



FPSO EX LIGHTING SOLUTIONS



PORTABLE LIGHTING

INSTALLED LIGHTING

AREA LIGHTING

POWER DISTRIBUTION

VENTILATION

TEMPORARY LIGHTING

ACCESSORIES

EXPLORING SOME FPSO PROJECTS

RELYING ON WOLF FOR EX SAFETY LIGHTING

Wolf Safety's ATEX, IECEx and UKEX certified Hazardous Area safety lighting is used in some of the world's largest and most remote Oil and Gas Fields, including on FPSO, FLNG and FSO vessels, as well as for pipeline and onshore facilities maintenance work and on fixed offshore platforms.

Area 1: Gulf of Mexico

Area 1 is located in the Bay of Campeche in the Gulf of Mexico, and includes three fields. It is estimated to hold 2.1 billion barrels of oil, mainly oil but with some associated gas.

Stabroek Field: Guyana

The Stabroek Field in Guyana, operated by ExxonMobil, has been a major oil discovery since 2015. It is estimated to have over 11 billion barrels of recoverable oil resources, with FPSOs playing a key role in production.

Santos Basin: Brazil

The Santos Basin is one of the most prolific offshore oil-producing regions in Brazil, mainly operated by Petrobras. FPSOs in this area are essential for producing pre-salt oil reserves, with several units operating at high capacity.

Johan Castberg Field

Operated by Equinor, the Johan Castberg Field is located in the Barents Sea. Production is set to begin in the near future, with an FPSO expected to handle over 200,000 barrels of oil per day.

Sangomar Field: Senegal

The Sangomar Field, located offshore Senegal, is developed by Woodside Energy. It began production in 2023 and is expected to produce up to 100,000 barrels of crude oil per day with innovative floating production systems.

Mero Field: Brazil

The Mero Field began operations in 2017. Operated by Petrobras, it is expected to produce up to around 180,000 barrels of crude oil per day. The development includes multiple FPSOs, which facilitate the extraction, processing, and storage of hydrocarbons.

Peregrino Field: Brazil

The Peregrino Field, operated by Equinor, is one of Brazil's largest oil fields. Production started in 2011, with its two FPSOs supporting the extraction of heavy crude oil in deep waters.

Kaombo Field: Angola

Located off the coast of Angola and operated by TotalEnergies, the Kaombo Field began production in 2018. It uses two FPSOs to extract crude oil, with an expected output of up to 230,000 barrels per day.

Malampaya Field: Philippines

The Malampaya Field, operated by Shell, has been a major gas producer for the Philippines since 2001. Facilities include a Production Platform, Subsea Pipeline and an Onshore Gas Plant.

Gorgon Field: Australia

The Gorgon Field is one of Australia's largest gas projects, operated by Chevron. The gas is processed onshore at the Gorgon LNG (Liquefied Natural Gas) Plant located on Barrow Island.

Greater Enfield Field: Australia

The Greater Enfield Field, operated by Woodside Energy, began production in 2019. This project utilises an FPSO to extract and process oil from challenging deepwater reserves offshore Australia.

Ichthys Field: Australia

Ichthys Field, operated by INPEX, is one of Australia's largest LNG projects. The FPSO facility handles both condensate and gas production, contributing significantly to the country's energy exports.

Crux Field: Australia

The Crux Field, located off Western Australia and operated by Shell, will supply gas to the Prelude FLNG facility.

1. Clair Field: UK

The Clair Field is the largest oilfield on the UK Continental Shelf. Operated by BP, production started in 2005 and facilities include a large fixed platform and pipelines.

2. Clair Ridge: UK

A key extension of the Clair Field, Clair Ridge is operated by BP and uses two fixed platforms with production transported through pipelines to the Sullom Voe Terminal in Shetland.

3. Culzean Field: UK

The Culzean Field, located in the North Sea and operated by TotalEnergies, began gas production in 2019. The field's infrastructure handles gas processing and export.

