Leica at the photokina 2012
What connects the legendary camera brand Leica with ERCO? Would it be aspects such as the fascination with light, whether as a medium of photography or as the fourth dimension of architecture, or an uncompromising standard of design, quality and precision, "made in Germany"? Commitment to technical progress? One way or another, as Leica revolutionises digital photography, ERCO is breaking new ground with LED lighting technology. Leica Camera presented world-class photography on 5000m² – illuminated by ERCO's Light Board LED spotlights.
The fascination with light is as strong as ever in the digital age. Standing as exemplary proof of this, the new Lichtbericht is filled with LED projects from a wide field of applications, ranging from private residences and civic buildings to retail stores and trade fair stands. You’ll find it all in this Lichtbericht, also serving as proof that the LED continues to find more and more applications.

Camera producer Leica is a brand that made the technological transition from analogue to digital a few years back. At the photokina 2012 in Cologne, Leica presented itself with a stand of outstanding proportions and a photo exhibition. Optical precision – a quality which Leica continues to perfect in exemplary manner – is also our focus as a Light Factory in the digital age. It’s the common denominator uniting ERCO in successful cooperation with Leica.

Villa Linari in Hamburg is a piece of architecture designed to stimulate all five senses. Light and smell form a virtually symbiotic unit here. Multi-sensory interior design is the key to an integrated spatial experience. Colour, shape, light, haptics, material, sound and smell blend in optimum combination. The result is synaesthetic architecture which subtly affects the subconscious.

On page 14 of this Lichtbericht we are giving you a small insight into the production process of our precision lenses. Featuring a new, automated production cell for polymer lenses, it spans the entire value chain in a seamless process, from injection moulding of the lenses and their removal from the machine for laser cutting through to optoelectronic testing.

Schorndorf town hall stands in the birthplace of Gottlieb Daimler. Dating back to 1730, the traditional building has now been renovated to present itself in accord with an attitude of modernity. Naturally, this project was also provided with state-of-the-art LED lighting technology. Along with the required light quality, the deciding factors for the town council were low energy and maintenance costs.

“Stiefelkönig” in Vienna also presents itself in a context dominated by LED lighting. Typical for a high-end shoe store of its calibre, product presentation is always the most definitive argument – coupled, of course, with the energy benefits of an LED lighting system.

The Turck group in Halver supplies high-tech products for industrial automation. Its new office and production building was to reflect the same high-tech in lighting. The new building complex therefore was provided with an efficient, networked LED lighting system. DALI-controlled LED lighting ensures efficient visual comfort across the facility.
London
As a successful construction and property company, Mace knows what an exclusive foyer should look like. Quintessence LED wallwashers and LED downlights were a great option for the entrance area of its new head office.

Mace HQ, 155 Moorgate, London
Architecture and lighting design: Mace Group, London
Photos: Edgar Zippel, Berlin
www.macegroup.com

Os (Bergen)
From outdoor areas to galleries and restaurants right through to the auditorium, the designers of the Oseana cultural centre in the Norwegian municipality of Os opted to use ERCO’s lighting tools – largely with advanced LED technology.

Oseana Art & Culture Center, Os (Bergen)
Architect: Grieg Arkitekter, Bergen
Lighting design: Multiconsult AS
Photos: Thomas Mayer, Neuss
www.oseana.no

Hamburg
Whilst walrus Neseya circles her new territory elegantly and weightlessly in the Arctic compound near Hagenbeck, visitors enjoy extraordinary views into the 7m deep basin thanks to panoramic windows. Elegant, efficient and robust Grasshopper LED spotlights illuminate the associated, highly informative exhibition.

Arctic compound, Hagenbeck Zoo, Hamburg
Architect: Geising & Böker GmbH, Hamburg
Photos: Frieder Blickle, Hamburg
www.hagenbeck-eismeer.de

Utrecht
In the semi-basement of the Rabobank high-rise facility, Sander Architects are currently designing a modern presentation area for the bank’s art collection and for temporary exhibitions – illuminated by flexible Optec LED spotlights on a structure of suspended Hi-trac track.

Rabo Art Zone Gallery, Utrecht
Architecture: Kraaijvanger, Rotterdam
Interior design: Sander Architects, Amsterdam
Photos: Thomas Mayer, Neuss
www.rabokunstcollectie.nl

London
In November 2012, London unveiled a new monument: Funded by public donations, the Royal Air Force Benevolent Fund set up a memorial for the 55,573 airmen of RAF Bomber Command who died during World War II. Designed in neoclassical style, the pavilion in Green Park near Hyde Park Corner houses a group of 7 bomber airmen statues. Daylight illuminates the sculptures through the open roof, while Grasshopper LED spotlights provide scenic lighting for the monument at night.

