

# CRAFT II

THE POWER PACK THAT LASTS

Left: CRAFT II plus - the unbeatable power pack. Protective shield made from a single mould: CRAFT II plus is created using the aluminium die-casting process. The luminaire is distinguished by its impressive resilience and revolutionary thermal management - even when faced with challenging ambient temperatures and extreme mechanical or chemical stresses.

**Right: CRAFT II performance - the robust lightweight.** Sustainably produced, powerful in action: housed in a lightweight yet sturdy sheet steel housing, the CRAFT II performance is a highly efficient high-bay luminaire. Extremely versatile thanks to six different light distribution curves. And with housing "Made in Germany", in a zero carbon production process.

# CREATED FOR CHALLENGING ENVIRONMENTS

CRAFT II – is not just two powerful new high-bay luminaires. CRAFT II is more than that: it's the first generation of Zumtobel high-bay luminaires based on the platform principle. Not a fixed stand-alone solution, but a tailor-made system. Maximum performance. And perfectly adapted to the requirements of the relevant operation.

# REVOLUTIONARY THERMAL MANAGEMENT

The CRAFT II plus uses two fundamental principles of physics, the Venturi effect and the Coandă effect, to cool and clean itself. The result: the innovative high-bay luminaire is in a completely different class from its predecessor model and can withstand high ambient temperatures (up to 70°C) – throughout its entire life time of around 100 000 hours. To achieve this, CRAFT II plus relies on an intelligent interplay of air pressure, air speed and air temperature. And all in an aluminium housing with excellent thermal conductivity.

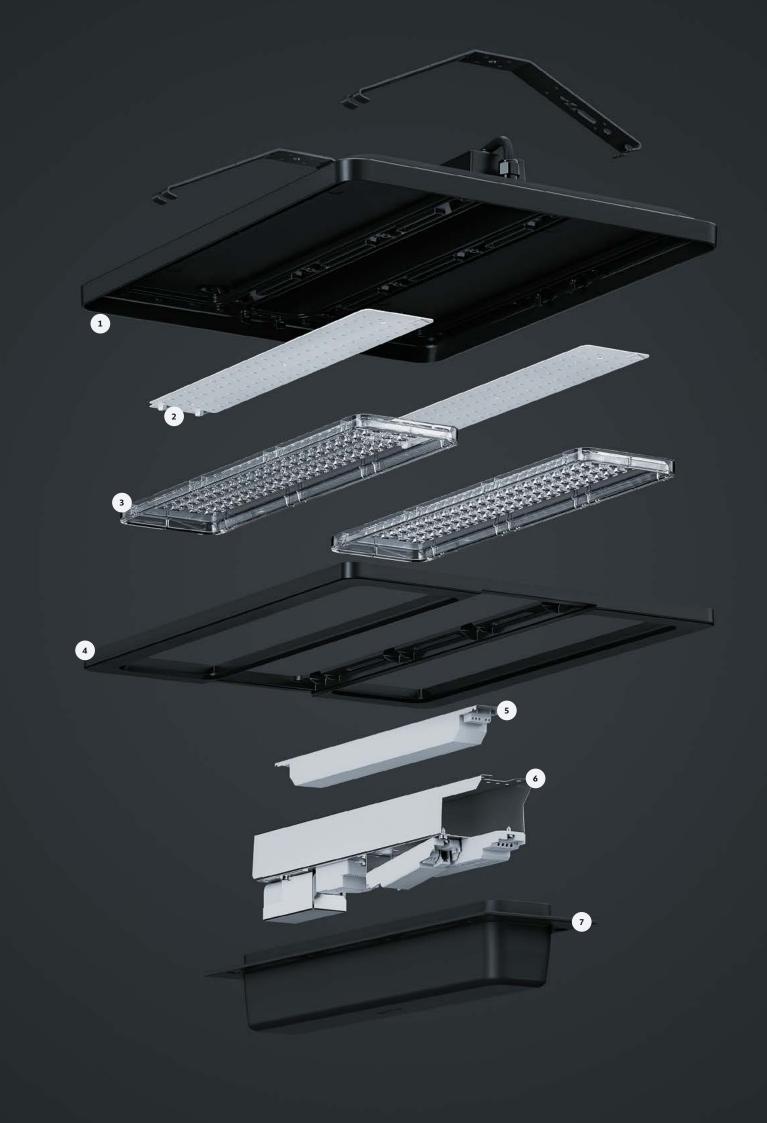
## Self-cleaning thanks to the Coandă effect.

