



THORN
LIGHTING

**PERFORMANCE
GUARANTEED**

INDUSTRY LIGHTING

**BETTER
LIGHT
BETTER
EFFICIENCY**

WE MAKE LIGHT WORK

PERFORMANCE GUARANTEED

Whether you're lighting a factory, production halls, logistics hub, loading bays or external storage areas, industrial lighting has a lot of jobs to fulfil – and very little margin for error. This guide outlines the key areas to consider when planning lighting for these demanding locations.



HEADQUARTERS OF ABS (ACCIAIERIE BERTOLI SAFAU), ITALY

**NICE TO
MEET YOU**

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BOOSTING PRODUCTIVITY

Lighting is an essential element in any industrial setting. It's about ensuring safety, delivering efficiency and withstanding harsh, demanding environments. But it's also about boosting productivity and supporting people.



LIGHT FOR PEOPLE

Great industry lighting helps people boost their productivity and give their best at their tasks. Thorn's high quality lighting provides safety and comfort, with minimal glare, keeping operations running smoothly.



LIGHT FOR SPACES

Heat, dust, high ceilings, vibration, corrosion... industrial settings are some of the most demanding. Good industrial lighting is built to withstand these tough environments, while also providing powerful light, ensuring the ideal light solution for industrial spaces.



LIGHT FOR THE ENVIRONMENT

Thorn uses the latest technology, smart controls and thoughtful design to provide the right light, where and when it is needed. Our highly efficient, long-lasting solutions require minimal maintenance and keep running costs low.

KEY FACTS

IN INDUSTRY LIGHTING

At Thorn we believe successful lighting for industry comes from a combination of facts.

01

PEOPLE AND PRODUCTIVITY

Employers everywhere are learning that light does more than just help people see, it has a significant effect on the comfort, alertness and mood of workers. In industrial settings where the risks of mistakes are high, this couldn't be more important.

Thorn Lighting is **designed around people**, maximising productivity.

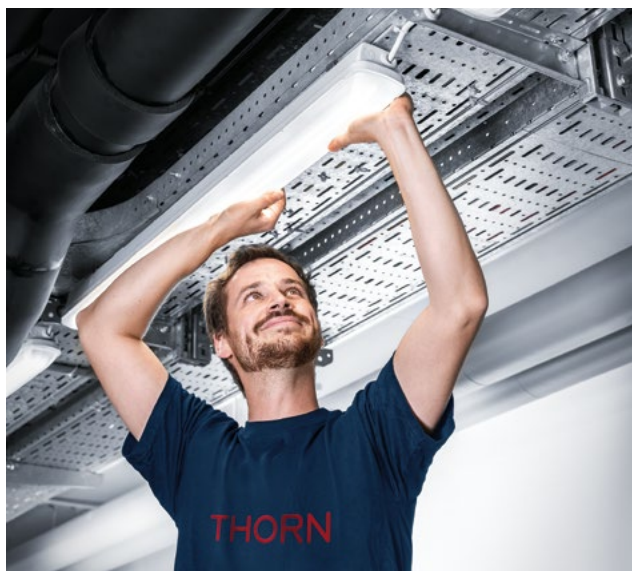
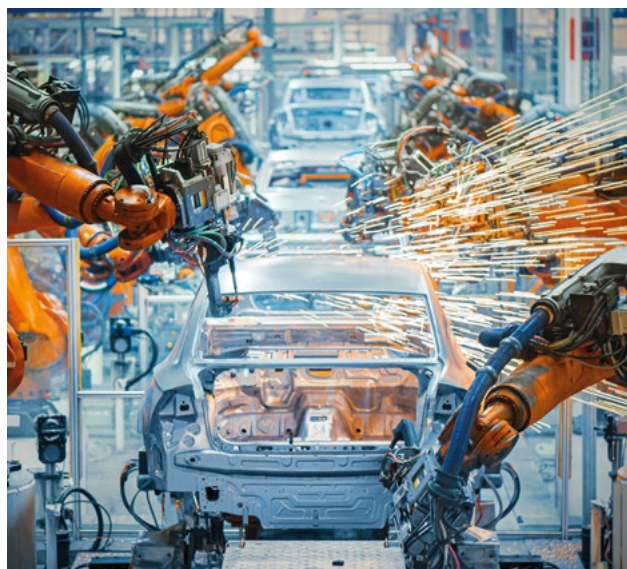


02

TECHNOLOGY

Industry 4.0 is changing everything. Data, connectivity, intelligence and automation are transforming the way industry works – and lighting is no exception. As buildings, services and operations become more integrated, lighting forms a key part of the digital environment. It is the ubiquitous building service, present everywhere, instantly reactive to the needs of the moment.

In a digital world, Thorn Lighting is **connected**, making your business ready for the future.



03

ADAPTABILITY

Today's industrial sites demand flexibility. They need solutions to be adaptable, with options that are easy to modify according to changing needs and activities. For instance, lighting should take into account the possibility of moving overhead gantries and moving vehicles such as forklift trucks. Thorn's wide range of products and solutions make lighting flexible, with a selection of mounting methods, from track mounting to battens and systems.

In an ever-changing world, Thorn Lighting provides the **flexibility** you need.

04

SUSTAINABILITY

At Thorn we take the environment seriously. We are certified to the ISO 14001 and ISO 50001 standards for environmental and energy management. Our factory at Spennymoor in the UK operates according to our zero landfill group policy. But our commitment to sustainability isn't just about our own operations – it's also about the kinds of products we make. Our highly efficient, intelligently controlled solutions help our customers run more sustainable operations – with benefits for their businesses, and for the planet.

In a world where resources are precious, Thorn Lighting is **efficient and sustainable**.



THORN FACTORY IN SPENNYMOOR, UK

INDUSTRIAL BUILDINGS

THE KEY SPACES

Every industrial operation has numerous steps that come together to form a whole. From production halls to logistic areas and from indoor spaces to outdoor, light plays a key role in meeting the needs of each environment.

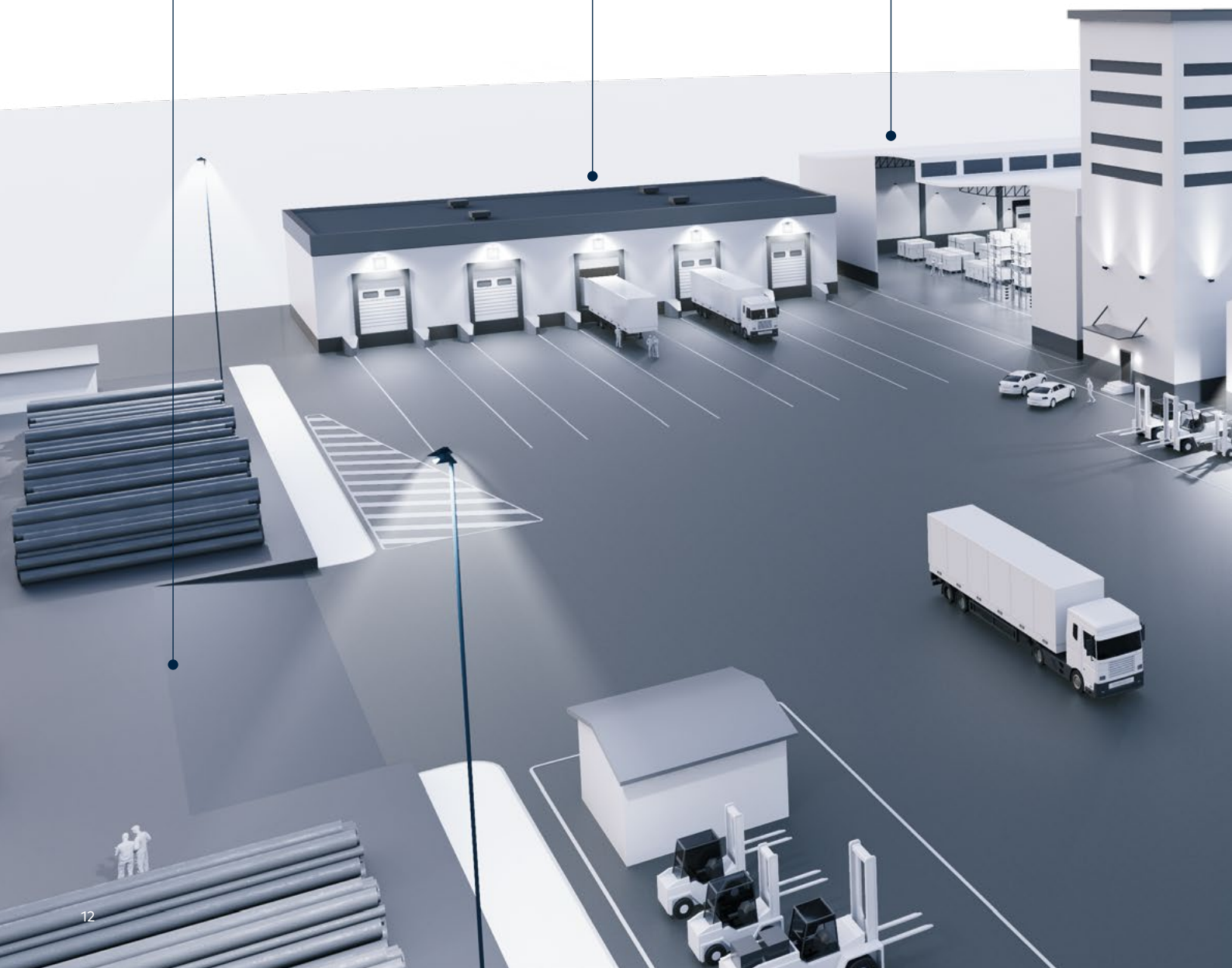
The following pages offer guidance on lighting seven key types of spaces in industrial sites, highlighting what different luminaires can achieve in each setting.

This guide gives detailed information on a selection of industry areas. If you have specific requirements not mentioned within this brochure, for example data centres, agriculture, food industry or chemical industry please contact your local Zumtobel Group office.

