



# Explosion-proof LED strip lighting increasing safety and visibility in underground wash plant



## REGION

QLD,  
Australia



## COMMODITY

Coal



## MINE TYPE

Underground  
Mine



## SOLUTIONS

x-Glo-Exm-88-36V  
LED Striplight



## METRES SUPPLIED

45m



**Before:** Fluorescent lighting created dark spots along the wash plant conveyor increasing safety risks

## Challenge

An underground coal mine sought to replace the fluorescent lighting to improve safety, and visibility in the underground wash plants. This underground wash plant has feeder tunnels with conveyors to transport the coal to be washed and processed. The plant is positioned under the coal stockpile, which has a presence of hazardous gases and coal dust that has the potential to ignite.

The previous lighting created dark spots making it cumbersome and time consuming to inspect and work on the conveyor. More importantly this compromised safety and visibility. Therefore site personnel needed to take additional measures causing extra downtime to work on the conveyor during inspections and maintenance.

Therefore, the mine required an explosion-proof (Exm rated), linear lighting system that would comply with the hazardous area safety requirements and provide a continuous flood of “day” light, eliminating dark spots.



## Requirements

- IECEx and ATEX certified lighting
- Improve visibility and safety
- Reduce maintenance downtime
- Repel dust
- Low maintenance
- Reduce slip and trip hazards

## Solution

MineGlow provided the mine with 45 metres of the Exm range to be installed and improve visibility along the wash plant conveyor.

The flexible and low-profile x-Glo Exm solution is purpose built to provide full and continuous “daylight” lighting conditions while preventing explosions where inflammable and explosive substances are present. Suitable for use in Class 1, zones 1-2 and Class 2, zones 21-22 the Exm range isolates and contains sparks to prevent explosions from escaping and igniting gases, dusts, fibres and particles in hazardous atmospheres.



**After:** MineGlow’s explosion-proof LED strip lighting providing continuous illumination, eliminating all previous dark spots.

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## Contact us today

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Mineglow is the exclusive Asia Pacific distributor for x-Glo LED strip lighting **x-Glo**

[mineglow.com.au](http://mineglow.com.au)

## Results

- ✓ Comply with safety standards
- ✓ Completely eliminate dark spots
- ✓ Increase worker safety and wellbeing
- ✓ Lower maintenance costs
- ✓ Higher standard of illumination

## Outcome

MineGlow’s x-Glo Exm range significantly improved the health, safety and wellbeing of site personnel working in the wash plant tunnel. Inspections are vastly easier to carry out and maintenance can now be carried out faster and more effectively.

Due to the success of the first installation, the mine is now looking to standardize all of their wash plant tunnels on the MineGlow Exm range.

“There is a huge difference between fluorescent lighting and MineGlow’s LED strip lighting. We can now easily spot slip and trip hazards before they occur and identify any dust build up which helps us improve safety.”

- Jatin | Electrical Supervisor