

| PROJECTS | DIALOGUE | 4 |
|----------|--|----|
| | MASTERING LIGHT Mastering the Shape of Light Mastering the Body of Light Mastering the Intelligence of Light | 9 |
| | BEST PRACTICE MAC Forum Munich Brunico City Centre Kassel City Centre MPREIS | 36 |
| | GALLERY Architecture and the Arts Public Space Roads and Traffic Airports and Logistics | 52 |

INSIDE ewo

Creating Light, Thinking Light

116



ABOUT THE POTENTIAL OF URBAN SPACE

"We would like everyone to feel comfortable in public spaces - and light like a campfire can draw people outdoors and bring them together."

> Hannes Wohlgemuth in dialogue with Sandra Hofmeister, editor-in-chief of DETAIL

SANDRA HOFMEISTER: In early 2019, you took over as the second-generation CEO of ewo. When you work with light, two generations is a long time and there are a great many leaps in terms of development. Where is your focus today?

HANNES WOHLGEMUTH: We have always been quick to adapt to completely new settings. My father started off as a blacksmith, and it is this know-

how that later became an incubator for the company. When my parents became fascinated by light, their curiosity prompted them to found ewo in 1996. Digging deep into the subject, they soon became experts in navigating and directing light. That was a quantum leap. After that, the next step were LED technology and electronical systems. And today, digitisation is at the top of our agenda. I grew up in the digital world, so I am particularly open to all things digital and forward-looking. Basically, mastering new domains and cultivating new fields of knowledge is deeply rooted in our DNA.

SH: Where are you heading in terms of new technological developments?

HW: At the moment, I find it particularly fascinating how we as manufacturers of light can improve someone's sense of well-being in public spaces during

daytime, in the evening and at night and by that I mean above and beyond a mere focus on efficiency, which we all have already taken to heart anyway. That is why, in late 2019, we were thrilled to present a new optical system at the PLDC: ewoLightTile, our novel light-guiding panels. The motivation driving this development was to further improve the quality of light and

With ewoLightTile, the individual LED units on the emitter are no longer visible: What you see is a homogeneous, smooth surface with a very pleasant, high-level visual comfort that distributes the light precisely and evenly, making it ideal for projects where the focus is on

SH: "Mastering Light" is your key concept that epitomises the expertise of



your company. What exactly does it

HW: We think of lighting in three different spheres: On the one hand, there's light itself: the Shape of Light; and on the other hand you've got the housing, the luminaire: the Body of Light. Now there's also a third sphere: the way in which light reacts intelligently to its to develop an alternative to lens optics. environment. It's what we call the Intelli-

gence of Light. We strive to master all three dimensions in order to be able to develop very specific effects and statements with our products.

SH: Light is immaterial, and intangible but its effect, for instance its colour or how it is directed, can be enormous. What are the technical means behind the Shape of Light concept?

> HW: In essence, the Shape of Light refers to the heart of a luminaire. Instead of relying on external service providers, we have built upon our own expertise in order to optimise the way light is directed, so that our optics can provide designers with a wide range of options to use light individually and for any project, however diverse.

> SH: What exactly does the Body of Light mean for a company that comes from the field of metalworkina?

> HW: By Body of Light we mean the housing: its skin, so to speak, which has an effect on its environment and is defined by its materials, texture and colour. We want to give planners as much freedom as possible and therefore offer different shapes, surfaces and design variations - all the way to the creation of an entirely individual luminaire. Thanks to our technical know-how, we can

provide any shape or form lighting planners or landscape architects can think of.

SH: The Intelligence of Light on the other hand means controlling light with the help of software. What's behind that?

HW: There are two sides to this: Firstly. luminaires contain built-in hardware. And then there is the software: Equipped with communication technologies, the

Dialogue

luminaire can receive signals and carry out commands. In 2017, we founded a start-up called connexx with the aim of boosting our in-house development of HW: That reminds me of a recent project believe that we can restore the signifiall IoT aspects that are becoming ever more important for our sector.

SH: Designers and building owners alike are increasingly focusing on light in public places. At the same time, public space is defined by many aspects, such as the notion that it should serve the community. To what extent, in this context, does light have a responsibility towards society?

HW: Light fulfils a crucial function in places where people like to meet and where social exchange takes place, because nobody likes to gather at night in the dark. Light can warrant a wide range of qualities – not least in terms of SH: There are many parameters in public a strong need for safety. While this topic is being taken very seriously, it is often dealt with in a one-sided manner. For example, the effort to apply standards to public spaces is primarily about HW: One option is to define softsafety. We on the other hand also look at how light can improve the quality of public spaces. We consider it our mission to provide the tools for this. If light is used strategically, you do not need an enormous amount of it in order to create security and a sensation of connected to a central software, new well-being.

SH: ewo has brought light to a whole host of public spaces that have turned into urban living rooms of sorts. Could you elaborate with an example?

HW: Well, there's this new district in Lyon called 'Part Dieu' that we were asked to illuminate. You see, the Body of Light is not just a light-emitting object: The luminaire can also contain other features, such as coat hooks and mirrors that are fitted onto the pole - or seating that expands from the pole. That way, the luminaire is used as an object and piece of furniture within a public space: It serves a function during the day, and at night its warm, soft light produces a light to evoke emotions - and at ewo, feel-good effect.

SH: Light evenly distributed or selective illumination - which approach better down to designing outdoor spaces in

recreates the sensation of being in a such a way that people enjoy spending living room?

in Germany, where the planner envisioned dynamic, zoned lighting as opposed to uniform illumination; in other words, light that is modelled on nature. have the chance to activate public To achieve that, we introduced different illumination levels that can change and adapt - which brings us back to the Intelligence of Light. We use digital sensors that allow us to create "rhythms" consisting of alternating lighter and darker zones according to the respective requirement and time of day. And we can create different scenarios with the help of additional sensors that register, for example, the number of people on a square.

spaces that are not constant and predictable. How can a control system react to that specifically?

ware-controlled rules and, based on empirical values, specify when and how the light should behave in a certain way by pre-programming different scenarios. The second method is more complex: In a setting where the entire system is rules can be defined at will - for example for events that require subdued lighting, such as Christmas markets. The third and most interesting method is one where this strategy is extended by including sensors that analyse their surroundinas.

SH: ewo has been on the market with its high-quality lighting systems for over 20 years. What's next?

HW: With all the latest in digitisation and automation, I see a strong trend where lighting designers will delve more deeply into the quality of time spent outdoors. There will also be an increase in the way we tap into the potential of we're all set and ready to go. Overall, however, I think that dynamic lighting will become big in the next few years. It's all

time in them at all hours. And to that end, light is a crucial medium. We cance of, say, the Italian piazza; a place that attracts people and encourages social interaction. Basically, we now spaces with the help of light.



LYON PART DIEU Lyon, France, 2019

Lighting Designer: Agence ON Products: ewoIndividual

"Light provides us the opportunity to activate public spaces."

MASTERING LIGHT

8



MASTERING THE SHAPE OF LIGHT

LIGHT GUIDED ANY WAY YOU WANT. ANY COLOUR. ANY DISTRIBUTION.
ALWAYS AT THE VERY HIGHEST LEVEL OF QUALITY.

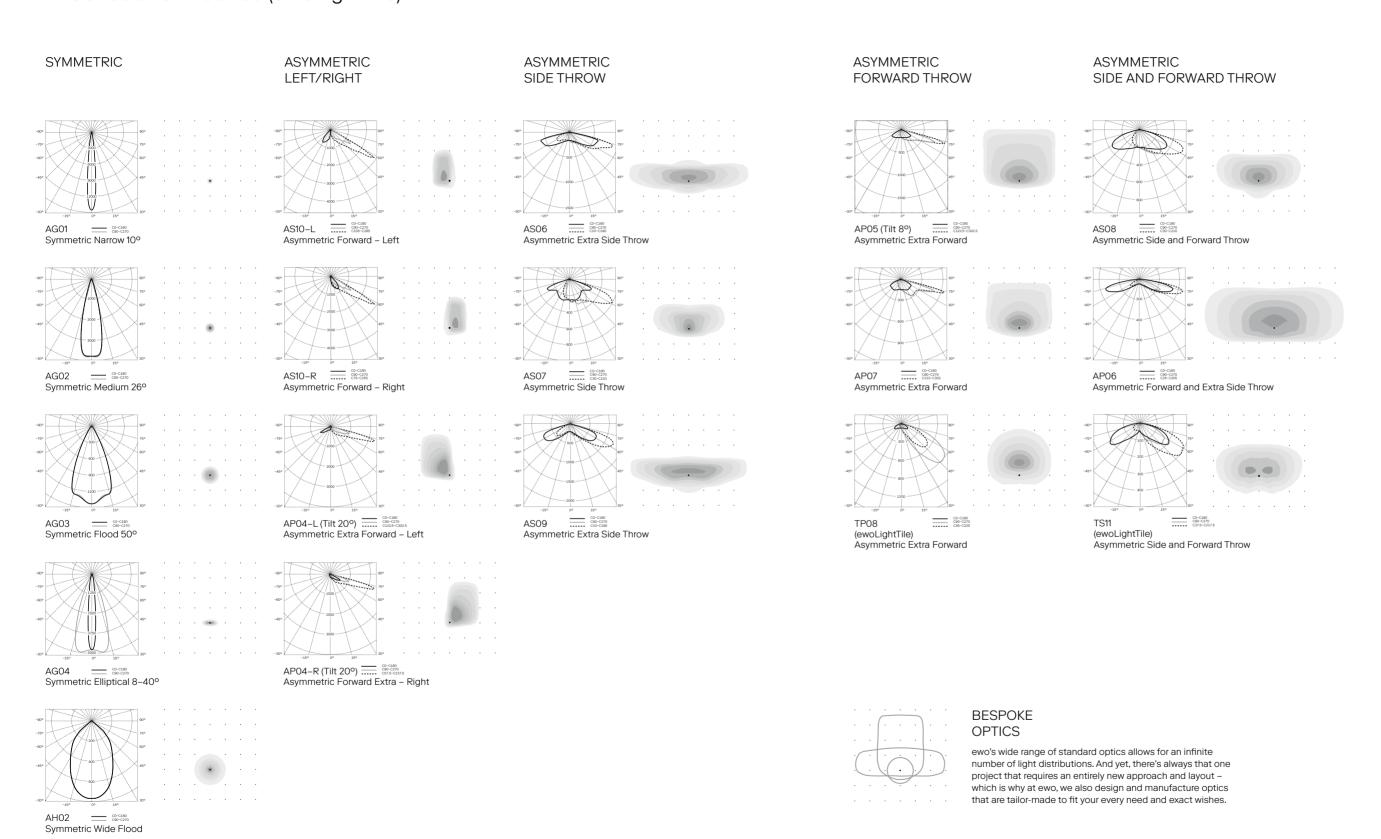
What is the shape of light? ewo knows the answer. Every product is envisioned and crafted to refine and optimise its lighting effect. And to achieve that, ewo's two Light Engines, A–Series and ewoLightTile, allow complete creative freedom:

The ewo A-Series, our very own modular Light Engine, enables every imaginable lens combination and light distribution – giving lighting designers all the flexibility and tools they need to create the most effective and state-of-the-art lighting solution possible.

With ewoLightTile (T–Series), ewo has premièred an absolute novelty on the world stage of optics: Glare-reduced light-guiding panels that unite two seemingly opposing qualities: Guaranteeing precise, homogeneous illumination and at the same time visual comfort at the very highest level, ewoLightTile becomes the perfect tool to fine-tune projects in which people are close to the light source – whenever light increases human well-being by creating that cosy feel-good effect.

Mastering the Shape of Light 11

STANDARD LIGHT DISTRIBUTIONS A–Series and T–Series (ewoLightTile)

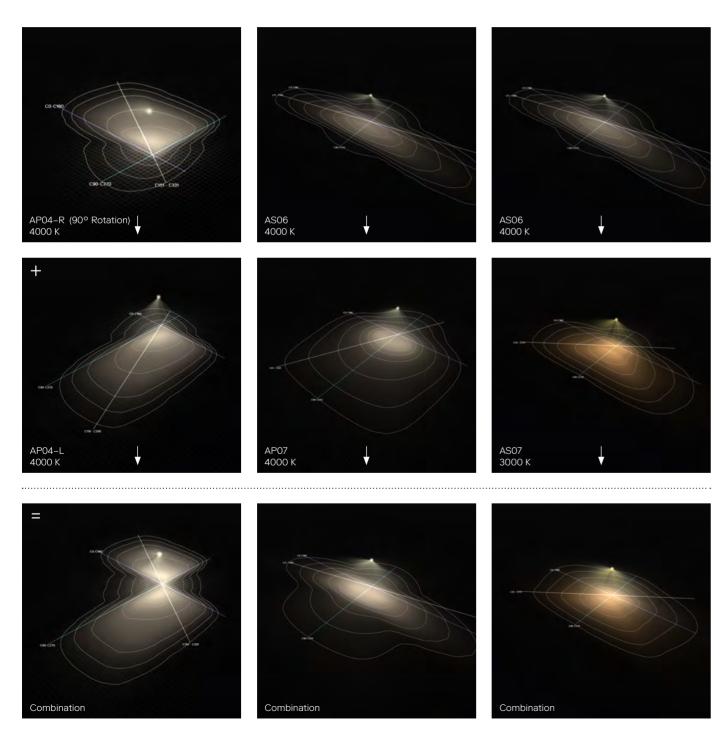


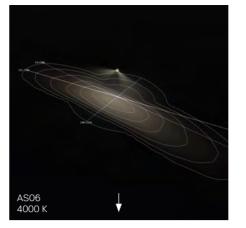
ewo Mastering the Shape of Light 13

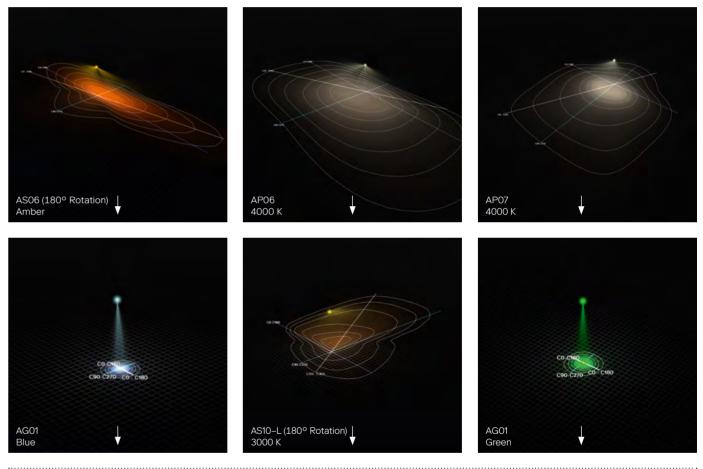
1.799.866.966 LENS COMBINATIONS: MAXIMUM FLEXIBILITY

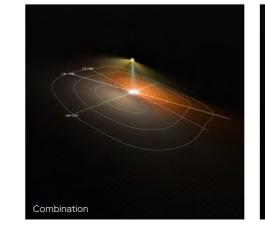
Versatility through modularity: With countless lens and colour combinations, the exact right solution is just a module away. Spot on – with the greatest possible individuality.