04 EXTERNAL STORAGE AREAS

03 LOADING BAYS

02 LOGISTICS

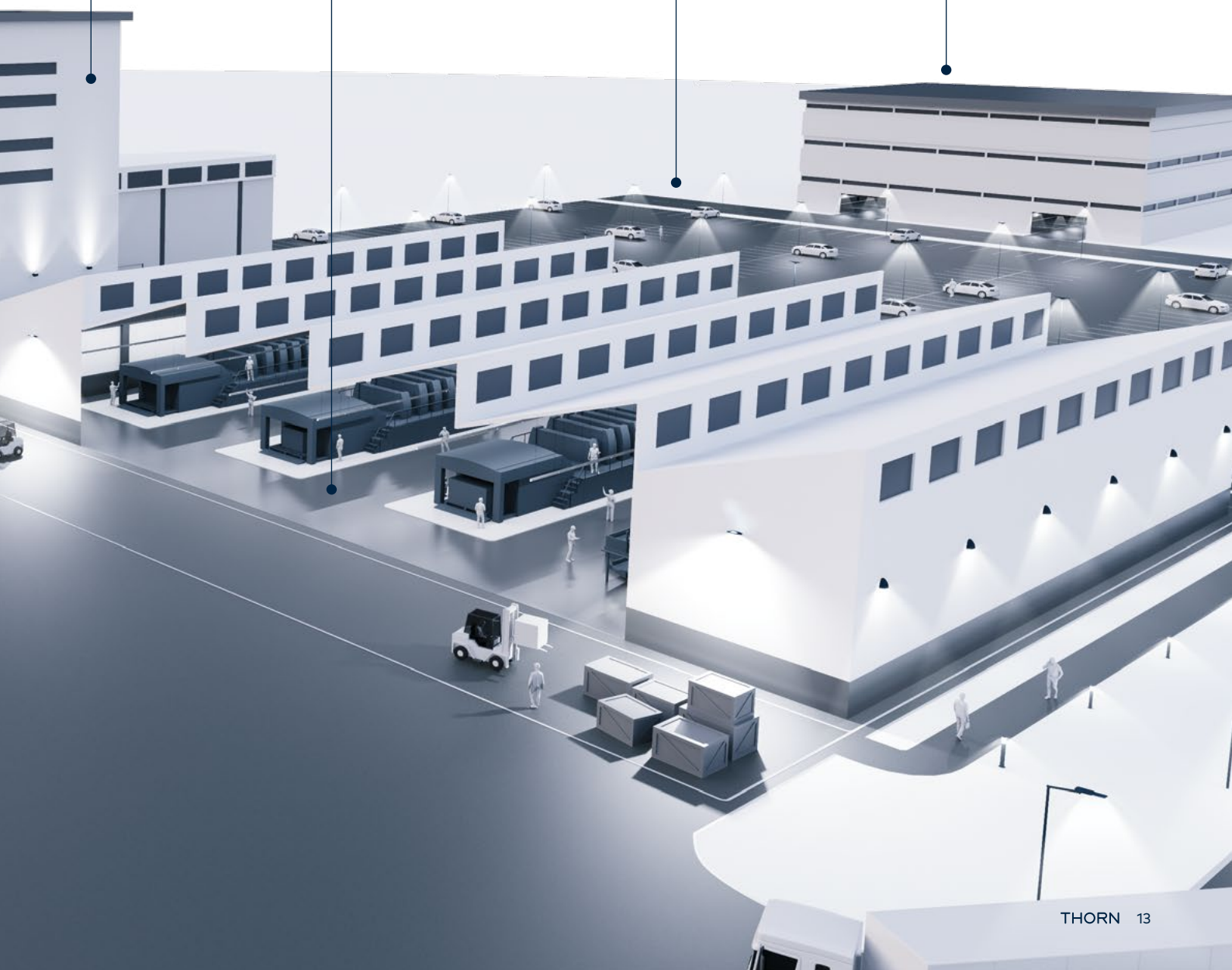


- 07 SUPPORT SPACES**
- WORKSHOPS
 - CHANGING ROOMS
 - OFFICES
 - CIRCULATION AREAS

05 INDOOR PARKING

01 PRODUCTION HALLS

06 OUTDOOR PARKING



PRODUCTION HALLS

ADAPTABILITY IS KEY

Factory spaces for heavy engineering and manufacturing traditionally feature high ceilings, and can be dusty and dirty. High bay lighting and trunking systems are most suitable in these areas. More modern manufacturing areas tend to have lower ceilings and a cleaner environment. Needs change and spaces must adapt due to changes in work layouts resulting in individual/customer-specific production or shorter product life cycles, like seasonality for example. Reliability is also key, to ensure minimal disruption due to maintenance. Errors are costly, so quality of light is a wise investment in order to avoid them.



CMG PAPER INDUSTRY | ALTOPASCIO, ITALY



Product used in the scene:



HIPAK

An IP65 single point suspension LED high bay luminaire with plug-and-play connection for rapid installation.

Other recommended product:



AQUAFORCE PRO

IP66 LED moisture-proof luminaire: protection against dust and powerful jets of water.

Lighting design: HiPak suspended, with a wide optic to provide uniform and general lighting for the performance of activities and moving of goods.

Luminaire Type	Spacing	Mounting Height	Em Maintained Illuminance	Uo Uniformity
HiPak suspended 10000 lm Ra 80 4000 K wide optic	6.5 m x 6.5 m	6 m (maximal room height: 8 m)	223 lx	0.46

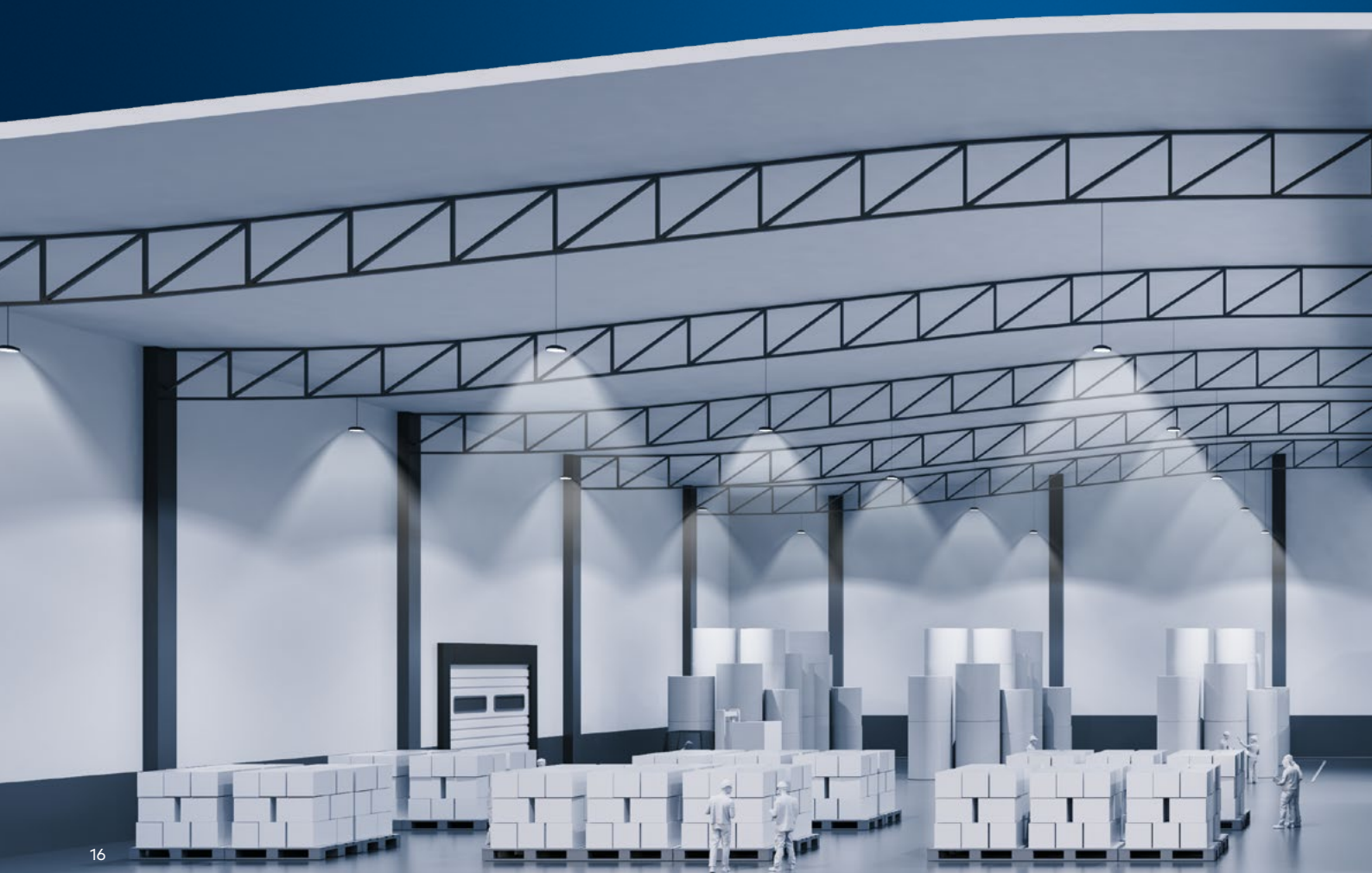
Product used in the scene:



HIPAK
An IP65 single point suspension LED high bay luminaire with plug-and-play connection for rapid installation.

Lighting design: HiPak is ideal for smooth logistics operations. With its optics, the luminaire provides the right lighting solution for different needs within the same space – from wide optics for open areas to rack optics for high shelving areas.