Bomber Command Memorial, London
Architect: Liam O’Connor, London
Photos: Edgar Zippel, Berlin
http://bombercommand.org

Madrid
This museum has housed the estate of Spanish painter Joaquín Sorolla (1863-1923) since 1932. The lighting of the temporary exhibitions has now been upgraded to Logotec LED spotlights.

Museo Sorolla, Madrid
Lighting design: Concurso Luca de Tena (Museum Management)
Photos: Nuno Caldas, Barcelona
http://museosorrillanooces.es

Paris
Test run at the brand-new studios of broadcaster Radio France International – the foreign service of the public radio broadcast in France. Last year, the broadcaster moved to new premises under the roof of “Audiovisuel extérieur de la France” in Issy-les-Moulineaux outside Paris. The challenging visual tasks of the audio technician at the mixing desk require highly shielded lighting tools: Compact 100 downlights for ambient lighting and Logotec LED spotlights for accentuation of the controls solve the challenge.

Studio Radio France International, Paris
Architect: Quinlan et Rossi, Ivry-sur-Seine
Photos: Dirk Vogel, Dortmund
www.rfi.fr
Bright prospects

Highline Park, New York
Architect: Diller Scofidio + Renfro, New York
Lighting design: L’Observatoire International Inc., Hervé Descottes, New York
Photos: Thomas Mayer, Neuss
Leica is a leading German brand known for quality and precision. The radical technological change from analogue to digital photography meant that the company had to steer a path through choppy waters, yet with surprising and innovative products and, finally, a spectacular trade fair presentation, it was possible to demonstrate the technological expertise together with cultural understanding of the legacy. Is it any wonder then that this story equally fascinates and inspires us, or more so that ERCO is proud to have contributed to it? With this introduction, we refer to the photokina 2012 trade fair held in Cologne last September. Leica Camera single-handedly filled the full 5000m² of Hall 1, occupying it with themed islands focused on different product lines, each marked with an oversized letter. The “Leica Gallery” added a cultural component. Presenting world-class photography, it filled the gap left when Köln Messe discontinued its special “Visual Gallery” exhibition, installed 8m above the entire space were some 800 Light Board LED spotlights provided by ERCO. Offering superior efficiency, precision lighting and excellent visual quality, Light Board fully measured up to the Leica standard, effectively transforming the stand into a dynamic and compelling setting for a broad array of experiences. The spotlight range with a really striking design has only been on the market since early 2012 representing the latest in LED lighting technology. Equally, it was rapidly deployed by a variety of famous art galleries and museums around the world. The primary feature of ERCO’s LED spotlight technology is undoubtedly its flexibility ensured through the creation of interchangeable Spheralit lenses that act as tertiary optical systems to determine the beam angle – a concept that finds parallels in the interchangeable high-speed lenses which have made the Leica M system a legend. Even the beam angles of Light Board spotlights are much closer to the ideal than conventional spotlights: the significance is clear – virtually free of spill light, highly homogenous, and with a soft, yet precisely defined edge. With a toolbox ranging from narrow spot through to wide and oval flood, objects of different sizes can be illuminated systematically and established in rich contrast: this includes the oversized letters or individual product exhibits. A row of light points, produced by spotlights pointing downwards onto the centre aisle of the stand at a perfectly vertical angle, underlined the light quality and guided the visitor to the Leica Gallery, where Light Board spotlights exceeded in their primary function – as gallery illumination: more on this overleaf. The 800 Light Board spotlights are now awaiting new tasks at the future head offices of Leica Camera AG, which are swiftly edging towards completion in November 2013.

Innovative LED technology, optical precision and design quality: Light Board spotlights are the perfect tool to fulfill Leica’s stringent standard of lighting design and superior efficiency.

Leica cameras have been coveted by photographers since 1925, when the company created a revolution in photography with its serial production of the first small format 35mm camera. They equally enjoy the highest respect of Asians, who dominate the global market today.

Leica has now successfully forged a link with the digital age: albeit enduring some tough times on the way, the advantage of digital technology photos taken can be reviewed instantly. The light of the warm white LED spotlights meets the correspondingly high standards of colour rendering quality.

