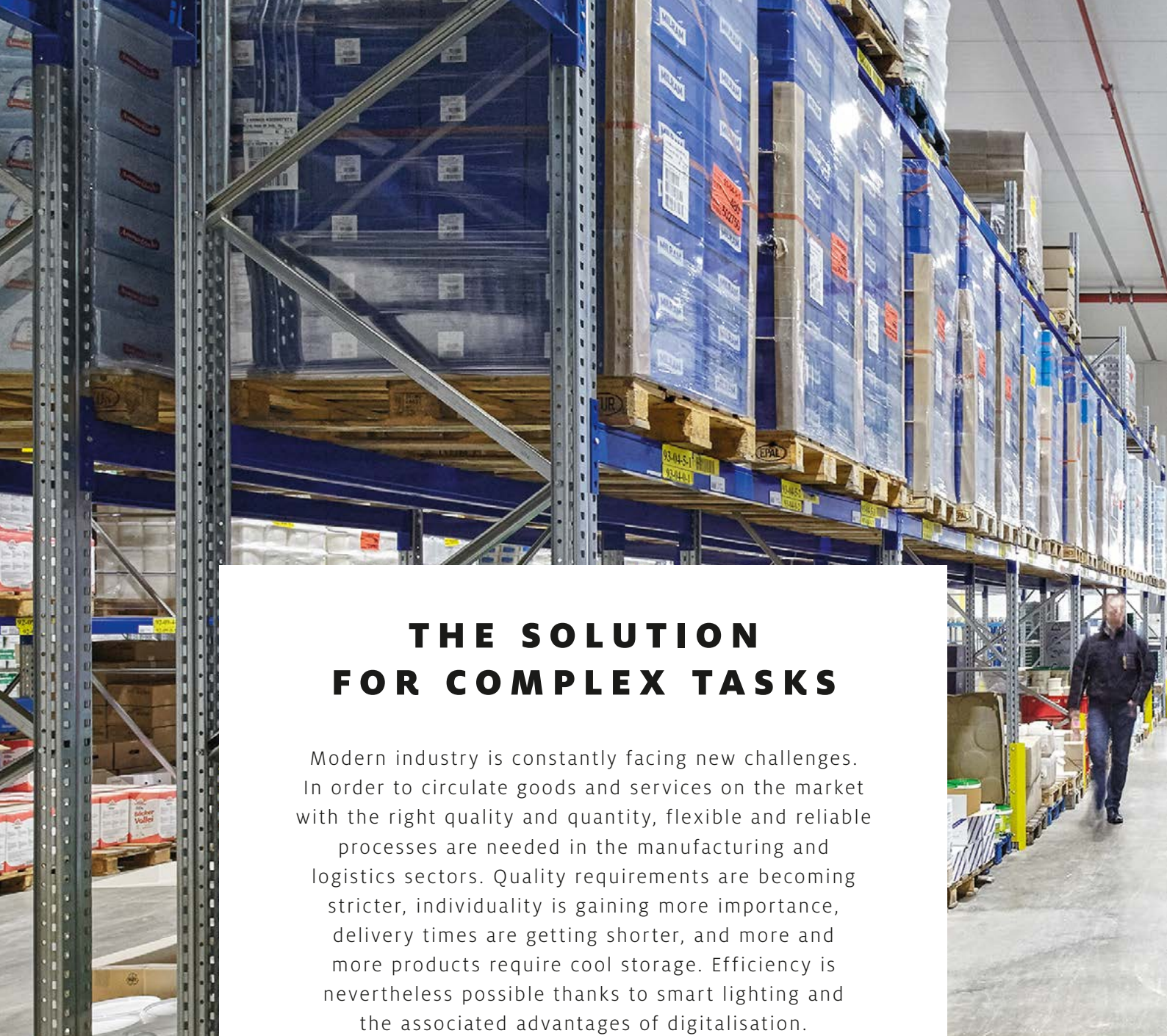


SMART INDUSTRY

THE EASIEST WAY
TO COMPLETE COMPLEX TASKS



THE SOLUTION FOR COMPLEX TASKS

Modern industry is constantly facing new challenges. In order to circulate goods and services on the market with the right quality and quantity, flexible and reliable processes are needed in the manufacturing and logistics sectors. Quality requirements are becoming stricter, individuality is gaining more importance, delivery times are getting shorter, and more and more products require cool storage. Efficiency is nevertheless possible thanks to smart lighting and the associated advantages of digitalisation.