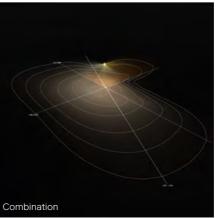
The ewo Product Configurator now features a brand-new component that turns the configuration process into photometric output in real time: LightRay. Visit configurator.ewo.com to create your own distributions.

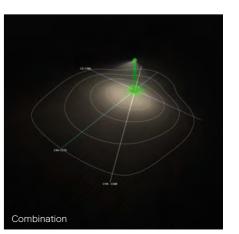












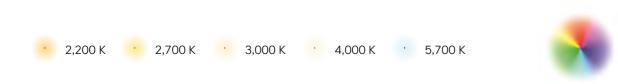
ewo Mastering the Shape of Light 15

A-Series



LENS OPTICS

With the A–Series, planners have all the tools they need to combine and create any individual light distribution imaginable. Modularity is key – and an infinite array of possible lens combinations in any luminaire head and in any desired luminaire is the solution. The A–Series is ideal for any project from small alleys, pavements and sidewalks to entire roads, public squares and large areas. Thanks to its modular set-up, it is optimised for any product – bollards, projectors, recessed wall luminaires, pole-mounted systems and high-performance floodlights.



T-Series

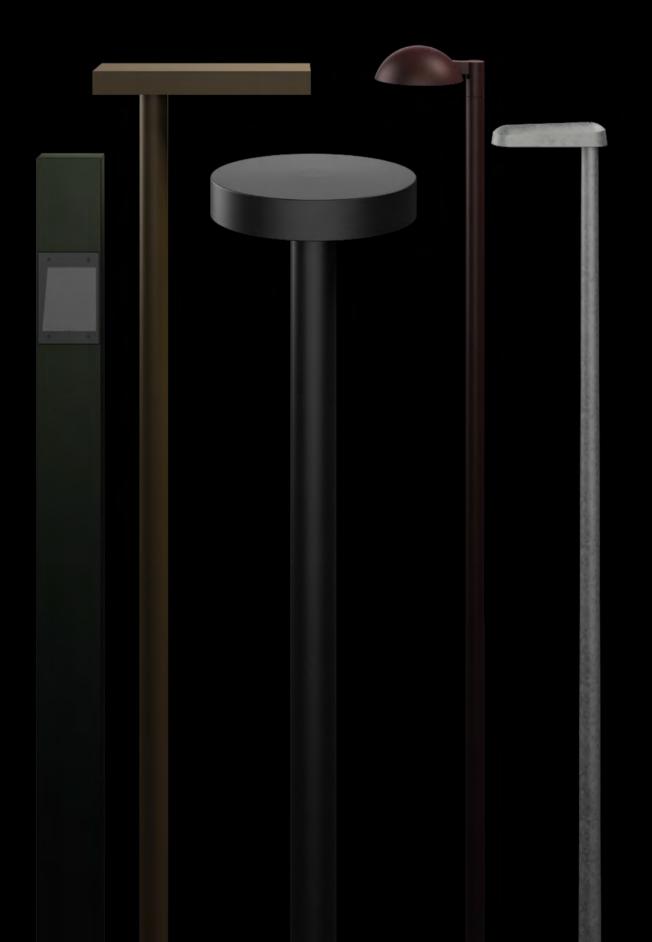


LIGHT-GUIDING PANELS

ewoLightTile is a novelty: Its light-guiding optics are ideal for projects that focus on making people feel safe and comfortable in a number of settings from pathways to residential areas and urban spaces. ewoLightTile provides visual comfort at the very highest level and at the same time a precise and homogeneous light distribution thanks to a smooth emitter that makes the individual LED units entirely invisible. ewoLightTile panels can be combined vertically and horizontally in many products within the ewo luminaire portfolio.



ewo Mastering the Shape of Light 17



MASTERING THE BODY OF LIGHT

OPTIMISED STANDARD LUMINAIRES. UNLIMITED INDIVIDUAL AND UNIQUE SHAPES.

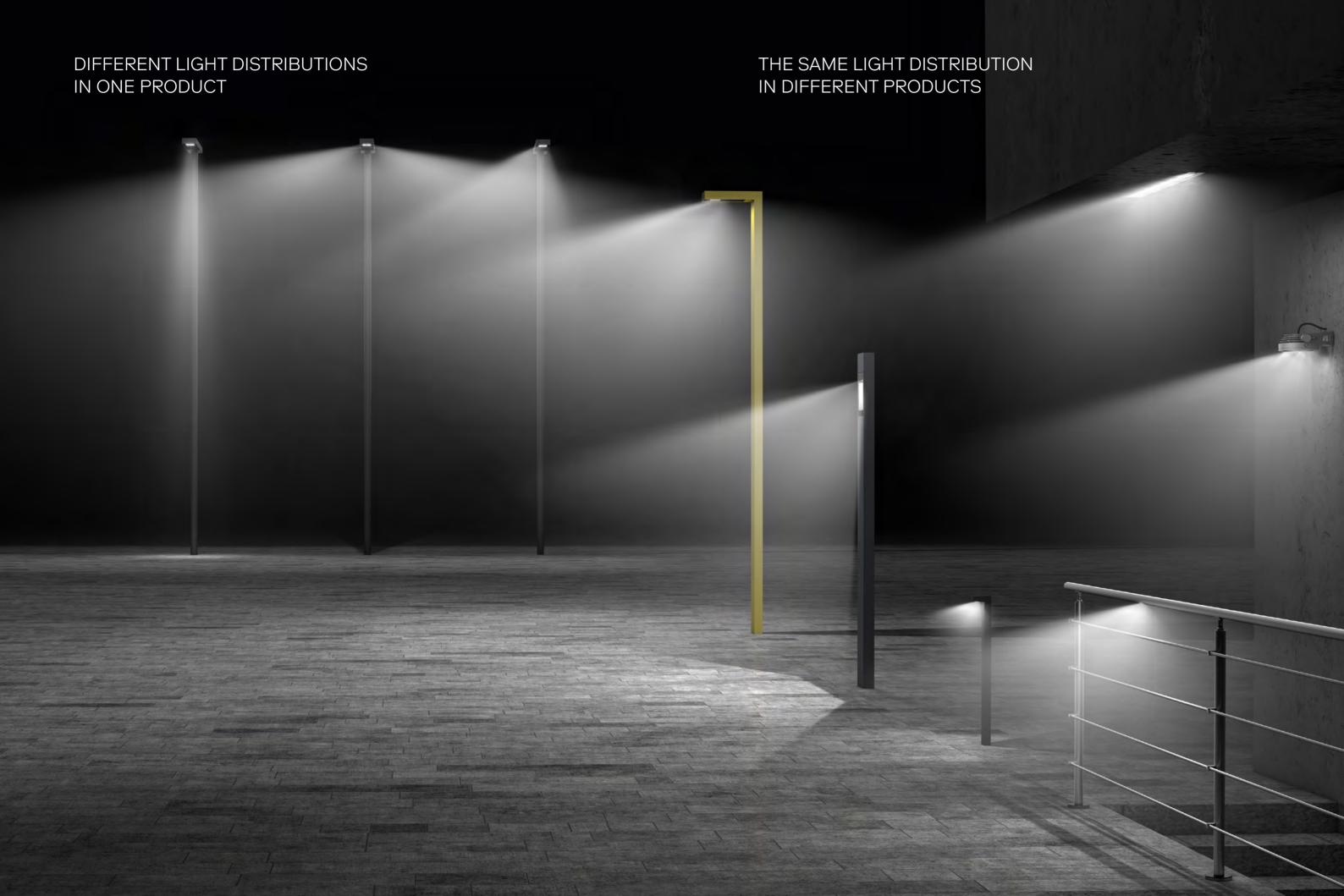
The housing is the body of light – from discreet architectural spotlights to road-side luminaires, from elegant bollard luminaires to powerful floodlights.

From the very beginning, durability, impeccable aesthetics, efficiency and high-precision craftsmanship have been an intrinsic part of ewo's DNA.

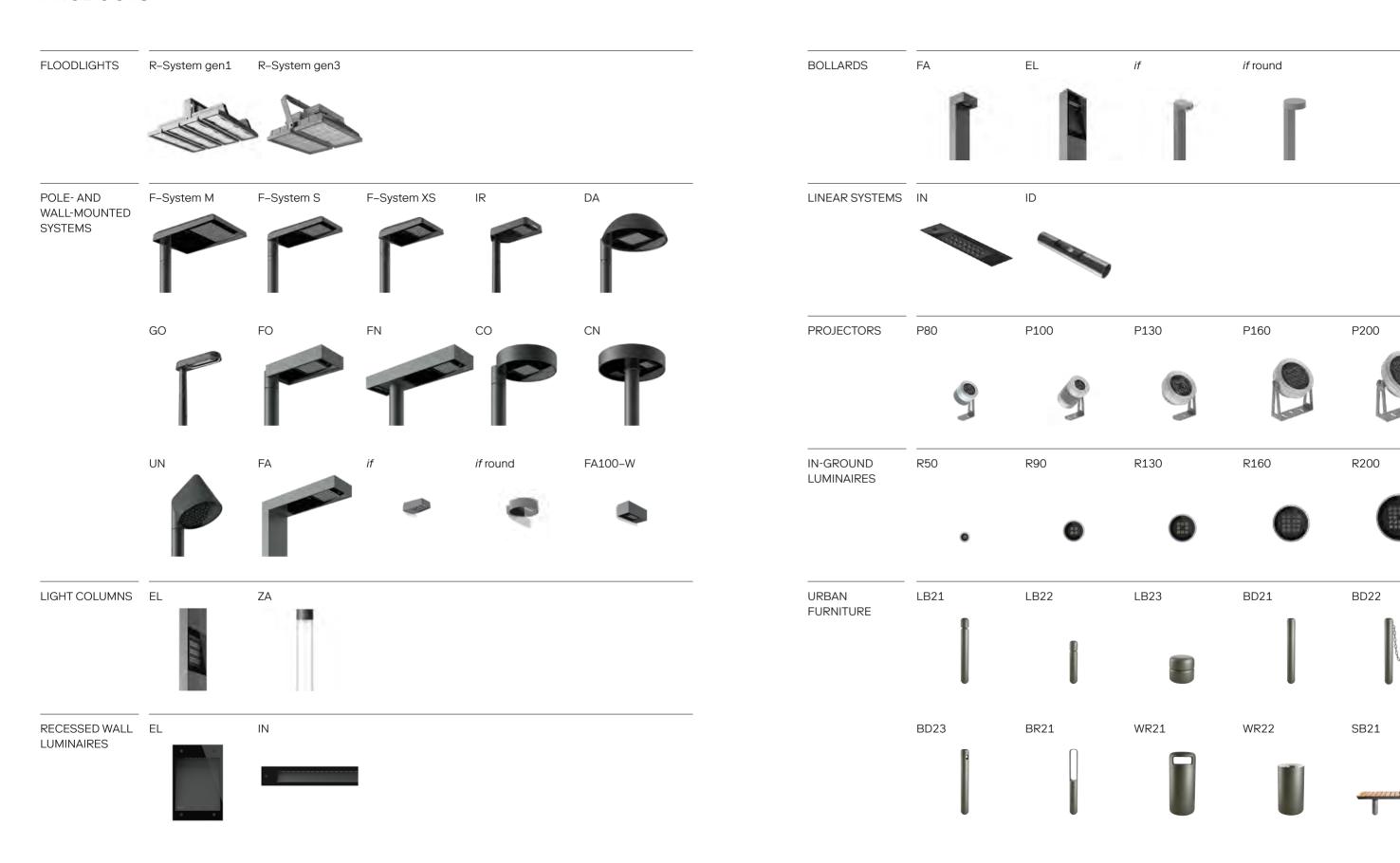
To this day, these values continue to shape every single product we make. And not only in our standard portfolio: With ewolndividual, the shape, colour and surface of each product can be customised to match your individual requirements.

In combination with the endless possibilities of our very own Light Engines, we can create product variants for every desired project, no matter how challenging or special. Whether you're looking for a striking object within a room or a low-key, discreet solution: We will sculpt the body of your light.

Mastering the Body of Light 19



PRODUCTS



ewo Mastering the Body of Light 23

PRODUCT COLOURS

STANDARD







White aluminium

RAL 9006 / DB 701 RAL 9007 / DB 702 DB703 Grey aluminium

ON REQUEST



RAL 1013 RAL 1015 Oyster white Light ivory



Zinc yellow



RAL 1018

RAL 1023

Traffic yellow



Luminous yellow



Broom yellow





Flame red

RAL 3004 RAL 3005



Wine red



Traffic red



RAL 4010 Telemagenta



Ultramarine blue

RAL 5003 RAL 5002







RAL 5008

Grey blue

Purple red



Gentian blue

RAL 6011

Reseda green



RAL 5011 Steel blue

RAL 6012

Black green



RAL 5013 Cobalt blue



RAL 5014

Pigeon blue





RAL 5015

Sky blue

RAL 7001

Silver grey

Sapphire blue





Moss green







Pale green









Signal grey

















RAL 6019

Pastel green









Stone grey

RAL 7013

Brown grey

RAL 7031 Blue grey

ON REQUEST



RAL 7040

RAL 8001

RAL 8015

Brown 05

RAL 9002

Grey white

RAL 9017

Traffic black

Ochre brown

Window grey





RAL 7042

RAL 8003

RAL 8016

RAL 9003

RAL 9018

Papyrus white

Signal white

Mahogany brown

Clay brown





RAL 7035

Light grey

Traffic grey A







RAL 8004 Copper brown

RAL 8017

RAL 9004

Signal black

AkzoNobel Brown

650

Chocolate brown





RAL 8022

RAL 9010

Pure white

Traffic black

RAL 7037

Dusty grey

RAL 7045

Telegrey 1













AkzoNobel Mars

2525





RAL 7016 Anthracite grey









Carbon 01



Graphite grey





RAL 7015

Slate grey











RAL 8007 Fawn brown

RAL 8019

Grey brown

RAL 9005

Jet black

Mineral Quartz

RAL 7036

RAL 7044

Silk grey

Platinum grey



RAL 8012



RAL 7038

RAL 7046

Telegrey 2

Agate grey





RAL 7039

Quartz grey

RAL 7047

Telegrey 4

RAL 8014

Sepia brown



Traffic white



And many other colours

24 ewo Mastering the Body of Light 25

ewolndividual

From sulphur-yellow powder coating to the vibrant, rugged look of COR-TEN weathering steel – we will fashion the ideal product to suit your exact, individual needs. Anything is possible from configurations matching the overall concept of your architecture all the way to one-of-a-kind eye-catchers. Our products can take on any desired colour, surface and even shape.



