

Das gute Licht

01|2021

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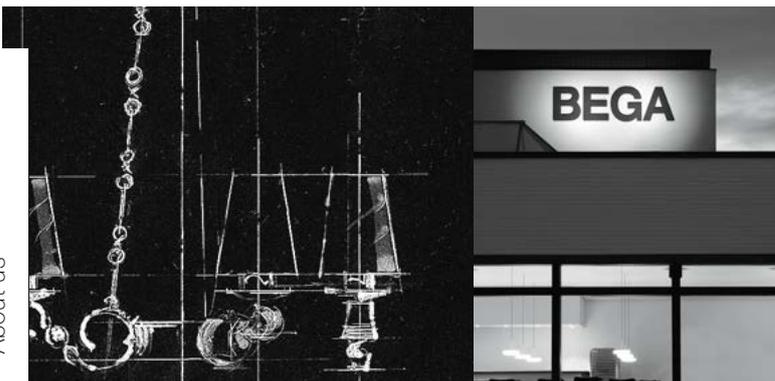
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Foreword



Dear reader,

How will we look back on 2020 now and in the future, with the benefit of hindsight? The answer to this question is far too individual in nature – and accordingly, there is no single explanation.

The events of the last twelve months have taught us to adapt to unsettling new circumstances that previously seemed unthinkable. That economic forecasts and the hope of an upturn would be so closely yoked to matters of health – such scenarios were believed to be a thing of the past and consigned to the history books.

But whether a vaccine becomes available or not, one thing is certain: changing the way we interact on a day-to-day basis reduces the spread of the coronavirus.

Our action plan to protect our employees, which was released early in the year and is continuously being updated, continues to keep us on course. And it is you, our customers and partners, who benefit from its implementation as the BEGA service remains fully available and we continue to guarantee delivery. Reliability remains extremely important to us in this new normality.

2020 was also the year in which our company turned 75 years young. What my grandfather started with determination, foresight and a passion for good lighting, remains entirely true today: our products and our customers' satisfaction are at the heart of everything we do – and BEGA will remain an innovator in sophisticated architectural lighting. We invest in the further development of our luminaires and lighting technology on a daily basis. Meanwhile, we aim to remain a manufacturer now and always.

Our performance floodlights with patented BEGA Vortex Optics® technology are just one example of this aim. Our innovative strength is characterised by outstanding lighting results for the entire RGBW colour spectrum, compact dimensions and the interplay of numerous technical innovations. These factors also characterise our research and the constant further development of our company.

Our lighting solutions are in global demand. They help to present architecture in the way it deserves and as our clients want it to be. The world-famous Neuschwanstein Castle is undoubtedly one of the most special projects of the recent past. We are delighted that the lighting designers were able to work so efficiently with our floodlight portfolio.

The effect of our pendant luminaires for large rooms is clear to see in a project in St. Gallen, Switzerland, where they serve the needs of people requiring special care. Our philosophy that lighting contributes to an atmosphere of well-being applies was of particular significance in this project, as it so very often is.

Our chandeliers reflect the grandeur of large rooms and grand banquet halls. As well as lighting, they solve the challenge of an impressive and unique decorative feature in the room. We offer chandeliers with different light effects and light distributions.

I hope you enjoy reading our magazine!
Yours sincerely,

Heinrich Gantenbrink

A scene from a fairytale

Germany's most famous castle and monument fascinates and inspires people around the world. New lighting solutions highlight its many architectural details at night.

Germany's fairytale castle – famous around the world: Neuschwanstein Castle in Bavaria is the incomplete architectural masterpiece of King Ludwig II. Originally used as a private retreat by its reclusive inventor and builder, the site is now a magnet for visitors. 1.5 million fascinated

visitors per year step into the fairytale realm of the castle – that's up to 10,000 people a day. Although not originally intended as a show of power, the castle is a breathtaking sight, even from many kilometres away. After dark, cleverly and thoughtfully placed lighting pays homage to this most famous monument in Germany. ▶







Square tower
architecturally inspired by Roman watchtowers and medieval castles



Stair tower
features architectural influences from the Ottoman Empire

Did you know...