4. Penguins Field: UK

The Penguins Field, located in the North Sea and operated by Shell, was redeveloped with a new FPSO. Production is expected to reach around 45,000 barrels per day, focusing on enhancing oil recovery from mature reserves.

5. Schiehallion Field: UK

The Schiehallion Field, operated by BP, is located west of Shetland. After redevelopment, production resumed in 2017 with a new FPSO, capable of producing up to 130,000 barrels of oil per day.

6. Johan Sverdrup Field: Norway

The Johan Sverdrup Field is one of Norway's largest oil fields and a major supplier of energy to Europe - up to 755,000 barrels of oil per day.



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FLOATING PRODUCTION STORAGE & OFFLOADING

The presence of potentially explosive atmospheres onboard FPSOs mean it is critical to use only correctly certified products and equipment designed for Hazardous Areas, ensuring the highest level of safety and compliance with international safety standards.



Wolf Hazardous Area lighting products are widely used in all of the following FPSO applications:

LIVE PLANT UPGRADES

Wolf Portable and Temporary lighting products facilitate improvement and modernisation work without halting production.



TANK CLEANING, INSPECTION, & REPAIRS

Routine tank cleaning, inspection, and repair are essential for maintaining the integrity and performance of an FPSO. Over time, crude oil residues, sediments, and corrosive substances can accumulate in storage tanks, posing safety risks and reducing efficiency. **Wolf Tank Lighting Kits, Temporary Lighting and Ventilation products** provide safe, efficient illumination and atmospheres for these critical tasks.



HOOKUP & INITIAL COMMISSIONING

The hookup and initial commissioning phase is critical for ensuring all systems onboard the FPSO are connected and fully operational, involving the integration of subsea production systems, riser connections, and commissioning of topside process equipment. **Wolf ATEX/IECEx lighting** provides safe, compliant illumination for these essential tasks.



ROUTINE OPERATIONS & INSPECTIONS

Daily operations onboard an FPSO include ongoing monitoring of production systems, checking operating parameters, and conducting safety inspections. **Wolf's Portable and Temporary Lighting** ensures safe, reliable visibility for these essential checks.



SHUTDOWN & MAINTENANCE APPLICATIONS

Planned shutdowns are essential in FPSO operations to enable comprehensive maintenance, inspection, and upgrades. During these periods, key systems such as topside equipment, safety mechanisms, and rotating machinery are overhauled. **Wolf's lighting products** ensure safe, reliable illumination throughout these operations.



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ATEX PORTABLE LIGHTING

Our wide range of ATEX certified LED Portable Hazardous Area lighting for safe use in potentially explosive atmospheres worldwide, includes explosion protected handheld straight and right-angled torches, head torches and handlamps, including the renowned Wolfite Handlamp, for use with either primary cell or rechargeable batteries and chargers.



HANDLAMPS INCLUDING:

WOLFLITE™ XT RECHARGEABLE LED HANDLAMP XT-50
GAS ZONES 1/2 DUST ZONES 21/22

WOLFLITE™ XT RECHARGEABLE LED HANDLAMP XT-70
GAS ZONES 1/2 DUST ZONES 21/22

WOLFLITE™ XT RECHARGEABLE LED HANDLAMP XT-75
GAS ZONES 0/1/2 DUST ZONES 21/22



TORCHES INCLUDING:

LED MINI TORCH
GAS ZONES 0/1/2 DUST ZONES 20/21/22

ATEX ZONE 0 COMPACT SAFETY LED TORCH TR-65 & TS-65
GAS ZONES 0/1/2 DUST ZONES 21/22



HEADTORCHES INCLUDING:

ATEX ZONE 0 LED HEADTORCH HT-400Z0
GAS ZONES 0/1/2 DUST ZONES 21/22

ATEX ZONE 0 LED HEADTORCH HT-650
GAS ZONES 0/1/2 DUST ZONES 21/22



WARNING LIGHTS INCLUDING:

