

# Phoenix's expertise in the mining market

spans over 70 years. In the 1940s, we partnered with a world leader in equipment manufacturing to tackle an industry-wide dilemma—constant lamp and fixture replacement. Our solution utilized a technology that has revolutionized lighting for mines. We continue to exemplify our "Durability by Design®" approach through carefully selected components and innovative designs. To this day, Phoenix fixtures remain the factory standard on many of the most prevalent heavy equipment models in the industry.

**Safety:** Proper illumination is critical to the safety of a mine site. With the durability and increased lifespan of LEDs, mines can easily eliminate the need to send personnel into unsafe areas to change lamps. Operators will also experience better light quality for their active mine areas as well as improved security following a power outage because of the instant-on characteristic of LED technology. Overall, LED lighting makes for a safer, more responsible industry.

# **Our values**

#### Collaboration

We are committed to the industries we serve and evolve with you as priorities shift and technology advances. The conversation is continuous, and we proudly lend our expertise whenever possible.

#### Craftsmanship

Our unwavering attention to detail ensures results that far exceed your expectations. We design, engineer and manufacture products that last.

### **Progress**

Our exceptional engineering team and innovative manufacturing practices are widely recognized and ensure that only superior products reach the market.

#### Authenticity

We stay true to the roots of Phoenix and respect the vision, ingenuity and hard work that have brought us to where we are today. We are committed to the future of our customers, employees and community.

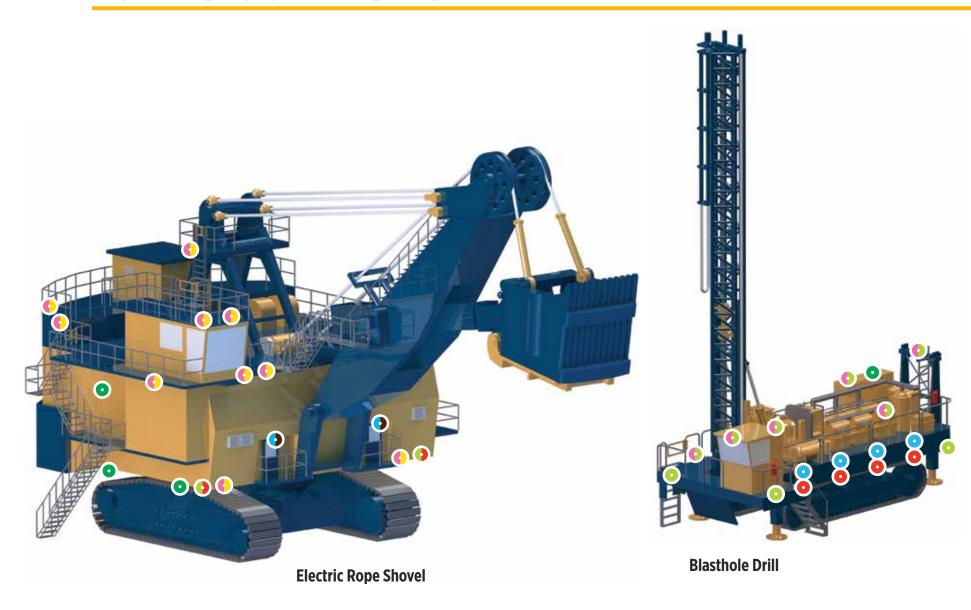
#### Durability by Design®

Every light. Every project. Every day. We are committed to durability. Our fixtures have been tested and proven in the most extreme conditions. We employ measures like potted drivers, conformal coating, stranded wires, high quality finishes and marine grade components to ensure that our fixtures thrive in their intended environments and last longer than the other market options.





# **Key Mining Equipment Lighting**





Number of fixtures per machine will vary. *Split circles* ① *represent interchangeable fixtures.* 



