

SOLUTIONS FOR  
**HAZARDOUS AREAS**



**Beghelli**

THE  
**Beghelli**  
GROUP



## BEGHELLI USA

**Beghelli USA** has been a leader in providing technologically advanced life safety products and luminaires to the North American market since 1989. We specialize in providing solutions for the commercial industrial markets; including parking garages, storage facilities, hazardous locations, and specialty environments.

Manufacturing products in South Florida has allowed **Beghelli USA** to optimize the design of innovative, code-compliant products that are continually introduced into the North American market. Our 70+ independent agents across the United States work at all levels of the lighting industry to promote Beghelli Solutions.

**Beghelli USA** is part of the Beghelli Group, headquartered in Northern Italy, a global lighting brand that brings its values to over 124 countries, including North America, South America, Europe and Asia; clearly demonstrating the international spirit of the company.

# HAZARDOUS LIGHTING SOLUTIONS



Beghelli USA offers a comprehensive line of hazardous location solutions. Offering low and high bay luminaires, flood lights, emergency and exit solutions, these heavy duty luminaires are all designed to perform in heavy industrial applications where extreme temperatures, flammable vapors and/or combustible dust is present.

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# HAZARDOUS AREA CLASSIFICATIONS

## CLASSES

Define the explosiveness or combustibility of the substances present in the atmosphere

- CLASS I: Locations where flammable gases, vapors, and liquids are present
- CLASS II: Locations where flammable dust particles are present
- CLASS III: Locations where flammable or easily ignitable fibers or flyings are present

## DIVISIONS

Define the degree of danger given the concentration of explosives or combustible substances in the atmosphere

- DIVISION 1: Hazardous elements are PERMANENTLY or CONSTANTLY present in the environment
- DIVISION 2: Hazardous elements are TEMPORARILY present in the environment

\*NOTE: A fixture for a Division 1 environment does not mean it is suitable for a Division 2 environment

## GROUPS

Define the range of explosivity or combustibility of the substances present in the atmosphere

Atmospheres that contain:

- GROUP A: Acetylene
- GROUP B: Hazardous gases or vapors, such as propylene oxide and butadiene; or substances with a percentage greater than 30% by volume
- GROUP C: Ethyl, ethylene ether, acetaldehyde, cyclopropane, and asymmetric dimethylhydrazine
- GROUP D: Acetone, Ammonia, Benzene, Gasoline, Butane, Ethane, Hexanes, Methanes, Petroleum, Naphtha, Octane, Pentanes, Propylene, Styrene, Toluene, Xylene, etc.
- GROUP E: Metal powders, such as aluminum, magnesium and their commercial alloys, and other metals of similar characteristics
- GROUP F: Coal, charcoal or coke powder
- GROUP G: Flour, starch, grain dust, wood, plastics



## HAZARDOUS LIGHTING



**CASTEX 100**

The **CASTEX 100**, a classified LED hazardous jelly jar, is ideal for use in areas with flammable vapors, gases or combustible dusts. The versatile fixture offers high-performance illumination in various hazardous locations, with features like 0-10V dimming and a gray, die-cast aluminum housing for optimal heat dissipation.

The **CASTEX 150** is classified for Class I, Division 1 locations. The gray, die-cast, copper free aluminum housing allows it to stand up to environments with high humidity, high vapor, high dust and high temperatures.



**CASTEX 150**



**CASTEX 300**

Next in line in the CASTEX family is the **CASTEX 300**. This fixture is housed in a die-cast, ADC12 aluminum alloy body and is built using a 4 mm tempered glass diffuser, which reduces the glare. The CASTEX 300 is ideal for use in heavy industrial areas such as mining, refineries, chemical, fuel and marine locations.

## HAZARDOUS LIGHTING

The **CASTEX 310** is similar to the 300; however, it differs in certification and features a Class I, Division 1 certification for the most extreme environments.