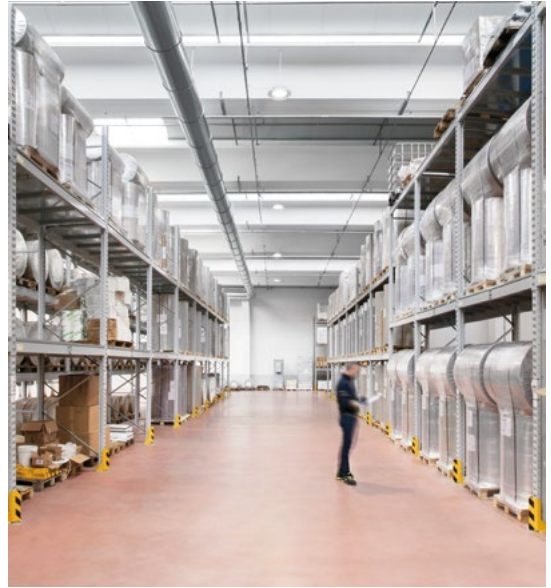
Luminaire Type	Spacing	Mounting Height	Em Maintained Illuminance	Uo Uniformity
HiPak suspended 25 000 lm Ra 80 4000 K wide optic	10 m x 10 m	10 m (maximal room height 12 m)	220 lx	0.64
Luminaire Type	Spacing	Mounting Height	Em Vertical Illuminance	Uo Vertical Uniformity
HiPak suspended 25 000 lm Ra 80 4000 K rack optic	5 m x 5 m	10 m (maximal room height 12 m)	204 lx	0.40



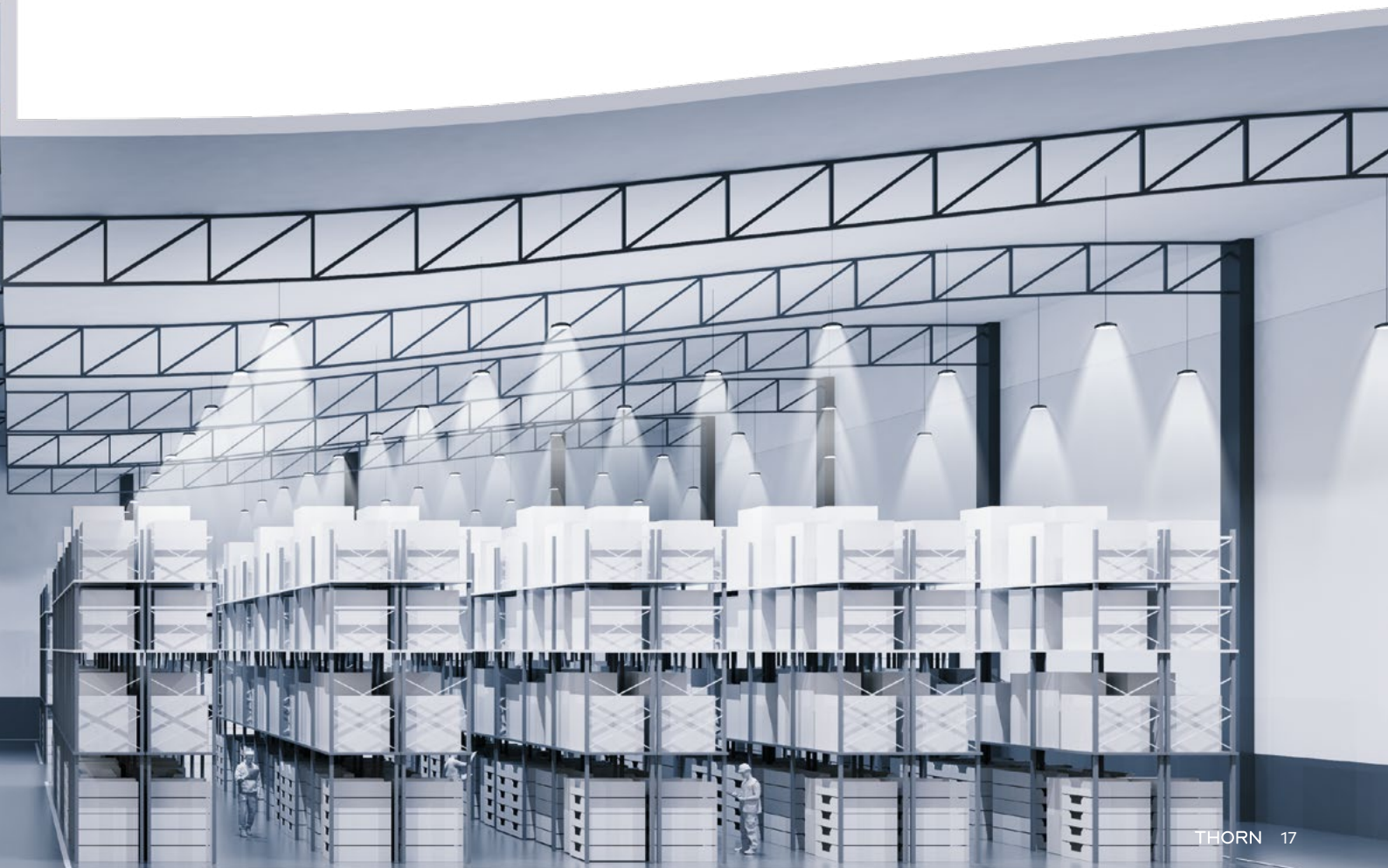
LOGISTICS

EFFICIENT, CAREFULLY DISTRIBUTED LIGHT

Warehouses are big, busy operations that need good light in corridors, storage racks and packing areas to perform safely and efficiently. The large scale and long hours of a typical logistics operation make lighting costly to run, so energy efficient products, good design and smart controls are a must. All lighting must be designed to illuminate not only horizontal surfaces such as floors, but also vertical surfaces such as storage rack faces, ensuring labels and items on shelves can be clearly seen and selected. Lighting should take into account the possibility of moving overhead gantries and moving vehicles such as forklift trucks, with a choice of optics to assure high space adaptability. The use of controls solutions is essential in these spaces to provide high energy savings and less maintenance costs by the use of LED lighting for a long lifetime operation.



ROSSELLA, ITALY



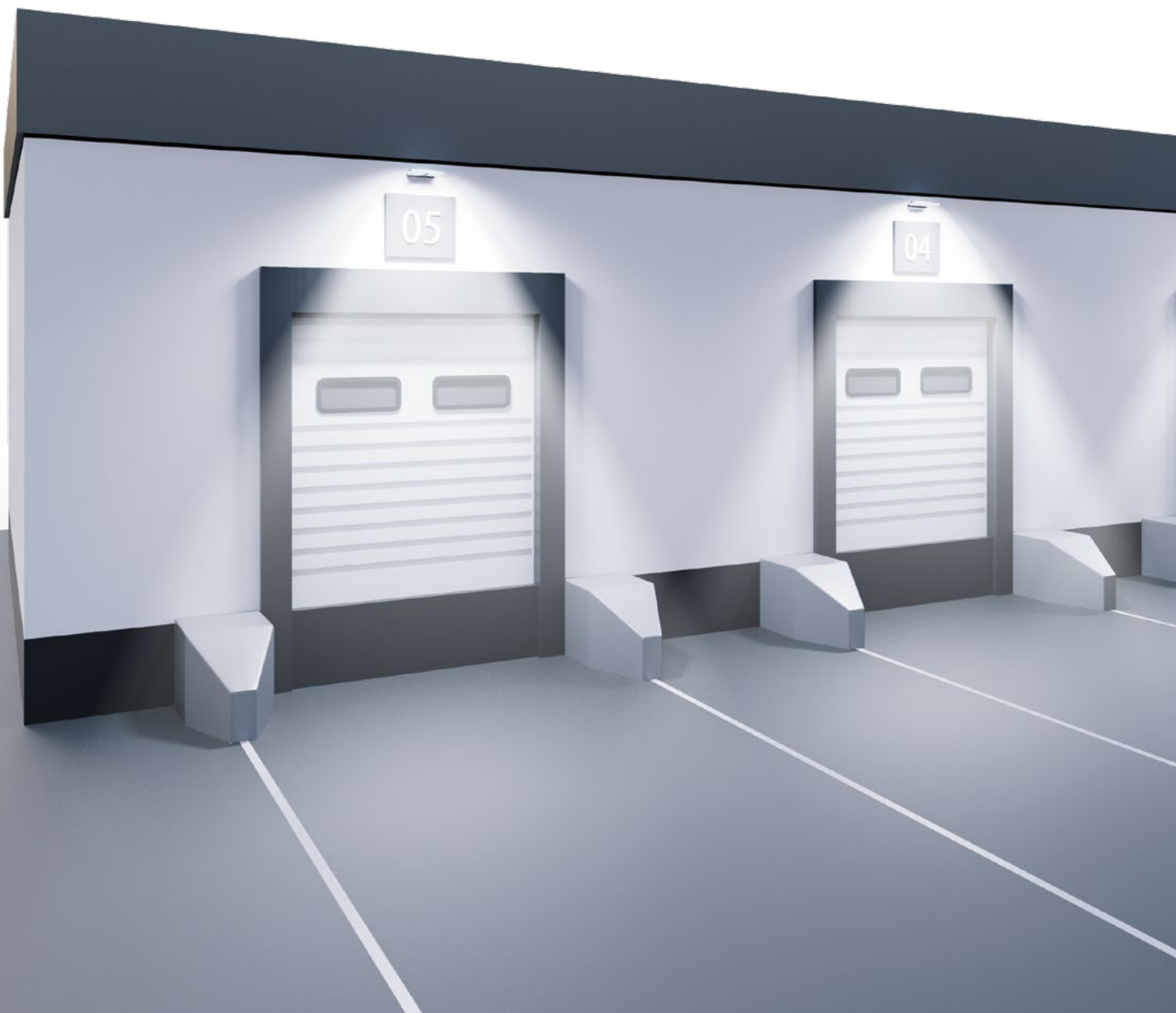
LOADING BAYS

LIGHTING FOR A SMOOTH OPERATION AND SAFE ENVIRONMENT

With multiple large vehicles manoeuvring in different directions, and goods being lifted in and out of vehicles, loading bays require clear, powerful light. Surfaces, obstacles and signage should all be clearly lit to ensure safe and smooth operation.



BOOZT FULFILMENT CENTRE, SWEDEN



Product used in the scene:



AREAFLLOOD PRO
General purpose area floodlight with superior optical performance and control.