Even young photographers are captivated by the fascination of the Leica myth. Leica feel the fascination of the cameras and lenses.

Leica feel the fascination of the cameras and lenses.
Photos that made history: Nick Út’s photo of the Vietnam war became a media icon. Taken in 1972, it shows Kim Phúc as a burnt 9-year-old fleeing her village after a napalm attack.

Leica Gallery 2012, Cologne

Nick Út

At the photokina 2012 Leica presented the Vietnam-born photographer with the Leica Hall of Fame Award, primarily for his contemporary photographs of the Vietnam war. Born in 1951, Nick Út today works in Los Angeles; his first camera was a protest. After he left the military, he decided to become a photographer with his Leica M2.

Space for art and creativity between megapixels and zoom factors: the Leica Gallery provided inspiration for photokina visitors for whom photography is more than applied technology.

Leica Gallery provided inspiration for all photokina visitors for whom photography is more than applied technology.

An outstanding attitude among camera suppliers: Two thirds of Leica’s stand space was taken up not by products, but by photo exhibitions. Similar to ERCO, Leica is also shifting its focus away from the technical tool and onto the design result – whether in photography or in lighting architecture. Illuminated by ERCO, Leica presented works including the “Portraits of Power” series by Platon, “Arab Spring” by Magnum photographers Dominique Nahr, Thomas Dworzak and Moses Saman, shots of the noted “Facing Change: Documenting America” project by Anthony Suau, the “Personal Best for Leica” exhibition by Magnum photographer Elliott Erwitt, and photos by internationally acclaimed photographers including Barbara Klemm, Steve McCurry, Araki, Rankin, Andreas Gursky and Hubertus von Hohenlohe.

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Synaesthetic architecture

When we look at modern marketing approaches, stimulating preferably all five of the human senses, and with this, enabling perception on an emotional level, is an important goal. Architecture is also open to frequent and intelligent use of multi-sensory media in order to create an integrated spatial experience. This is seen in the case of “Villa Linari” in Hamburg, where architecture, light and smell form a virtually symbiotic unit.

At the end of the day, it is a question of whether the scent is right for the room or the room impression. Often, you don’t realise how important scent really is until there is an unpleasant smell in the room.”

Unconscious effect

The principle of multi-sensory stimulation is still rather uncommon in the home. Synaesthetic architecture is found primarily in hotels and shops or for temporary room installations. Often deployed in marketing activities and events, the sector relies increasingly on psychological and neurological findings. Consumer buying behaviour is not only influenced by the interior design, but also by mood lighting, scents and music.

“Synaesthesia” actually comes from the Latin word “synaesthesis” and refers to an alteration of perception in which sensory stimuli are combined in uncommon ways, making one believe, for instance, that we can taste or see music and smells. This same perception can also be triggered through intelligent combination of multi-sensory media in synaesthetic room concepts – here, however, as a conscious, sensual experience. Not all senses are stimulated to the same extent. Researchers ever found that the brain has a sensory “image” based on a number of senses.
The upper floor has various bedrooms and workrooms. The rearward floor houses a largely glazed library which opens up to a roof terrace.

In 2001, Rainer Diersche, a university-educated industrial engineer and designer, founded the “Linari” brand for exclusively created, superior designer, founded the “Linari” symbol quality room fragrances. The “Villa Linari” symbolises the philosophy and intensive experiences are remembered. What these insights mean for architecture is best illustrated by temporary structures such as trade fair stands. Multi-sensory media have, until now, been used primarily as an element of interior design. An example of a successful synaesthetic concept is the stand which the Interior Design Department at the University of Applied Sciences in Coburg set up for the “Designale” at the Heim & Handwerk consumer trade fair in Munich. “Light Worlds” here transported visitors to different colour zones that could also be felt, heard and smelled. Green light, for example, was combined with the smell of freshly mowed grass. Another multi-sensory experience was provided for the audience of the play “Die Gesellschaft der Düfte” (The Society of Scents) at the “Casamexo Theater” in Cologne. The play based on themes by the internationally renowned author Elke Kies, relating her experiences. “It creates a more intense experience, one which is also more easily remembered.”

