



Case Study

Tigerlight and Ecovantage combined to help Dunlop Foams cushion the effects of rising power prices on their lighting costs.



primo
FIRST FOR HIGH PERFORMANCE
LED HIGHBAYS



SleepMaker™

Summary

Dunlop Foams and Sleepmaker have embarked on a lighting upgrade in their plants around Australia, starting with Wetherill Park in Sydney and Deer Park in Melbourne.

Fitting daylight harvesting sensors maximised savings as well as the ESS rebates available.

Challenge Faced

The Deer Park manufacturing plant and warehouse operation was using a large number of 400W metal halide highbays and 250W lowbays internally, as well as various HID floodlights and streetlights around the outside of the building.

Tigerlight's brief was to preplace each light fitting on a one-for-one basis, while ensuring that the resultant light levels met Australian Standards.

Solution

A total of 326 Tiger LED fittings were installed at Deer Park, as follows:

- 228 x Primo 145W dimmable LED highbays
- 51 x Primo 90W LED lowbays
- 1 x 60W Tiger MegaFlood
- 25 x 60W Tiger LED Streetlights
- 21 x 120W LED Streetlights

As skylights were present in many sections within the building, there was an excellent opportunity to amplify the savings through daylight harvesting.

Primo 145W highbays have 1-10VDC dimmable drivers as standard. Connected to a light sensor on each fitting, the output dims down automatically to just 10 per cent of its normal output when sunlight is detected. Under the skylights, consumption is down to just 14-15W when the sun is out.



Front page: Primo 145W Dimmable LED highbays with daylight harvesting sensors under the skylights at the Dunlop Foam / Sleepmaker plant at Deer Park in Melbourne.

Left & Right: Primo 90W LED Lowbays illuminating the warehousing and storage areas, in place of 250W MH Lowbays.

Tiger Eye daylight harvesting sensor

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



Primo 90W LED Lowbay/Highbay

- 12,000 lumens
- Replaces 250-400W HID
- Height from 5+ metres
- 115 degree beam spread
- Polycarbonate lens
- IP65.



Primo 145W Dimmable LED Highbay

- 16,000 lumens
- Replaces 400W+ HID
- Dimmable 1-10VDC
- 115 degree beam spread
- Height 8-14m
- IP65.



Solution – continued

The Primo 145W fittings are dimmable 1-10VDC, and are designed to dim gradually and individually so the dimming process can occur in the background, without sudden changes to lighting conditions. This is preferable to basic on-off switching, which can distract staff-members and perhaps create issues from an OH&S point of view.

Importantly, improved light levels have been achieved, despite the drop in power consumption.

The white 5700K colour temperature was ideal for the fine detail work, colour matching, etc, undertaken on site.

Ecovantage played an active part in the upgrades in both NSW and Victoria, with a significant proportion of the capital outlay returned in the form of a cash rebate under the prevailing Energy Saving Schemes in each state.

Other sites are scheduled for lighting upgrades with Tigerlight fittings in the next 12 months.