QUALITY

In industry, mechanical challenges are part of everyday life. Robust luminaires are resistant even to extreme temperatures and other environmental influences. Yet despite the increasing automation of production and logistics processes, people still play an essential role. Working conditions and therefore light have a major influence on employees' work performance. In order-picking areas, high-quality lighting is crucial.

FLEXIBILITY

Modern merchandise management requires increasing flexibility. Production and logistics areas are frequently expanded or adapted. An intelligent lighting system not only meets current expectations, but is also well prepared to incorporate future options, including the Internet of Things. Digitalisation is advancing and a modern system offers the flexibility to integrate services that haven't even been invented yet.



EFFICIENCY

Light makes an important contribution to optimising processes. As a result of long operating times, lighting in industry also makes up a high percentage of power consumed. In logistics, this can be up to 20%. 70% of this can be saved with an intelligent comprehensive package, which includes efficient lighting, lighting controls for controlled use and digital services such as energy monitoring.

SAFETY

In production and logistics, the number of self-driving systems is increasing, which in turn increases the need for control. Light is essential to be able to grasp the full extent of a situation and to recognise dangers quickly. Services integrated into the lighting infrastructure also offer the ability to control speed and avoid collisions.

TRANSPARENCY

For many industrial companies, every production step must be monitored. In series production facilities working with large quantities and mass customisation, this often becomes a challenge. Intelligent sensor pallets create transparency by providing an overview of the entire customer order using sensors in the lighting infrastructure.

RESCLITE

safety luminaires

Escape route, anti-panic and spotlight lenses for walls and ceilings, even in rooms with very high ceilings

zumtobel.com/resclite



CRAFT II

The robust powerhouse for industrial use
zumtobel.com/craft2



TECTON

The universal continuous-row lighting system for storage rooms and production facilities
zumtobel.com/tecton



Lighting management

Future-proof system and sensors specially developed for industrial use

zumtobel.com/litecom



Safety lighting

Escape-sign luminaires with ISO 7010 pictograms for industrial use and supply systems

zumtobel.com/crossign

LIGHT INFRASTRUCTURE

Lighting is one of the standard services in any room. Nothing could therefore be more obvious than to use the infrastructure of a modern lighting solution for digitalisation as well.

LUMINAIRES

Smart luminaires use the latest LED technologies to achieve maximum energy efficiency with the help of high luminous efficacy and precise light distribution. When retrofitting conventional lighting systems with LED lighting, the connected load and energy costs can often be halved. The long life time of the luminaire also significantly reduces maintenance costs.

Our product recommendation for industrial use:
TECTON continuous-row lighting system, CRAFT II high-bay luminaires

SAFETY LIGHTING

In a smart lighting solution, safety luminaires are an integral part of the system, saving time and costs for wiring and installation. During operation, a central monitoring system ensures seamless compliance with legal requirements – with no need for manual testing or documentation.

Our product recommendation for industrial use:
RESCLITE safety luminaires, CROSSIGN escape-sign luminaires, ONLITE central eBox central supply system

LIGHTING MANAGEMENT

Smart companies use motion sensors to detect when and where light is needed. Daylight linking reduces power consumption by a further 20 to 30%. With the freedoms of standardised DALI-2 technology, lighting management becomes a future-proof key to the Internet of Things.

Our product recommendation for industrial use:
LITECOM lighting management system

About Zumtobel

Part of the Zumtobel Group, Zumtobel is a leading international provider of holistic lighting solutions, delivering professional lighting for buildings both indoors and outdoors.

For over 70 years we have been developing innovative and individual lighting solutions and are constantly guided by a unique design approach. Our goal is to improve people's quality of life through light, by offering an extensive range of high-quality luminaires and lighting control systems and combining these with comprehensive consultations and services.