**CASTEX 310**



**CASTEX 320**

Adding to the line of Class I, Division 1 solutions, Beghelli offers the **CASTEX 320**. This fixture is housed in a die-cast, ADC12 aluminum alloy body and features a 4mm tempered glass diffuser that provides a wide 120° distribution. The CASTEX 320 is ideal for mines, refineries, chemical, food and coastal marine facilities.

The **CASTEX 350** is a high-efficacy LED flood/high bay fixture for hazardous locations, classified for Class I, Division 2; Class II, Division 1 & 2; and Class III environments. Available in three sizes with up to 56,000 lumens, it features a rugged die-cast aluminum housing, wide beam distribution, and 0-10V dimming for versatile applications.



**CASTEX 350**

## HAZARDOUS LIGHTING



**CASTEX 400**

For a vapor tight hazardous solution, Beghelli offers the **CASTEX 400**. This low maintenance, weatherproof fixture is made with a stainless steel body and a polycarbonate lens. The CASTEX 400 is perfect for power generation stations, mines, military, oil, chemical production and marine and ocean platform applications.

The **CASTEX 510** comes standard in gray with a surface/wall mount bracket. Housed in die-cast, copper free aluminum, the 510 comes with a polycarbonate diffuser and wide, 120° distribution. The 510 is ideal for the oil and gas industry, paint facilities, pumping stations, metal smelting, foundry and fabrication, food and distilling and other high humidity, high vapor, high dust and high temperature locations.



**CASTEX 510**



**CASTEX 600**

Rounding out the CASTEX is the **CASTEX 600**. This Class I, Division 1 solution protects against high humidity, high vapor, high dust and high temperature locations. The CASTEX 600 is gray in color and comes housed in die-cast, copper-free aluminum body with a clear tempered glass cover.





# CASTEX COMPARISON

CASTEX PORTFOLIO	CAS100	CAS150	CAS300	CAS310	CAS320	CAS350	CAS400	CAS510	CAS600
<b>OPERATION</b>	HT (AC Only)	HT (AC Only)	HT (AC Only)	HT (AC Only)	HT (AC Only)	HT (AC Only)	HT (AC Only)	HT (AC Only)	HT (AC Only)
<b>CLASSIFICATIONS</b>									
Class I Division 1 Groups C & D		•		•	•				•
Class I Division 2 Groups A,B,C,D	•	•	•	•	•	•	•	•	•
Class II Division 1 Groups E,F,G	•	•	•	•	•	•	•	•	•
Class II Division 2 Groups F & G	•	•	•	•	•	•	•	•	•
Class III	•	•	•	•	•	•	•	•	•
<b>HOUSING</b>	die-cast copper-free aluminum	die-cast copper-free aluminum	die-cast aluminum	die-cast aluminum	die-cast aluminum	die-cast aluminum	stainless steel	die-cast aluminum	die-cast copper-free aluminum
<b>CCT</b>	5000K	5000K	5000K	5000K	5000K	5000K	5000K	5000K	5000K
<b>DIFFUSER</b>	clear tempered glass	clear tempered glass	tempered glass	tempered glass	tempered glass	tempered flat glass	polycarbonate	polycarbonate	clear tempered glass cover
<b>WATTAGE (W)</b>	20, 30	30, 40	60, 80, 100, 150, 200, 250, 300, 400	60, 80, 100, 150, 250	60, 80, 100, 150	60, 80, 100, 150, 200, 250, 400	30, 40, 50, 60	40, 60, 80	40, 50, 60, 80, 100
<b>LUMENS</b>	2000 to 3000 lm	3300 to 4400 lm	8400 to 56,000 lm	8400 to 35,000 lm	8400 to 21,000 lm	8400 to 56,000 lm	4370 to 8276 lm	5600 to 11,200 lm	5600 to 16,800 lm
<b>OPERATING TEMP</b>	-40°C to 40°C	-40°C to 65°C	-40°C to 55°C	-40°C to 60°C	-40°C to 55°C	-40°C to 50°C	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C
<b>MOUNTING</b>	surface suspension	surface suspension	surface suspension	surface suspension	surface suspension	surface suspension	surface, pole suspension	surface suspension	surface suspension