HAZARD LAMP HL-95
GAS ZONES 0/1/2

MARKERLITES
ML-15W WHITE
ML-15R RED
ML-15A AMBER
GAS ZONES 1/2 DUST ZONES 21/22



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ATEX TEMPORARY LIGHTING

LINKEx™ TEMPORARY LUMINAIRES & FLOODLITES



LINKEx™ LX-400 LED TEMPORARY LUMINAIRE

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
POWER SOURCE: LEAD

LV: 18-50V AC/DC
HV: 90-264V AC

SOVI*



LINKEx™ LX-400E LED EMERGENCY TEMPORARY LUMINAIRE

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
POWER SOURCE: LEAD & EMERGENCY BATTERY

LV: 18-55V AC/DC
HV: 90-264V AC

SOVI*



LINKEx™ WF-300XL LED FLOODLITE

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
POWER SOURCE: LEAD

LV: 18-50V AC/DC
HV: 90-264V AC/DC

SOVI*



LINKEx™ WF-250XL LED FLOODLITE

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
POWER SOURCE: LEAD

LV: 18-50V AC/DC
HV: 90-264V AC/DC

SOVI*

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LINKEx™ ATEX TANK LIGHTING KITS



LINKEx™ TANK LIGHTING KITS

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
POWER SOURCE: LEAD

230V OR 110V INPUT TO 24V

SOVI™



Extended cable lengths available

up to 100 metres from transformer to lights.

SOVI™



SOVI™ (Safe Optimal Voltage Indicator) technology is a unique feature of our Temporary Lighting range. It ensures that your lighting solution is operating safely, effectively and at the optimal voltage level, and giving clear visual warning signals if it is not.

SOVI™ lights are certified and safe down to 0 volts.

ATEX AIRLAMPS

Our world-famous and market-leading compressed air driven ATEX, IECEx and UKEX airlamp range has been updated for 2024, and is available now! Whilst using the same proven components and maintaining the excellent performance of the existing range, the A-TL44C and A-TL45C are:

- **Smaller**
- **Easier to maintain**
- **New, easy to fit seals**
- **Between 20% and 25% lighter** (aluminium non-sparking grade construction)



NEW!

**ATEX TURBOLITE A-TL44C
BAY LIGHT**

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22

POWER SOURCE: AIR
24V BULB



NEW!

