12K lowbays and Primo 17K highbays installed throughout the De Bortoli winery complex at Bilbul, NSW.

Solution – continued

De Bortoli’s management was pleased with the power savings achieved.

They also noted significant elevation in the light levels achieved across the different areas - wine maturation, tank rooms, packaging storage, bottling room and finished goods warehouse.

Apart from the outstanding output, the clarity and colour temperature of the light were greatly appreciated, especially where wine sampling takes place.

Externally, there were 4 areas in the carpark and evacuation points where light was required but it was not feasible to bring power cabling across the distances involved.

A simple solution was to install 4 x Corso SPLIT fully self-contained solar lights on 4m poles to provide lighting to these areas without the need for mains power.

CorsoSPLIT solar area light

- Simple bolt-on solar solution with separate light head to direct light where it is needed.
- Powerful 35W panel, 10W Cree LED light
- Quality lithium ion batteries to store power
- Motion sensor automatically brightens from power conservation mode to conserve power and maximise battery autonomy.



Primo 12K 80W 12000 lm Lowbay

- 12,000 lumens @ 150lm/W
- Replaces 250-400W HID
- Dimmable 1-10VDC
- Height from 5+ metres
- 115 degree beam spread
- Polycarbonate lens. IP65.



Primo 17K 115W 17000lm Highbay

- 17,000 lumens @ 150lm/W
- Replaces 400W+ HID
- Dimmable 1-10VDC
- Height 8-14m
- 115 degree beam spread
- Polycarbonate lens. IP65.



Tiger Eye daylight harvesting sensor

- Enables auto-dimming of Primo dimmable highbays
- Daylight sensor module operates with 1-10VDC dimmable drivers
- Simply attaches to each highbay via second junction box on fitting



Tiger LED MegaFlood 120W

- 16,540lm @ 140+lm/W
- Replaces 400W HID
- Modular design with polycarb lenses and stainless fascia
- 10 lens options to suit. IP67.

