



# Life-Saving, Yield-Building

## Retrofit Lighting Tips For Haul Trucks

Haul truck operators brave many dangers as they haul material across dusty and rugged terrain at night or through inclement weather like fog, snow and rain. To ensure operator safety in these conditions, and to avoid costly accidents, mining operations have begun retrofitting their haul trucks with newer LEDs. But for some, the question remains: are LEDs worth the price tag for the safety benefits they bring?

## The Dangers Haul Truck Operators Face

Even the most experienced operators face the risk of work-halting injury the moment they approach a haul truck. According to an industry study<sup>1</sup>, the causes of injuries for haul truck operators are:

**63%** collisions with other equipment

**28%** haul truck falling into a hole or incline

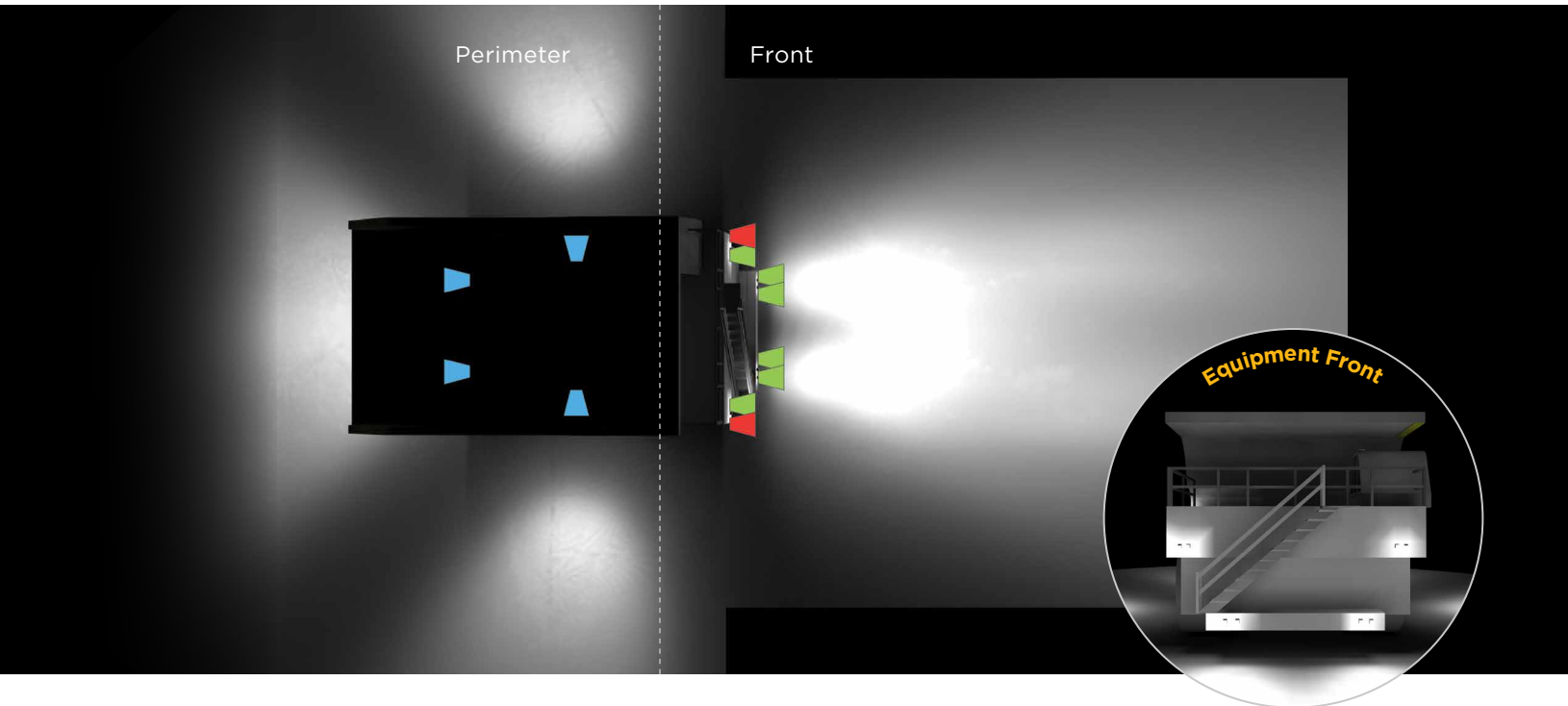
**46%** slipping during vehicle egress

Injuries could be caused by many things, but in the low-visibility conditions of most surface mines, inadequate lighting is an obvious culprit. With better lighting from newer LEDs, the possibility and frequency of injuries could be reduced.

1. <https://www.cdc.gov/niosh/mining/works/coversheet1560.html>

# But To Reap LED's Full Benefits, They Must Be Installed Correctly

Like any tool, LEDs must be installed in the right spot and angle to provide the most benefit.



## Equipment Front

 x6 Elliptical LEDs (Front)

 x2 Spot LEDs (Cab)

- Elliptical LEDs act as 'driving lights', providing clean light (5000-5500K) for safe driving, upwards of six or seven meters