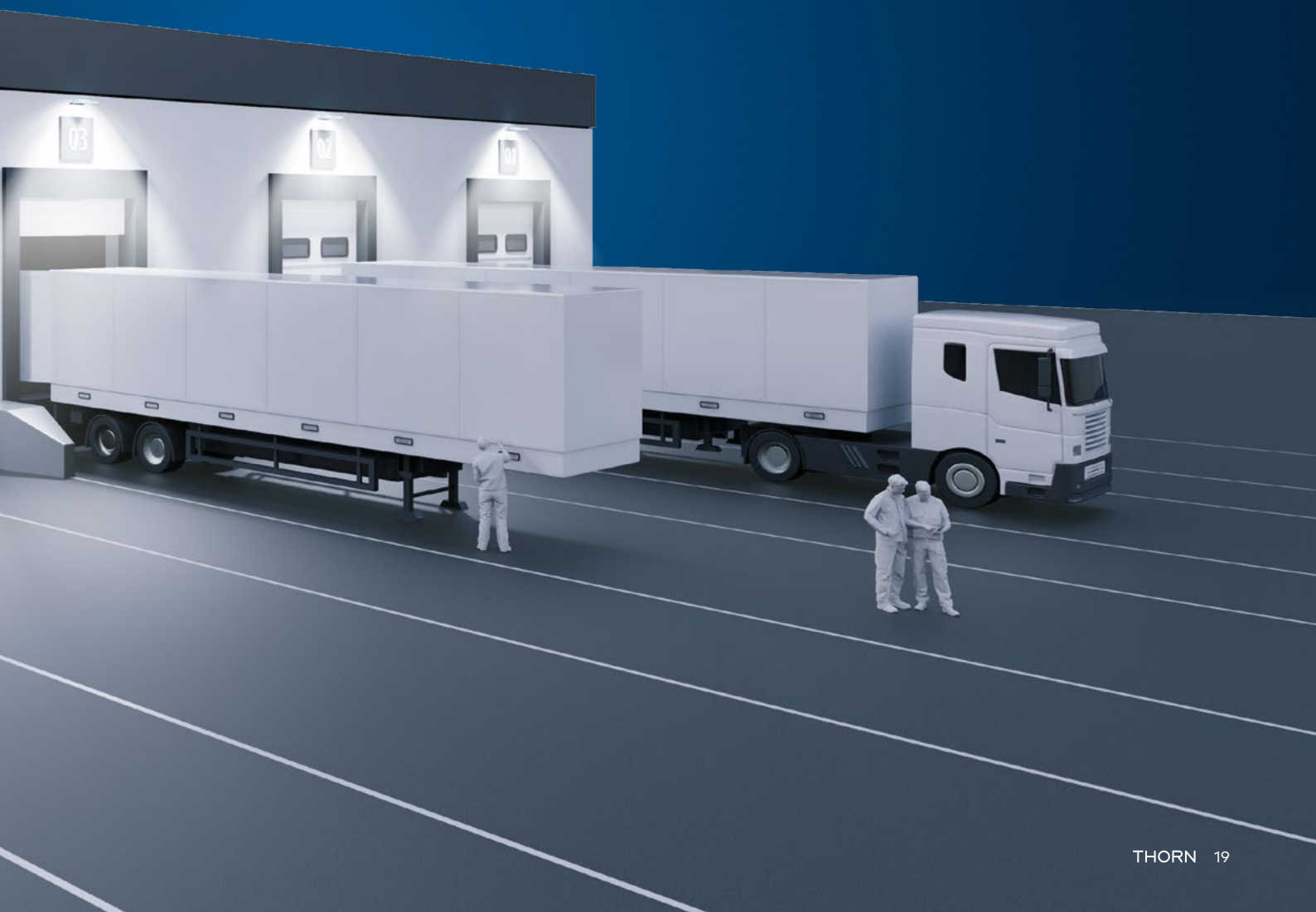
Other recommended product:



LEDFIT
An ultra lightweight, reliable and efficient LED floodlight with best in class optic.

Lighting design: With high efficiency and optimal optical control for minimal spill light, Areaflood Pro is ideal for loading bay lighting. Its compactness and reduced weight make it easy for retrofit installations and due to its 100k hours rated lifetime almost no maintenance is needed.

Luminaire Type	Spacing	Mounting Height	Em Maintained Illuminance	Uo Uniformity
Areaflood Pro medium 15 000 lm Ra 70 4000 K asymmetric optic 60°	9 m	8 m	50 lx	0.4



Product used in the scene:



CHAMPION

Excellent spill light control and project flexibility.

Other recommended products:



AREAFLLOOD PRO

General purpose area floodlight with superior optical performance and control.



ALTIS

High-power LED floodlight for high-mast area lighting.

Lighting design: Combining quality optics with flat glass technology and an integrated visor, Champion focusses light forward at 0° tilt with a defined cut-off to help reduce sky glow, glare and intrusive light. It is an ideal choice for area lighting.

Luminaire Type	Spacing	Mounting Height	Em Maintained Illuminance	Uo Uniformity
Champion > 76 000 lm Ra 70 4000 K with reflective visor and V2 optic (60°)	90 m x 60 m	18 m columns (2 luminaires per column with 0° tilt)	61lx	0.41



EXTERNAL STORAGE AREAS

SAFETY FIRST

Light helps to provide a safe work environment in an area which may contain machinery, a variety of vehicles and pedestrians, along with stored items such as building materials, and incomplete structures. The more clearly the area is lit, the more safely people and vehicles can move around.



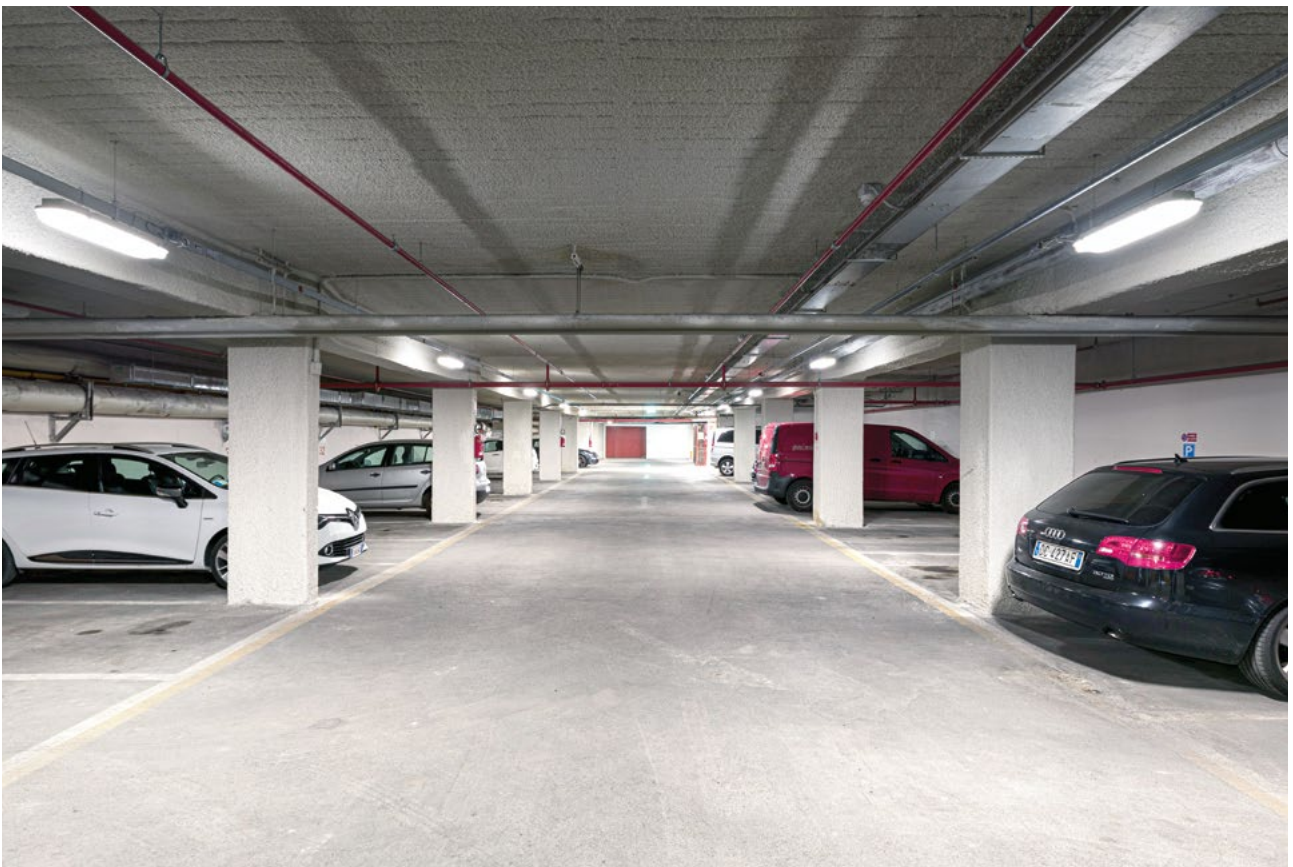
HEADQUARTERS OF ABS (ACCIAIERIE BERTOLI SAFAU), ITALY

INDOOR PARKING

CREATING A POSITIVE PRESENCE

Car parks often provide both the first and last impression of an industrial site. Requirements for indoor car parks are covered by the European indoor workplace lighting standard EN 12464-1. Within Germany a new standard specifically for indoor parking, DIN 67528, has been introduced. EN 12464-1 specifies requirements in terms of horizontal illuminance, whereas DIN 67528 focuses on cylindrical and vertical illuminance. This is to provide better visibility of people, cars and other objects, with requirements of 50 lux for the cylindrical and vertical illuminance in the driving lane, and uniformity levels of 0.4.

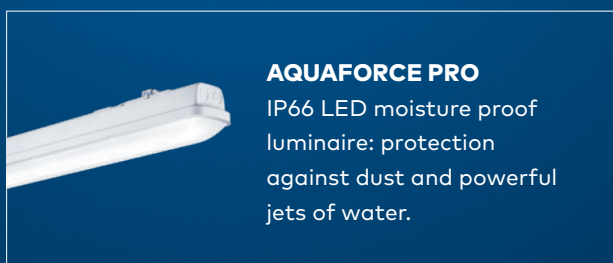
Also important in indoor parking areas are controls, to reduce energy use when no one is around, and emergency lighting to safely show the way out in the event of a power failure.



PARCHEGGIO AUTOSCUOLA, ITALY



Product used in the scene:



Other recommended product:



FORCELED
Compact IP66 LED, dust and moisture proof luminaire with unique prismatic diffuser.

Lighting design: In car parks drivers need to identify obstacles from a short distance and a good uniform lighting is key. Aquaforce Pro's diffuser with optical control via refraction prisms ensures best light quality. The luminaire features DALI dimming and a built-in corridor function for higher energy savings.

Luminaire Type	Spacing	Mounting Height	Em Maintained Illuminance	Uo Uniformity	Em Cylindrical Illuminance	Uo Cylindrical Uniformity
Aquaforce Pro large 4300 lm Ra 80 4000 K wide optic	6 m x 5 m	2.3 m	89 lx	0.54	50 lx	0.57

Product used in the scene:



ISARO PRO
High-performance LED street lantern that brings comfort and safety.

