The way ahead in Helideck lighting systems

CAP437 COMPLIANT HELIDECK LIGHTING SYSTEMS
When safety matters most you can trust in Orga.

With over 45 years of experience in the offshore industry, Orga delivers high quality and efficient solutions for marking assets and landing areas to ensure safe operations. Having delivered helideck marking lights for many years, we wanted to contribute to the safety of helicopter pilots and passengers even more. Following three helicopter accidents in the North Sea, the UK CAA was looking for an industry partner to help specify a new system with a lit Touchdown/Positioning Marking Circle and lit Heliport Identification Marking ‘H’ lighting system (TD/PM Circle H) in 2013. Orga has closely collaborated with the CAA in the development of this specification which now forms a part of CAA CAP437 regulation.

It is because of this collaboration with the UK CAA why we can guarantee that our complete system meets the CAP437 requirements and is compliant with regional regulatory requirements.

At Orga we don’t just help you meet these challenges, we help you to stay ahead of them.

"Over 200,000 safe landings on more than 200 Circle-H installations."
Better visibility for the pilot will bring your crew home safe.

Foggy or stormy weather and especially night flights are the most challenging conditions for a pilot to approach a helideck and land their helicopter safely. Orga’s complete helideck system provides pilots with the best possible visual cues during approach and landing in all weather conditions.

The lit TD/PM Circle-H is an important aspect in Orga’s helideck system. It is designed to eliminate the disorienting ‘black-hole’ effect. Pilots refer to the ‘black-hole’ effect when they approach a brightly lit platform with the actual helideck being a dark spot which is difficult to navigate to.

Orga’s system is fully certified and approved by the CAA, HCA and has ABS product approval. In addition, the installation methodology has been reviewed and certified by ABS, Lloyd’s register and Hilti.

Due to the fact that the TD/PM Circle-H specification now forms a part of the CAA CAP437, there is a major increase in the safe use of helicopters in getting people to and from work on an offshore facility.

“Clients can be fully reassured that the system has been properly designed, certified and field trialled to meet the harsh offshore environmental and operational requirements.”
Bringing your crew home safe

Over 200,000 safe landings on more than 200 Circle-H installations
L85 green
Helideck Perimeter Light
Perimeter lights allow the pilot to identify the helideck during approach from a minimum range of 0.75NM at night and should be equally spaced at intervals of not more than 3 meters around the perimeter of the safe landing area.

Orga’s L85 is based on low power long life LED technology with a lamp life up to 100,000 hours, resulting in maintenance savings. The same perimeter light is available in a recessed version. Both versions meet the requirements of ATEX and IECEx and are designed from stainless steel and meet the regulatory requirements for CAP437, NORMAN 27, NORSOK and ICAO.

- Green LED (100,000 hrs avg. life)
- Recessed version also available
- ATEX and IECEx compliant

L425
Helideck Status Light
A helideck status light (wave-off light) will be activated by a signal from the assets fire & gas alarm system and tells the pilot if a helicopter should not land during conditions that may be hazardous for the helicopter, its occupants or others involved.

The L425 is a high-intensity warning beacon and flashes a red light at an intensity of 700 Cd. In addition, repeater lights can be used in the system to give the pilot additional information while the helicopter is parked on the helideck.

Orga’s helideck status light is specifically designed to meet CAP437 requirements. Its low profile makes it possible to attach the lights stainless steel mounting facilities directly to the deck.

- High power LEDs
- Easy to install
- Low maintenance

HWC100
Illuminated Windsock
A wind direction indicator (windsock) gives pilots a clear indication of wind speed and direction while taking off and landing in all weather conditions. It should be located so that it is visible to the pilot from 360 degrees of approach.

To optimise visibility, especially at night or during foggy weather, the HWC100 is illuminated by an internal floodlight to minimise glare to the pilot. In addition, an optional integrated obstruction light on top is available to mark the windsock as an aviation obstruction.

The windsock complies with CAP437/ICAO requirements and is suited for use in hazardous environments, since its ATEX/IECEx-certified.

- Internally illuminated
- Aeronautical obstruction light included

HTP100
TD/PM Circle-H Helideck Lighting System
Developed in collaboration with the CAA (UK), Orga’s HTP100 LED light panels burn a steady yellow and green, respectively. The yellow lights illuminate the Touchdown/Positioning Marking Circle, while the green lights illuminate the Heliport Identification Marking ‘H’. The illuminated Circle-H eliminates the disorientating ‘black-hole’ effect and makes sure the helicopter has a clear view during approach, especially when landing at night or in bad weather conditions.

For optimum offshore suitability, the complete Circle-H is explosion proof and the LED housings are fabricated from fully sealed, high-quality marine plastic materials. They have integrated cable connections and a stainless steel framework for reliable and robust operations. The system is fully painted and friction-test friendly.

- Optimal visibility
- Low maintenance and easy to install
- Friction-test friendly

• Green LED (100,000 hrs avg. life)
• Recessed version also available
• ATEX and IECEx compliant
• Internally illuminated
• Aeronautical obstruction light included
• High power LEDs
• Easy to install
• Low maintenance
• Friction-test friendly
**HFL100 Helideck Floodlight**

The helideck floodlight is designed to provide surface illumination across the helideck landing area, for personnel movement and maintenance. However, the floodlight is no longer allowed under CAP437 requirements during aviation manoeuvres and must then be switched off.