81%



dim level



+22°C

temperature

40%

humidity

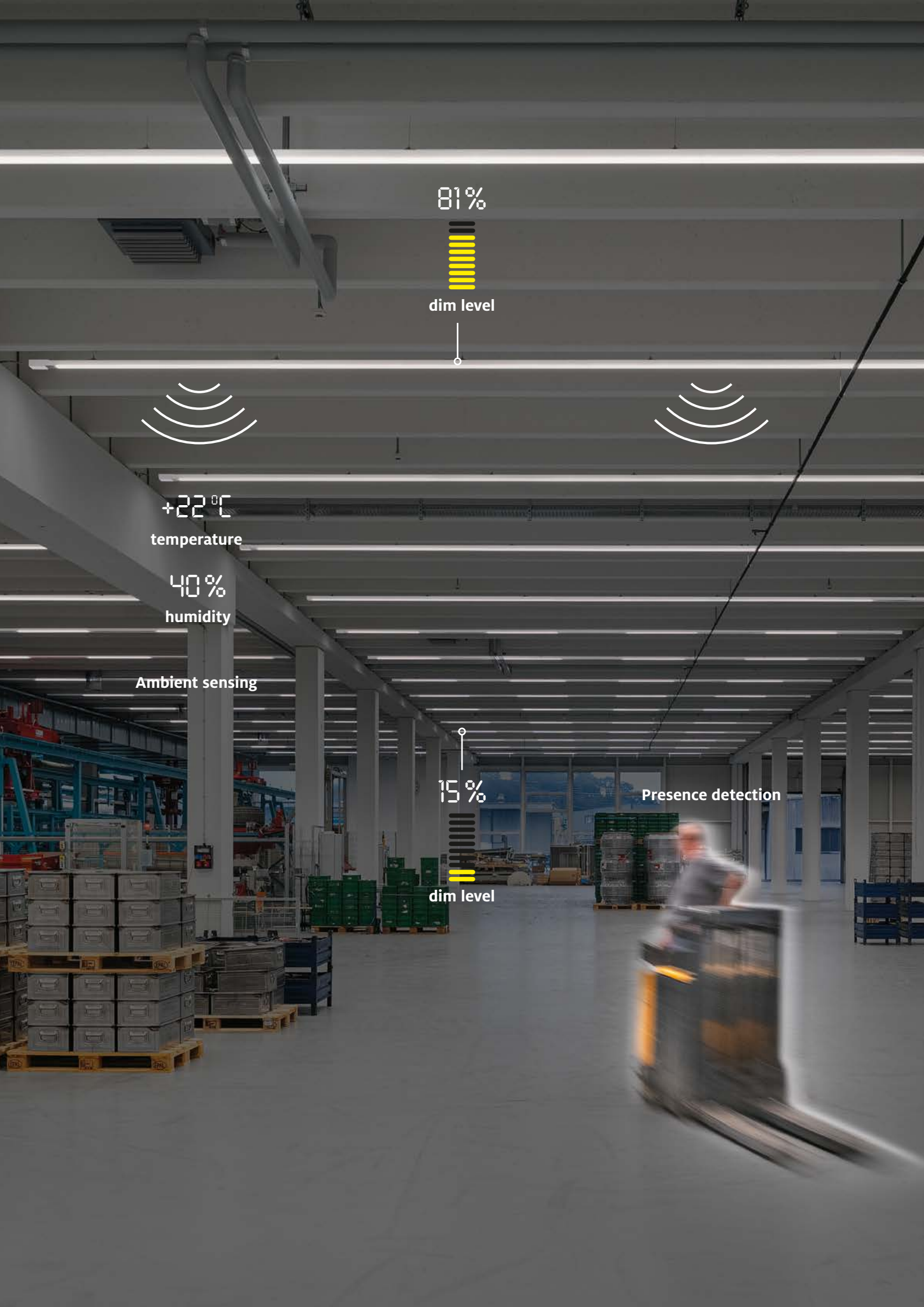
Ambient sensing

15%



dim level

Presence detection



DIGITAL SERVICES

For a minimal total cost of ownership, modern lighting infrastructure enables, simplifies and accelerates digitalisation.

In the networked world, the collection, visualisation and analysis of data is a fundamentally important discipline.