Other recommended product:



PLURIO INDIRECT
Post top LED lantern combining no obtrusive light and a perfect mix of two LED colour temperatures with the NightTune technology.

Lighting design: The lighting of outdoor car parks has to be highly efficient and comfortable. Isaro Pro provides a very versatile solution for this application, with tilting technology, best in class optical performance and built in connectivity.

Luminaire Type	Spacing	Mounting Height	Em Maintained Illuminance	Uo Uniformity
Isaro Pro small 2636 lm Ra 70 4000 K extra wide street comfort (EWC) optic	16 m x 21.5 m	6 m columns with 5° tilt	11lx	0.44

COLOUR CHANGING SCENARIOS AND LUMINOUS FLUX ADJUSTMENT WITH THE NIGHTTUNE TECHNOLOGY

The indirect version of Plurio is the first luminaire that can be equipped with Thorn's NightTune technology, which tunes the colour of light and adjusts the light output throughout the night to support wellbeing and protect the night ecosystem.

NightTune solution:

12 LED 4000 K
12 LED 2200 K

For perfect colour mixing.



OUTDOOR PARKING

SMART, EFFICIENT LIGHTING THAT GUIDES THE WAY

With vehicles and pedestrians moving around together, it is vital that exterior car park lighting is clear and safe. This is also one of the applications where there are significant opportunities to reduce energy consumption and to use the latest technology to unlock new benefits. Smart controls can dim or turn lights off when no one is there, while guiding the way safely when vehicles or pedestrians are present.



PARKING OF SUPERMARKET DENNER IN AMRISWIL, SWITZERLAND – REALIZED WITH NIGHTTUNE



SUPPORT SPACES

LIGHT FOR BEHIND THE SCENES AREAS

Industrial operations are supported by spaces including workshops, changing rooms, offices, circulation areas and canteens. Each of these will require suitable levels of illuminance and lighting control. In workshops, luminaires should be robust with appropriate optical control. Offices and circulation areas need good facial recognition and comfortable lighting. Light plays a key role in creating the best working environment for people in all these spaces.

Workshops



HARLEY DAVIDSON SHOP, FRANCE

Changing rooms



MORGAN SINDALL, UK

Recommended products:



AQUAFORCE PRO

IP66 LED moisture proof luminaire: protection against dust and powerful jets of water.



POPPACK

LED one for one replacement for single and twin T8/T5 fluorescent battens.



BETA

A flexible, efficient and long-lasting solution.



CETUS

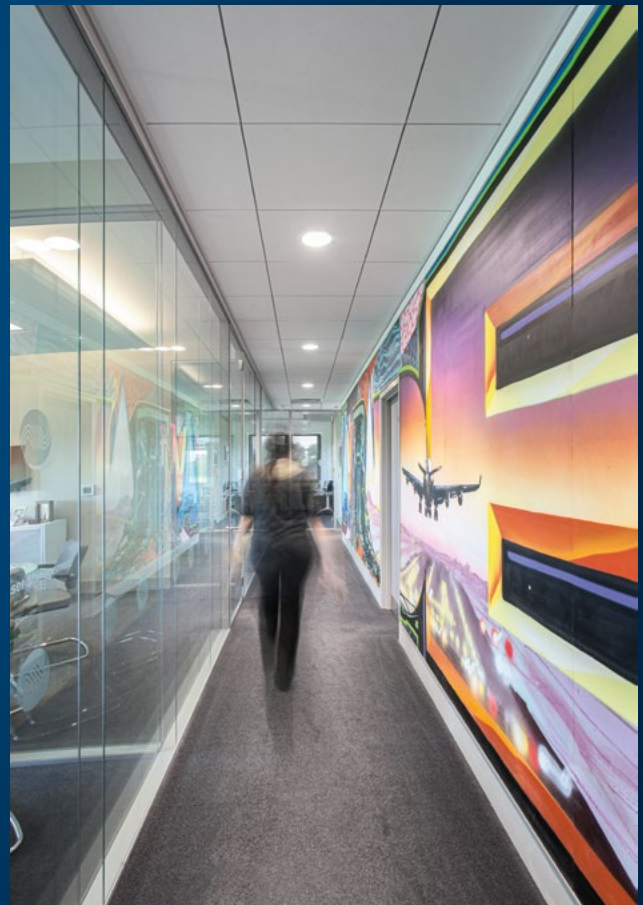
An highly flexible downlight family, available with the Lumen Colour Select (LCS) functionality, to choose between 2 different lumen outputs and 3 colour temperatures in one single luminaire.

Offices



MORGAN SINDALL, UK

Circulation areas



AVTRADE, UK

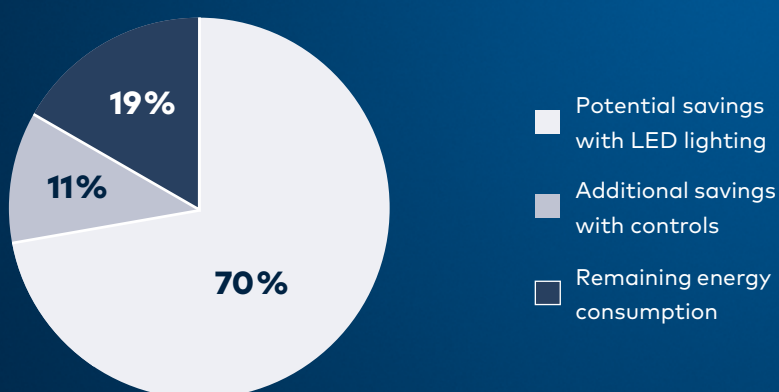
Before



REFURBISHMENT

MAKE SAVINGS BY UPGRADING TO LED HIGH BAYS

Refurbishments using Thorn's HiPak high bay enable substantial savings on energy consumption and CO₂ emissions. HiPak's technology offers savings of more than 70% as compared to conventional lighting solutions. Its single-point suspension is ideal for one-to-one replacement of conventional lighting. With the use of controls, HiPak enables even greater energy savings through dimming, motion detector and daylight sensor integration.



EXISTING INSTALLATION

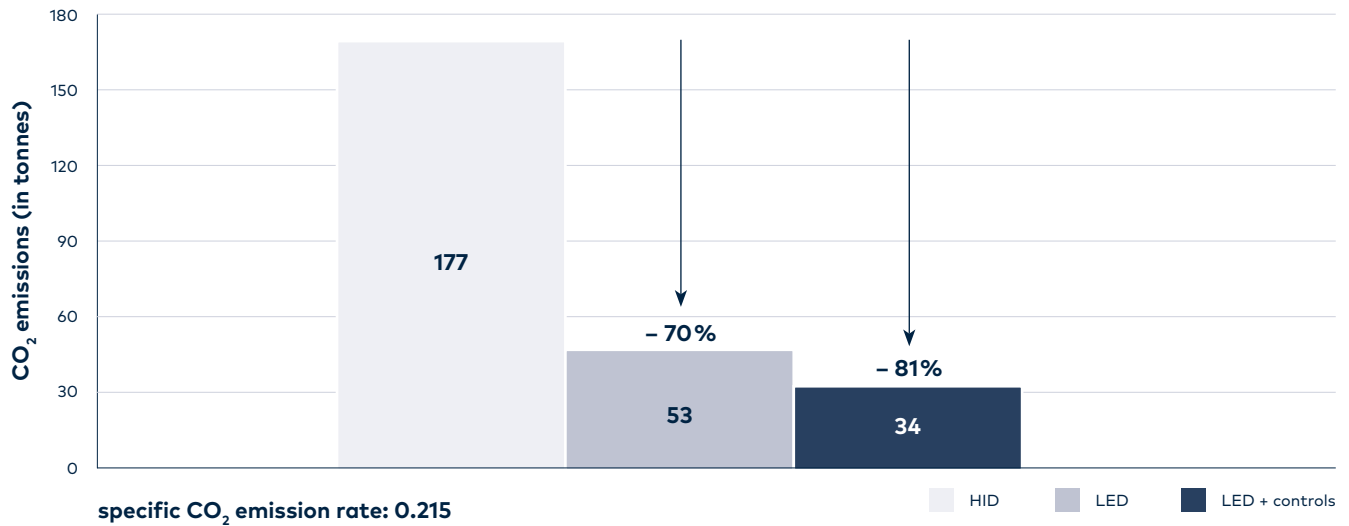
36 x 450 W HID high bay luminaire
200 lx
U_o (E_{min}/E_m): 0.68
Controls: switching

LED REFURBISHMENT SOLUTION

36 x 134.5 W HiPak
205 lx
U_o (E_{min}/E_m): 0.75
Controls: switching/dimming



TOTAL CO₂ EMISSIONS OVER LIFETIME (15 YEARS)



LIGHTING WITH HIPAK

During a refurbishment project, it is important to consider the suitability of existing or proposed mounting structures. Ease of installation, flexible planning are essential when exchanging the luminaires. HiPak is ideal for refurbishment due its high efficiency, low maintenance and very long lifetime.

LIGHTING REQUIREMENTS

Below is an overview of the main lighting requirements for industrial areas, based on recommendations from the European standards EN 12464-1 for indoor workplaces and EN 12464-2 for outdoor workplaces. A balance between horizontal, vertical and cylindrical illuminance is ideal to create a comfortable space in which people can carry out their activities with good uniformity levels and glare control.

TYPE OF TASK OR ACTIVITY (EN 12464-1/-2)

	Em	Uo	RUGL/GR	Ra
Production plants with continuous manual operation	200	0.4	25	80
Storage rack face/Logistics	200	0.4	–	60
Loading bays Pedestrian passages, vehicle turning, loading and unloading points	50	0.4	50	20
Parking Areas (Indoors)	75	0.4	–	40
External storage area Continuous handling of large units and raw materials, loading and unloading of freight, lifting and descending location for cranes, open loading platforms	50	0.4	20	50
Parking Areas (Outdoors)	10	0.25	20	50
Workshops/Laboratories	500	0.6	19	80
Offices: staff office	500	0.6	19	80
Circulation areas and corridors	100	0.4	28	40
Changing/Dressing rooms	200	0.4	25	80
Cloakrooms, washrooms, bathrooms, toilets	200	0.4	25	80
Canteens	200	0.4	22	80

Em: Maintained illuminance in lx

Uo: Uniformity

RUGL: Unified glare rating limit

GR: Glare Rating

Ra: Colour rendering index

REMARKS

For indoor parking:

Instead of mainly considering the horizontal illuminance, the German standard DIN 67528 focuses on cylindrical and vertical illuminance. Its requirements recommend 50 lx cylindrical and vertical illuminance in the driving lane, and a uniformity of 0.4.