#### ModCom<sup>®</sup> 2 Lo

**Shovel** On machine house **Drill** On deck



#### ModCom® 2 Max

**Dragline** Outside machine house, on mast, on boom



#### ModCom<sup>®</sup> 2 Hi

**Shovel** On A-frame **Pragline** Inside and outside machine

house, on boom

Phoenix Lighting / Mining / www.phoenixlighting.com



#### **HDL-LED Series**

**Shovel** Inside and under machine house **Drill** Inside machine house **Dragline** Inside machine house



#### **Cube-Light**

**Shovel** Above doors **Drill** Above and below deck **Dragline** Inside tub



### **Cube-Light Wall Mount**

**Shovel** Above doors



#### **SturdiLED**®

**Shovel** Under machine house

**Drill** On deck and operator cab

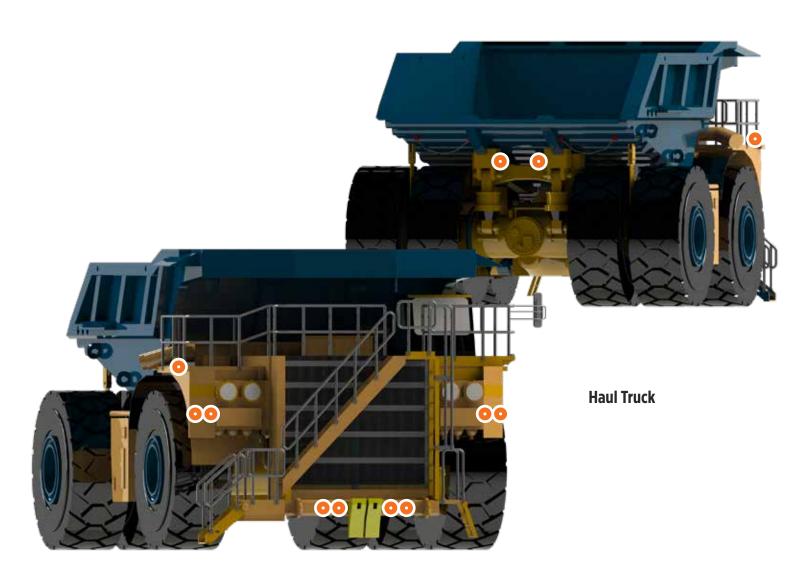


#### **ARIES**

**Shovel** Under machine house

**Drill** Above and below deck

# **Key Mining Equipment Lighting**



**Hydraulic Excavator** 

Number of fixtures per machine will vary. Position of spot and flood optics will vary.



Sturdilite® E-DC Series is available in 15W, 24W, 56W and 90W. Size of machine will determine fixture wattage needed. Contact your Phoenix sales representative for more information.



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# **Key Equipment Lighting**







# Sturdilite<sup>®</sup> E15 & E36

Low-voltage LED Floodlight

Phoenix's renowned Sturdilite® line has been reinvented to offer a durable, economic LED option for DC applications. The E15 delivers up to 880 lumens for maintenance trucks, man carries, and other small mobile equipment. The E36 delivers up to 1800 lumens to haul trucks and other small mobile equipment. Both offer easy installation and fits easily into factory-installed positions.

#### Sturdilite® E56 Low-voltage LED Floodlight

Phoenix has reinvented the prominent Sturdilite® brand to offer DC applications a durable, economic LED option. The E56 delivers up to 4500 lumens and has been made especially for rolling stock and other small mobile equipment. The E56 can be easily installed into factoryinstalled positions.

#### Sturdilite® E90 Low-voltage LED Floodlight

Phoenix's highest power fixture in its E-DC Series offers a durable, economic LED option for larger DC applications. The E90 delivers up to 7100 lumens to excavators, bulldozers, wheel loaders and any other mobile equipment that require higher light levels.

Wattage	15W, 24W	56W	90W
Lumens	up to 880, up to 1800	up to 4500	up to 7100
Repairable			
Lens/optic options	✓	✓	✓
Voltage	12-48V DC	12-48V DC	12-48V DC
UL1598A Marine			
Haz Loc rated			
IP rating	IP69K	IP69K	IP69K
cUL/cETL/CSA			
CE compliant	✓	✓	✓
Warranty	3 years	3 years	3 years
Durability tested	D <b>X</b> Ω	D <b>X</b> D	ם <b>χ</b> ם



# **Key Equipment Lighting**





ModCom® 2 Hi

Heavy Duty LED Floodlight

The ModCom® 2 LED floodlight is a

durable, compact, surface-mounted

installations. The Hi replaces up to

include shovels, drills, draglines and

a 1000W HID. Ideal applications

stacker reclaimers. Amber option

fixture designed for AC and DC



#### ModCom® 2 Lo Heavy Duty LED Floodlight

The ModCom® 2 LED floodlight is a durable, compact, surface-mounted fixture designed for AC and DC installations. The Lo replaces up to a 400W HID. Ideal applications include shovels, drills, draglines and stacker reclaimers. Amber option available.

#### **Patents Pending**

Wattage	145W	290W	435W
Lumens	up to 14,000	up to 28,000	up to 42,000
Repairable	✓	✓	✓
Lens/optic options	✓	✓	✓
Voltage	120-277V, 277-480V, 10-50V DC	120-277V, 277-480V, 10-50V DC	120-277V, 277-480V
UL1598A Marine	✓	✓	✓
Haz Loc rated	✓	✓	✓
IP rating	IP69K	IP69K	IP69K
cUL/cETL/CSA	✓	✓	✓
CE compliant	✓	✓	✓
Warranty	5 years	5 years	5 years
Durability tested	D <b>X</b> D	סאָם	D <b>X</b> D

available.

**Patents Pending** 

# ModCom® 2 Max Heavy Duty LED Floodlight

The ModCom® 2 LED floodlight is a durable, compact, surface-mounted fixture designed for AC and DC installations. The Max replaces up to a 1500W HID and is ideal for high bays, draglines, wash bays and coal pile lighting. Amber option available.