REMOTE & ENERGY MONITORING

- Excellent system transparency thanks to the display of dimming level, power consumption, error status and diagnostic values for LED drivers in real time
- Optimisation of energy costs for the lighting and achievement of CO₂ targets through the cumulation and aggregation of energy consumption figures, which are considered as evidence of continuous improvement
- Proactive planning of maintenance tasks and reduction of downtimes in the production process by comparing usage data
- Continuous monitoring for compliance with specific limit values using automatic notifications via email or SMS (alarming)

AMBIENT SENSING

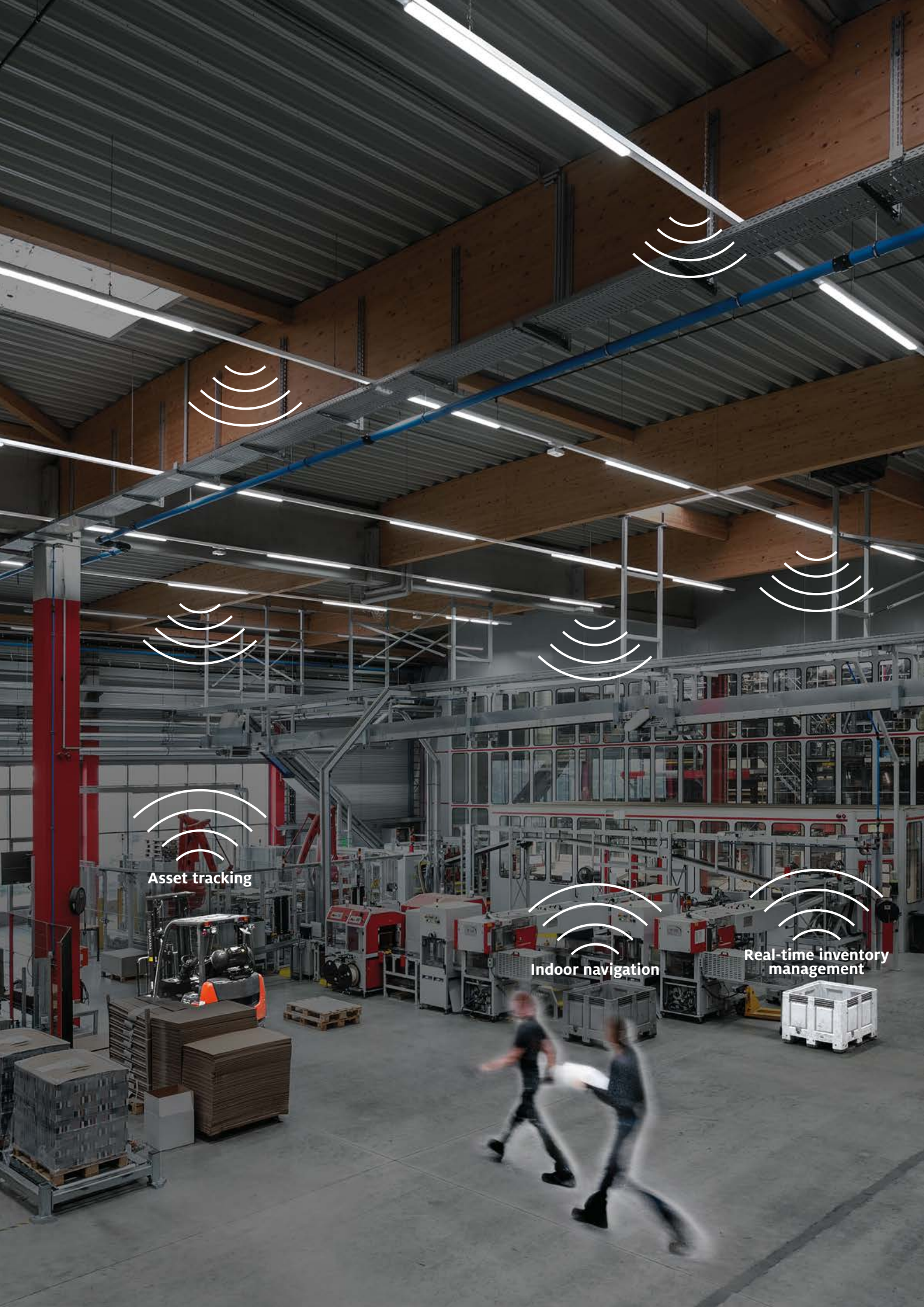
- Integration of sensors that measure environmental conditions such as temperature and humidity, CO₂ levels or the particle content of volatile organic compounds (VOC)
- Optimised control parameters and the associated reduction of operating costs through direct incorporation of the measured values in the ventilation and air-conditioning technology
- Improved workplace quality thanks to a high sensor density and the resulting improved overview of the actual situation
- Seamless documentation of storage conditions by recording temperatures together with the location of a product (asset tracking), for example to prove an uninterrupted cold chain