For emergency:

Emergency lighting requirements are detailed in EN 1838.



HEADQUARTERS OF ABS (ACCIAIERIE BERTOLI SAFAU), ITALY
PRODUCT: ALTIS

SUCCESS PROJECT

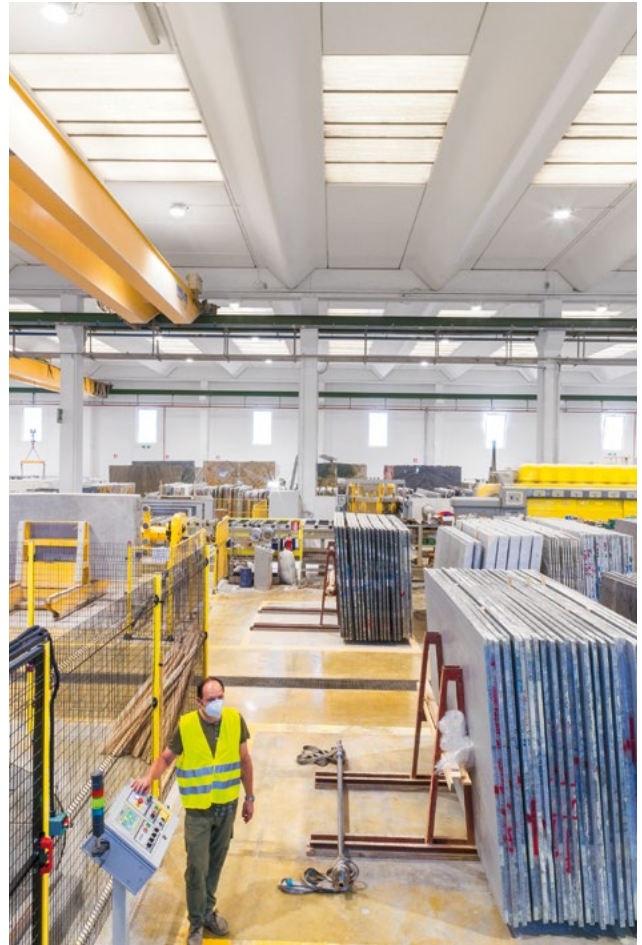
BRUNO LUCCHETTI SRL

CARRARA MARBLES, ITALY

Bruno Lucchetti Srl is dedicated to quarrying the prestigious white marble of Carrara. A complex of over 10000 square meters boasts an inventory containing over 250 types of materials including marble, granite, onyx, and quartzite. The industrial hall has been modernised with the latest lighting upgrade supported by Thorn. With this, a major energy upgrade and an improvement in the comfort and lighting conditions of this working environment for warehouse, shipping, and semi-finished products were achieved.

The building, measuring more than 6000 square meters, had 121 obsolete 400 W projectors. Thorn replaced these with 84 industrial HiPak fixtures. HiPak adapts easily to the performance of conventional luminaires and is the ideal choice as a replacement for conventional industrial luminaires, offering a long lifetime and particularly high energy efficiency of up to 165 lm/W.

The new installation has been highly appreciated by the company both for the energy improvement obtained and for its lighting levels, which allow people to work better and more effectively. It has also reduced CO₂ emissions by almost 60%, but above all, it has guaranteed the Lucchetti Group the fastest payback ever: thanks to important savings both on energy and maintenance, it is estimated that there will be a return on investment in little more than a year.



Luminaire solution used in the project:



Full LED
refurbishment



121 obsolete
400 W projectors
replaced with 84
HiPak fixtures



165 lm/W



CO₂ emissions
reduced by 60 %



Return on investment
in little more than a year



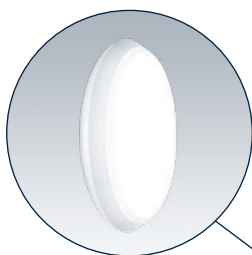
SURROUNDING AREAS

THESE AROUND THE EDGES SPACES ALSO NEED THE RIGHT LIGHT

Lighting industrial sites is about more than just the main operational areas. The main entrance, building surrounds, façade and public spaces are all important. Thorn offers a complete solution – inside and out.

Katona

for canopy areas



Contrast

for façade



Areaflood Pro

for open areas



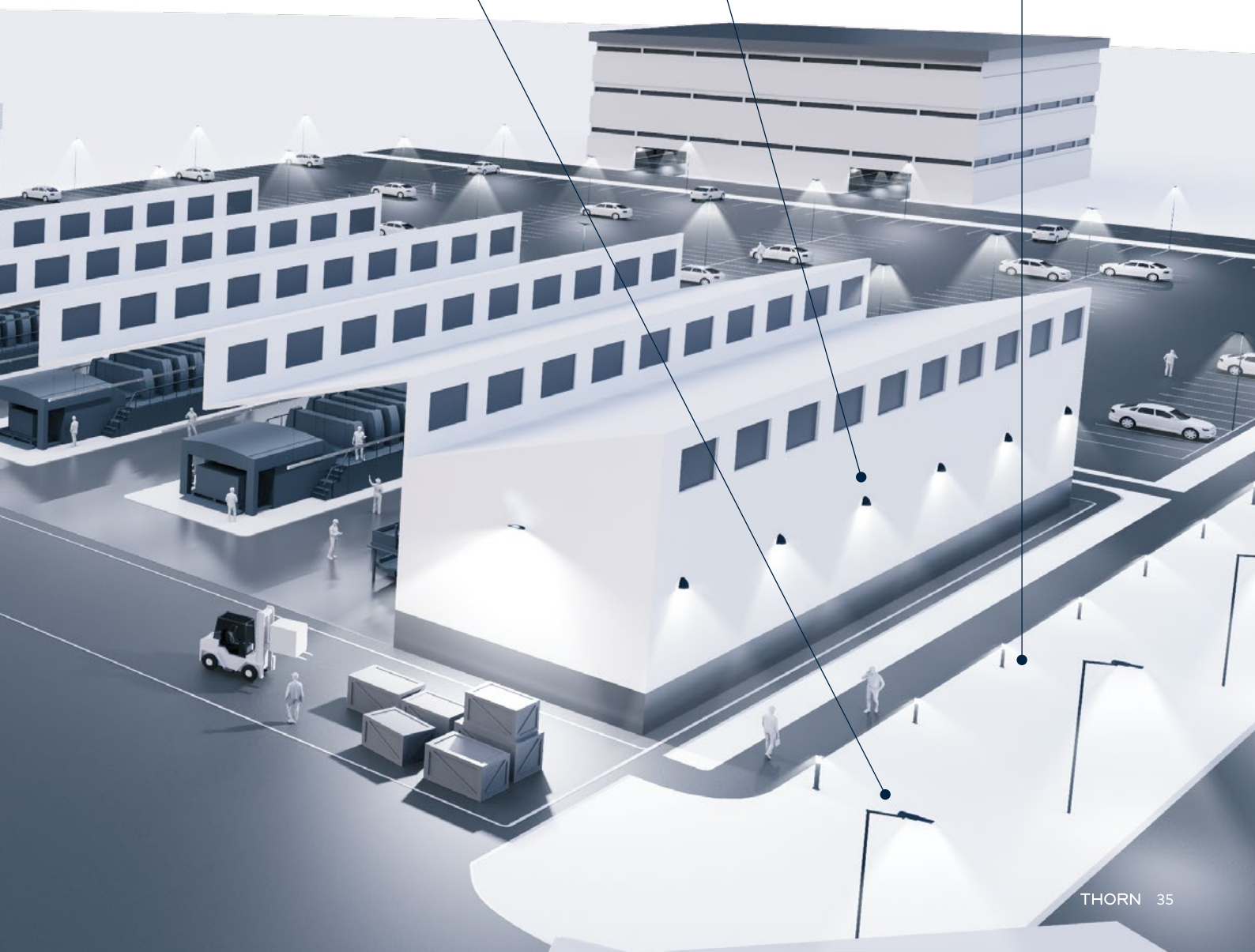
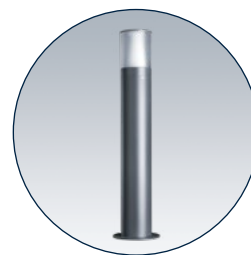
Isaro Pro
for streets



Piazza II
for building surrounds



D-CO Bollard
for pedestrian areas



HIPAK

THORN'S INNOVATIVE INDUSTRIAL LUMINAIRE, THAT OFFERS STUNNING PERFORMANCE AND COMPELLING RETURN OF INVESTMENT

Thorn's HiPak high bay is a highly efficient one-for-one replacement for conventional industrial luminaires – with a high value efficacy it promises a quicker payback than ever. With a choice of two sizes and six lumen outputs up to 35 000 lm, HiPak is an ideal choice for point-for-point replacements on retrofit projects.