**ATEX TURBOLITE A-TL45C
FLOOD LIGHT**

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22

POWER SOURCE: AIR
24V BULB

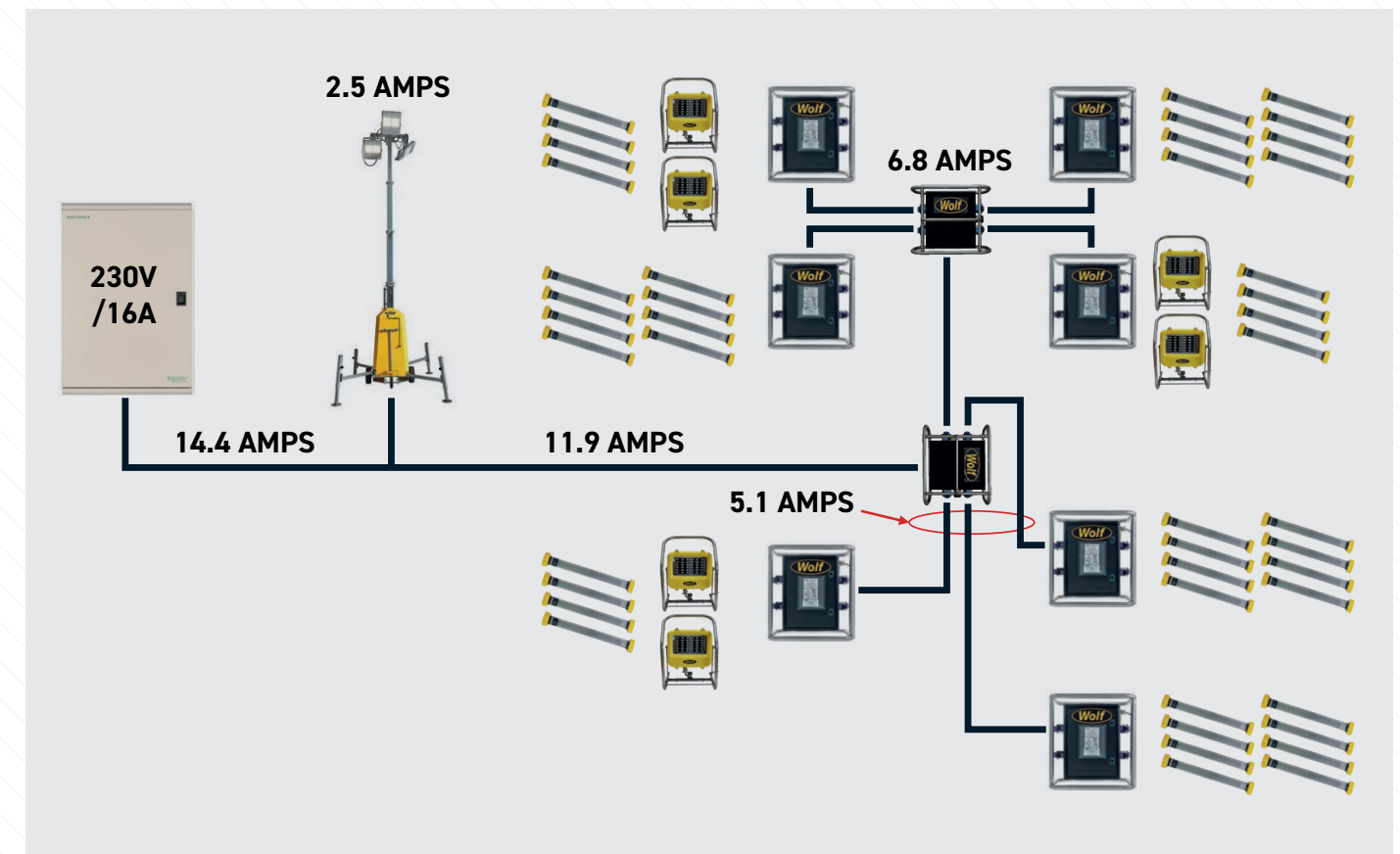


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FLEXIBLE LINKABLE LIGHTING CONFIGURATIONS

Wolf ATEX Temporary Lighting products provide a highly versatile range of solutions designed to adapt to specific Hazardous Area requirements and applications. Our extensive range is designed to provide an ATEX lighting solution using Wolf transformers, splitter boxes, and cables to ensure the perfect combination to enhance safety and efficiency in potentially explosive atmospheres.



The above example shows a 230V Towlerlite™ in conjunction with Wolf LinkEx™ lighting solutions and transformers. The transformers are powered from an ancillary socket on the Towlerlite™ allowing additional equipment to be connected or multiple Towlerlites to be powered from a single electrical socket. Custom configurations are readily available to meet specific demands. Cable lengths are offered up to 300 metres, with transformer-to-light distances achievable up to 140 metres, depending on voltage and the type of cable used.

For more specific information, or to make use of our free lighting design service, please contact Wolf Safety.

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PORTABLE ATEX LED INSPECTION LIGHT

The TY-300 is a compact and lightweight, portable ATEX Zone 1/21 LED inspection lamp. It can be comfortably handheld for close-up inspection work, or suspended by the integrated swivel hooks for use as a temporary task light.

NEW!