## HAZARDOUS EMERGENCY

The **ROBUSTO UNIT** (RBOU) has a standard 120/277V input. The solid state, high efficiency, dual rate charger provides precise float voltage control and incorporates a low voltage disconnect for optimum protection. Fuse protection is standard. The durable NEMA 4X fiberglass enclosure is corrosion and vandal resistant. The housing is fully gasketed and is supplied standard in an industrial gray finish. The ROBUSTO UNIT can be surface mounted. Magnetic test switch and LED status indicator are standard. The ROBUSTO series is approved for use in Class 1, Division 2, Groups A, B, C and D.



**ROBUSTO UNIT**



**ROBUSTO  
COMBO**

The **ROBUSTO COMBO** (RBOC) has been designed for harsh and hazardous environments - and is approved for use in Class 1, Division 2, Groups A, B, C and D applications. Like the ROBUSTO UNIT, the combo unit is made with a durable NEMA 4X fiberglass enclosure making it corrosion and vandal resistant. The ROBUSTO COMBO (RBOC) is configured with high-output red or green LEDs and two weatherproof PAR36 heads.

The **ROBUSTO EXIT** (RBOE) comes with standard 120/277V input on all versions, including the HT. Self powered (SA) models use maintenance free, Nickel Cadmium batteries that provide a minimum 90 minutes emergency duration with standard fuse protection. The durable NEMA 4X fiberglass enclosure comes standard in an industrial gray finish and is corrosion and vandal resistant. The ROBUSTO EXIT (RBOE) can be surface mounted. Offered in a single face version only, with removable chevrons. The self powered (SA) version comes standard with a LED status indicator and a magnetic test switch.



**ROBUSTO EXIT**

# HAZARDOUS EMERGENCY



**BRAVADO  
HAZARDOUS**

The **BRAVADO HZ** (BRVHZ) is certified to perform in Class I, Division 2 environments. The vandal resistant design provides security and reliability. The BRAVADO HZ (BRVHZ) is rated NEMA 4X and IP66 and is designed to perform in applications where the environment would punish any other unit. The compact and low profile design allows the unit to be incorporated into the architecture of the installation.

The **PLURALUCE® HAZARDOUS** (PL HZ) is engineered for environments where hazardous gas or dust may be present. The compact design of the PLURALUCE HAZARDOUS is fully gasketed for protection against wet and dust-filled environments. The housing design acts as a heat sink ensuring efficient thermal management and long operating life of the LEDs. Configured with a two-wire 120-347VAC 50/60 Hz input the PL HZ features interchangeable optics that allow for optimum performance based on the installation.



**PLURALUCE®  
HAZARDOUS**



# HAZARDOUS EMERGENCY

The **CASTEX 700** is a hazardous location exit sign that comes standard in gray with a surface/wall mount bracket and optional pendant mounting. Housed in die-cast copper-free aluminum, the CASTEX 700 is self-powered and equipped with self-diagnostic features. The CASTEX 700 is ideal for installation in oil and gas environments, chemical, marine, aerospace, metal treatment, food processing areas, and high vapor, dust and temperature locations. It comes with both red and green lettering options and has the option for special wording.



**CASTEX 700**



**CASTEX 800**

The **CASTEX 800** is a hazardous location exit and emergency combo with a fiberglass reinforced polycarbonate housing in a standard gray finish. It features surface/wall mount and optical pendant mounting options. Designed for demanding applications in mines, refineries, and marine environments, the CASTEX 800 is rated for Class I, Division 2, Groups A, B, C and D. Options include autotest, and internal heater, and a battery blanket for reliable performance in hazardous locations.





A large offshore oil rig is visible on the right side of the image, illuminated by its own lights. The rig features a tall derrick and various platforms. The background shows a vast ocean under a dramatic sky with large, dark clouds and a bright sunset or sunrise glow on the horizon. The overall color palette is dominated by blues, oranges, and yellows.

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