MULTIPLE LIGHT DISTRIBUTIONS

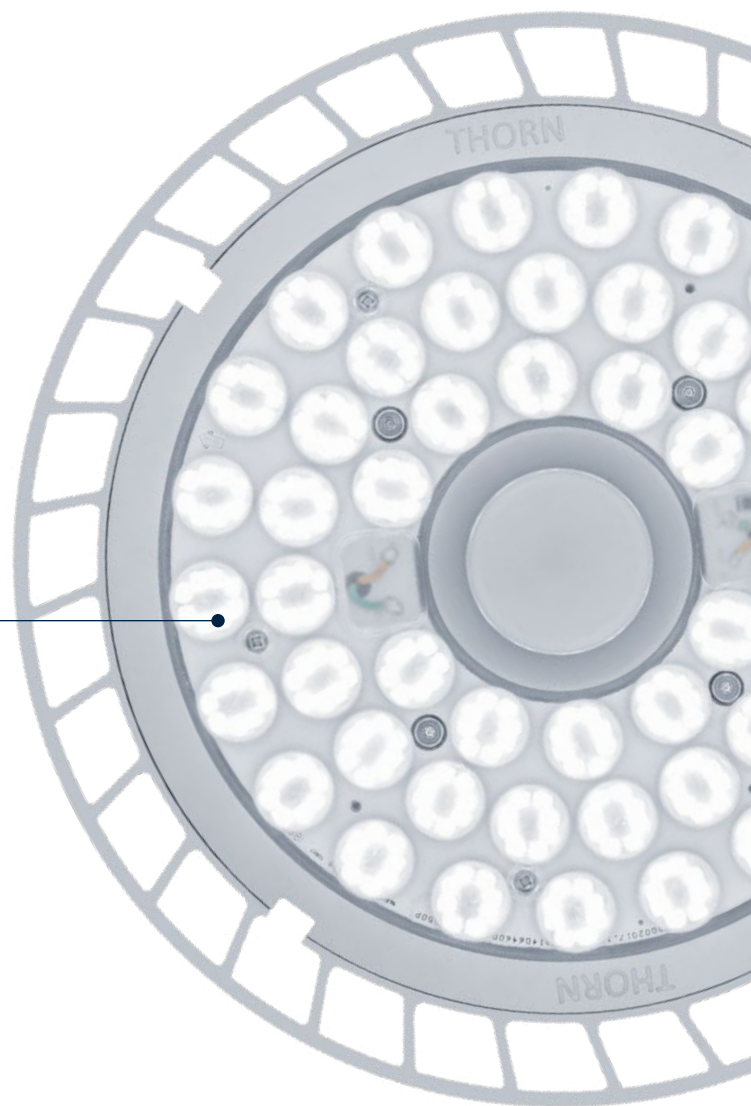
With wide and rack optic light distribution options and carefully designed diffusers and reflectors, HiPak keeps glare to UGR 19 or below, making it an ideal choice for applications where image is everything.



WIDE OPTIC



RACK OPTIC



EXCELLENCE IN EFFICIENCY

The high light output of industrial luminaires means energy efficiency is particularly important. For the latest generation of HiPak, Thorn has increased efficiency to a maximum of 165 lm/W – the best ever performance. This means HiPak offers a rapid payback for users upgrading from conventional light sources. Minimal maintenance requirements and smart controls help to get the cost of ownership down even lower.

AQUAFORCE PRO

THE BENCHMARK FOR MOISTURE AND DUST RESISTANT LED LIGHTING

TWO MATERIALS

PC: UV and high impact resistance; chemical resistance to alcohol, ethanol and water.

PMMA: High lighting transmission; resistant to shocks, weather influences and UV radiation; minimized risk of stress cracking; chemical resistance to a wide range of acids.

2 LENGTHS

1100 or 1600 mm
long versions.

DRIP-EDGE-EFFECT

Unique design with Drip-Edge-Effect to avoid dirt build up on main light output surface.

SIMPLE MOUNTING

Long mounting sliders for high flexibility.

EASYCLICK

Patented snap-on mechanism for clipless mounting of diffuser.

DRILL HOLES FOR CABLE ENTRIES

10 cable entry options at 5 different positions for through-wiring.

QUICK-CONNECT

Equipped with quick fit electrical connection. (PC version only)

SCREWLESS CABLE TERMINAL

For quick installation.

 **-20 UP TO +45 °C (PC)**
-10 UP TO +35 °C (PMMA)
Operating temperatures.

SENSOR CONTROL

 Integral presence detector and RF module for wireless connection of luminaires. Microwave presence detector, Radio Frequency (RF) and Bluetooth® Mesh (bmLINK) modules for wireless communication.

PRODUCT HIGHLIGHTS

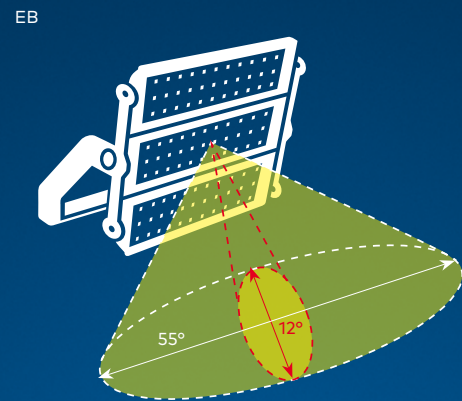
ALTIS

HIGH-POWERED LED FLOODLIGHTING

OUTSTANDING PERFORMANCE

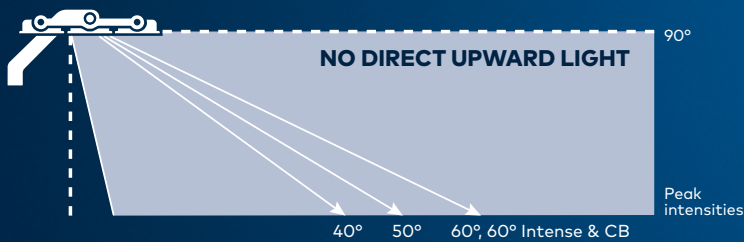
A powerful, flicker-free and flexible LED floodlight – that's Altis. Whether with electronic, DMX/DALI or gearbox control, it immediately delivers 100% light. Separately adjustable LED modules and seamless dimming at various levels allow for optimised lighting design. Its safety features include protection class I, IP66 and IK08 as well as a die-cast aluminium housing, frame and mounting bracket.

ELLIPTICAL LIGHTING DISTRIBUTION



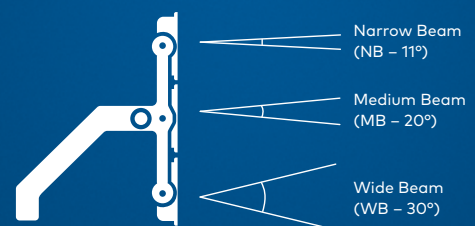
ASYMMETRICAL LIGHTING DISTRIBUTIONS

A4/A5/A6/A6-I/CB



SYMMETRICAL LIGHTING DISTRIBUTIONS

NB/MB/WB



MODULAR AND HIGHLY FLEXIBLE



3 LED MODULES (396L)



2 LED MODULES (264L)



1 LED MODULE (132L)



CONTROL GEARBOX
Installation from local to the floodlight to up to 200 m remotely.

AREAFLOOD PRO

GENERAL PURPOSE FLOODLIGHTING WITH GREAT OPTICAL PERFORMANCE

Areaflood Pro is an ideal fit for numerous industrial applications. It features three sizes with optimised lumen packages, superb optics and lighting controls, also installation and maintenance flexibility. It is available in IP66 and IK08 protection, colour temperatures of 3000 K, 4000 K and 5700 K, and a remote control gearbox.



AREAFLOOD PRO LARGE

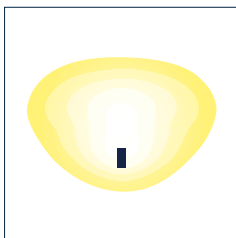


AREAFLOOD PRO SMALL

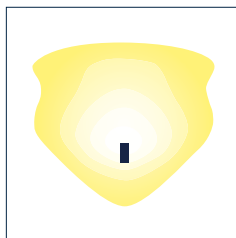


AREAFLOOD PRO MEDIUM

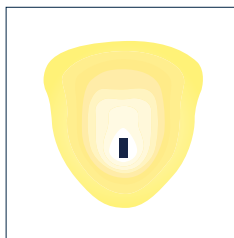
Well-suited for wide ranging applications, Areaflood Pro offers a choice of seventeen optics for efficient and effective lighting.



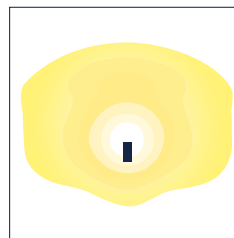
A4 – 40°
Asymmetric Optic



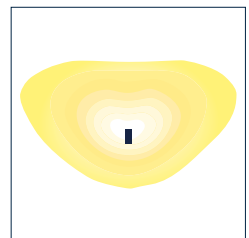
A5 – 50°
Asymmetric Optic



A6 – 60°
Asymmetric Optic



EWR: Extra Wide
Road Optic



WR: Wide Road Optic

EMERGENCY LIGHTING

A SAFE WAY OUT WHEN NEEDED



The purpose of emergency lighting is to allow people to make their way to a place of safety in the event of an evacuation. In these situations, lighting can save lives and keep people calm. It goes without saying that emergency lighting must comply with all relevant rules and regulations. But the best emergency lighting goes further, incorporating flexible luminaires with easy installation and maintenance, long life and energy efficiency. Thorn's 90+ years of experience and reputation for quality are your guarantee of an optimal emergency lighting solution.

Thorn only offer products that are designed, manufactured and tested to meet the latest European standards regarding safety and electromagnetic compatibility, including:

- EN 60598-1
- EN 60598-2-22
- EN 62471
- EN 55015
- ISO 7010

THE VOYAGER FAMILY

EMERGENCY LUMINAIRES

Architectural



Voyager Star

Cutting-edge technology, flexible mounting and hassle-free connectivity.



Voyager Fit

A super-compact new LED emergency luminaire for ceilings.

EMERGENCY EXIT SIGNS



Voyager Style

Stylish yet strong.



Voyager Blade 2

Sleek & Simple.

Industrial IP65



Voyager One

Combining the best of 2 worlds: safety luminaire & safety sign luminaire in one.



Voyager Twin Spot

Flexible. Durable. Strong.



Voyager Solid

A flexible LED emergency bulkhead.



Voyager Square

Strong, smooth and highly protected

Our **VOYAGER** family comprises of a wide offer of escape luminaires, safety signs and networked systems to manage and monitor all the components, from self-contained to centrally supplied systems.

INTELLIGENT LIGHTING CONTROL

INDOOR OR OUTDOOR, SINGLE ROOMS OR WHOLE BUILDINGS. NO TWO INSTALLATIONS ARE THE SAME, SO OUR CONTROLS SOLUTIONS ADAPT TO YOUR NEEDS

INDOOR: FROM INDIVIDUAL ROOMS TO THE WHOLE BUILDING

Whether it is a small installation or a large building, a central system or a room based solution, via Zumtobel we have controls that adapt to your needs. DIMLITE provides the solutions for individual room control systems and LITECOM manages smaller to larger spaces up to the whole building, working with any DALI fitting.



DIMLITE: control individual rooms.



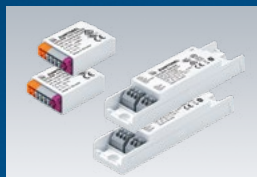
LITECOM: manage from small to large scale spaces.