The Coandă effect is a principle of physics used in the aviation industry and applied to CRAFT II plus: a pressure imbalance presses the airflow against the curved surface of the luminaire. This efficiently cools the LED boards in particular. At the same time, the airflow also removes everyday dust from the surface of the luminaire.

### Efficiently cooled thanks to the Venturi effect. Specially designed nozzles

Specially designed nozzles in the body of CRAFT II plus generate negative pressure and thus ensure that the air circulates at a high speed between the LED drivers and LED boards. The so-called Venturi effect cools the CRAFT II plus luminaire very efficiently and allows the power pack to be operated even at extremely high ambient temperatures.

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## RESILIENT Power Pack

Whether in heavy industry, in agriculture, in swimming pools or gymnasiums – wherever extreme chemical and mechanical stresses are at play, the strengths of the CRAFT II plus really come into their own. Tough. Strong. Resilient.
And housed in a high-quality aluminium housing.
The CRAFT II plus luminaire is particularly impactresistant thanks to a glass fibre-reinforced polyamide cover for the electronic components and thanks to diffusers, which are resistant to chemical and mechanical stresses.

### 1 Housing

Impact- and corrosion-resistant aluminium housing with copper content reduced by 80%, powder-coated for special surface strength and maximum protection in challenging environments.

## 2

#### LED boards

LED boards designed for a very long life time, and premium-quality LED chips, with increased resistance to moisture, temperature and chemicals.

## 3

### Diffusers

Resistant to chemical influences and mechanical stresses, available in polycarbonate, PMMA or CHEMO.

## 4

#### Frame

A solid frame made of the same material as the housing protects the main internal components and ensures optimum protection of the sealing elements.

#### LED drivers

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Industrial LED drivers specially developed for CRAFT II for increased safety, thanks to sturdy design and extensive testing under extreme conditions, high reliability thanks to the selection of premium-quality components.



#### Connectivity and sensors

There are several sensor technology options to choose from for maximum convenience and efficiency in a wide range of application areas: microwave sensors detect presence or absence and all variants can be operated via DALI or wirelessly. Even IoT integration is possible.



#### Cover for electronic components

Impact- and corrosion-resistant, made of glass-fibre-reinforced polyamide, for optimum transmission of radio waves from Bluetooth<sup>®</sup> devices and sensors.





### 1

**PIR multi-sensors** detect ambient light and presence from a height of 8 to 16 metres. This data can be used for maximum energy savings.

CRAFT II performance luminaires also come with a PIR standalone sensor (PIRILD) and an IR remote control. A PIR sensor, which allows wireless communication via Bluetooth® for presence and daylight sensor technology, is available as a further option (PIRBC).

## 2

Microwave sensors (MWS) combine presence detection from a height of 5 to 12 metres with IP66 protection and an IK08 impact resistance rating. A highly resistant luminaire can therefore significantly reduce energy consumption.

The MWDABC microwave sensor option adds to the advantages listed above by allowing wireless communication via Bluetooth®. 3

With BC Bluetooth® Wireless Control modules, the luminaire is embedded in a dimmable and groupable **basicDIM Wireless** solution for <u>individual rooms.</u>

Bluetooth<sup>®</sup> mesh network

up to 15 m distance between luminaires

up to 20 m distance from mobile control device

up to 250 wireless nodes per network

any number of networks



4remoteBT app
to operate a
basicDIM Wireless solution
(Casambi ready)

# GOOD INTELLIGENCE PROTECTION

Resistant and intelligent. The new generation of CRAFT II luminaires provides several options for conveniently saving a lot of energy. Presence- and daylight-controlled. Not only in new builds but also in refurbishment projects. Cost-effective and even wireless if required. Luminaires and sensors can be wirelessly integrated, grouped and controlled. Even networking in the Internet of Things is possible. The required IoT modules are simply built into the luminaire.