...that after the foundation stone was laid in 1869, the first rooms of Neuschwanstein Castle were furnished in 1884? For more than two decades, the construction site was the largest employer in the region with up to 300 workers at once working on implementing the plans of King Ludwig II.

...that the castle was constructed from bricks? Claddings with other types of masonry were added later. The white limestone used in the facades comes from the nearby Alterschrofen quarry.

...that the energy saved by modernising the exterior lighting amounts to approximately 9,000 kilowatt hours per year?

The intricate and detailed architecture of the castle poses a challenge for the lighting designer



Neuschwanstein Castle is unique in its impact on people: the castle has countless details, inspired by different cultures and building periods, to discover.

Lighting designer Walter Bamberger and his engineering firm conceptualised and implemented the new lighting design for the exterior of the fairytale castle. To achieve this, he set out to become intensely familiar with King Ludwig II and the history of the castle's construction. "The intricacy and attention to

detail of the architecture is both fascinating and challenging," says Bamberger. "The big challenge was to come up with a lighting design that has the same impact on the observer from many kilometres away."

When the decision was made to replace the old exterior lighting from the 1980s ("It was just bright!") with modern, energy-saving and insect-friendly LED light, the Bavarian Palace Administration ultimately rejected two already created lighting concepts – and recommended



“We essentially deconstructed Neuschwanstein, with its many influences and angles, into its individual parts.”

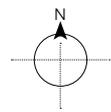
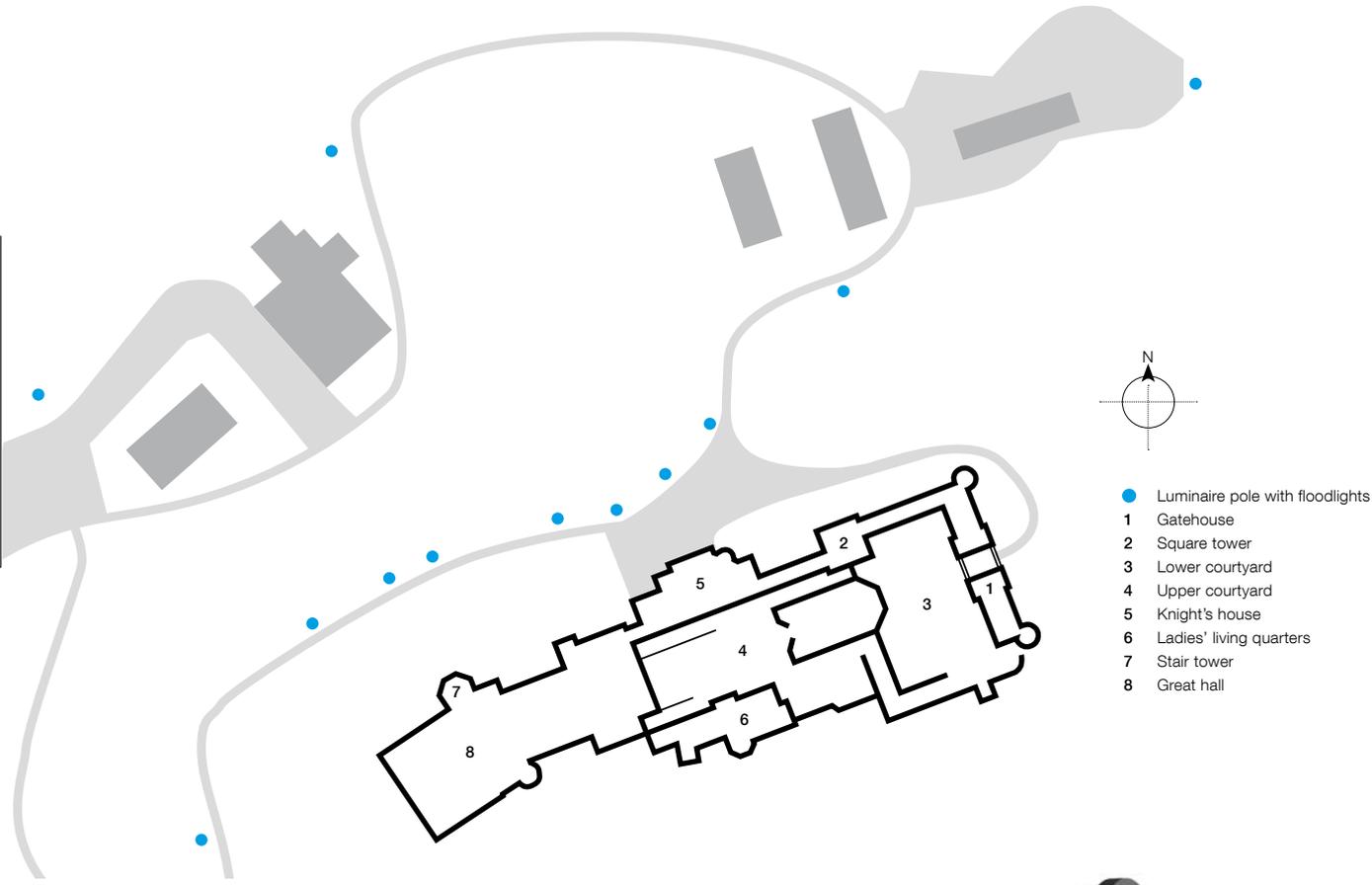
Walter Bamberger, Lighting Designer