Already common practice in marketing, art and temporary architecture, this phenomenon now also finds its way tentatively into modern architecture. Away from purely “seeing” to a comprehensive perception of space could be the motto here. Even if sensations such as sound or smell are not deliberately produced, they are nonetheless present. And perceived. “There is no such thing as smell-free rooms, every room has its own, distinct smell,” says Prof. Hatt. “Through the furniture, the carpets, especially the people in the room and their clothing.” Against this backdrop, it seems to make sense, therefore, to place the focus of interior design not on visual aspects alone, but specifically include in equal measure multi-sensory media such as smell, sound and light in order to ensure a comprehensive perception of the room.

“The LED technology has opened up entirely new possibilities for us in lighting, but I believe we are also seeing changes in the deployment of fragrance technology in rooms. I expect that both will be combined in the future to produce synaesthetic architecture. We are on the right track here, but we need to give it more time.”

Villa Linari, Hamburg
Architect: Thomas Dibelius, Dibelius Architekten, Hamburg
Lighting and electrical design: Manfred Necker, Ralph Kollinger, Sineplan, Hamburg
Lighting control: Dirk Beyer, Ingenieurbüro Breyer, Neumünster
Photos: Frieder Bickle, Hamburg
www.linari.com

About the author
Katja Neumann is a freelance design journalist with focus on light and lighting. She is co-founder of the international editorial network of specialised journalists “Designjournalists” and has received numerous design awards for her online magazine “Spionfonk”, which she published from 2005 to 2012. As an author and journalist, Katja Neumann writes for various print and online magazines about design, architecture, light and lighting. She lives and works in the Ruhr area.

www.designjournalists.com
LED lenses – a core competence of ERCO
Precision work for ultimate light quality

Crystal clear and lightweight, they are no bigger than a chocolate bar – and yet they hold the secret of the superior efficiency and light quality of ERCO’s LED lighting tools: the LED lenses that are made of optical polymer at the Lüdenscheid factory. Development, design, toolmaking, production, assembly – every aspect of the process is handled under one roof. The short distances help to secure ERCO’s edge in technology and quality. In order to cope with the rise in demand for LED spotlights, ERCO has started up an automated production cell where parts are handled entirely by an industrial robot. From removal of these parts from the injection moulding machine for laser cutting right through to optoelectronic testing before finally placing the finished parts in transport trays – all steps combine to produce a fascinating technical ballet.

Suction grippers on the robot arm carefully place the optical precision parts – here a triple collimator – in a feeding frame for optoelectronic testing.

Every 36 seconds, the robot removes a new casting from the polished steel injection mould, after holding the two-piece die closed for injection moulding at a force of 1100kN. The part still consists of two collimators at this point, joined by the lug.

Setting up the robot’s track system is a precision job. The fitter defines the end points of travel and action and the safety distances to the machine parts in manual operation to allow the robot’s own control computer subsequently to calculate the optimum path.

The grade of the optical parts is checked piece by piece through digital, optoelectronic testing. An automated process in which faulty parts are ruthlessly sorted out and, if necessary, the system fitters are alerted to potential process errors.
New products 2013
Trion LED

Trion ceiling washlights with LED
The archetypal design of Trion has been devised to ensure unobtrusive integration of the wall-mounted luminaire into architectural interiors for ceiling lighting; it has stood the test in many applications. New to the range are versions with effective LED technology – available in two sizes with appropriately adjusted luminous flux and with either wide or deep beam characteristic.

Light guidance in Trion LED
The Trion wallwasher photometrics with LED are characterised by efficiency and a highly uniform brightness distribution enabling optimum luminaire spacing for effective lighting concepts. The Spherolit lenses with wide or deep beam options permit adjustment of the light distribution to suit the relevant lighting task. Other characteristic features of the Trion LED wallwashers include the absence of spill light, especially at the mounting surface, and excellent glare control for good visual comfort. The Varychrome RGBW versions extend the application of Trion to include effective illumination of ceilings using coloured light or high-quality white light with variable colour temperature.

New products 2013
Parscoop LED

Parscoop with LED
The Parscoop range is primarily intended for outdoor architectural lighting, but is also suitable for indoor areas. Mounted on the wall, Parscoop floodlights can illuminate ceilings, porches or floors. When ceiling- or floor-mounted, they can illuminate walls and façades. New to the range are versions with effective LED technology – available in two sizes and wattages and with either wide or deep beam characteristic.

