

Solving Mining Productivity and Efficiency Dips with Task-Specific LEDs

To meet ambitious growth and production targets, operations in today's surface mines often continue from dusk to dawn. To keep night shift operators safe, aware and highly productive, mining equipment must be fitted with the right lights for the task at hand.

Lights that are overly bright, cause excessive glare or are underwhelmingly dim cost time and money. Generic fixtures can cause operators to:



Slow Down

as their eyes struggle to adjust between a bright work area and the surrounding darkness



Become Tired

due to eye fatigue caused by direct glare from lights, which distracts operators and leads to mistakes



Waste Time

from repositioning their equipment and themselves to better see a dimly lit work area

These events cause minutes of lost productivity for each operator. Compounded across an entire night shift, they can significantly harm overall productivity and yield.



Bringing Productivity And Efficiency Back On Track

In today's dynamic mining environments, a 'one-size-fits-all' lighting solution rarely works. The quick guide below is a basic compilation of features that will help raise operator speed, productivity and efficiency.

When buying LED lights for mining equipment look for:



Wide selection of optics

The right light pattern helps operators work confidently and finish tasks quicker, so ensure your chosen light has a variety of optic options:

- Flood Optics provide even illumination across a wide area
- Elliptical Optics provide smooth and uniform light
- Spot Optics are great for tasks that require focused light



Built-in aim indicators

Built-in aim indicators allow light to be quickly and accurately directed to where its needed, at an angle that reduces or eliminates glare to operators. They also allow mines to replicate light angles from lighting designs or previous equipment. The light's mount should have:

- · An aiming mechanism that allows for 120° aiming capability
- Markings every 5° for quick but accurate adjustments



Wide color temperature range

Mining environments are subject to varying weather conditions. During inclement weather, a light's color temperature can help or hinder an operator's speed and accuracy. Look for lights with:

- White light which is bright but doesn't strain the eyes
- · Amber light which penetrates dust, snow, rain and fog



Application-specific lenses

The quality of a mining light's lenses directly influences the quality of light that night-shift workers depend on for consistent and safe work:

- Polycarbonate lenses are impact resistant, making them ideal for the harsh mining environment
- · Tempered glass lenses can endure high temperatures that mining equipment may face
- · Anti-stick coating on lenses allow lights to stay clean in dirty environments and are easier to clear



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Phoenix Lighting supplies mining equipment LEDs to mines across the US and around the world. Looking for high-quality equipment lights to keep night shift operators efficient and productive?

Tell us about your lighting or retrofit needs and let's talk!