the firm of Walter Bamberger to the responsible municipality of Schwangau instead. The specialist in special lighting scenarios was only satisfied with his design, which he said “should be more than just a mundane spotlight illumination”, on the second try. The engineering firm’s design earned admiration from the administrators of this architectural jewel.

Bamberger’s solution: to use light and shadow to their maximum effect and highlight the details, as though Neuschwanstein Castle were coated

in a fine layer of icing. “It’s important to understand the philosophy of the castle, which was never really completed.”

A tower, which is reminiscent of a minaret and documents King Ludwig II’s enthusiasm for Ottoman culture, is part of a visual composition with elements of a medieval castle and the appearance of a Roman watchtower. ▶



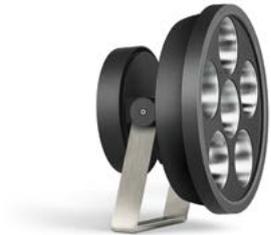
- Luminaire pole with floodlights
- 1 Gatehouse
- 2 Square tower
- 3 Lower courtyard
- 4 Upper courtyard
- 5 Knight's house
- 6 Ladies' living quarters
- 7 Stair tower
- 8 Great hall



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Distinctive images at night: the castle goes to sleep

In his design for the illumination of Neuschwanstein Castle, Walter Bamberger set out to "Find the architectural elements and make them stand out from the facade!" Targeted placement of shadows makes the castle look even more lifelike at night and from a greater distance. "We tried to find luminaires with the corresponding light distribution and output for every single angle and situation of the architecture, which was designed by King Ludwig himself," explains Walter Bamberger. "We also broke down the lighting into single elements."

To create spatial depth and a variety of luminous energy, the various BEGA floodlights provided just the right level of implementation. "We have played a lot with the BEGA portfolio and thoroughly shuffled it for the nighttime illumination of the castle," says Walter Bamberger. Eleven different high-performance and compact

floodlights light up Neuschwanstein Castle from a distance. The fact that the individual floodlights are available with different light distributions and light outputs helped implement Walter Bamberger's concept for the world-famous castle with pinpoint precision.

"My motto was: the castle goes to sleep! I had never done anything like it before."
 Walter Bamberger, Lighting Designer

But illuminating the castle's unique features in their entirety was not the only challenge that presented itself after dark. Walter Bamberger