BUGA FIBRE PAVILION Heilbronn, Germany, 2019 LDE Belzner Holmes



JYSKE BANK OFFICE BUILDING Silkeborg, Denmark, 2016 Normann Rådgivende Ingeniørfirma



QUAI RAMBAUD Lyon, France, 2015 LEA – Les Eclairagistes Associés



STATIONSPLEIN Enschede, Netherlands, 2013 Studio DL



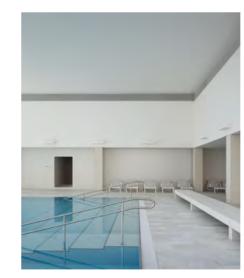
KASSEL CITY CENTRE Kassel, Germany, 2018 Städtische Werke Netz + Service GmbH



FESTSPIELHAUS ERL Erl, Austria, 2012 Halotech



LYON PART DIEU Lyon, France, 2019 Agence ON

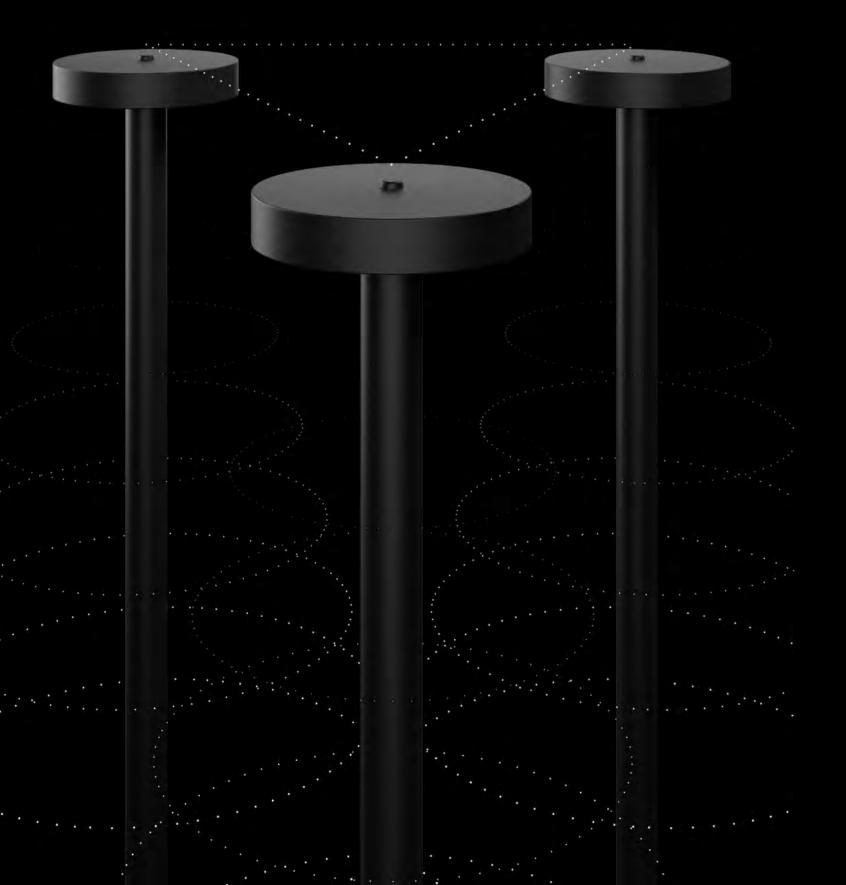


OVAVERVA POOL, SPA AND SPORTS CENTRE St. Moritz, Switzerland, 2014 Reflexion



KUFSTEIN CITY CENTRE Kufstein, Austria, 2012 Halotech

26 ewo Mastering the Body of Light 27



MASTERING THE INTELLIGENCE OF LIGHT

INNOVATIVE LIGHT MANAGEMENT FOR SMART SOLUTIONS

When lighting systems become smart and intelligent, they are able to react to a variety of surrounding factors: light and temperature, wind and humidity, people and their movements.

For ewo, intelligent light management is not just a technological end in itself. Connectivity is always a path that leads somewhere – be it safety, a sensation of comfort and well-being or simply a special lighting experience. With our subsidiary connexx, a start-up that develops both hardware and software for controlling all kinds of lights, ewo has brought a key partner on board. Together, we now offer the entire range and wealth of connectivity solutions. The result: smart features and intelligent light from a single source. A synergy of expertise for the city of the future.

Mastering the Intelligence of Light

INTELLIGENT LIGHTING CONTROL: DYNAMIC SUMMER AND WINTER SCENARIOS

Intelligent light can react in a matter of seconds, minutes or over longer time units. In locations with major differences between cold and warm temperatures or bright summers and dark winters in particular, intelligent lighting control can have a balancing effect that significantly improves the sensations experienced by passers-by. Neutral white light in hot summers, warm white light in frosty winters: Thanks to smart components, the changing seasons can be harmonised within a single luminaire.



SUMMER Neutral white WINTER warm white

INTELLIGENT LIGHTING CONTROL: LIGHT DISTRIBUTION THAT CHANGES DYNAMICALLY

Much like a minutely planned score, light in public spaces is an intricate composition: Key tones and accents guide the notes along, while the pace is set by safety, efficiency and moods. But standards often limit the scope of what is possible. By using different light distributions within the same luminaire, we are able to play the entire spectrum. The secret? It's all down to a combination of different optics: That way, the light can be modulated dynamically, turning the space into a stage perfectly set for any desired scenario and mood.



SCENARIO 1 SCENARIO 2
Standard-conforming illumination Accentuated light

INTELLIGENT LIGHTING CONTROL: SHOWCASING EMOTIONS



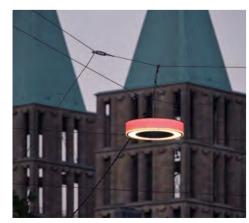
SPIELJOCHBAHN Zillertal, Austria, 2017

Lighting Designer: Die Lichtplaner Products: R-System gen1, R4



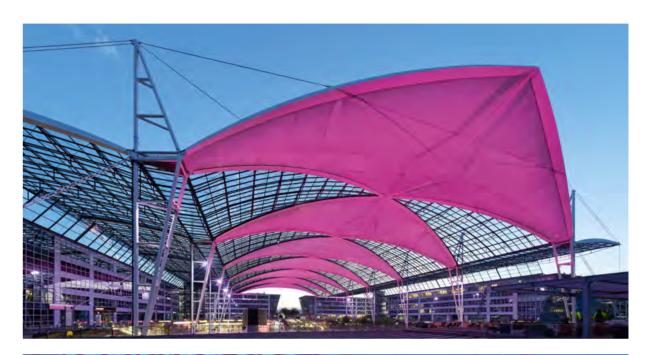






KASSEL CITY CENTRE ► P. 46

From everyday settings to exceptional occasions, light provides a frame for any situation in life. Exclusive contexts such as anniversary celebrations, Christmas markets and special events often require truly unique moods. Light can be used to set the scene, enriching it with colour, intensity and emotion. In doing so, the RGBW colour spectrum is the ideal dramaturgical tool: It diversifies everyday scenarios with dynamism and vitality, accentuating the effect of light and illuminated objects. Capable of generating a multitude of different sceneries, it can be pre-programmed or operated manually. Smart components are the perfect tool to meet special needs in extraordinary situations, with added safety and interactivity.





MAC FORUM ▶ P. 38

ewo Mastering the Intelligence of Light 3

BEST

COMPLEX, SPECIFIC, EFFICIENT

Making the impossible happen – Mastering Light in all but three dimensions: its outline, its intelligence and the shape of the luminaire. Our BEST PRACTICE projects push every known boundary. This is where we make our customers' and lighting designers' every wish come true, no matter how specific.

PRACTICE

SOPHISTICATED, REFINED, INDIVIDUAL

BEST PRACTICE means outstanding projects that would not be possible with standard solutions. Be it specific light distributions or powerful aesthetic choices: From complex sceneries all the way to efficiency at the very highest level, whoever aims to master light must first master all those things.



MAC FORUM

SMOOTH PRECISION

A 90 m curved glass roof

Designed by star architect Helmut Jahn, the MAC Forum at Munich Airport is an enormous multi-purpose structure under a curved glass roof that towers 41 m above some 10,000 m² of floor space suitable for all types of major events. The ceiling consists of a delicate construction of glass and fibreglass panels that spans an impressive 90 m. With the help of our signature modular systems, we developed a series of customised light distributions – to ensure a smooth, even illumination of this challenging surface based on different lens combinations within just one luminaire.

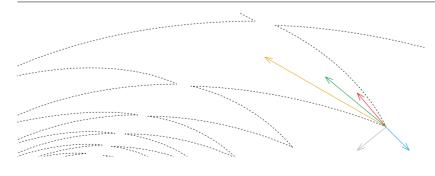
MASTERING THE SHAPE OF LIGHT

How is an even light distribution across such a large, curved surface made possible?

The requirement was to illuminate both the ceiling and the hall from fixed, predetermined positions. To achieve this, a series of luminaires point upwards to create a scenic effect, while the remaining lenses face downwards to guarantee functional illumination of the hallway, including safety and emergency lighting.

Although the luminaire model itself was the same regardless of its position, combinations of wide and narrow spot lenses allowed smooth illumination tailored to each area.

LENS COMBINATIONS



Combination A

6 x AG02 Symmetric Medium 20° 2 x AG03 Symmetric Flood 50°

Combination B

4 x AG01 Symmetric Narrow 8°

4 x AG02 Symmetric Medium 20°

Combination C

6 x AG01 Symmetric Narrow 8° 2 x AG02 Symmetric Medium 20°

z x AGOZ Symmetric

Combination D 8 x AH02 Symmetric Wide Flood

Combination E

8 x AP05 Asymmetric Extra Forward

Best Practice 39

MAC FORUM

MASTERING THE BODY OF LIGHT

How were customised design solutions developed?

For the MAC Forum, ewo has developed a customer-specific product typology, the shape of which is derived from the functionality of the different lighting positions on the one hand and from the positions specified for the individual luminaires on the other.

The resulting lighting system combines ewo's P–Series architectural projectors and high-power floodlights in one luminaire. Visually, the model resembles a slightly larger version of our standard P–Series projectors.

MASTERING THE INTELLIGENCE OF LIGHT

What's the advantage of lighting control?

Intelligent light means that the lighting distribution is not only modifiable, it also has the additional benefit of pre-programmed scenes that can be managed by the customer – an enormously user-friendly, dynamic light control system suitable for a variety of different events.

For example, special light distributions that can be pre-programmed and stored in the system can illuminate the MAC Forum in the corporate colours of Munich Airport at the push of a button. In addition, a range of special colour palettes provides scenic lighting for a variety of events such as Christmas markets.

Each RGBW luminaire was fitted with two DMX drivers, creating luminaires with 173 W power each. For the safety lighting, the luminaire was equipped with a DALI driver at 276 W.



40 ew



BRUNICO/BRUNECK CITY CENTRE

THE DESIGNER'S EYE - LICHTRAUM²

Shining your best light on the special features of urban morphology

"In cities, light is more than just a matter of functionality: It is a cultural affair thanks to which it is possible to identify and rediscover the special features of the morphological make-up of urban space." These are the words of lighting designers Gerlinde Schatzer and Daniel Schiefele of Lichtraum².

The team decided to emphasise "the connection between the monuments and the urban context" within their lighting design – which Lichtraum² considered an obvious choice for a place as rich in historical buildings as Brunico/Bruneck. In this manner, this city founded in 1256 in the heart of South Tyrol and its historic old town in particular "can be experienced as a coherent, connected urban landscape, as an ensemble". In addition, the light design enhances the significance of the surroundings, creating unmistakable and appealing spaces where both the urban setting and the light become an invitation for people to linger, stroll and feel at home.

MASTERING THE SHAPE OF LIGHT

How can light create spatial impressions?

The most important prerequisite for public spaces is that people feel comfortable and safe – this can be achieved with the help of uniform light distribution. In this case, the second requirement was to emphasise the historical heritage of the city of Brunico/Bruneck. At night, the light design lends the city a look and feel that is also effective from a distance. A series of accents and pools of light underline the characteristic elements of the city, rendering the structure in which it was built visible.

Once more, the ideal tool for this is ewo's modular system: precise, homogeneous illumination made easy. At 3,000 K, warm white light generates a cosy mood outlined by street and path lighting equipped with satin-finished, asymmetric lenses. Optics with left/right-angle light distributions were used to selectively illuminate the colourful historical façades and avoid light scattering.

GALLERY ▶ P. 76 – 77

Best Practice 43

BRUNICO/BRUNECK CITY CENTRE

MASTERING THE BODY OF LIGHT

An extensive, individual product family

Lichtraum² and ewo have jointly designed a series of cable pendant luminaires as well as pole- and wall-mounted systems with straight and inclined masts – all of which customised in a uniform design language aimed at shining a unique, harmonious light on Brunico/Bruneck. The shape of the inclined street lights was inspired by the spinning plates used by jugglers: Arranged to "dance" around the chestnut trees lining the avenue in a rhythmic pattern, the circular lighting fixtures become companions guiding passers-by through the medieval alleyways.

MASTERING THE INTELLIGENCE OF LIGHT

Adaptable light effects

Out of more than 3,000 new ewo luminaires installed throughout Brunico/Bruneck, 330 are smart luminaires capable of performing special tasks. They have a clear advantage: Their pre-programmable settings are a simple, quick way to respond to the daily needs of the city. Thanks to their integrated control panel system, the user can switch between different lighting scenes to cater for particular events and adjust the illumination in individual areas, along selected streets or even within individual luminaires to suit their exact requirements – both instantly and with the option to plan ahead for years to come. The control panel can display the luminaires on a map and produce well-ordered overviews and statistics on past and future switching activities.

The differing urban areas throughout the city can be illuminated differently and the lighting adapted according to the respective setting or event: The colour in which the castle walls are lit, for instance, can be changed within a matter of seconds. On top of this, the control panel system allows for easy maintenance and repair works, since the system sends out a message in case of damage or failure.



44 e



KASSEL CITY CENTRE

ARTISANS OF LIGHT

Hand-made in Italy

Thanks to our trademark modular system, we can develop, manufacture and customise any product that our customers may require. In Kassel, the city's cultural and historical heritage served as an inspiration for the design of a truly unique, made-to-measure luminaire. The result: a custom-built design unlike anything we have created before. A luminaire that fulfils a whole range of aesthetic and functional specifications.

MASTERING THE SHAPE OF LIGHT

Which lighting effects are possible within a single luminaire?

The circular design emits light from two different sources: functional lighting and effect lighting. For the primary, functional lighting, each luminaire houses 32 asymmetric street lighting lenses of the LS13 type with a warmth of 3,000 K mounted underneath the ring. White light is used to provide functional and standard-conforming illumination, while the luminaire's RGBW configuration allows for an extensive range of scenic settings that are suitable for any type of event and can easily be controlled and adapted: RGBW LEDs fitted to the rim for effect lighting illuminate the PMMA cover of the luminaire from the inside. This allows the exterior to project a 360-degree light show onto the surroundings, which – e. g. during key events – shrouds its backdrop and the area below in a variety of RGBW-configured colours.

Best Practice 47

KASSEL CITY CENTRE

MASTERING THE BODY OF LIGHT

ewolndividual - a shape like no other

For the city centre of Kassel, we developed an entirely customised lighting system that perfectly meets the particular technical and design requirements of the site – with the cultural and historical heritage of Kassel serving as an inspiration for a one-of-a-kind solution. The result is a tailor-made luminaire unlike anything we have produced before – one that fulfils a whole range of aesthetic and functional specifications while at the same time displaying a theatricality befitting the town's stature as a cultural landmark: From the flat underside of an elegant ring (about 100 cm diameter), pivotal areas are illuminated in grand style.