ATEX TY-300 PORTABLE ATEX LED INSPECTION LIGHT

**GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22**

**POWER SOURCE:
LEAD**

**88-140V AC
180-277V AC**



NEW!

- Up to 1390 lumens (emitted) light output
- Patented DLO (Directional Linear Optics) technology for low glare
- Available in two sizes: 640mms or 910mms
- 110V and 230V models available
- Compact and lightweight for close-up handheld inspection work
- Supplied with 2 integrated swivel hooks for hands-free task lighting
- Supplied with 10m of H07RN-F 3 core flexible 1.5mm² cable as standard
- Can be supplied with fitted ATX, CEAG, Marechal or Stahl Ex plugs
- Designed to permit users to easily change the cable
- Ex Certified replaceable anti-static film available to prevent damage from dirt, debris and paint

LIGHT OUTPUT

**TY-300/18 - 1006 LUMENS
TY-300/26 - 1390 LUMENS**

**PATENTED DLO (DIRECTIONAL
LINEAR OPTICS) TECHNOLOGY
FOR LOW GLARE**



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ATEX RECHARGEABLE WORKLIGHTS

Wolf Rechargeable Worklights are ideal for Hazardous Area locations which lack a convenient power source and for tasks of a brief duration.



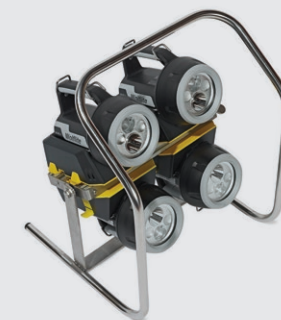
**ATEX LED MINI
WORKLITE™ WL-50**

**GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
POWER SOURCE: RECHARGEABLE**



ATEX LED WORKLITE™

**GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
POWER SOURCE: RECHARGEABLE**



ATEX ZONE 0 FLOOD BANKS

**GAS ZONE: 0, 1 AND 2
DUST ZONE: 21 AND 22
POWER SOURCE: RECHARGEABLE**

ATEX TEMPORARY POWER

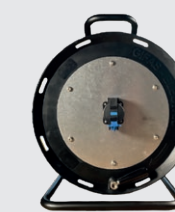
With our range of ATEX certified Hazardous Area power distribution products, Wolf can provide everything you need to safely illuminate any Hazardous Area, no matter what the size.



TRANSFORMERS



SPLITTER BOXES



CABLE REELS



EXTENSION CABLES

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ATEX LIGHTING ACCESSORIES

We offer a broad selection of accessories for charging, protecting, fixing and mounting our range of portable and temporary lighting.



LX-400 ACCESSORIES



WF-250XL / WF-300XL ACCESSORIES



MARKERLITE ACCESSORIES



OTHER ACCESSORIES

ATEX VENTILATION

Wolf is the UK distributor of the Ramfan™ range of Hazardous Area ventilation fans, ducting and Venturi units. They are ATEX, IECEx and UKEX certified for safe use in Hazardous Areas, and are available in 115 or 230 volt options.



FANS / VENTILATORS

VF-UB20XX 20CM
GAS ZONES: 1/2 DUST ZONES: 21/22 0.33 HP (0.25KW)

VF-EFi75XX 30CM
GAS ZONES: 1/2 DUST ZONES: 21/22 0.75 HP (0.56KW)

VF-EFi150XX 40CM
GAS ZONES: 1/2 DUST ZONES: 21/22 1.5 HP (1.1KW)

VENTURI



- Available in 3 sizes
- Minimal maintenance - no moving parts
- Cylindrical mixing chamber delivers higher induction ratios
- Highly reliable
- Fixed standard API openings
- Tough and durable anti-static polymer housing

ATEX INSTALLED LIGHTING

Our extensive Hazardous Area lighting range now includes ATEX, IECEx and UKEX certified LED Installed lighting, consisting of:

