

MERCMASTER LED



 **Appleton**



# SEE THE FUTURE.

## THE MERCMASTER LED

PULP & PAPER MILLS | PROCESSING PLANTS | CHEMICAL PLANTS | OIL REFINERIES | STORAGE AREAS





**SOME THINGS DON'T CHANGE.**

Hazardous industrial locations demand lighting fixtures that deliver utmost safety and dependable illumination for critical tasks.

**BUT SOME THINGS ARE CHANGING RIGHT BEFORE YOUR EYES.**

Hazardous locations are increasingly responsible for energy efficiency and “green” operations to save money and precious resources.

**THAT'S WHY THIS CHANGE IS HUGE.**

LED lighting has come to hazardous locations, and the Mercmaster LED is setting the industry standard for safety, performance and efficiency. To control the future, you need to see it. The Appleton Mercmaster LED.

# MERCMASTER LED: THE CHOICE FOR A SMART FUTURE.

No LED industrial fixture surpasses the Appleton Mercmaster LED in efficiency, performance and advanced engineering. In day-to-day use, installation and maintenance, the Appleton Mercmaster LED's superior design simply shines.

## FEATURES

- Compact lightweight low-profile design, well suited for low mounting heights.
- Multiple mounting hoods accommodate any application requirement.
- Fixture housing and mounting hoods are copper-free cast aluminum for better heat dissipation. All exposed hardware is stainless steel.
- Rounded edges throughout the heatsink reduce risk of injury during installation and maintenance.
- Hinge design increases safety during installation and servicing, assuring 360° compression on ballast housing gasket.
- Silicone rubber gasket seals out moisture, dirt and dust; stays flexible and withstands high temperatures.
- Polycarbonate lens is threaded for easy removal and secure attachment.
- Epoxy powder-coat finish and stainless steel latch assembly are corrosion resistant.
- Dark Sky Compliant: meets specifications for low glare, focused beam and avoidance of overlighting.

## INDUCTION/HID LAMP COMPARISON

	85W QL	165W QL	100W HPS	175W PSMH	LED (175W PSMH output)
System Watts	85	165	130	208	98
CRI	85	80	22	62	75
Ignition	0.1 sec	0.1 sec	5 sec	10 sec	Instant
Warm Up	5 sec	5 sec	3 - 4 min	1.5 min	Instant
Re-strike	0.1 sec	0.1 sec	1 min	1 min	Instant
Life	100k	100k	24k+	15k	60k

## WHY IS LED THE FUTURE?

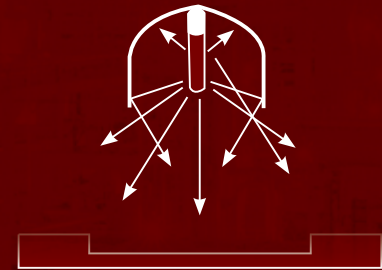
It's not just about efficiency. LED lighting delivers real productivity benefits.

- Resistant to vibrations and shock.
- Directional light can improve efficiency, productivity and safety.
- Cold start capable to -40°C and instant-on (<100ns).
- Uses no mercury and its beam gives off no heat.
- Promises long life up to 60,000 hours.
- Delivers reduced maintenance costs.

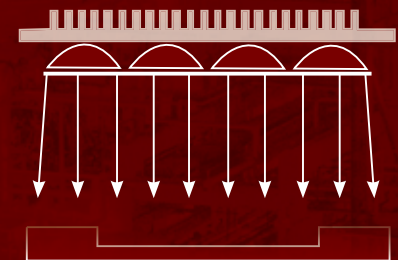
And perhaps most importantly, it's green – offering savings of up to 49% for similar luminosities compared to the PSMH (Pulse Start Metal Halide) you may be using today. Because of its all-around benefits, LED will soon be the prevalent lamp technology in manufacturing settings worldwide. Your future can start now.

## LED vs. HID: THE FUTURE OF EFFICACY.

**BULB:** HID lamps emit light in every direction; this light is controlled using a reflector or refractor. The result is poor utilization efficiencies as high as 40%.



**LED:** LED directs the light to where it's needed without the use of external optics. This results in efficiencies as high as 80%.





# EASIER INSTALLATION, EASIER MAINTENANCE, EASIER TO BE GREEN – EVERYWHERE.

The Appleton Mercmaster LED excels in a varied range of demanding locations.

## APPLICATIONS

LED fixtures suitable for use in:

- Marine and wet locations.
- A wide range of industrial, chemical processing and other areas where flammable gases and vapors are present under conditions defined by the National Electrical Code as Class I, Division 2 and Class I, Zone 2.
- Areas of low clearance, low ceiling heights or where fixture weights must be minimized.
- Non-hazardous locations where severe weather conditions, excessive moisture, dirt, dust, corrosive atmosphere or high ambient temperatures are encountered.