MASTERING THE INTELLIGENCE OF LIGHT

Jointly controlled function and effect

Public spaces typically require lighting that is primarily functional and which meets official standards. Special occasions, however, require special lighting. This lighting system features pre-programmed scenes that the customer can select and manage with little to no effort – a user-friendly, dynamic lighting control system perfect for a variety of events such as Christmas markets.

This makes it possible for a wide range of customised colour scenarios stored in the system to provide a spectacular backdrop for countless settings and occasions. The illumination is controlled by a power line communication, for which two controllers are installed on each luminaire. One unit regulates the functional light and the other controls the effect lighting. Depending on the desired lighting scene, the luminaires can be adjusted together or individually.



48 e



CORPORATE COLOURS MPREIS

A SPLASH OF OF RED

Corporate colours translated into light

A decisive advantage and clear USP of ewo's modular system is that it allows the combination of different lenses in a single luminaire head. Red and white, the corporate colours of Austrian supermarket chain MPREIS inspired to create a bespoke light distribution solution: a set-up that highlights the corporate identity of the company by adding a series of accentuated red touches and meets the functional requirements of providing neutral white light to illuminate the car park – all with the help of a single product.

MASTERING THE SHAPE OF LIGHT

How does ewo combine colour and functional lighting?

Modular. Unique. A wide range of combinations within just one luminaire. The light distributions and colours can be combined in every possible way to form a completely individual solution. For MPREIS, we equipped each housing with 32 white and 16 coloured LEDs to create colourful accents and two boards to provide the functional lighting. That way, white light with a warmth of 3,000 K ensures the car park is uniformly illuminated, while spot lenses bathe the area around the poles in soft red light.

MASTERING THE BODY OF LIGHT

One product family

The MPREIS store parking lot in the Austrian town of Tannheim is dotted with a total of 37 luminaires. We developed a special, customised solution to create the harmonious, consistent effect of having just one product family. As a basis, we used the F–System XS with its single and double luminaire heads and wall-mounted versions. The F–System XS offers the ideal materials to harmonise the overall design and echo the customer's corporate identity. With its die-cast aluminium housing and polyester powder coating, the dark pole absorbs the light scattered by the red LED accents.

Best Practice 51

GALLERY

Light can be described with countless words. But only when we behold it do we understand it. Immediately, directly, out of intuition. In our gallery, we let the spaces attired by ewo speak for themselves.

Architecture and art, public space, roads and infrastructure, airports and logistics: Mastering the Shape, Body and Intelligence of Light. Go on, take a look.

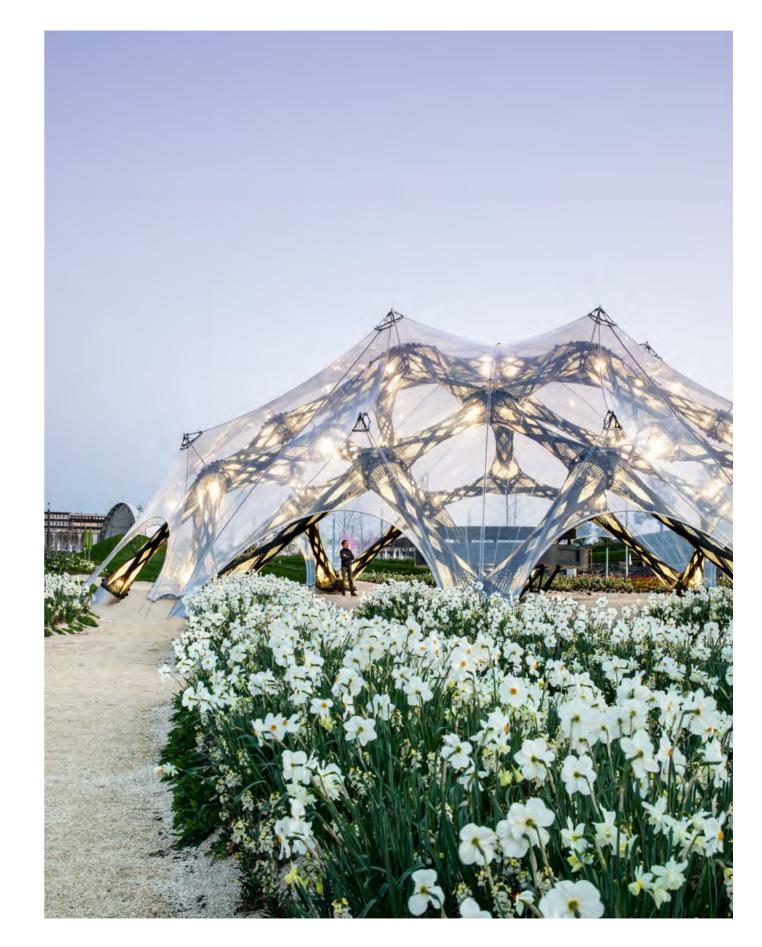
ARCHITECTURE AND THE ARTS



SETTING THE SCENE FOR SPACES AND OBJECTS

Light and architecture are intrinsically linked. Architecture relies on light to convey itself to people at night. At the same time, light must never outshine architecture, but rather serve it in a subtle and resourceful way. Architects and lighting designers have high demands when it comes to accentuating a building in order to make it stand out. Luminaires can perform as part of a building, as architectural objects or as an invisible source of light. ewo's modular system affords complete freedom to these ideas and provides the perfect individual solution.

BUGA FIBRE PAVILION Heilbronn, Germany, 2019 Lighting Designer: LDE Belzner Holmes Products: ewolndividual

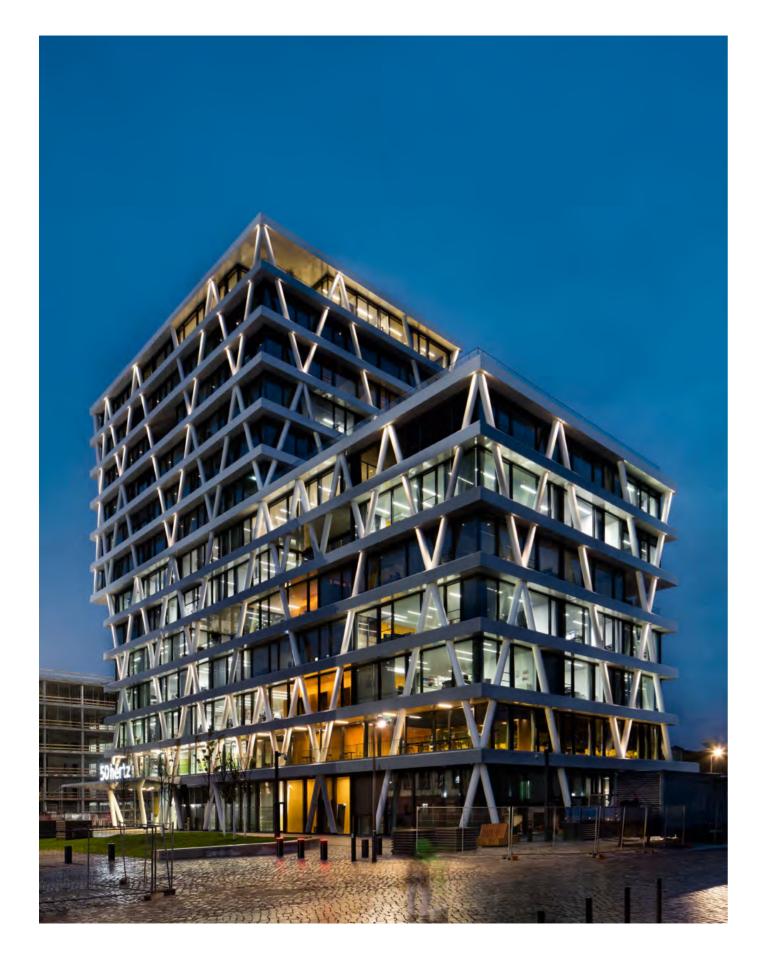


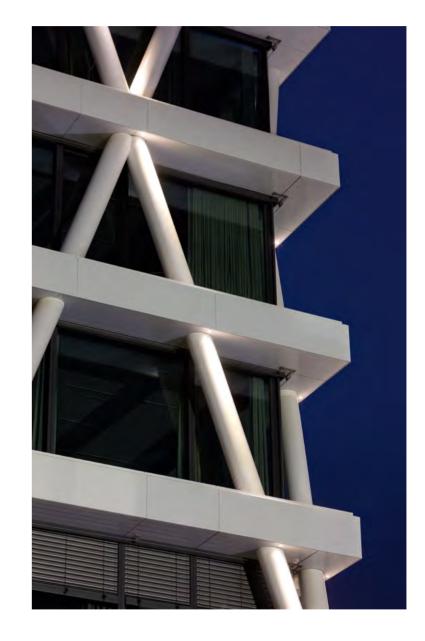


MAC FORUM MUNICH AIRPORT Munich, Germany, 2019

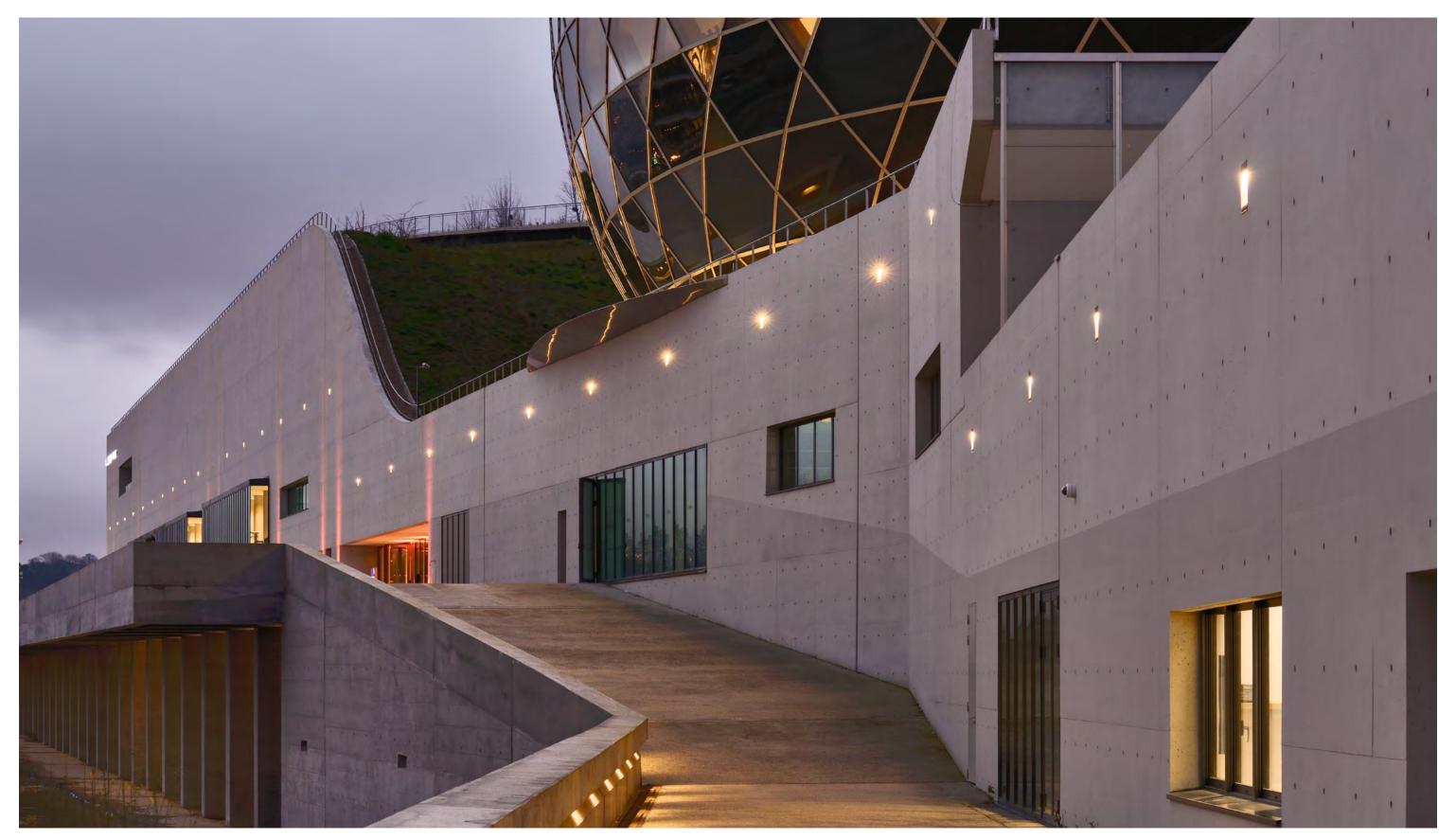
Products: ewoIndividual, P-Series

► P. 38





50HERTZ TRANSMISSION HEADQUARTER Berlin, Germany, 2016 Lighting Designer: Aurelia Design Products: R60

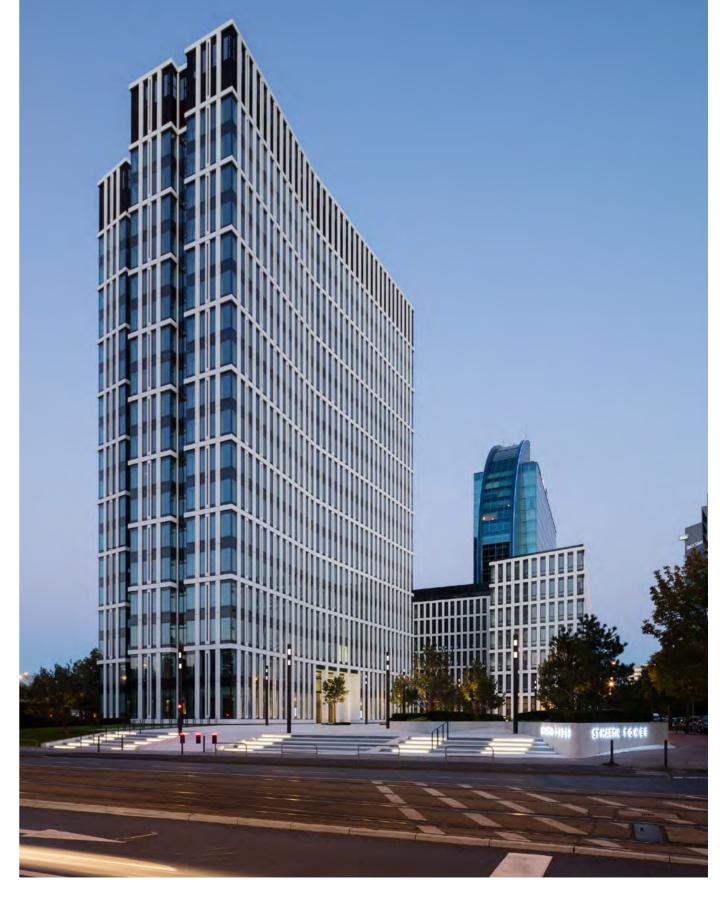


LA SEINE MUSICALE Boulogne-Billancourt, France, 2016

Lighting Designer: 8.18 paris Products: ewolndividual, EL







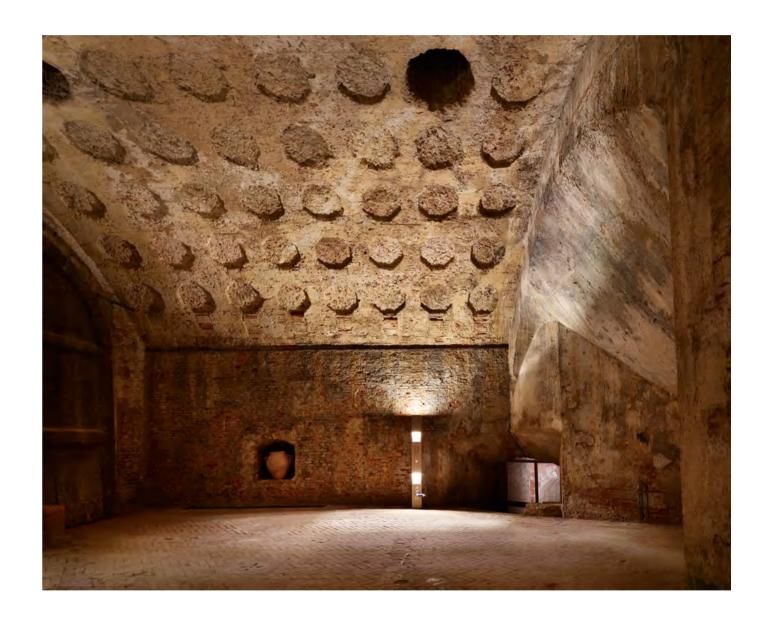
ST. MARTIN TOWER Frankfurt am Main, Germany, 2015 Lighting Designer: Kubus Freiraumplanung Gbr Products: ewolndividual, EL