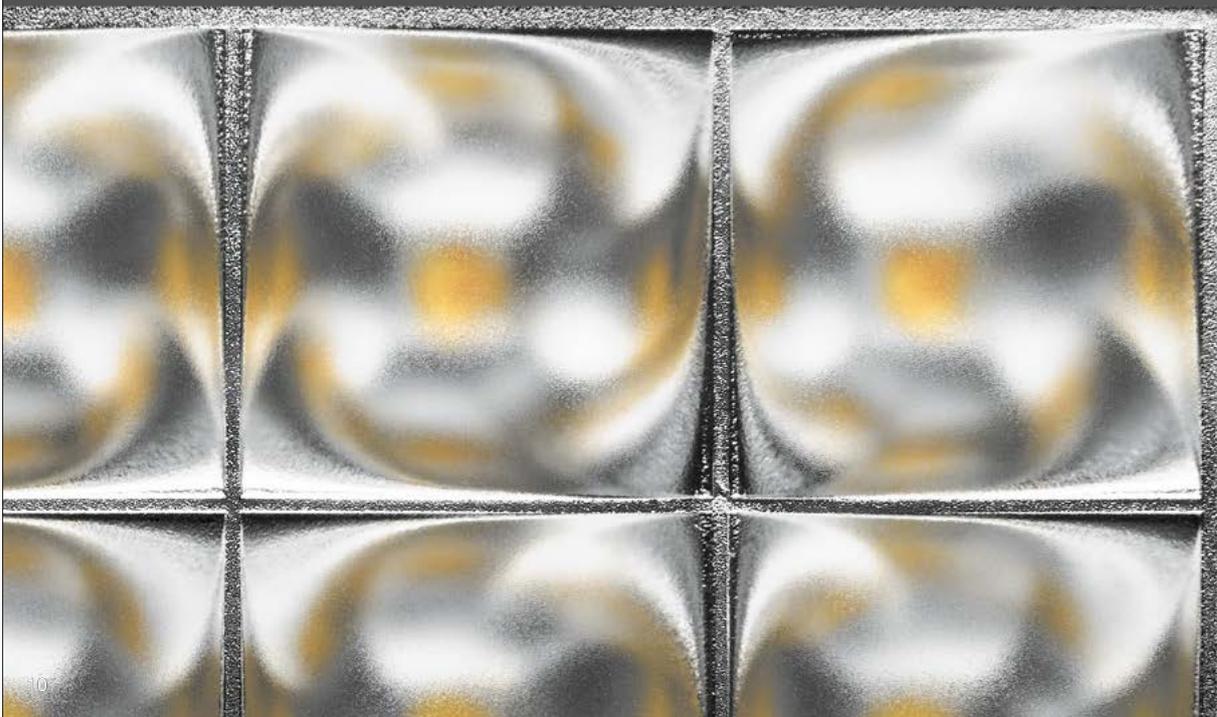
experimented with a one-of-a-kind closing scenario at night: "The lights shouldn't just go out," explains the engineer. Just before 11 pm, the observer is shown a spectacle in which the middle elements of the castle are first to disappear into the night. The light is carefully dimmed before being extinguished. "After that, the two dominant towers appear from a distance as though they are two separate castles. It's a very distinctive image," remarks Walter Bamberger. After the final scenes in the performance, Neuschwanstein Castle finally goes to sleep for the night.

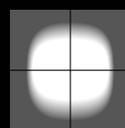
Underlying it all is the legend of this 19th-century masterpiece. Walter Bamberger gets to the heart of his fascination of Neuschwanstein Castle, saying: "To get the change to work on such a famous building is something special, and make us very proud." ■



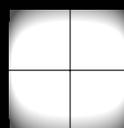
In a performance class of its own

Precise light deflection and light distribution without interfering artifacts:
Our performance floodlights with the patented reflectors EP 3098504 –
BEGA Vortex Optics® set the highest standards - in virtually any aspect
of the the efficiency, technical potential and visual effect of the luminaires.

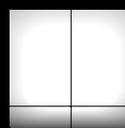




Narrow beam



Wide beam



Asymmetrical





Scan this code to see
our performance floodlights

BEGA performance floodlights are characterised by highly efficient light outputs with very compact design. The patented BEGA Vortex Optics® reflector system is optically effective as well. The newly developed twisted reflectors with a virtually wear-free surface, made of pure aluminium, enable intense concentration of the light for perfect light deflection. The grid structure of the optics ensures outstanding visual comfort by suppressing glare from the light source.