Light guidance in Parscoop LED
The photometrics of Parscoop wallwashers/ceiling washlights with LED are characterised by efficiency and a highly uniform brightness distribution enabling optimum luminaire spacing for effective lighting concepts. The Spherolit lenses with wide or deep beam options permit adjustment of the light distribution to suit the relevant lighting task. Other characteristic features of the Parscoop wallwashers/ceiling washlights with LED include the absence of spill light, especially at the mounting surface, and excellent glare control for good visual comfort.

Cut-off shield
The cut-off shield in LED versions for warm white and neutral white restricts the projected beam in the main axis to suit the application precisely.

Varychrome RGBW
Trion ceiling washlights with LED are also available in Varychrome RGBW technology for infinity variable colour temperature and scenic lighting effects with saturated colours.
Focus

LED photometrics for projector spotlights

Projector spotlights with LEDs are a relatively recent photometric development, primarily due to the higher complexity of optical imaging systems compared to normal spotlights. These systems require a light source with sufficient light intensity and a compact focal point. In conventional light sources such as low-voltage halogen lamps, this is achieved by the lamp. A comparable light effect, however, currently still requires several LED chips on a PCB, each representing individual focal points which need to be concentrated to produce a focused image. In ERCO’s solution, this is achieved by a stepped Fresnel lens, enabling a compact design. A framing attachment adjusts the size and shape of the beam. Its sharpness is then set using the projection lens at the contour attachment to suit varying lighting distances. This optical system with a projection lens is characterised by high light intensity.

As its counterparts with low-voltage halogen lamps, LED projector spotlights can be dimmed, but combine a comparatively higher light output ratio with a considerably longer life – resulting in superior efficiency in operation.

Optical system of the LED projector spotlight

The optical system of the LED projector spotlight is based on a collimator (1) which directs the semi-spherical light of the LED chips with their lenses into a parallel beam. The Fresnel lens (2) concentrates the rays of light of the various LEDs to enable the projection of a contour. The size and shape of the beam are adjusted using the framing attachment (3). The projection lens (4) is used to set the sharpness of the projected contour (5) to the level required for the appropriate distance.

Double focus

Optic projector spotlights

The key design feature of the Optic projector spotlights is the separation of round projection lens and rectangular control gear housing.

Pollux projector spotlights

The compact format of the Pollux projector spotlights is perfect even for small rooms. The necessary control gear is integrated in the transadapter on the track.

Optec projector spotlights

The compact format of the Optec projector spotlights is ideal for small rooms. The necessary control gear is integrated in the transadapter on the track.

Adjusting the projection area

The projection area is increased by pulling out the framing attachment. Perspective distortion is balanced through rotation of the attachment.

Setting the sharpness

The sharpness of beam edges is set by adjusting the lens holder.

Thomas Schielke

LED projector spotlights in application

Projector spotlights with framing attachments produce sharp-edged beams which can be adjusted in shape and size. They are especially suitable for high-contrast lighting effects such as found in museums, restaurants or homes. They are typically used, for instance, to create the effect of a crisp focused beam illuminating an image that appears to be self-illuminating.

Adjusting the projection is simple: The sharpness of the beam edges is set by adjusting the projection lens on the framing attachment, focusing it to suit varying lighting distances. The framing attachments regulate the size and shape of the projected contour. In practice, it has proven useful initially to adjust the beam so as to be marginally smaller than the image format and subsequently, through slight defocusing, to extend it towards the edge of the image without light spilling onto the background area.

A significant advantage in terms of handling the LED projector spotlights is the low heat generation of the light emitted: Made of polycarbonate, the framing attachment ensures comfortable adjustment of the projection area even during operation – contrary to metal framing attachments for conventional lamps, which quickly heat up. Scenic lighting in exhibitions as a key area of application for projector spotlights benefits from the constant colour temperature of the LEDs when dimmed: low dimmer settings do not shift the light colour into the warm tone area as is the case with incandescent lamps; light colour and colour rendition remain the same for all exhibits.

Thomas Schielke
This Norwegian energy company literally sits at the source, as it carries out its role of marketing Norway’s plentiful oil resources worldwide. At its headquarters in Stavanger, energy efficiency is core business, and the campus-like facility’s lighting has now been fitted with LEDs.