ewo Architecture and the Arts





Lighting Designer: Fabio Daole and Mario Pasqualetti Products: ewoIndividual, EL



CITTADELLA NUOVA Pisa, Italy, 2014

Lighting Designer: Fabio Daole Products: ewolndividual, EL



GRADONNA MOUNTAIN RESORT Kals, Austria, 2011–2013

Lighting Designer: Lichtraum² Products: FA COR-TEN

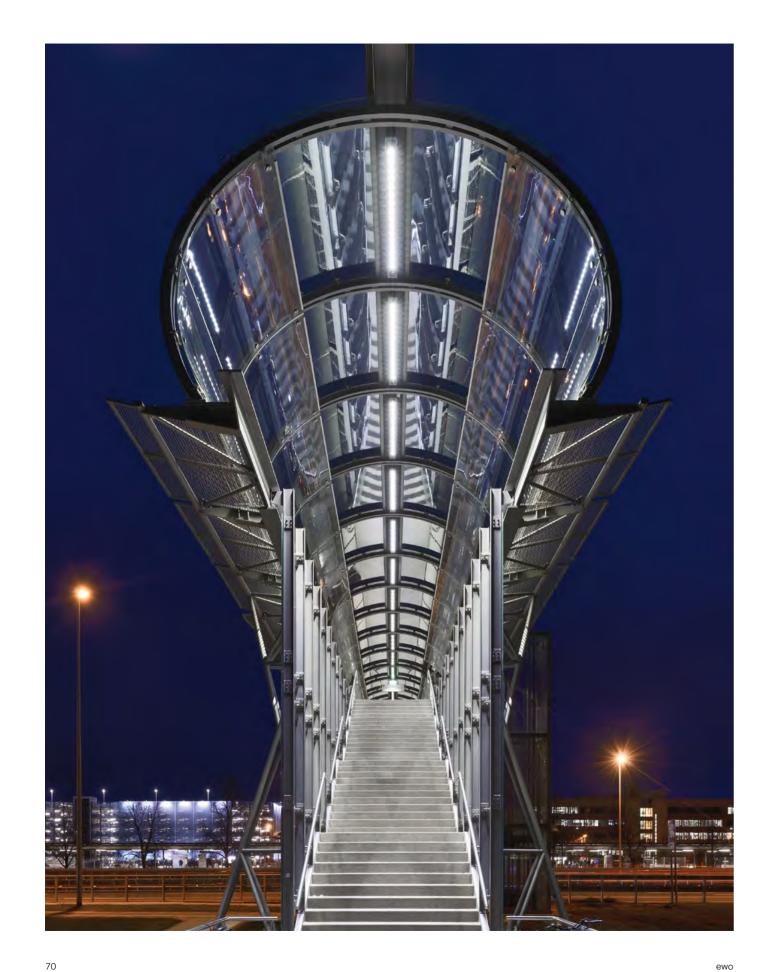




Products: R-Series



XAL COMPETENCE CENTER Graz, Austria, 2011–2013 Lighting Designer: XAL Products: FA, EL





FOOTBRIDGE MUNICH AIRPORT Munich, Germany, 2017 Products: ewolndividual

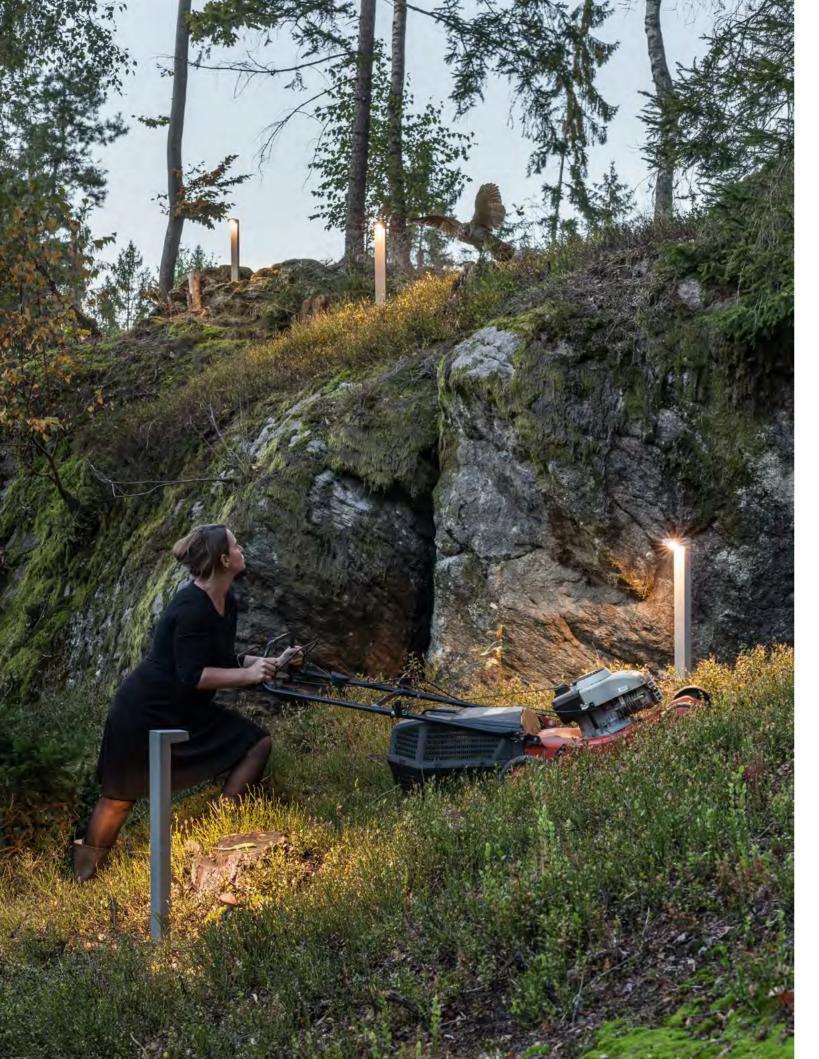
71



"We were motivated by the idea of creating a simple bollard luminaire exhibiting a sleek and slender elegance that can be unobtrusively integrated into any setting. Creatively *if* harmonises contrasts: soft vertical lines with clear edges along the horizontal plane." – Moritz Kessler



Designer: Moritz Kessler Photography: beierle.goerlich



Architecture and the Arts 73

PUBLIC SPACE

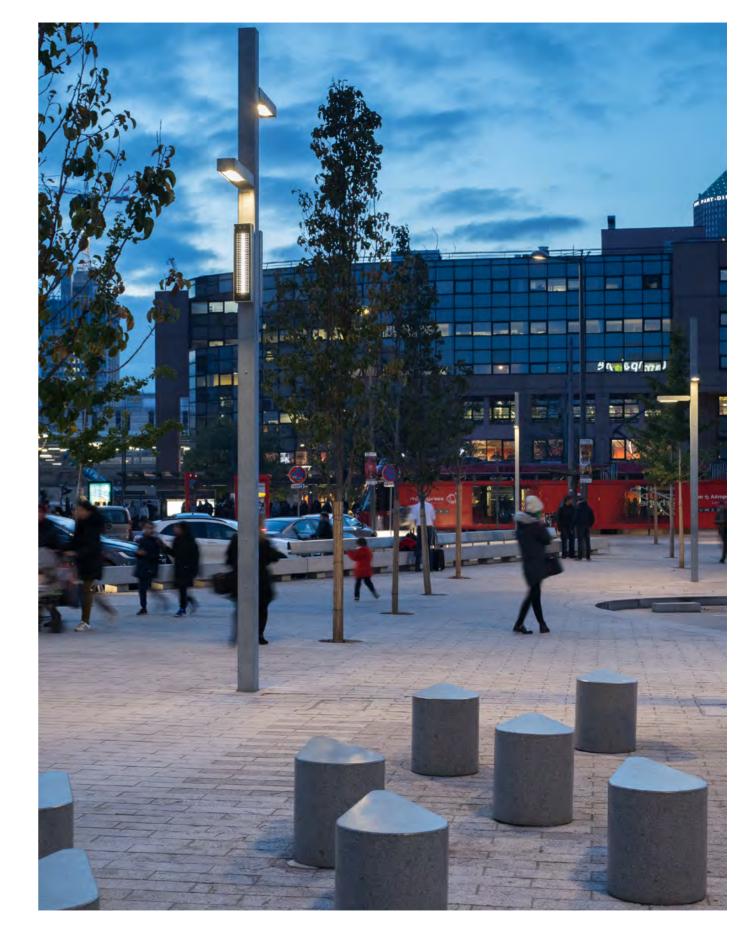


AT HOME IN AN URBAN LIVING ROOM

Public spaces are key meeting points in every city, town or village. They provide a framework for urban life and a stage set for its inhabitants. Long misunderstood as a purely functional place which people merely pass through, today they are once again held in high regard. Space is becoming increasingly architectural – and its usage more complex. Its planners and those who use it look for high-quality design and an expressive, strikingly engineered urban "living room" – both during the day and at night. Creative elements such as the shape of the luminaires and light installed have the potential to increase the quality of time spent outdoors. That is why, in the theatre of city life, ewo provides lighting designers with the tools to create the right dramaturgy for objects and atmospheres alike.

NEW CITY DISTRICT: PLACE FRANCFORT Lyon, France, 2019

Lighting Designer: Agence ON Products: ewoIndividual

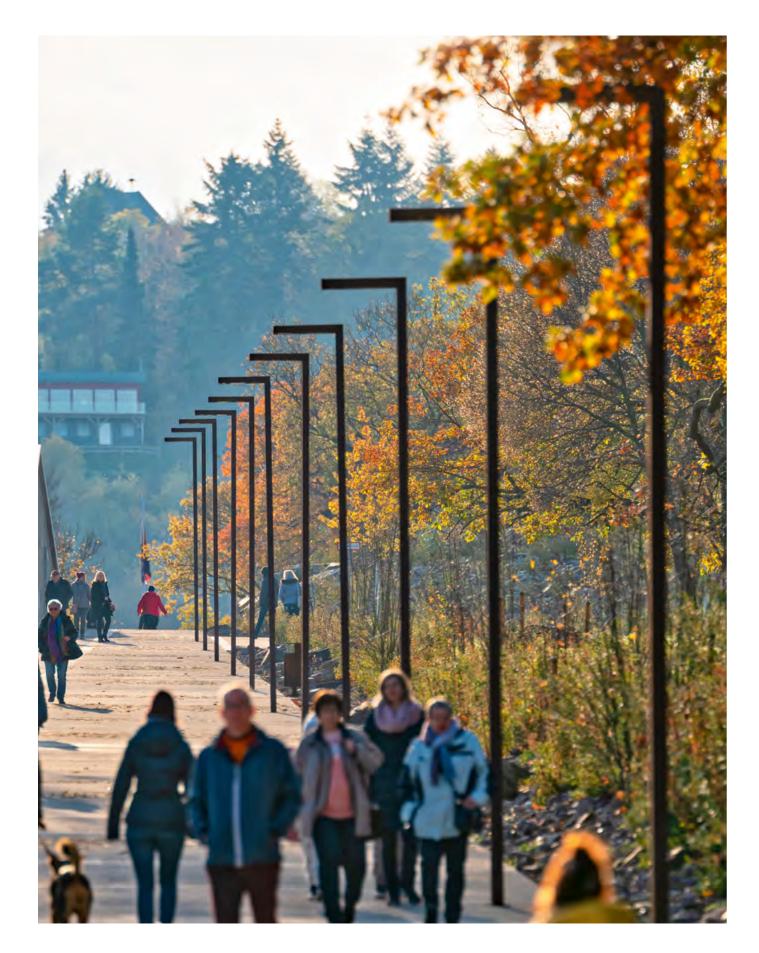






CITY OF BRUNECK/BRUNICO Brunico, Italy, 2018 Lighting Designer: Lichtraum² Products: ewolndividual ► P. 42

77





LANDSCHAFTS- UND KULTURPARK LORELEY Bornich, Germany, 2015–2017 Lighting Designer: werkteam loreley Products: FA770, FA770–W, FA170