- FFA (Forward Facing Array) or DLO (Directional Linear Optics)
- Floodlights - 4 different beam patterns available
- Highbays - 4 different beam patterns available
- Bulkheads - including Intelligent Emergency versions
- Linears - standard industry lengths and fittings for easy retrofit of existing installations



LHX1S

LHX2S

LHX HIGHBAY

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22

INPUT VOLTAGE RANGE:
88 - 140V AC
180 - 277V AC



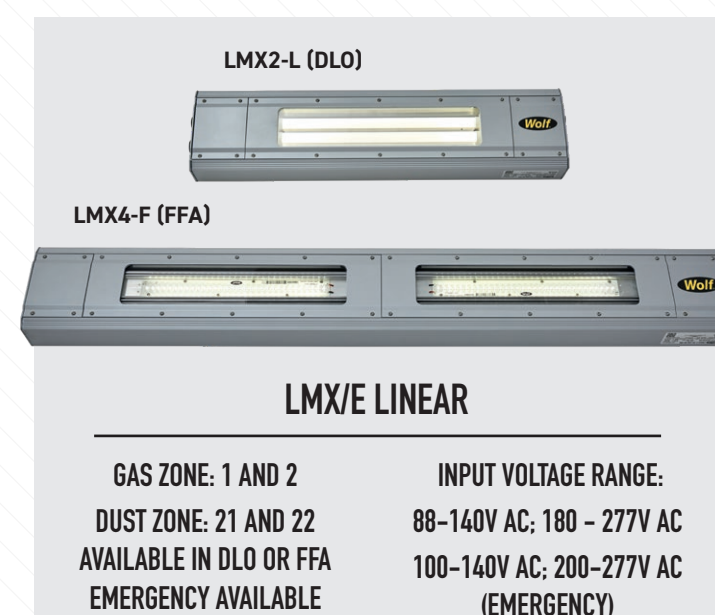
LFX1S

LFX2S

LFX FLOODLIGHT

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22

INPUT VOLTAGE RANGE:
88 - 140V AC
180 - 277V AC



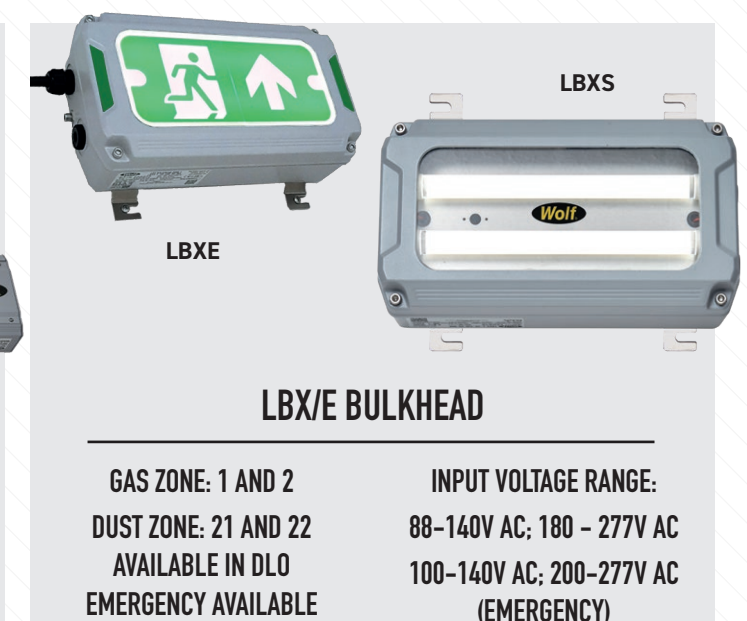
LMX2-L (DLO)

LMX4-F (FFA)

LMX/E LINEAR

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
AVAILABLE IN DLO OR FFA
EMERGENCY AVAILABLE

INPUT VOLTAGE RANGE:
88-140V AC; 180 - 277V AC
100-140V AC; 200-277V AC
(EMERGENCY)