In the RGBW version, a wide range of coloured light atmospheres is brought to life with vivid colour and light effects. The colour is mixed before the light even leaves the optics, rather than when it is already on its way to the illuminated surface. This results in significantly more homogeneous colour mixing.

The thermal management of the performance floodlights, which ensures the long service life of the LED modules and other components, is also extremely effective – even in intensive use, as well as in extremely high ambient temperatures. The interaction between the thermally intelligent design of the luminaire, the protection of the temperature-sensitive components using BEGA Thermal Control®, and the efficient LED module, manufactured in-house, improves both efficiency and safety by ensuring effective heat dissipation. In the event of temperature influences that are well over the defined maximum values, the

luminaire reduces the nominal power so subtly that it is barely perceptible. As a result, the floodlight continues to operate in this high temperature range – without negative effects on performance and the service life of the LED modules.



The performance floodlights offer narrow-beam, wide-beam and asymmetrical light distribution and feature an innovative closing system without visible screws, as well as a highly efficient and reliable BEGA Ultimate Driver® power supply unit, rounding off the extensive package of benefits offered by these exceptional luminaires. For light experiences that set standards in every colour range. ■





Client	Gemeinnützige und Hilfsgesellschaft der Stadt St. Gallen (CH) (Charitable Aid Society of St. Gallen)
Architects	Benz Engeler Architekten BSA SIA, St. Gallen (CH) Timon Bischofberger GmbH, St. Gallen (CH) Oestreich + Schmid GmbH Architekten BSA SIA, St. Gallen (CH)
Construction management	rörm Ruppanner Baumanagement GmbH, Sirmach (CH)
Photos	Jürg Zürcher, St. Gallen (CH)

Individual lighting atmosphere

The GHG Rosenberg competence centre “Living, Support, Care” is a unique project. 40 million Swiss francs were invested in a home for the elderly that offers help and support to people requiring special care.

The roots of the “Gemeinnützige und Hilfsgesellschaft der Stadt St. Gallen” (CH) (Charitable Aid Society of St. Gallen, or “GHG” for short) go back to 1816. Then known as the “Hülfsgesellschaft”, the organisation was founded to combat famine in the Swiss canton of St. Gallen. Help and support for people requiring special care remains the organisation’s primary mission more than 200 years later – a society that works for society. The GHG Rosenberg competence centre is the biggest project in the organisation’s long history. Two care homes that were

previously run in separate locations were merged at Rosenberg in St. Gallen.

The planning and implementation of the project was a spectacular undertaking:

In order to build a second house with 130 residential units next to the existing building for the centre, a historically listed villa was moved 20 metres using steel rails and hydraulic presses, assisted by a special company.

The new build was then constructed parallel to the existing building – the two houses forming one harmonious unit. ►





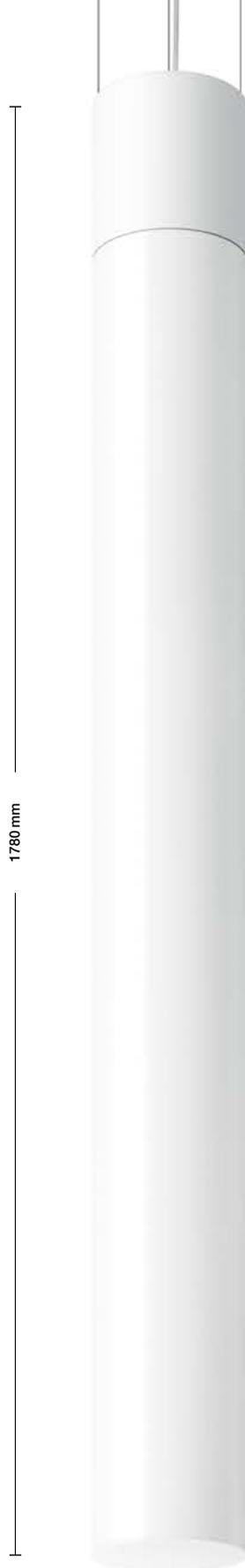
BEGA pendant luminaires for large rooms light and decorate the two-storey recreation rooms

Optimal oases of well-being for residents with special care needs: GHG designed its competence centre "Living, Support, Care" in Rosenberg, St. Gallen, with a special feature: two groups of 20 residents share each of the respective recreation rooms. Two-storey dining and social areas form the centre of their life together.