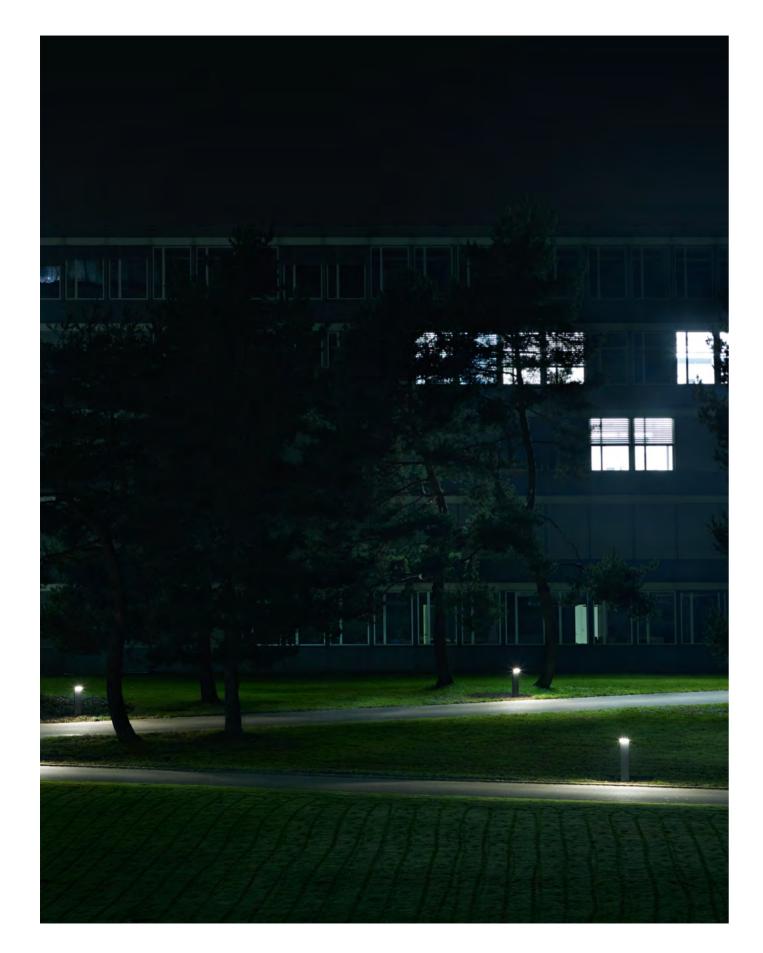
SAN MARCO SQUARE Venice, Italy, 2014

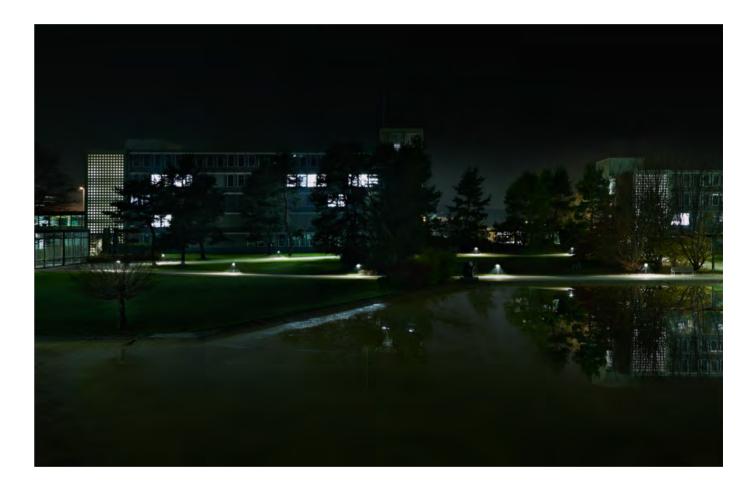
Lighting Designer: Studio Associato Gms Products: F–System M



TERRASSE BOIELDIEU Paris, France, 2019

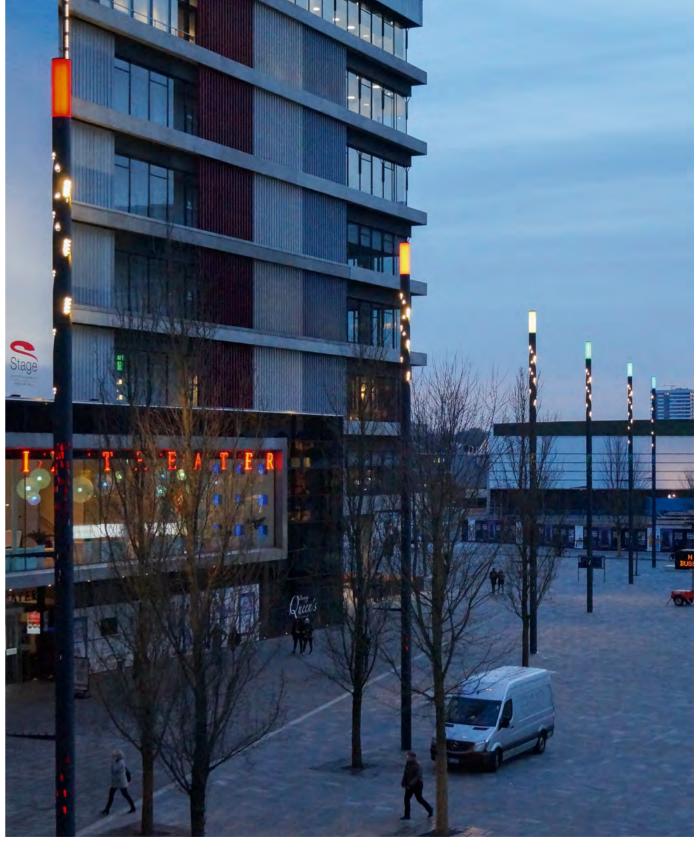
Lighting Designer: LEA – Les Éclairagistes Associés Products: ewolndividual





ETH CAMPUS ZURICH Zurich, Switzerland, 2011 Lighting Designer: nachtaktiv Products: FA bollards





CITY OF UTRECHT Utrecht, Netherlands, 2019

Lighting Designer: Studio DL Products: ewolndividual

CITY OF BARENDRECHT Lighting Designer: Rob Trieling, Lichtidee Barendrecht, Netherlands, 2019 Products: EL and P160

86 ewo Public Space 87





STATION DE SKI LES MENUIRES Les Menuires, France, 2017 Lighting Designer: LEA – Les Éclairagistes Associés Products: ewoIndividual



WIMBACH EXPRESS Wimbach, Austria, 2018

Lighting Designer: Die Lichtplaner Products: R-System gen1, R1 and R2

UP-Series

Hovering street furniture in timeless design.
As far back as 2009, the Norwegian designer team
NORWAY SAYS designed a product family for ewo
with accent lighting to make urban spaces
more appealing and durable.

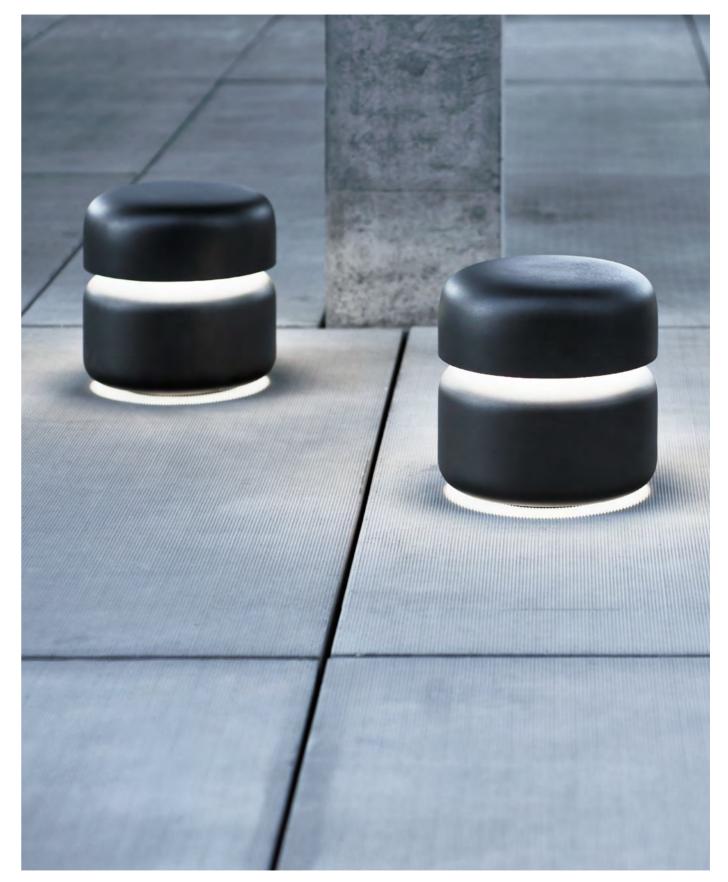






BR21 Bicycle stands with accent lighting

SB21 Bench with accent lighting



LB23 Stool seats with accent lighting

92 ewo Public Space

ROADS AND TRAFFIC

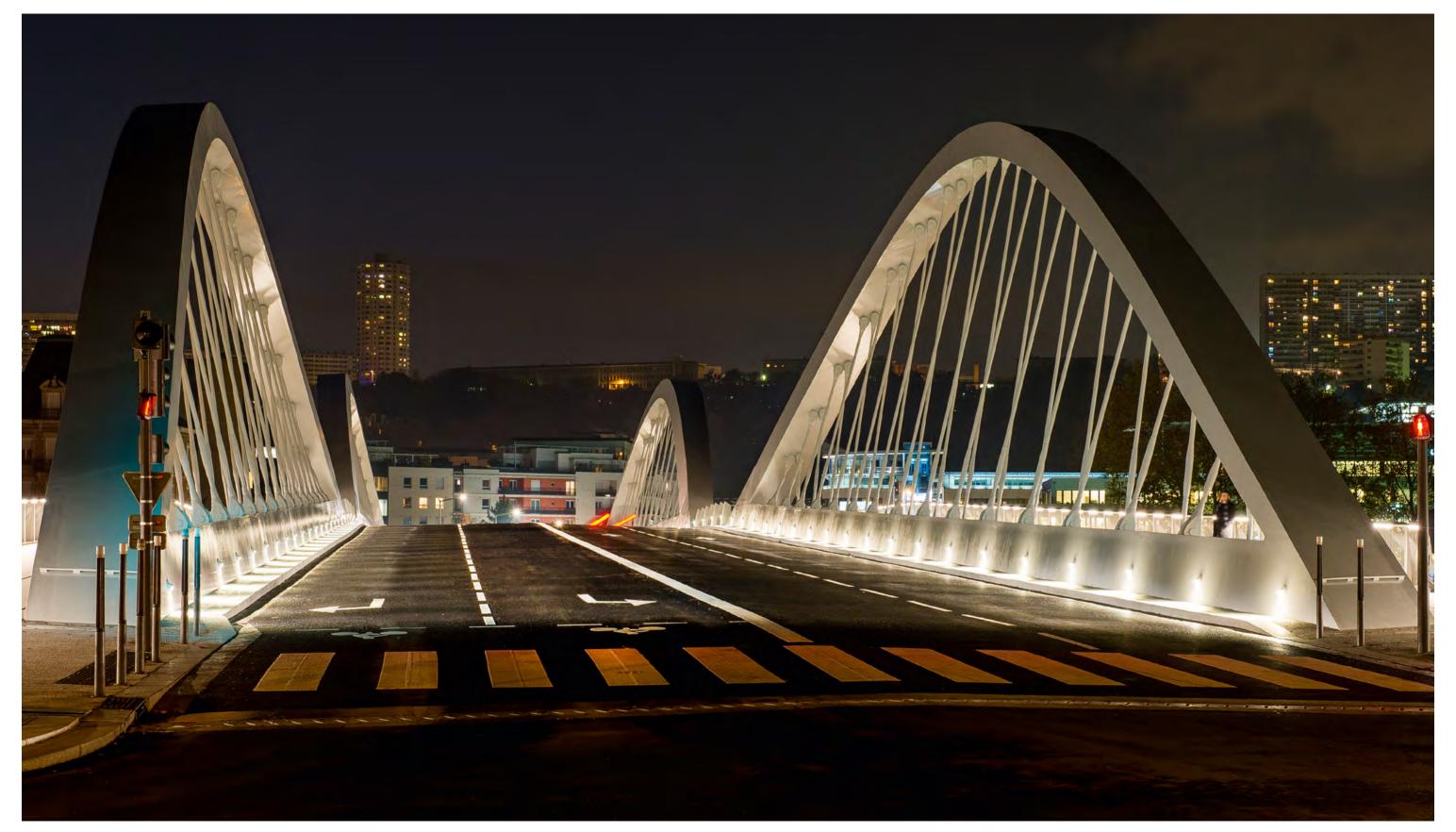


PRECISION IN PERPETUAL MOTION

On the road, what counts is safety, durability and full compliance with standards. But that's not all: In the age of smart mobility, traffic is becoming increasingly individual and reliant on networks. New means of transport, new energy sources and new apps: Mobility is being revolutionised, and roads are becoming labs. Now more than ever, we need individual and smart solutions that respond to these innovations while meeting the very highest standards of safety and precision. Fast-paced expertise and a vast range of uses across the entire network: ewo's modular system is at the forefront of every lane.

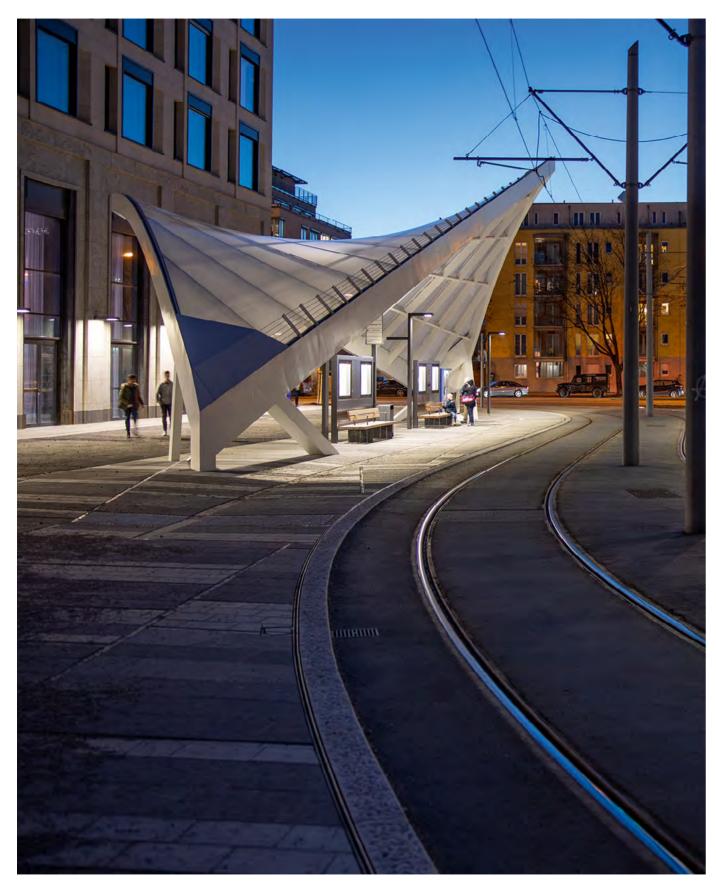
LUXTRAM Luxembourg, Luxembourg, 2017 Lighting Designer: Atelier Lumière Products: ewolndividual. EL





PONT SCHUMANN Lyon, France, 2014

Lighting Designer: LEA – Les Éclairagistes Associés Products: ewolndividual





Lighting Designer: Lumen 3 München Products: ewolndividual





VIA ALTO ADIGE Bolzano, Italy, 2010



MOTORWAY SERVICE AREA AND RESTSTOP FÜRHOLZEN Kiefersfelden, Germany, 2016

Lighting Designer: Duschl Ingenieure Products: F-System S, F-System M

AIRPORTS AND LOGISTICS



RELIABLE PERFORMANCE IN A WIDE FIELD

For the operators of airports and other large-scale areas, performance, durability and efficiency are pivotal. Typically, the aim is to provide precise and homogeneous illumination. To this end, our in-house think-tank has launched a number of pioneering solutions, bringing LED systems to the grandest of arenas: airports. Today, some 100 air-traffic hubs around the world rely on ewo's signature technology – from the Arabian Desert all the way to Greenland. A development that knows no standstill: In 2020, the third generation of high-power R–System floodlights has taken to the runways. This is the story of a trailblazing idea and its incessant optimisation. For a truly flawless performance in a broad field.