LBXE

LBXS

LBX/E BULKHEAD

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
AVAILABLE IN DLO
EMERGENCY AVAILABLE

INPUT VOLTAGE RANGE:
88-140V AC; 180 - 277V AC
100-140V AC; 200-277V AC
(EMERGENCY)



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ATEX AREA LIGHTING

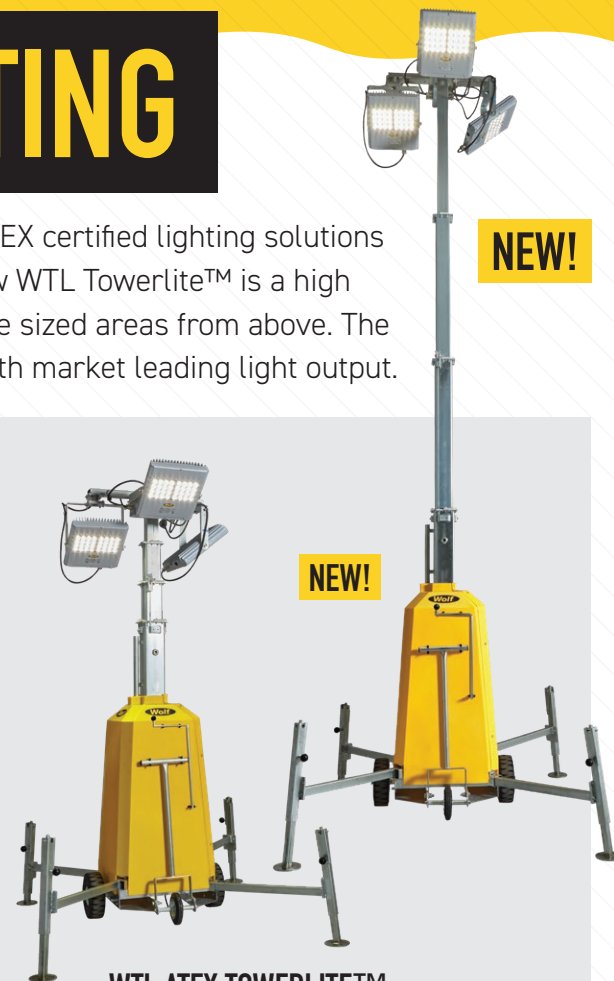
We're proud to introduce two brand new ATEX, IECEx and UKEX certified lighting solutions in our new Area Lighting range for Hazardous Areas. The new WTL Towerlite™ is a high powered, linkable Area Light that illuminates medium to large sized areas from above. The WAL Wolf Area Light is compact, directional, and movable, with market leading light output.



WAL AREA LIGHT

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
POWER SOURCE: LEAD

88-140V AC 180-277V AC



WTL ATEX TOWERLITE™

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
POWER SOURCE: LEAD

88-140V AC 180-277V AC



EX PIR AUTOMATIC ILLUMINATION SYSTEM

The PIR-500 is a Passive Infrared Sensor (PIR) motion detector that is both ATEX and IECEx approved for safe use in Zones 1,2 and 21,22 potentially explosive atmospheres. It is equipped with a 230V/16A rated dry contact, allowing it to control lighting installations and ancillary equipment to improve safety and boost energy efficiency.

- Instant illumination
- Save energy
- Reduce accidents
- Reduce impact on the environment