### up to **85%** Daylight- and motiondependent dimming/ brightening basicDIM Wireless control unit (PIRBC) standalone with IR remote control (PIRILD) up to 70% Motion-dependent basicDIM Wireless control unit (MWDABC) dimming/brightening without lighting management, optional master-slave switch (MWS) up to **60%** Dimming/brightening basicDIM Wireless control unit (BC) 0n/off without lighting Standalone and wireless solutions management up to 50% (refurbishment LED) DALI dimmable solutions

### ENERGY SAVING POTENTIAL





# PROTECTIVE SHIELD FROM A SINGLE MOULD

CPS – three letters, one promise: the so-called CRAFT PROTECTION SHIELD provides the CRAFT II product family with a type of protective shield for challenging industrial environments. In both the aluminium and sheet steel variants, the housing is made from a single mould. Zumtobel thus guarantees that sensitive components such as sensors, emergency or IoT technology are completely covered and also prevents water from getting into the luminaires.

> On conventional high-bay luminaires, screws on the top mean that there is a danger of moisture and chemicals getting into the housing from above. The CRAFT PROTECTION SHIELD eliminates potential entry points on the top of the luminaire.

All screw connections on CRAFT II performance and CRAFT II plus are on the underside of the luminaire and thus completely covered by the innovative CPS. A protective shield that is as simple as it is effective.







# HIGH-PRESSURE CLEANING

Attractive appearance, minimal cleaning effort: the clear housing design with smooth surfaces and rounded corners prevents water or dirt from accumulating on the luminaires of the CRAFT II product family. But does dust still sometimes need to be removed? The smooth surface (CRAFT II performance) and the large distance between the ribs on the high-bay luminaire (CRAFT II plus) makes it easy to clean the luminaires by hand with a cloth.

CRAFT II luminaires are supplied with water protection class IP66 as standard. Those who want to bring out the heavy guns, for example a high-pressure washer, can do this for the CRAFT II plus luminaire without hesitation This can be supplied with IP69 via myCRAFT II on request. This maximum degree of protection is made possible by the CRAFT PROTECTION SHIELD and the innovative sealing system, which places all sealing channels at the same level. For the CRAFT II plus, these come with a corrosion-resistant liquid seal, which follows the shape of the sealing components. Maximum protection. Even at maximum water pressure.

	CRAFT II performance	CRAFT II plus
Housing material	galvanised steel plate (powder-coated)	die-cast aluminium
Protection class	IP66	IP66
		IP69 via myCRAFTII



## LIGHT QUALITY FROM ZUMTOBEL

The CRAFT II product family doesn't just make use of pioneering technologies, it also benefits from the extensive project experience and in-depth lighting expertise of the Zumtobel Group. For example, the optics engineers have replicated a natural phenomenon called TIR – total internal reflection. Transparent, laser-structured lenses with a micrometrically small, diagonal dome-like structure reflect the whole ray of light like a mirror. This distributes the light rays optimally in the room – precise and highly efficient.



Wide Beam (WB)



Narrow Beam (NB)



Wide Beam Controlled Glare (WBCG)



Narrow Beam Controlled Glare (NBCG)



Very Wide Beam (VWB)



Extrem Narrow Beam (XNB)



Asymmetric Beam (AB)