It is the understatement that the rest of the world considers so very typically Scandinavian: a complex of three- to four-floor office pavilions on campus-like grounds, its functional design betraying the tradition of classic modernism, far from new, but immaculately kept – Norway’s biggest company, the Statoil energy corporation, presents a decidedly low-key image at its headquarters in Stavanger. Since the 1970s, oil discoveries in the North Sea have presented the country with great assets. In 1972, the corporation was formed as the central instrument for the production, processing and marketing of these natural resources. Today, the former state-owned enterprise is a listed stock corporation in which the Norwegian state holds a 64% share. Around 4,500 people are employed at its corporate headquarters, with a further 30,000 or so working for Statoil worldwide in locations from Norwegian oil rigs to overseas refineries, on pipelines and throughout the network of petrol stations operated by Statoil in Scandinavia and the Baltic states. Yet in Stavanger the fact that Norway’s oil and gas sources are huge doesn’t influence the goal of social and responsible energy stewardship. The corporation’s “Renewable Energies” division is examining wind power, biodiesel and hydrogen technologies as future complementary technologies.

By Mies van der Rohe for the Illinois Institute of Technology in Chicago and the administrative buildings masterminded by Egon Eiermann for the German IBM near Stuttgart. The four-wing office pavilions form several atria which, along with the entrances and connecting pathways, need to be illuminated in the long Nordic winter nights. A consistent and permanent energy efficiency drive identified great possibilities with optimising exterior lighting. The ERCO LED solutions help to present a more attractive appearance of the headquarters at night, but more so, they contribute to achieving the company’s energy savings targets thanks to the high efficiency of the lighting system.

Nights can be long in the Nordic winters. This makes it all the more important to ensure attractive and efficient lighting for outdoor facilities, aiding orientation and giving users a sense of security. At the same time, great lighting underlines the image of an international corporation such as Statoil.

The established Beamer range of spotlights is now also available with LED Spherolit lens technology. Here, they set off the greenery in the garden of Statoil’s company restaurant – in warm white version with 12W LED module and spot lens.

The Midipoll bollard luminaire with LED not only offers effective illumination of areas or paths, but also makes its presence known in a subtle fashion – with a nominal capacity of only 8W.

Compact housings, a wide selection of beam characteristics, and high efficiency through Spherolit lens technology – these are the features of Grasshopper. At Statoil, the luminaires are used with oval flood characteristics to illuminate the roofed main entrance.
The birthplace of Gottlieb Daimler – this ubiquitous reference to Schorndorf’s most famous son establishes the town near Stuttgart in the tradition of Swabia’s creative and inventive minds. Stepping from the idyllic setting of the historic market square with its half-timbered houses into the foyer of the freshly renovated town hall brings home the fusion of a mindset steeped in traditions and an attitude of modernity. With the greatest of ease, the glass structures of the built-in Wedding Chamber and the large Council Chamber, both designed by Stuttgart’s Ippolito Fleitz Group, blend in with the listed building, which dates back to 1730. Providing fresh insight and views, they elegantly meet the functional requirements of the 21st century. As distinctive design elements, the Council Chamber features undulating ceiling panels that merge into the front wall of the Chamber to provide a projection screen, along with desks in U-shape formation made of smooth, white Corian, and floor-to-ceiling curtains in warm shades of brown that stand in stark contrast to the cool aesthetics of the furnishing. The main element of the lighting design devised by Prof. Stefan Hofmann is ceiling-integrated luminaires. Mounted in recessed ceiling channels, Quintessence LED recessed spotlights – with either spot or narrow spot characteristic, depending on the installation height – are precisely aligned to ensure uniform illumination of the desktops. The LED downlights and wallwashers of the Quintessence system also provide the right tools for other room situations in the building. Inconspicuously mounted Parascoop ceiling washlights add indirect ambient lighting. The cost analysis in relation to the service life of the lighting system was convincing and the town council decided, despite initially higher investments than would have been necessary for conventional lighting, to opt for the digital solution. The return on investment, delivered by lower energy and maintenance costs, is just a couple of years, and the building demonstrates responsibility and progressiveness.

View from outside into the Wedding Chamber, which also serves as the session room for the Lord Mayor. The shade and colour rendering of the warm white LEDs in the Quintessence recessed luminaires score points both with the designers and the users of the building.