PIR-500

GAS ZONE: 1 AND 2
DUST ZONE: 21 AND 22
AC Input 110V to 230V



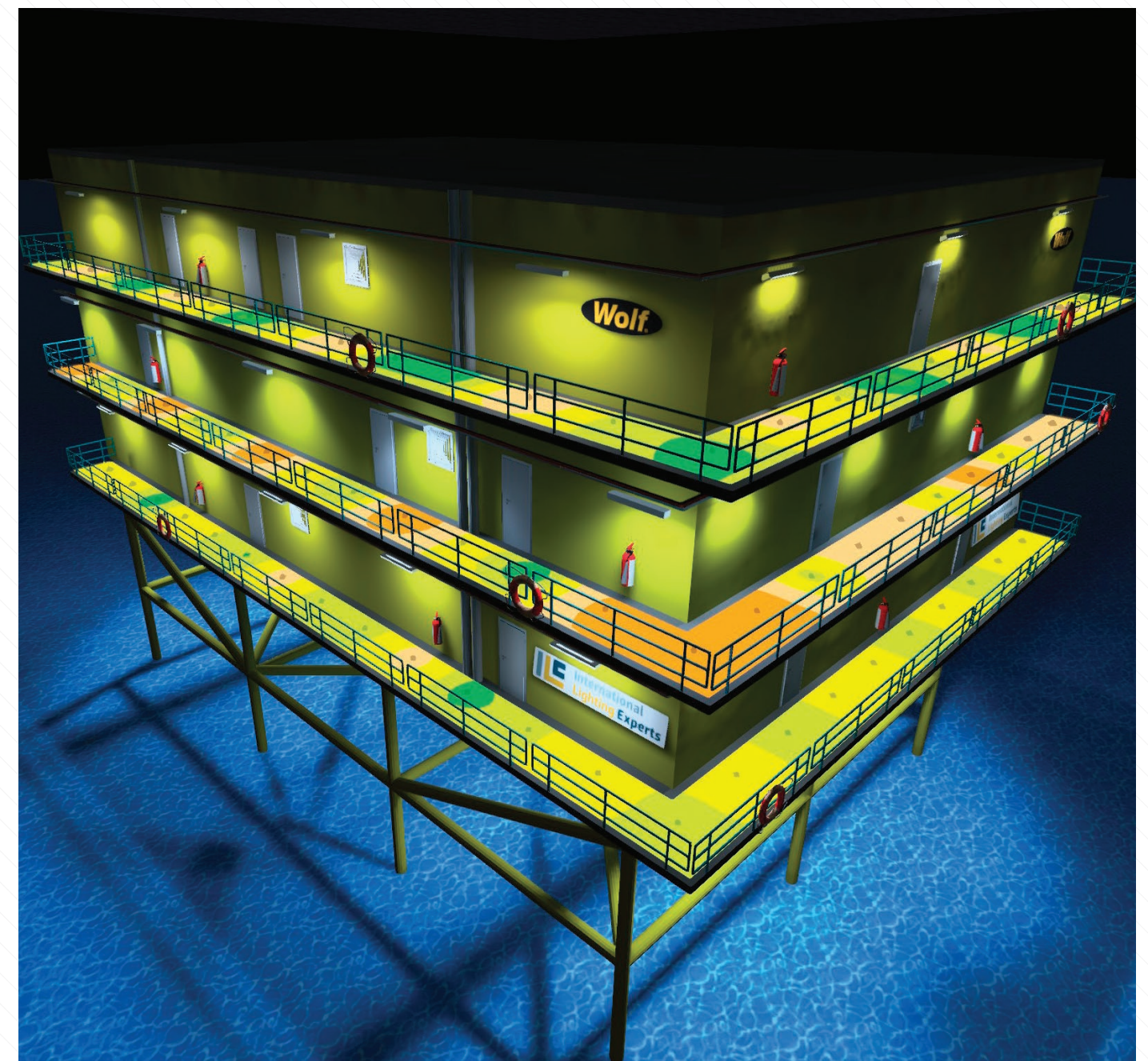
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LIGHTING DESIGN SERVICE

Wolf's specialist lighting design team can provide free detailed lighting plans that clearly illustrate the different, customised options we can offer to safely and efficiently illuminate your Hazardous Area.

We can simulate light levels of different options and combinations that Wolf products will produce for your site, using industry standard modelling and illuminance mapping software.



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