Products: F-System LARGE, F32

MUNICH AIRPORT RAMP 2

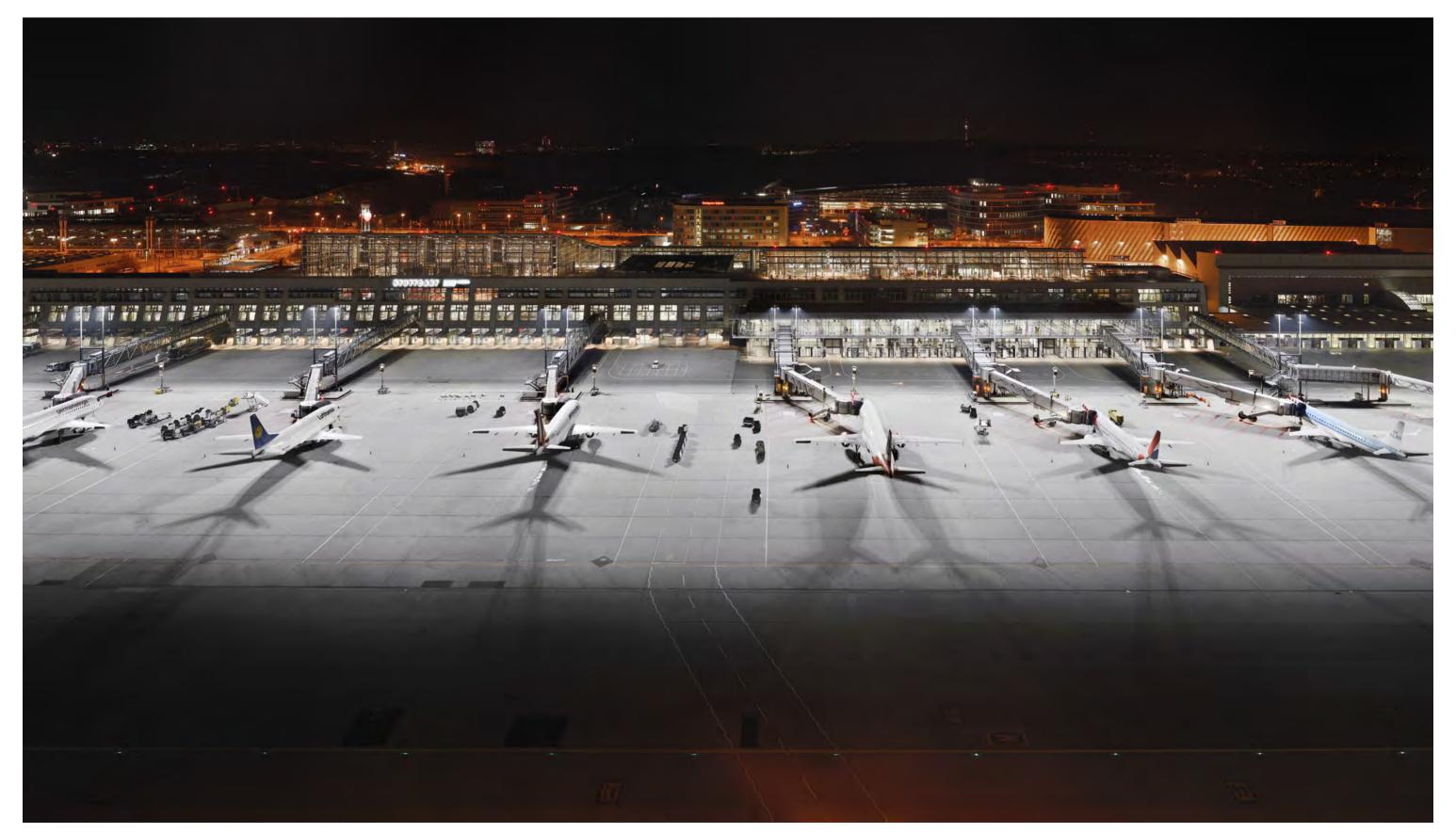
Munich, Germany, 2019





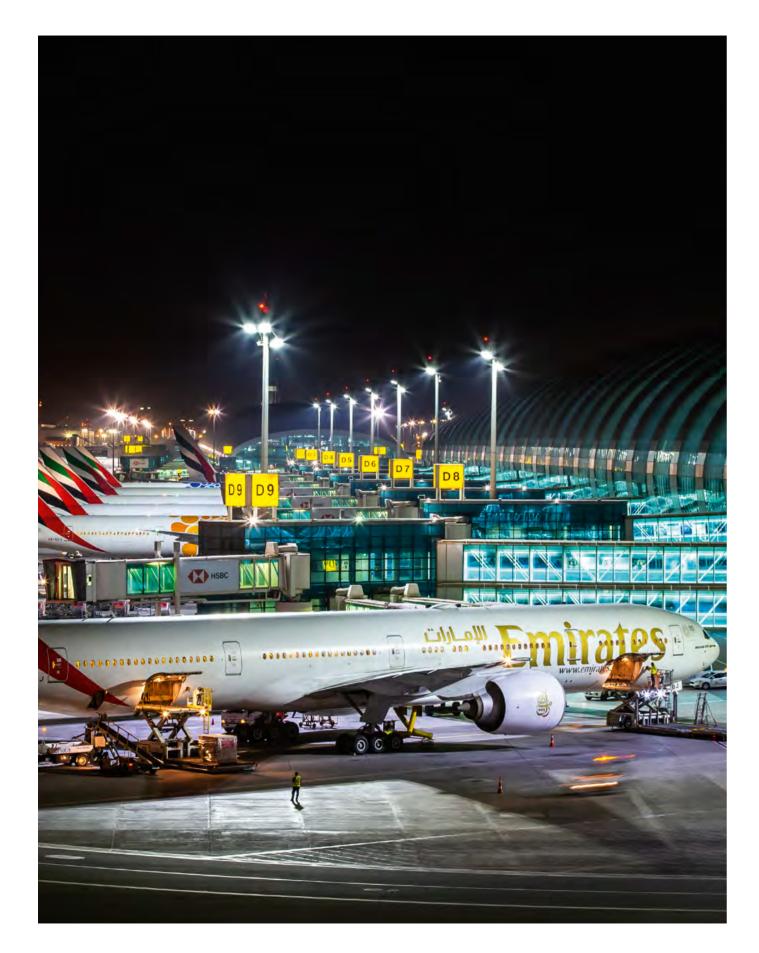
MUNICH AIRPORT RAMP 2 Munich, Germany, 2019

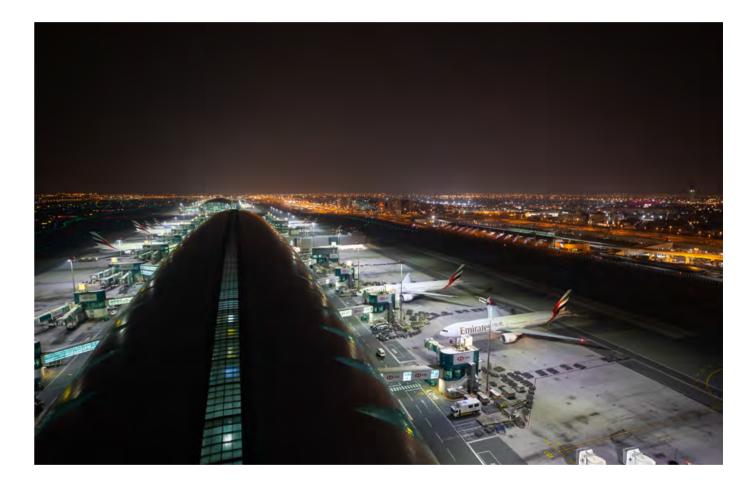
Products: F-System LARGE, F32



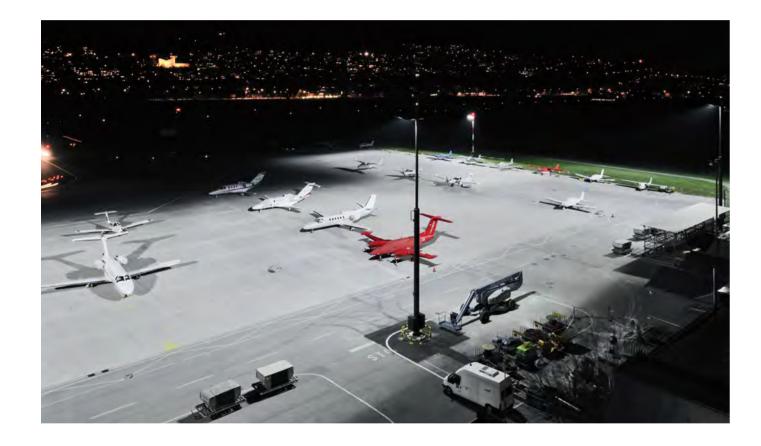
STUTTGART AIRPORT Stuttgart, Germany, 2014

Lighting Designer: act consult AG Products: F-System LARGE, F32





DUBAI INTERNATIONAL AIRPORT Dubai, UAE, 2019 Products: R-System gen1, R4 and R2





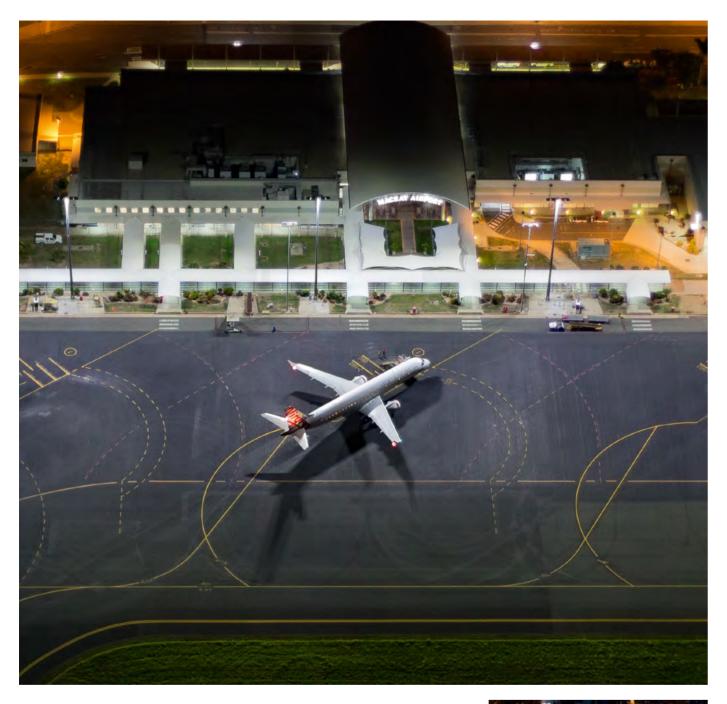
LINZ AIRPORT Linz, Austria, 2012–2014

Lighting Designer: EBP Products: T-System

Lighting Designer: A3 Jenewein Ingenieurbüro Products: T-System

INNSBRUCK AIRPORT Innsbruck, Austria, 2010

ewo Airports and Logistics 111





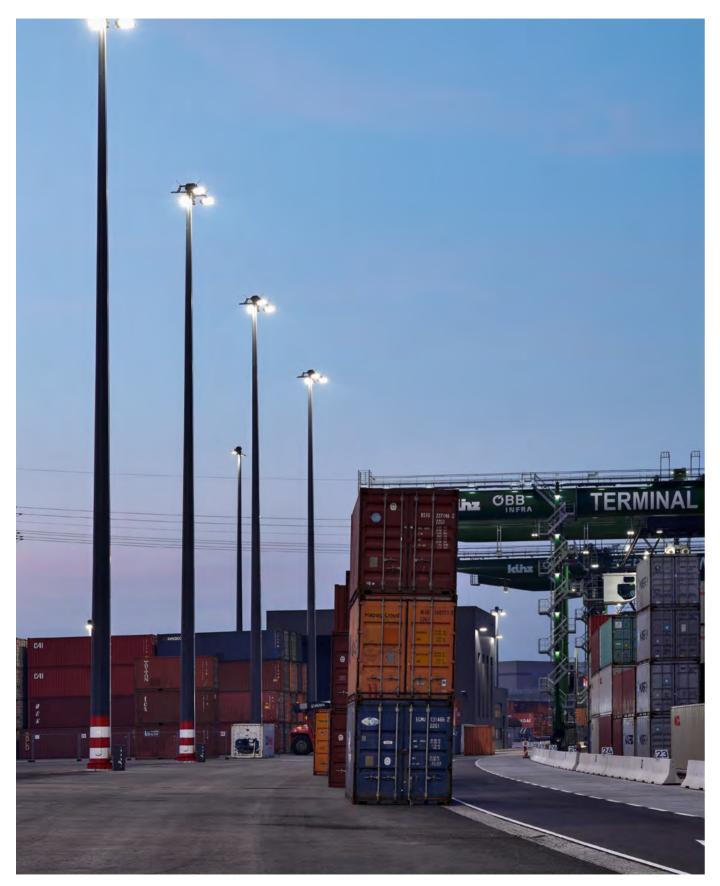
MACKAY AIRPORT Mackay, Australia, 2016 Lighting Designer: GHD Products: F-System LARGE, F32