The interior renovation was completed using various materials and building elements. Different types of wood and concrete walls characterise the interior architecture.

The large, high-ceilinged recreation rooms of the St. Gallen competence centre required special lighting solutions. They are illuminated with BEGA pendant luminaires for large rooms with additional downlights. The high light output of the unshielded luminaires enables efficient vertical illuminance free of glare. The downlights additionally create a high degree of illuminance on the illuminated surface. The luminaires are DALI-controlled – for individual lighting atmospheres in the recreation rooms. They also function as a striking feature that elegantly accentuates the height of the room. ■





1780 mm

**50673.1**

For additional illuminance below the luminaires, the unshielded pendant luminaires for large rooms can also be ordered with an extra downlight installed. Both light functions can be DALI-controlled separately to create individually adjustable lighting atmospheres.

50672.1

Impressive dimensions and high light outputs: The BEGA pendant luminaires for large rooms emit a pleasant, unshielded light and lend even more elegance to large rooms with high ceilings.



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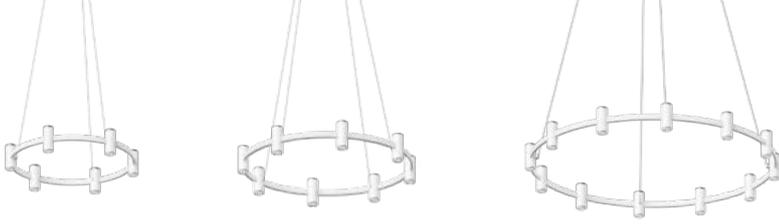
The historical chandelier for the modern day

BEGA luminaires with the latest technology give grand halls and rooms a unique shine

Originally, historical chandeliers were fitted with oil lamps or candles for lighting of extremely large rooms. Their grand size and appearance makes these prestigious pendant luminaires look ever so impressive.

From their traditional beginnings in the fifth century, these historical luminaires evolved into

the modern chandelier – a wide ring suspended from three chains with multiple luminaire arms. For a grand hall or large room not to have one of these decorative, illuminating fixtures was just as unthinkable centuries ago as would be today. BEGA chandeliers are the contemporary interpretation of these historic luminaires. Equipped with the latest technology, of course. ▶



Striking luminaires make a big impact

Pleasant, impressive and festive lighting for grand halls and large room architecture: BEGA chandeliers not only impress with their light effects. Their generous size elevates both exclusive private rooms, as well as grand, stylish architecture.

We have redesigned these luminaires and offer them in various different versions. There is now a variety of light effects and light distributions to choose from, which can be adapted to the individual room. All the luminaires distribute their light both upwards and downwards – and can be separately controlled on custom-made products. ■



Chandeliers with BEGA Hybrid Optics®

The downlights with wide-beam light distribution utilise the advantages of lens and reflector technology.

The result is highly efficient, low-loss optical systems with optimum glare suppression and very compact dimensions. Chandeliers with this lighting technology stand out due to their very high luminous efficiency and the excellent quality of their lighting.





50882.1



50885.1



50888.2

Chandeliers with opal glass

Lenses made of three-ply opal glass softly and evenly distribute the light upwards and downwards in the room.

The frosted hand-blown luminaire glass provides a pleasant, uniform brightness and a lighting atmosphere that is reminiscent of festively lit rooms, thanks to the long cylindrical luminaire bodies.



Chandeliers with crystal glass

The partially frosted, thick-walled crystal glass characterises the festive aesthetic of these chandeliers. The built-in reflector deflects the light upwards and downwards in the room in a very wide beam.

The handcrafted crystal glass creates a brilliant, multi-faceted play of light.



STUDIO LINE chandeliers

The STUDIO LINE chandeliers feature a fascinating composition of different metal finishes with an elegant lighting atmosphere.

The matt, metallic colours on the interior (aluminium, brass or copper-coloured) contrast beautifully with the velvet black or velvet white exterior finish – especially when illuminated.