Quintessence directional luminaires with LED

Digital aesthetics: Individually produced, the acoustic ceiling panels were provided with a pixelated pattern of holes that echoes the light points of ERCO’s LED optical systems. A darklight reflector in the Quintessence directional luminaires ensures perfect visual comfort. The rimless mounting detail adds to a precise and minimalist appearance.
Stiefelkönig, Vienna

Architect: Mag. Hans Michael Heger, Graz
Lighting design: Vedder Lichtmanagement, Munich / Mitterberg
Photos: Gustavo Alidi Bernasconi, Vienna

The smell of leather, the feel of quality in your hands, a shoe wonderland like a dream come true – Stiefelkönig, literally the “king of boots”, is an Austrian subsidiary of Leder und Schuh AG that has stood for exclusive shoe fashion for close to 100 years. This notwithstanding, the new flagship store in Vienna’s Mariahilferstraße, in the very centre of the metropolis, sets new standards. More than 20,000 pairs of shoes displayed in an area of over 460 square metres are on offer here, divided into four differently themed sections for ladies, men, kids and lifestyle to give customers a true experience of the world of shoes.

Each section is fitted out in entirely different ways, yet together they form a striking unit joined by large glass panes with ample lines of sight. The transitions are softly illuminated to give scope to the highlights of each section. Details such as the seating area where kids can listen to audio dramas on headsets suspended from the ceiling are highlighted by this approach.

The biggest challenge for the lighting designers from Vedder Lichtmanagement, Munich, was the difference in ceiling heights. At the end of the day, it is the light on the product and in the room that counts, whether ceilings are under 2.50 metres high or up to 6 metres. The problem was solved using Light Board spotlights as the ideal solution for these requirements thanks to the combination of highly effective, spill light free distribution and great flexibility with different lumen packages. An example of this is ERCO’s unique narrow spot technology with a beam angle of less than 10 degrees and exceptionally high illuminance on the target surface, even from large distances.

“Who has the finest shoes of them all? Stiefelkönig!” The store’s claim of quality and uniqueness is backed by excellent colour rendering achieved by the Light Board spotlights with LEDs in warm white. Ever new trend colours, but also changing classic brown tones require such a brilliant light to enchant customers like a fair vision in a fairy tale dream.

Jan Battenberg

The Light Board spotlights are mounted on special track with lateral openings to suit the low ceiling. The technology with very little spill light enables glare free light even at unusually shallow angles. This application would not have been possible with conventional reflector technology.
Turck office and production building, Halver

Industrial culture through architecture – a mindset found increasingly often in South Westphalia, a business region defined by small to medium-sized companies. The new building complex of the family-owned enterprise Turck is yet another formidable industrial building in the portfolio of Lüdenscheid’s architectural firm artec. The 13,000m² facility includes development laboratories and production facilities, and also a 700m² multifunctional auditorium. As a producer of sophisticated technology for industrial automation, cutting-edge building technology was logical in the building’s specifications. DALI lighting controls of ERCO LED solutions enhance the efficient visual comfort proposal across the facility with scenographic effects in the spacious auditorium.

Quintessence LED recessed luminaires
Foyer (left) and auditorium are defined in appearance by vertical illuminance provided by wallwashers – complemented by downlights and directional luminaires for effective lighting of such aspects as the exposed stairs leading through the room.

Architect: artec, Lüdenscheid
Lighting design: LDE KOBER, Dortmund
Photos: Dirk Vogel, Dortmund
www.turck.com

Architect: artec, Lüdenscheid
Lighting design: LDE KOBER, Dortmund
Photos: Dirk Vogel, Dortmund
www.turck.com

High-tech for industrial automation: products of the Turck group are used to build the factories of the future. The group’s own new building is progressing well – with efficient, networked LED light.

Logotec LED
The versatile LED spotlights and floodlights take on a variety of tasks in the concept devised by lighting designer Nicole Kober – from accentuating products displayed in the foyer using narrow beam characteristics through to illumination of the corridors with oval flood characteristic.

Logotec recesed spotlights with LED
Logotec recessed spotlights with the lighting technology of Logotec LED spotlights are an aesthetic alternative to directed, accentuated light and integrate inconspicuously in architecture.

Kubus LED
Efficient LED light is also featured outside the new building. A pergola of steel sections creating a transition zone between auditorium and open terrace is provided with Kubus luminaires.
In Norway, pupils continue after their compulsory 10-year education in a primary school to attend secondary schools with a choice of subjects that either prepare them for higher education or provide valuable work experience. One such school is found in Haugesund, making the small town a centre of attraction for 15- to 18-year-olds in the region. The history of the school dates back a century, with the recently opened extension adding room for 850 students.

The students with vocational courses related to the building trade found the annexe to be a particular learning experience: each of them pitched in based on their particular special field, to help, as it were, build their own new school – a perfect way to promote motivation and identification. Good concepts and a solid supply of staff are only one side of the coin ensuring a successful education; the other is functional facilities with a pleasant atmosphere.