Without controlled glare optic

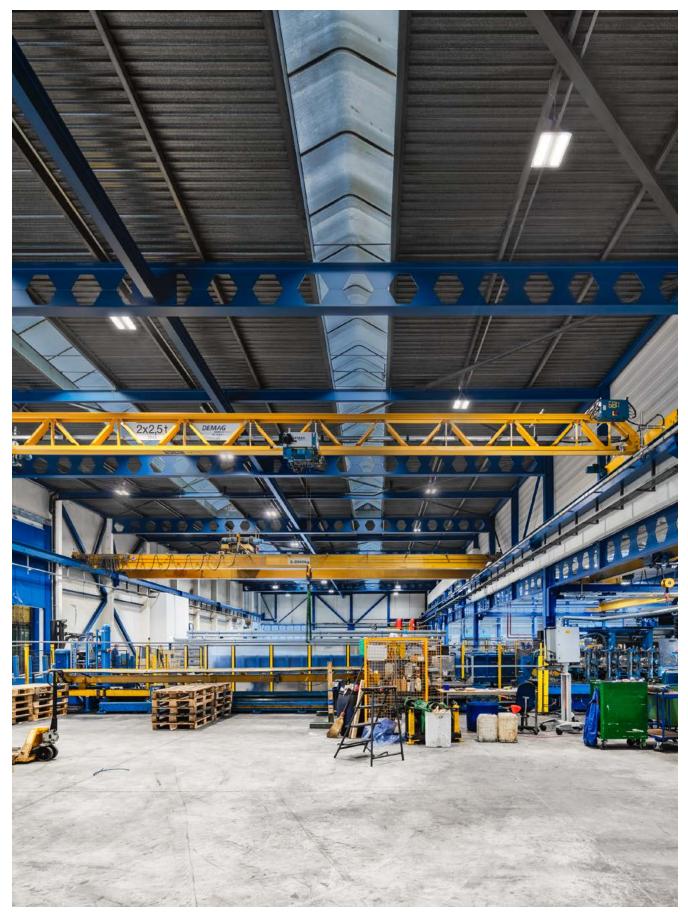
### **CONTROLLED GLARE OPTIK**

But that's not all. The CRAFT II product family also offers a very elegant solution to a common problem in all high-bay luminaires: their glare or perceived glare. This occurs for example in a logistics setting or in sport - especially in any situations in which people look up and directly into the light from a high-bay luminaire. For these situations, Zumtobel has devel-



With controlled glare optic

oped an innovative "controlled glare optic". An integrated louvre enhances the appearance of the CRAFT II performance or CRAFT II plus luminaires and creates two additional light distribution options: "narrow beam controlled glare" and "wide beam controlled glare". These are extremely effective in reducing glare to a minimum and enable a UGR < 19.



Forming AG, Möhlin | CH



Intercable Arena, Bruneck | IT



Reitsporthalle Estermann (equestrian centre), Hildisrieden | CH

### CRAFT II PERFORMANCE M

### CRAFT II PERFORMANCE L



Temperature range	-25°C to +65°C	
Emergency	Self-contained (E3, E3D, E3DUK) Central supply	
	Presence(8-16m) and ambient light: PIR multi-sensor for central control PIRBC sensor for basicDIM Wireless soluti PIRILD standalone sensor with IR remote o	
nsors MWS microwave sensor MWCF microwave sensor with corridorFUNCTION MWDABC microwave sensor for basicDIM Wireless solution		
Controls	Switchable, DALI, basicDIM Wireless solution (Casambi ready, based on Bluetooth® Low Energy protocol) with remoteBT app for operation	
Light distribution	Wide Beam, Wide Beam Controlled Glare, Very Wide Beam, Narrow Beam, Narrow Beam Controlled Glare, Extrem Narrow Beam, Asymmetric Beam	
Housing material	Galvanized steel sheet (powder coated)	
Typical applications	Logistics, retail, automotive, manufacturing	
Luminaire efficiency	up to 1901m/W	
Colour temperature	3000K, 4000K, 5000K, 6500K, Balanced White 3000-6500K (on request)	
Luminaire luminous flux	10000lm, 13500lm, 17500lm, 21000lm	20000lm, 27000lm, 35000lm, 42000lm
Dimension	540 x 470 x 77 mm	1045 x 470 x 77 mm
mounting type	Surface-mounted (celling, wall) Suspended (chain suspension, cord suspen Recessed TECTON compatible Trunking	sion, vertical cable suspension)
Mounting type	Surface-mounted (ceiling, wall)	

#### CRAFT II PLUS M

### CRAFT II PLUS L





Surface-mounted (ceiling, wall) Suspended (chain suspension, cord suspension, vertical cable suspension) Recessed TECTON compatible Trunking 518 x 414 x 109 mm 1025 x 414 x 109 mm 10000lm, 13500lm, 17500lm, 25000lm 20000lm, 27000lm, 35000lm, 50000lm 3000K, 4000K, 5000K, 6500K, Balanced White 3000-6500K (on request) up to 1951m/W Metal processing, heavy industry, wood, textile, chemical production, cool logistics, Food industry (FI) Aluminium die-cast Wide Beam, Wide Beam Controlled Glare, Very Wide Beam, Narrow Beam, Narrow Beam Controlled Glare, Extrem Narrow Beam, Asymmetric Beam

Switchable, DALI, basicDIM Wireless solution (Casambi ready, based on Bluetooth® Low Energy protocol) with remoteBT app for operation

Presence(5-12m): MWS microwave sensor MWCF microwave sensor with corridorFUNCTION MWDABC microwave sensor for basicDIM Wireless solution

Self-contained (E3, E3D, E3DUK) Central supply

-40 °C to +70 °C



Video CRAFT II

## THE LIGHT



### zumtobel.com/contact