A true manufacturer

BEGA luminaires are long-lasting products of the highest quality. This philosophy has characterised the continuous further development of our company for 75 years.

The luminaire is our focus. Always. When Heinrich Gantenbrink founded our company 75 years ago, he treated our products as a “leadership tool”, as he would say. This determined resolve to create long-lasting assets in illumination and lighting technology continues to define our work today. The Gantenbrink family continues to own and manage BEGA in its third generation, and define the development of our products from day to day.

To be a worldwide leading brand and innovator in sophisticated architectural lighting – that is one of the primary aims of the BEGA mission statement. This provides an outlook for the future, far beyond our anniversary year of 2020.

Another guiding principle is that our goods and services help our partners to maintain a successful presence on the market. This calls for an exceptional continuous further development process, which exceeds the expectations of the market with the quality of our products and media, and sets the

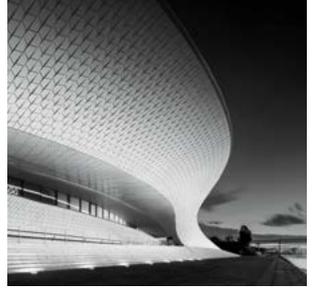
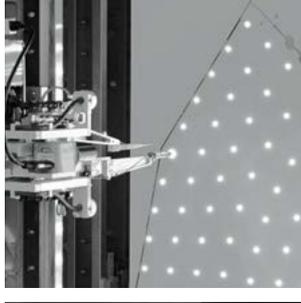
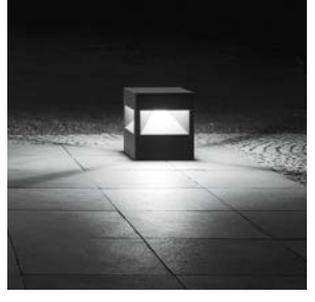
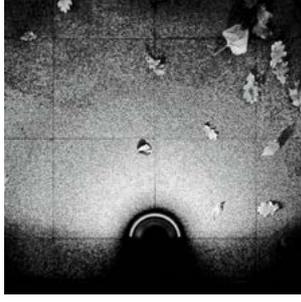
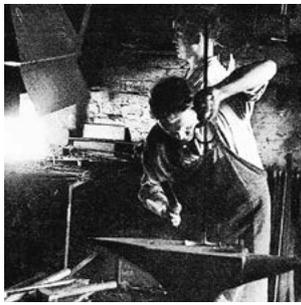
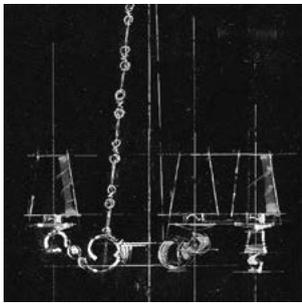
benchmark for the competition.

Our promise: we never stop researching and continually developing our products, services and technologies, as well as ourselves.

Meanwhile, we remain true to our fundamental principles: BEGA is and will always be a true manufacturer. Our products are first and foremost made by people who give a face to the diversity of our work.

At the beginning of 2020, we could never have guessed that our anniversary year would be defined by the coronavirus pandemic. This exceptional situation has forced us to postpone all anniversary plans to an undetermined time in the future. We are focusing on other priorities for the sake of people and our company.

The current challenges will remain with us for some time, and we will continue to rise to them. For the future success of our partners – together with BEGA. ■



LED compact downlights for flush-mounting installation in unplastered and plastered concrete ceilings



Symmetrical, asymmetrical and flat beam light distribution
1210 to 2845 lm

Recessed ceiling compact downlight with three light distributions for convenient flush-mounting installation in plastered and unplastered concrete ceilings. Suitable installation housings are available for the respective installation situations, including for installation in precast ceilings and in-situ concrete ceilings. Upon completion of the ceiling, the luminaires are quickly and easily inserted into the recessed housing via a bayonet closure. The recessed housing for plastered concrete ceilings is delivered with a levelling device to ensure precise alignment with the plaster thickness. Both recessed housings include a holder for the luminaire's external DALI power supply unit for convenient overhead installation.

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