Before



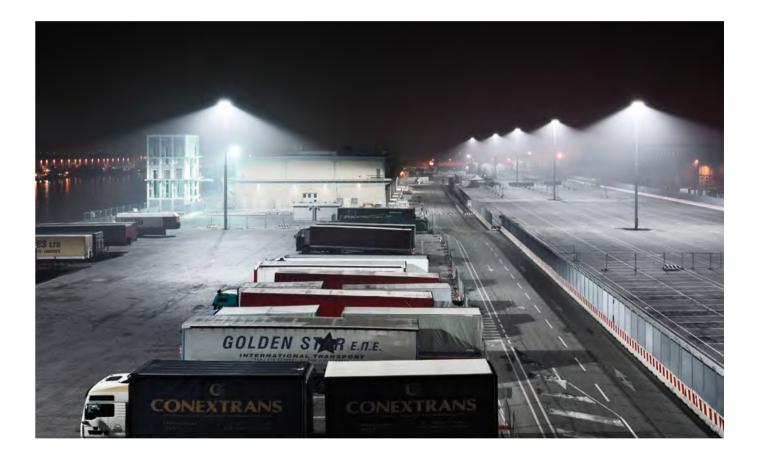
| AAL | Aalborg Airport | FDF | Martinique Airport | RTM | Rotterdam The Hague Airport |
|-----|---|-----|---|------|--------------------------------------|
| AAR | Aarhus Airport | FNI | Aéroport Nîmes-Alès-Camargue-Cévennes | RTW | Saratov Airport |
| ABJ | Abidjan Airport | FRA | Frankfurt Airport | RUN | Roland Garros Airport (Réunion) |
| ABZ | Aberdeen Airport | GRJ | George Airport | SIN | Singapore Changi Airport |
| ADL | Adelaide Airport | HAJ | Hannover-Langenhagen Airport | SCL | Santiago de Chile |
| APV | / Samoa International Airport | HAM | Hamburg Airport | SJC | San José Airport |
| ARN | Stockholm Arlanda Airport | HEL | Helsinki-Vantaa Airport | SLC | Salt Lake City International Airport |
| BOS | Logan International Airport (Boston) | HSH | Henderson Executive Airport (Las Vegas) | STR | Stuttgart Airport |
| BQN | Rafael Hernández Airport (Puerto Rico) | INN | Innsbruck Airport | SXF | Berlin-Schönefeld Airport |
| BRN | Bern Airport | JED | King Abdulaziz International Airport (Jeddah) | SYD | Sydney Airport |
| BTH | Hang Nadim Airport | JRO | Kilimanjaro International Airport | THU | Thule Air Base (Greenland) |
| BWI | Baltimore Washington Airport | KMS | Kumasi International Airport | TRN | Turin Airport |
| CAG | Cagliari Airport | KUL | Kuala Lumpur International Airport | TSV | Townsville International Airport |
| CDG | Paris Charles de Gaulle Airport | LNZ | Linz Airport | TXL | Berlin Tegel Airport |
| CGN | I Köln/Bonn Airport | MEL | Melbourne Airport | VCE | Venice Marco Polo Airport |
| CPH | Copenhagen Airport | MFM | Macau Airport | VFA | Victoria Falls Airport |
| DEN | Denver International Airport | MKY | Mackay Airport | VIE | Vienna International Airport |
| DOH | Hamad International Airport (Doha) | MUC | Munich Airport | WRO | Wroclaw-Copernicus Airport |
| DPS | Ngurah Rai International Airport (Denpasar) | MST | Maastricht Aachen Airport | YKS | Yakutsk Airport |
| DUS | Düsseldorf Airport | NRT | Narita International Airport (Tokyo) | YPL | Pickle Lake Airport |
| DUE | Dunedin Airport | OAK | Oakland International Airport | YQR | Regina International Airport |
| DXB | Dubai International Airport | OOL | Gold Coast Airport | YVR | Vancouver International Airport |
| EBJ | Esbjerg Airport | OSD | Åre Östersund Airport | YYZ | Toronto Airport |
| EIN | Eindhoven Airport | OSL | Oslo Airport | YWDC | Wodgina Airport |
| ELS | East London Airport | PUF | Pau Pyrénées Airport | ZCO | Aeropuerto Maquehue Araucania |
| ETZ | Metz-Nancy-Lothringen Airport | RDZ | Rodez Marcillac Airport | ZRH | Zürich Airport |
| EUX | F.D. Roosevelt Airport (St. Eustatius) | RIL | Rifle Garfield County Airport | | |
| FAT | International Airport Fresno Yosemite | RIX | Riga International Airport | | |
| | | | | | |

ewo Airports and Logistics 113





Lighting Designer: A3 Jenewein Ingenieurbüro GmbH Products: F–System LARGE, F32



SEA TERMINAL MOLO DI PONENTE Venice, Italy, 2010 Lighting Designer: Tifs Ingegneria Padua Products: T-System

INSIDE ewo

When you set foot in the ewo head offices in the quaint village of Cortaccia, nestled in the Italian Alps, countless fascinating stories begin to unfold: A story of a family business that ventured beyond the constraints of the possible from the very beginning and discovered that modularity was an integral part of its DNA. A story of smart decisions made at the right time. Of inspiration drawn from the arts and science. A story of aiming higher and envisioning the future. A story about what it means to understand light.

> TEXT Maik Novotny

> > ewoLAB "Magic", Bolzano, 2018







CREATING LIGHT, **THINKING** LIGHT

Pure Concentration. Tranquillity. No noisy machines. No assembly lines, no enormous warehouses. The first thing that comes to mind when you enter ewo's spacious workshop in Cortaccia is: This is where industry and craftsmanship join forces. This is the place in which each die-cast housing meets its very own LED optics, where every extruded pole is first clad in its noble shell and then spruced up with the inner workings that elevate it to the ranks of light poles. Much like a precious pearl, a small lens, the primordial cell of light, lies ready on its workbench: This is where optics meet their housing.

Every part of each product passes through skilworks here is guided by the proverbial "big picture": from the delivery of the components to the workbench and all the way to the packing station. Here, the acts of making and thinking SUCCESS STORY OF A FAMILY VENTURE are deeply intertwined in terms of space, muscle and brainpower. This allows for short ewo's story is that of a family-run business that reaction times.

The innovation lab sits directly above the workbenches: wooden cubes and a free-standing the workbenches and tables of the research department, while products and prototypes are displayed on shelves on the outside. Here, too, a rather holistic approach dominates the view: The research floor and the production hall Driven by curiosity and open-mindedness,

All employees pass this spot at least once a ful hands under watchful eyes. Everyone who day - because ideas are also stimulated by communication.

TIME TO WRITE A NEW CHAPTER IN THE

has thought ahead from the very beginning. The story of a company where heads and hands work closely together, where thinking and getting things done are carefully linked. glass wing on a brand new deck. Inside are Right from the start, ewo was characterised by the awareness that when you come from a different background, you have to be faster than those already on the market.

are in direct eye contact with each other. Flora Emma Kröss and Ernst Wohlgemuth

- HQ surroundings, Caldaro, 2019
- ewo HQ, Cortaccia, 2019
- Flora Emma Kröss, Hannes Wohlgemuth, Ernst Wohlgemuth. Cortaccia, 2019

118 119 1 Booth at Light + Building, Frankfurt, 2018

2 ewo blacksmiths, Sarentino, 2009

3 Hannes Wohlgemuth, Cortaccia, 2019

4 Designer Jörg Boner, Hannes Wohlgemuth, Ernst Wohlgemuth, Cortaccia, 2019

5 ewoTALKS "Industry 4.0. The Future is Now", Marcus Fairs, Clemens Weisshaar, Vienna, 2016

6
ewoTALKS
"Urban Lounge",
Elina Kränzle, Hannes
Wohlgemuth, Sandra
Hofmeister, Patrick Lüth,
Anna Rose,
Bolzano, 2019

founded the company in 1996. "We knew early on, as lateral entrants we could only rely on quality and flexibility," says Flora Emma Kröss. Their flexibility has always allowed the entrepreneurial couple to quickly react and adapt.

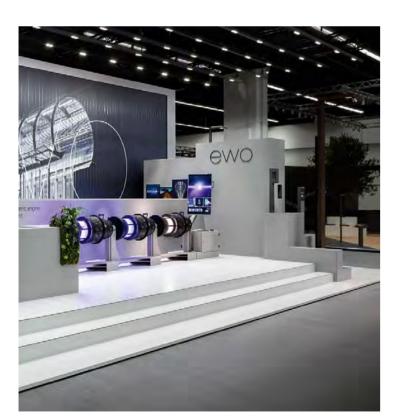
ewo still retains its flexibility – and the story has been passed on and placed in new hands to be continued with new decisions. At the turn of the year 2018/19 ewo opened a new chapter when Hannes Wohlgemuth, son of the founders, took over the executive management. With Hannes at the helm, the 2nd generation of ewo is being driven by creative solutions paired with innovation.

Thus the DNA of an innately versatile company is passed down through the ages – in a setting where family and business are considered the driving forces of innovation.

ewoTALKS IS A SERIES OF CONVERSATIONS INITIATED BY ewo TO DISCUSS THE RECIPROCAL EFFECTS OF THE INTERACTION BETWEEN ART, DESIGN, ARCHITECTURE, TECHNOLOGY AND THE BUSINESS WORLD. FROM NEW NETWORKS OF INFORMATION TO THE SIGNIFICANCE OF PUBLIC SPACE

In 2015, ewo CEO Hannes Wohlgemuth initiated the series in cooperation with the Museion Foundation of Bolzano/Bozen. The focus: interdisciplinary and socially relevant topics that piqued his interest both as an architect and as an entrepreneur. "For us, light is an aesthetic element based on a progressive technology that allows us to draw on abundant resources – both for the present and when looking ahead, for many years to come", he explains. "That's why we are interested in all areas that light touches upon." The ewoTALKS format is the ideal forum to fuel this interest through dialogue, discussing current trends in design, architecture, technology, business and the arts.

ewoTALKS has its finger on the pulse of the zeitgeist and looks into the future with a curious and critical eye. What moves us at this transition point between creative disciplines, technological progress and economic drive? Which digital and networking worlds are currently being constructed? How is the social significance of space changing? Are we facing a revolution of our mobility, with new transport and information systems? These are just some of the questions that ewoTALKS raises – in search of a multitude of possible answers.





2



3







6

ewo Inside 121





ewoLAB "Magic" UniBZ, Bolzano, 2019

Inside 123









"URBAN LOUNGE - public space as a living room" was the motto of the December 2019 edition of ewoTALKS. For ewo, public space is an essential sphere of action. It is therefore FRESH IDEAS AND NEW PERSPECTIVES: significance of these spaces. Because in times FOR THE FUTURE of prioritising and the constant bolstering of our individuality there is an increasing need for more community. As a democratic good, public spaces offer a chance to build new relationstructures.

editor-in-chief of the architecture magazine DETAIL - in early December 2019 a high-profile discussed the current and future relevance of public spaces with Hannes Wohlgemuth at

the Museion Museum of Modern and Contemporary Art in Bolzano.

only logical to react to changes in the use and ewoLAB IS A PLAYFUL DESIGN TOUCHSTONE

Installations, playful colour combinations, an unbiased new understanding and way to view light: All these things open up a vast playing ships. They create meeting points for social field. And because each team benefits from the freedom of a whole new, concerted focus, new questions can be raised and new solutions Moderated by Sandra Hofmeister – author and sought. After all, ewoLAB is also a testing ground for new developments.

panel consisting of Elina Kränzle, urbanism With this in mind, it is only natural for us to researcher at TU Wien, Patrick Lüth, architect keep in close contact with the design talents and Managing Director at the Innsbruck offices of the future. In the 2018 summer semester, of Snøhetta and Anna Rose, urban planner, one such collaboration with the Free Univerarchitect and Director of Space Syntax UK, sity of Bolzano/Bozen produced a series of remarkable design ideas.

1 ewoLAB "The Alphabet", JDS, Bolzano, 2010

ewoLAB ECAL Lausanne, Bolzano, 2011

2

3 ewoLAB "Tagliente", Plasma Studio, Bolzano, 2010

ewoLAB "Function1.1", Brecht Heytens, Bolzano, 2017

124 125 The aim of "Magic", the 9th ewoLAB project, was to re-imagine public space as a kind of play-ground that invites people to interact with their surroundings. The inspiration for the design was drawn from the location itself: luminaires that react to sound and emerge from the ground, rechargeable lighting elements that people can carry around with them – these are just two examples from a wide range of ideas that can transpire when a solid concept and a team of creative minds work in unison.

WHO WOULDN'T WANT TO HOLD LIGHT IN THE PALM OF THEIR HAND?
THE EWOSPHERE BRINGS AN ENTIRE COSMOS OF LIGHT WITHIN EASY REACH

New spaces open up new worlds. With the ewoSphere, we have developed a novel tool that offers brand-new opportunities to anyone working with light. It combines the power of our third-generation A–Series lenses with the perks of added LED options in a compact, handy little orb that allows its user to exchange and test different lens optics and LEDs in less than no time. The ewoSphere demonstrates the infinite flexibility of light distributions and colour temperatures in a most simple way, making modularity easy to grasp in every sense.

ewoSphere,

ewoSphere, Cortaccia, 2018

Design:

Cortaccia, 2018

Kram/Weisshaar Cortaccia 2018

ewoPhotometricEngine,

"The handy ewoSphere offers a user-friendly experience that demonstrates the endless flexibility of the A-Series virtually anywhere – without the need to visit previous projects to see the light in action," as product designer Moritz Kessler summarises. "Holding such powerful LEDs in your hands, being able to illuminate nearby objects and see how the light distribution affects the surroundings is a major innovation for lighting designers, architects, project managers and members of the sales team."

WITH PLAYFUL EASE,
THE ewoPhotometricEngine UNRAVELS
A WORLD OF FLEXIBILITY

"With the A-Series, we have completely revamped modular lighting systems. Massive miniaturisation and an extremely powerful Industry 4.0 process that maps each and every one of its steps from planning to installation have allowed us to open up an enormous new potential in terms of both design and efficiency," says ewo founder Ernst Wohlgemuth.

The booth presenting the A-Series light at the Light + Building fair in 2018 was also an innovation in itself. Developed in cooperation with Clemens Weisshaar and Reed Kram, ewo's new ewoPhotometricEngine interactively explores the flexible and infinitely variable possibilities of applying modular concepts. The machine simulates light distributions live in a playful, accessible way and with a comprehensible interface. "The ewoPhotometricEngine is an optomechanical light simulator that allows you to experience the configuration of 1,799,866,966 different light distributions available in the ewo A-Series," designer Clemens Weisshaar explains.

Any light distribution can be combined with any luminaire, whether it is a street luminaire, bollard or mast, a wall-mounted system or a handrail fixture.

Flexibility is the backbone of the company, and it has been from day one. No wonder, therefore, that ewo is particularly proud of the ewoPhotometricEngine – of making flexibility visible and accessible.





2

1



3

ewo Inside 127

Headquarters Cortaccia/Kurtatsch near Bolzano/Bozen, South Tyrol, Italy ewo

> Offices Austria and Germany

plus an extensive network of international partners

Number of employees > 100

CEO Hannes Wohlgemuth

CONTACT

We know that special lighting projects require close interaction. That is why personal contact with you is the key to our corporate philosophy.

Call us today - our team of experts will be happy to advise you.

Would you like to stay up to date on what's new at our end? For all the latest updates, visit our website and follow us on social media: ewo.com

Instagram (ewolighting) LinkedIn (ewo srl/GmbH) Facebook (ewo.lighting) YouTube (ewo)

ewo srl/GmbH Via dell'Adige/Etschweg 15 IT-39040 Cortaccia/Kurtatsch BZ +39 0471 623 087 mail@ewo.com ewo.com

ewo Deutschland GmbH Gotzinger Straße 8 DE-81371 München +49 (0)89 5203 0729 germany@ewo.com

ewo Austria GmbH Grabenweg 3a AT-6020 Innsbruck +43 (0)650 3064 799 austria@ewo.com

IMPRINT

Projects and Products: First edition, February 2020 Publisher/Copyright: © ewo srl/GmbH

Concept/Design: MMCC Mark Möllenbruck Translations: ewo, Barbara Oberhofer

Editing: James Turner

Photographers: Achim Reissner, beierle.goerlich, Bernhard Limberger, Damiano Nava, Dubai Airport, Filiberto Daidola, Flash Studio Photography, Florian Brenner, Hans Georg Esch, Herbert Piel, ICD/ITKE Universität Stuttgart, Jacopo Coen, James Lenney,

Jasmine Deporta, JeanMarc Charles, Jean Christophe Hecquet, Johann Lichtl, Johannes Roloff, Jürgen Schwope, Kathrin Obletter, Linda Jasmin Mayer, Luca Meneghel, Malou Reedorf, Marcus Ebener, Mario Ciampi, Markus Lindert, Michel De Pourq, Moritz Lechner, Nathalie Peters, Nava-Rapacchietta, Nicolò Degiorgis, Niels Nygaard, OskarDaRiz, Pascal Simonin, Paul Ott,

Ralph Feiner, Simone Tarozzi, Walther Toft, Werner Huthmacher, Xavier Boymond

Renderings: Mirko Bocek Project Lead: Anabel Nächt

Longo AG, Via J. Kravogl 7, I-39100 Bolzano Print:

Errors and omissions excepted. Subject to change.





128 ewo