#### **Patents Pending**







#### **Conveyo**™ LED Conveyor Belt Light

This 50W LED fixture is ideal for use on conveyor belts, narrow pathways as well as general wall or pole mount lighting. Emitting up to 6000 lumens, the Conveyo offers a durable, yet economic design and was engineered for ease of installation. Amber and warm white options available.

Wattage	50W
Lumens	up to 6000
Repairable	✓
Lens/optic options	✓
Voltage	120-277V
UL1598A Marine	✓
Haz Loc rated	✓
IP rating	IP63 (wall mount), IP65 (pole mount)
cUL/cETL/CSA	✓
CE compliant	✓
Warranty	3 years
Durability tested	D <b>X</b> D

# **Key Equipment Lighting**





**Cube-Light Wall** 

Compact LED Area Light

The Cube-Light Wall Mount is a compact,

yet durable LED area light. Available as

a complete fixture or as a retrofit kit, it is

an ideal replacement for jelly jar fixtures

used for doorways, walkways and

Australian Design No. 359170

general perimeter lighting.

US Patent No. D762,321 S

Mount



**HDL-LED Series** 

The HDL-LED has been designed

and up to 400W HID floodlights

using marine grade construction,

US Design Patent No. D720,875

surge protection and a potted driver.

to replace linear fluorescent fixtures

**Heavy Duty LED** 







#### Cube-Light\* Compact LED Area Light

The Cube-Light is an economic, yet durable line of LED area lights. The fixture's compact design makes it ideal for use along walkways and in machine cabins. It replaces up to a 32W compact fluorescent vaporproof fixture.

#### Australian Design No. 359170 **US Patent No. D762,321 S**

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Wattage	13W	13W	32W, 62W or 92W
Lumens	up to 1000	up to 1000	3400, 6600 or 9900
Repairable	✓	✓	✓
Lens/optic options	✓	✓	✓
Voltage	120-240V, 13-27VDC	120-240V, 13-27VDC	120-277V
UL1598A Marine	✓	✓	✓
Haz Loc rated			✓
IP rating	IP66	IP66	IP67
cUL/cETL/CSA	✓	✓	✓
CE compliant	✓	✓	✓
Warranty	3 years	3 years	5 years
Durability tested	D <b>X</b> D	D <b>X</b> D	מאָמ

\*Retrofit option available

#### **LEDLT** LED Tube Light

The LEDLT is an instant-on, surface-mounted fixture designed to replace up to a 2 foot, 2 lamp 17W linear fluorescent. It is ideal for task lighting and illuminating compact spaces.

#### **SturdiLED®** Super-rough Service LED Floodlight

The SturdiLED® is an extremely durable LED floodlight. The fixture's potted driver, conformal coated circuit board and rugged shock mount base provide maximum vibration resistance. It replaces up to 150W HID or 500W quartz halogen.

**ARIES** 

The ARIES LED floodlight features a compact, yet durable design. Drawing only 16 watts, it is energy efficient and replaces up to 250W quartz halogen fixtures. A magnet base accessory is available.

16W LED Floodlight

#### US Design Patent No. US D708,776

Wattage	10W	37W	16W
Lumens	1250	2900	up to 885
Repairable	✓	✓	✓
Lens/optic options		✓	✓
Voltage	120-277V, 10-30VDC	120-277V	120-277V
UL1598A Marine	✓	✓	✓
Haz Loc rated			
IP rating	IP66	IP67	IP67
cUL/cETL/CSA	✓	✓	✓
CE compliant		✓	✓
Warranty	5 years	5 years	5 years
Durability tested	дХα	DXD	DXD

### **Additional Lighting Fixtures**



**DLA LED docklite**\*
16W Modular LED
Loading Dock Light Head

- 789 lumens
- Wet location rating available
- INC dock lights also available



Flex LED docklite\*
Flexible Arm LED Dock Light

- 942 lumens
- Portable listed



**IS2000** 

Infrared Imaging System

- Enables equipment operators to work safely in environments with high dust, snow and fog
- Available in AC and DC



LEDBM LED Berth & Mirror Light

- Marine rated LED berth and mirror light
- Warm white (3000K) color temperature



LFXB / LFXB LED Series

Explosion-proof LED or Linear Fluorescents

- 2 foot and 4 foot options
- EMB option



ReadiLED™ Series LED Snaplight® & Retrofit Tray

- 1975 to 3617 lumens
- 2 foot and 4 foot options
- EMB option



MRSE Series Heavy Duty Floodlight

- Marine and Hazardous ratings
- Narrow and wide optic options
- Remote ballast required



MRS 64/1000 Super-rough Service Floodlight

- Marine rated halogen floodlight
- Searchlight options available



Metallic LED VP Series Vaporproof Fixture

- 1336 lumens
- Wet location, Marine and Hazardous location rated
- available in LED, CFL and INC



SLX LED / SLXP LED / DLX LED

**Explosion-proof Floodlights** 

- 2540 lumens
- Available without base and handle
- Available with arm



WT Portable

Wet Location Sturdilite® Floodlight

• Available in AC and DC