## CERTIFICATIONS AND COMPLIANCES

cETLus

Class I, Division 2, Groups A, B, C, D

Class I, Zone 2, Group IIC

Class II, Division 1, Groups E, F, G

Class II, Division 2, Groups F, G

Class III

Simultaneous Exposure (Class I, Division 2/Class II, Division 1)

Ambient: -40°C to +55°C

Electrical: 120-277 Vac, 50/60 Hz

347-480 Vac, 50/60 Hz

Type 3R & 4X

Marine Outside Type (salt water)

Suitable for Wet Locations

IP66 and IP67

Standards: UL 844, UL 1598, UL 1598A, UL 8750,  
CSA C22.2 No. 137, CSA C22.2 No. 250.0

## MOUNTING HOODS

Available with six different types of mounting hoods.



Pendant



Pendant Cone



Ceiling



Wall



25° Stanchion

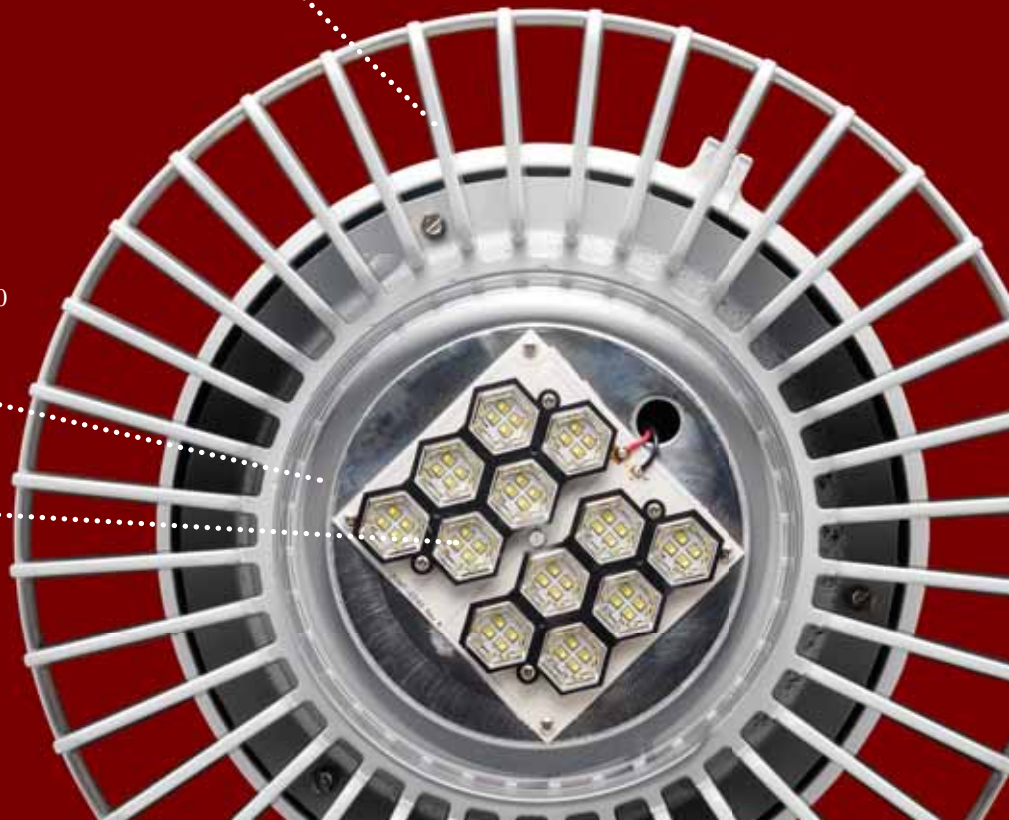


90° Stanchion

- Heatsink enables reliable heat transfer via the die-cast, aluminum body

- Protective polycarbonate lens allows for easy maintenance access

- 48 LEDs in internal array direct light to where it is needed without the use of external optics



Appleton is our premium line of industrial electrical products under EGS Electrical Group, a division of Emerson Industrial Automation.

Emerson Industrial Automation brings integrated manufacturing solutions to diverse industries worldwide. Our comprehensive product line, extensive experience, world-class engineering and global presence enable us to implement solutions that give our customers the competitive edge.

For over 150 years, our electrical product brands have been providing a rich tradition of long-term, practical, high quality solutions with applications ranging from the construction and safe operation of petrochemical and process plants to providing quality power that precisely controls automotive robotic production.

Engineers, distributors, contractors, electricians and site maintenance professionals around the world trust Emerson Industrial Automation brands to make electrical installations safer, more productive and more reliable.

EGS is organized into three focused businesses that provide distributors and end-users expert knowledge and excellent service.

**Electrical Construction Materials**  
This group manufactures a broad range of electrical products including conduit and cable fittings, plugs and receptacles, enclosures and controls, conduit bodies, and industrial lighting. Whether the application is hazardous location, industrial, or commercial, the ECM group has the products to meet your needs.

**Power Quality Solutions**  
This group offers the broadest power quality line including UPS, power conditioners, voltage regulators, shielded transformers, surge suppression devices and power supplies.

**Heating Cable Systems**  
This group offers a broad range of electrical heating cable products for residential, commercial, and industrial applications.

Electrical Construction Materials

 **Appleton**

**OZGEDNEY**

 **Nutsteel**

Power Quality Solutions

**SOLAHD**

Heating Cable Systems

**EASYHEAT**

**NELSON**

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