The HFL 100 shines a white beam and has aiming functionalities. Due to the low profile and its stainless steel brackets, the floodlight can be mounted directly to the helideck. An integrated junction box allows for ease of installation and maintenance and is suitable for the harsh offshore environment.

- Compact design
- ATEX and IECEx compliant

**HCCP Helideck Central Control Panel**

The Orga helideck lighting control panel design allows for the full status, monitoring and control of the lighting systems for the helideck. The modular design concept allows for easy installation and maintenance of the system and is available with a range of interface options for control by the assets main system. The control panel can be configured for individual system (e.g. status light) or for full helideck lighting systems.

Available for both a non-certified and certified areas and designed to meet the requirements of the offshore environment the control panel can be located in a convenient location for the HLO (helideck landing officer) or main control room.

- Connects all helideck lighting components
- Touchscreen user interface
- Full status, monitoring and control functionality

**L85 red Aeronautical Obstruction Light**

A 200 Cd steady burning RED aeronautical obstruction light should be fitted to the highest points of the installation, with 10 Cd steady burning RED aeronautical obstruction lights then placed every 10m down until level with the helideck. This is to identify structures on the asset that could be dangerous to helicopter movement during landing and take-off in line with CAP437, NORSOK, NORMAM 27 and other local regulatory requirements.

The L85 is available in 10, 32, 50 and 200 Cd, to meet different local regulatory requirements and is designed using low power long life LED technology with a stainless steel body to meet the demanding offshore environmental conditions.

- Red LED (100,000 hrs avg. life)
- 10, 32, 50 & 200 Cd
- Available in EX and SA
HFL100 Helideck Floodlight
- Compact design
- ATEX and IECEx compliant

L85 Green Helideck Perimeter Light
- Green LED (100,000 hrs avg. life)
- Recessed version also available
- ATEX and IECEx compliant

L425 Helideck Status Light
- High power LEDs
- Easy to install
- Low maintenance

HCCP Helideck Central Control Panel
- Connects all helideck lighting components
- Touchscreen user interface
- Full status, monitoring and control functionality

HWC100 Illuminated Windsock
- Internally illuminated
- Aeronautical obstruction light included

HTP100 Circle-I Helideck Lighting System
- Optimal visibility
- Low maintenance and easy to install
- Friction-test friendly

L85 Green Helideck Perimeter Light
- Green LED (100,000 hrs avg. life)
- Recessed version also available
- ATEX and IECEx compliant
HELIDECK LIGHTING SOLUTIONS

Orga’s complete helideck system and its benefits.

Due to the modular mounting plate design, we can deliver a system that can be installed on either steel or aluminium helidecks in the shortest timeframe on the market today. Approximately 2-3 days for aluminium helidecks and 3-4 days for steel helidecks.

In addition, the mechanical fixing installation methodology is proven to provide a firm and operationally secure result. It is essential that during helicopter landings, directly on to the system, that the system is robust, reliable and secure.

The system modules arrive fully populated and painted with a friction surface (min. 0.65µ coefficient). As a fixed system, the Orga design does not need to be removed during the annual friction testing process and the system elements are also not required to be friction tested as this is covered under the systems certification.

A complete solution when it comes to helideck lighting systems.
Effective and reliable visual cues for the pilot at night and during poor visibility.
Comprehensive product certification andanny to ensure reliable and robustness.
One and only solution for the removal of the blackhole effect.
Modular & high quality products, easy to install, maintain and repair.

Orga started as a service company and has worked, over many years with all types of offshore assets. These days we have a dedicated team of certified service engineers. With years of worldwide experience and due to our modular designs, our team will install your system with minimal downtime and a first time right approach.

A helideck lighting survey will give you the best advice for your helideck to meet the latest regulatory requirements. In addition, this will identify timesaving and cost effective recommendations to minimise the helideck downtime during the installation process.

Orga’s service department can offer a range of installation options from supervision of the on-deck installation, to full turnkey projects including control panel placement, cable runs and commissioning.

Since our systems are installed all over the world and a failure can occur anytime, we guarantee that our service desk is 24/7 available by phone for troubleshooting.

“...enormous in relation to systems that need to be removed and re-installed on an annual basis.”
Why make business complicated when the solution is just one call away?

Our expertise and proven track record, together with our in-house Research & Development department give us the opportunity to work as efficiently as possible. We keep improving our delivery time, to make sure we can deliver our helideck systems to meet our clients’ requirements.

Orga’s effective, reliable and robust helideck systems are essential for safety to ensure that offshore structures are visible to pilots in all weather conditions. Contact us now and we will assist to optimise the visibility of your helideck so that is completely in line with the regulations. Orga helps you stay ahead.

Over 45 years of experience in safety marking.
Since 1973, Orga has been delivering high quality and efficient marking solutions for offshore platforms, to contribute to the safety of people, assets and the environment.

For optimum marking of your helideck, call us:
+31 (0)10 208 5555

“Orga is not just a trusted partner, with solutions that always meet the necessary safety regulations, they give me the innovation and service that I need to make my business work!”