Remote monitoring and energy management video



Ambient sensing video



Asset tracking

Indoor navigation

Real-time inventory management

DIGITAL SERVICES

Data-based decisions are the foundation for effective and efficient action. A central role is played by the real-time location of objects and people, which is made possible by various technologies.

INDOOR NAVIGATION

- Good orientation in an unfamiliar environment with the help of mobile devices such as smartphones
- Concrete route guidance for finding the place you are looking for quickly and safely
- Reduction of travel times in large, confusing or unfamiliar company premises

ASSET TRACKING

- Localisation of goods, equipment or tools using asset tags
- No unnecessary search or wait times for materials in production processes
- Less downtime
- Automated real-time inventory management for a better overview, prevents unnecessary purchases
- Improved occupational safety, as self-driving vehicles automatically reduce their movement speed, for example if a person is somewhere they cannot easily be seen
- Efficient maintenance processes thanks to location-based information for service technicians

DATA ANALYSIS

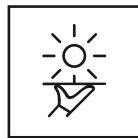
- New insights from the collection and aggregation of data
- Easy monitoring of problematic locations through a colour-differentiating heat map display, of heavily frequented routes, for example
- Detection of detours and concrete instructions for employees using the individual treatment and overlay of driving and walking route data
- Recording of travel times with a comparison of individual and average values to find the potential for optimisation



Asset tracking video

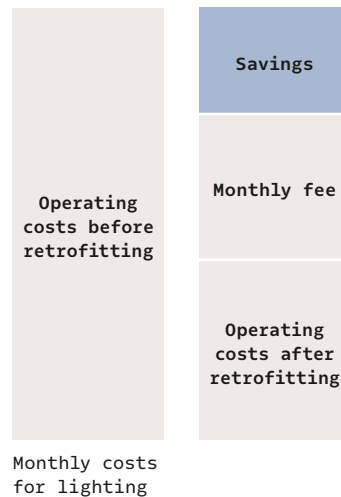
SERVICE PRODUCTS FOR INDUSTRY

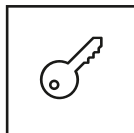
The rapid pace of technological development has increased the scope and complexity of lighting systems in production and logistic environments. Zumtobel counters this with an extensive portfolio of physical and digital services – for a smart life with light.



LIGHT AS A SERVICE

This Zumtobel service allows industrial companies to place light and all the work associated with it in reputable, expert hands. From designing a modern and efficient lighting system to turnkey delivery through to recurring maintenance – everything is included. It also offers the financial incentive of not buying the light but instead purchasing it in fixed monthly instalments to start saving from day one – in terms of costs as well as CO₂ emissions caused by power consumption.





TURNKEY SERVICE

To provide a turnkey state-of-the-art lighting solution, Zumtobel handles all tasks from project design to installation and commissioning. With international expertise in equipping production and logistics facilities, Zumtobel acts as a general contractor and central point of contact for a customised complete package from a single source.



PROPERTY MANAGEMENT

This Zumtobel service ensures that a lighting solution will provide the best possible service for many years, even under heavy industrial use. A general service level agreement in which services and response times are adapted to the needs of the customer forms the basis of the service package, along with an annual maintenance service for the entire lighting infrastructure. Additional services such as on-site support are available on request.



Turnkey services video

T H E L I G H T



zumtobel.com/contact