- The edges of elliptical light contrast minimally with the surrounding darkness. This reduces glare and eye strain - both of which distract operators, leading to accidents.
- Have at least two Spot LEDs near the driving cab for operation in bad weather. These LEDs should emit amber light (2200-2500K) for safe visibility in fog, rain, snow and dust.

## Sides and Rear

 x2 Flood LEDs (Side)

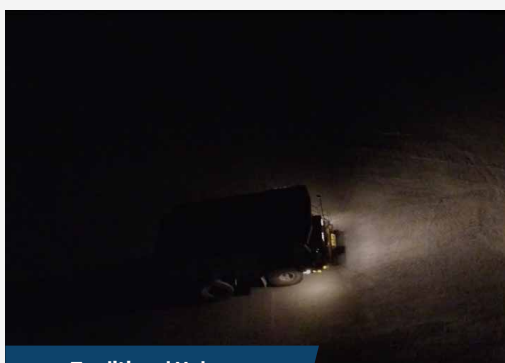
 x2 Flood LEDs (Rear)

- Flood LEDs (5000-5500K) adequately illuminate a haul truck's sides and rear, both of which are its blind spots. These LEDs also warn other equipment of the haul truck's position at night.
- Rear Flood LEDs should be a cool color temperature of 5500K to improve clarity and reduce glare interference to a haul truck's rear camera, which operators need to reverse safely

# How Lannon Stone Keeps Their Haul Trucks – And Operations – Safe

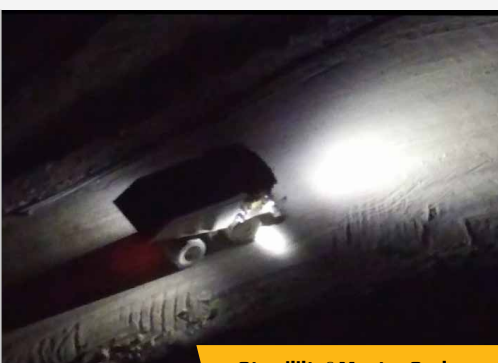
Lannon Stone Inc operates multiple quarries and mines, with ambitions of becoming the leading aggregate supplier for southeast Wisconsin – and the nation. As growth accelerated, mining hours had to be extended, with one local quarry going from 1-2 hours at night to 24-hour operations. Lannon Stone selected Phoenix's Sturdilite® Master Series DC-voltage fixtures to retrofit their haul trucks, enabling high-quality light that keeps operators safe around the clock. We think the results speak for themselves.

**Before**



**Traditional Halogen**

**After**



**Sturdilite® Master Series**



Want similar results for your haul truck fleet?

**Contact us to tell us about your lighting or retrofit needs!**

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