



Case Study

BRAVUS

MINING & RESOURCES

Bravus Mining and Resources, sought a lighting solution for the Carmichael mine's heavy vehicle service and tyre bays, that met strict lux level requirements, including high uniformity, low glare and minimal shadowing within the work bays.

Summary

Bravus Mining and Resources' Carmichael mine is an open cut thermal coal mine in central Queensland's North Galilee Basin, approximately 160 kilometres northwest of the town of Clermont.

Carmichael produces in the order of 10 million tonnes per annum of high-quality coal for the export market.

To enhance operational efficiency and safety at the mine, Bravus engaged Tigerlight to design a lighting solution to satisfy complex requirements for the Tyre bay and Heavy Vehicle Service bays.

The primary objectives were to achieve high levels of illumination with minimal glare and optimal uniformity, given the heavy vehicle maintenance tasks conducted there. Consideration to be given for potential shadowing and emergency lighting. As always, compliance with safety standards, particularly in high-activity work zones.



Solution

Tigerlight's lighting engineers achieved vertical & horizontal illumination of 400 lux, meeting the Australian standards for heavy vehicle maintenance as outlined on page 2.

LUMINAIRES SPECIFIED

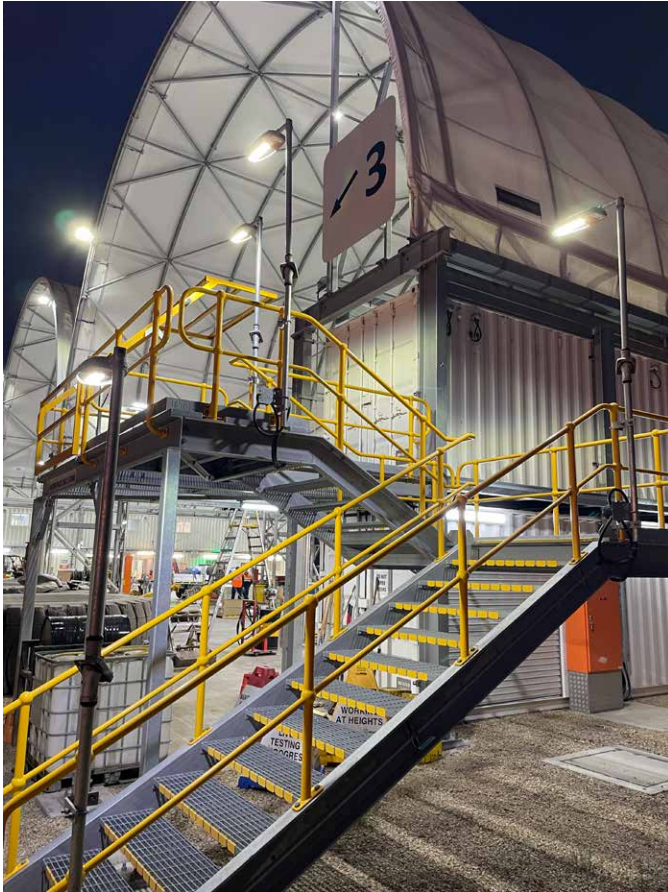
SERVICE BAY:

26 x 480W Megafloods
7 x 200W Megafloods
8 x Primo 21K highbays
5 x Mako area lights
25 x Emergency Makos
7 x Silverback Battens

TYRE BAY:

18 x 480W Megafloods
6 x Emergency Makos
3 x Primo 26K highbays

The installation utilized Tigerlight's signature T4M forward throw lenses at a 0-degree tilt, effectively illuminating the sides of the vehicles while reducing glare.



ABOVE & BELOW: Mako Area lights and Mako Emergency lights, mounted on Swivelpoles around the walkways, stairways and gantries. 480W MegaFloods with trunion brackets, mounted on poles above the walls, accompanied by Silverback 40W IK10 IP66 batters mounted on walls and under walkways. BELOW RIGHT: Emergency Eyewash Stations featuring Green LED Mako Area Lights.



COMPLIANCE WITH AUSTRALIAN STANDARDS

Tigerlight's lighting plans were in compliance with the following applicable standards:

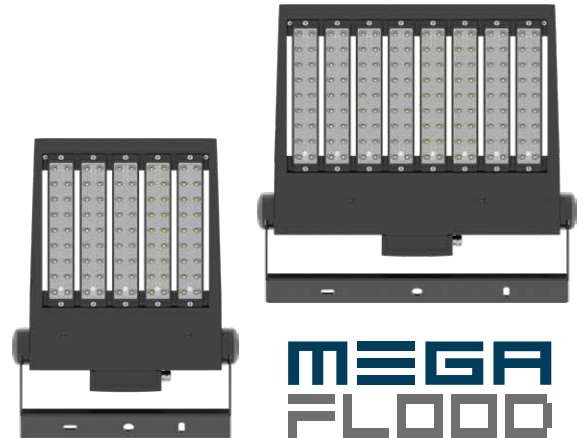
AS1680.2.4:2017 for lighting of service igloos & areas, ensuring adequate illumination for tasks involving medium to difficult moderation, inc grinding, polishing, and vehicle assembly.

AS1680.5: This standard pertains to outdoor workplace lighting, applying to the Tyre and Heavy Vehicle Service Bays.

FEATURED LUMINAIRES

MEGAFLOOD LED FLOODLIGHTS

Modular platform with almost limitless options:
Wattages, Voltage, CCT, CRI, Optical lenses - symmetric & asymmetric, Brackets, Lighting controls, Remote or Built-in drivers
From 40W to 960W. Output from 6200 to 118000 lm
Our TAILOR-MADE service - Built to order and shipped to arrive in Australia in 6-8 weeks.



**MEGA
FLOOD**

MAKO AREA LIGHTS & MAKO EMERGENCY

Fully optioned spigot-mounted area light
TM2 for wide light spread from mounting heights as low as 2.4m. T4M also readily available
Wattage: 30W, 40W, 50W
Flux: 4120, 5500, 6820 lm respectively
Sleek design prevents build-up of sediment
Emergency option - maintained integrated emergency
Green LEDs for Emergency Eyewash stations.



MAKO

PRIMO LED HIGHBAYS

High efficacy - 170 lm/W at CRI 80
Wattage: 100W, 150W, 200W
Output: 17000, 25500, 34000 lm respectively
Rated IK10 and IP66 for tough environments
6mm tempered glass lens
Lighting controls / dimming.



primo

SILVERBACK IK10 IP66 BATTENS

Tough battens made to take the harshest conditions
Rated IK10 and IP66
40W 1200mm battens are easily linkable
Output 6400 lm.



SILVERBACK