INDOOR: WIRELESS SOLUTIONS

BasicDIM Wireless and bmLINK solutions let you control lights via a mobile app. Powered by Bluetooth®, these wireless solutions are particularly suited to spaces where it would be a challenge to add new control wiring.



basicDIM Wireless: control luminaire individually to easily change colour temperature and light intensity (also applicable for outdoor luminaires).



bmLINK: refurbishment without DALI cables.

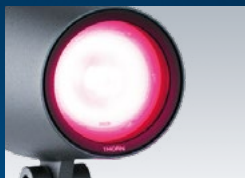
**Qualified
Bluetooth®
mesh**



Bluetooth® mesh.
Completely secure –
now and in the future.

OUTDOOR: GROUP CONTROLS

Groups of luminaires can be controlled using a variety of wired and wireless solutions, which are easy to commission and can enable significant energy savings. Whether using a local control cabinet, power line communication, DALI, DMX or a radio frequency (RF) wireless system, multiple lights can be adjusted together, according to predefined profiles or in response to the presence of people and vehicles.



DMX RDM: create dynamic scenes.



DALI2: control the light intensity or the colour.



MovU lateral or Post top: external motion sensor with Radio Frequency (RF) and with Master/Slave possibility.



Integrated motion sensor in the luminaire with Radio Frequency (RF) technology and with Master/Slave possibility.

OUTDOOR: SINGLE LUMINAIRE

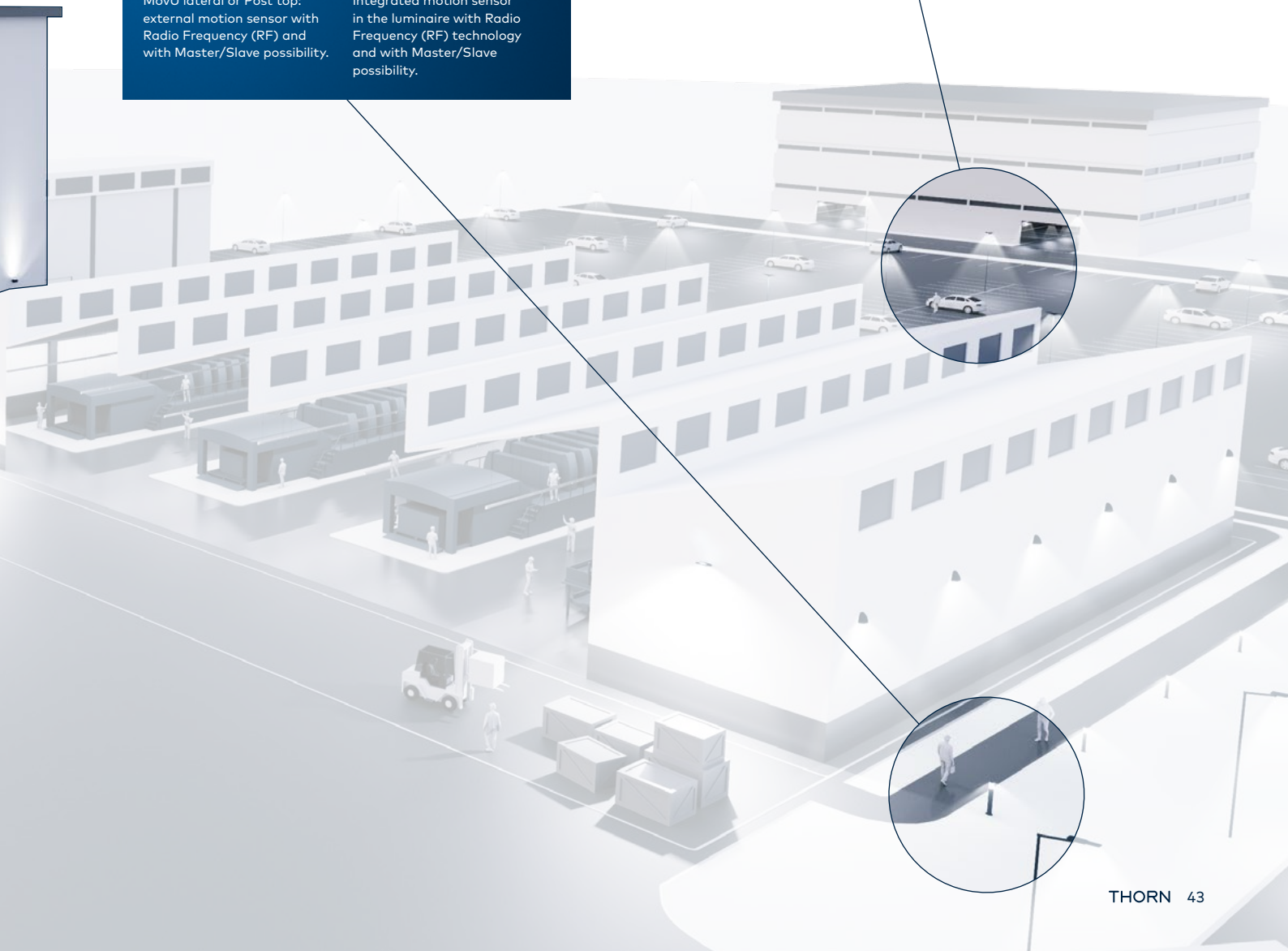
Individual luminaires can be controlled by time switches, photocells and motion detectors, for reliable savings with minimal effort. Thorn's bi-power switch (BPS) solutions enable dimming to 50% for eight hours at night. Dimming can also be made directly on the product with our switchDIM technology to better adjust to users specific needs.



Bi-power switch (BPS): requires no external control wiring, and can be easily customised or turned off.



switchDIM: manually dim the light directly at the fitting.



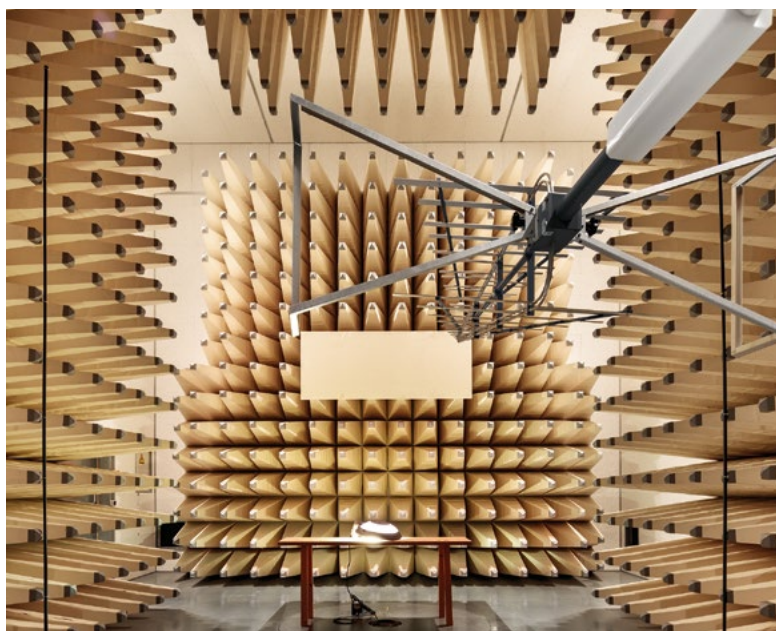
THE BENEFITS

OF WORKING WITH THORN

01

OVER 90 YEARS EXPERIENCE

Yes, we really have passed the 90-year mark! Thorn has had nearly a century to develop its unique knowledge and expertise. And the best part is that we can build on this knowhow to make sure that we are always ahead of the game with the latest technology, the most reliable services and a price that works for everyone.



ELECTROMAGNETIC COMPATIBILITY (EMC) TESTING LABORATORY

02

CONSTANT RESEARCH AND INNOVATION

Thorn has been at the forefront of lighting technology for decades, and continues to push the boundaries. Our investment in R&D and innovation aims to bring customers the very best performance, thanks to the latest advanced engineering in light and electronics, with in-house development.

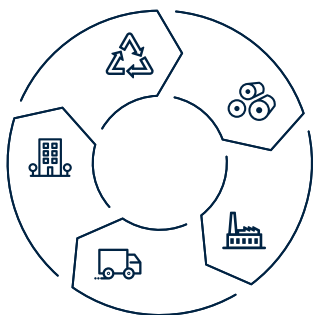
03

EXTENSIVE TESTING AND CERTIFICATION

Thorn's products undergo demanding tests for compliance, safety and performance. With Thorn, you can be sure that your lighting product does what it says it will do, meets all relevant standards and regulations, and comes with a guarantee of quality and safety.

04

ENVIRONMENTAL PRODUCT DECLARATION (EPD)



At Thorn, we provide EPDs as a standard service for several products and the declarations can be downloaded from our website. The EPD for each specific product details its impact on the environment throughout its lifecycle. The EPDs are based on EN ISO 14025 and EN 15804. The information given by an EPD is relevant not only for environmental certifications such as LEED, BREEAM or ÖGNI; it also helps customers select the most sustainable products.

05

BEST-IN-CLASS OPTICS

Thorn's product range benefits from our class-leading optical systems. They offer several precision light distributions to fulfil various requirements, with excellent uniformity and glare control.



06

QUALITY FROM THORN'S SPENNYMOOR FACTORY

Thorn's products go through intensive quality manufacturing, assuring the best processes to develop better products all the way. In addition, we are one of the first companies in the UK to be certified to ISO 14001 – the standard for environmental management. In addition, we have successfully been recommended for certification to ISO 50001:2018 for energy management. Our factory at Spennymoor in the UK, has achieved a reduction of approximately 25% in significant energy uses and 14% in electricity use compared to the previous year.

07

FIVE YEAR GUARANTEE

All Thorn products carry a five year guarantee.



**5 YEAR
GUARANTEE**

08

ZUMTOBEL GROUP MEMBER

The Zumtobel Group is an international lighting group and a leading supplier of innovative lighting solutions, lighting components and associated services. With its core brands, Zumtobel, Thorn and Tridonic, the Group offers its customers around the world a comprehensive portfolio of products and services.

THORN
LIGHTING

GET IN TOUCH

www.thornlighting.com/contacts

WE
MAKE
LIGHT
WORK

07/2021