LED light for school buildings: Two schools in Norway

Haugaland secondary school, Haugesund
Architecture: Opus Arkitekter AS, Haugesund
Photos: Thomas Mayer, Neuss
www.haugaland.vgs.no

Skadberg Skole, Stavanger
Architecture: Akripartner AS, Stavanger
Photos: Thomas Mayer, Neuss
http://skadberg.solaskolen.no

The students in the vocational courses at the secondary school in Haugesund haveaison to be proud: They eagerlypitched in to help build their school’s annexe – based on their special fields – to gain valuable practical experience.

The designers of local firm Opus worked with clear shapes using plain and simple materials. As elsewhere, sustainability is an issue of prime importance for public buildings in Norway – as a result, the decision was made to use energy-efficient, long-life Quintessence LED downlights for the school’s lighting system, adding to an attractive appearance of the classrooms.

The 12,000m² large complex of the new school in Skadberg comprises seven staggered building sections extending across a slope with an elevation difference of 21m. Around 450 students between the ages of 6 and 15 years will be taught here. A central staircase hall connects the different sections and serves as a generously proportioned recreation room. The design of the classroom wings is based on equally functional quality concepts. Special attention was given to low energy consumption: Thanks to excellent insulation, the floor-heated buildings require much less energy than prescribed for public buildings in Norway. The corridors benefit from the high quality of the light produced by Quintessence double washlights: fitted with highly efficient LEDs in warm white, they ensure pleasant luminances both on the floor and walls – all thanks to darklight reflectors with optimum visual comfort.
A hands-on approach to life is traditional in a harbour city such as Hamburg – people here know how to work as hard as they play. It should come as no surprise then that Hamburg has dedicated a whole museum to work. The new permanent exhibition shines splendidly in brilliant LED light from ERCO.

The museum dates back to a club founded in 1980 that, in 1982, decided to relocate to the site of what once was the factory of the “New-York Hamburger Gummi-Waaren Compagnie” built in Barmbek in 1871. After 10 years of makeshift arrangements, renovations finally began in 1992. The first permanent exhibition opened in 1997. Since 2008, the museum has been supported by the Stiftung Historische Museen Hamburg (Foundation of Historical Museums of Hamburg). In April 2012, the foundation’s director, Prof. Dr. Kirsten Baumann, finally presented the redesigned permanent exhibition “ABC der Arbeit. Vielfalt, Leben, Innovation” (ABC of Work. Variety, Life, Innovation) on the 2nd floor of the main building. Over an area of 400m², the museum showcases diverse aspects of the history of work in Hamburg since industrialisation, underlined by products, clothing, tools, machinery, oral and written memories, and photographs: “Our exhibition is a contribution to the history and evolution of work in the 20th century. Using the example of Hamburg, it brings together personal mementos and work biographies with pioneering innovations that are significant to Hamburg’s development as a harbour and industrial city,” explains Director Baumann.

As the exhibition sheds light on technical innovations and social conflicts, it also reflects the collection strategies of the museum with insight into its inventory database. Here too, as in other museums of the foundation including the Altona Museum and the Hamburg Museum, the exhibits are cast in the best light using LED lighting tools from ERCO. Providing optimum light quality and flexibility with interchangeable Spherolit lenses, the tools promise low operating and maintenance costs as a welcome relief to the institutes’ already stretched budgets: technical progress in the service of culture.
Backlights

Bauhaus Foundation, Dessau: Marcel Breuer Exhibition, 31 May – 31 October 2012

His revolutionary tubular steel furniture is a design icon and to this day a symbol of one of the most influential and innovative institutions in the history of architecture: the Bauhaus. Marcel Breuer was only 23 years old when he designed these now often copied classics back in 1925. The Vitra Design Museum in Weil am Rhein honoured Marcel Breuer last year with a travelling exhibition whose route also took it to Dessau, the home of the Bauhaus. In the immediate context of their place of origin, Breuer’s designs display a particular charm, underlined by an apt presentation and the clear and focused lighting using LED spotlights supplied by ERCO. Light Board spotlights with interchangeable Spherolit lenses for different beam characteristics fulfill the requirements of flexible exhibition lighting. The striking, functional design of the spotlights bridges the gap between the design tradition of the Bauhaus and the future-oriented LED technology of the 21st century.

Photos: Rudi Meisel, Berlin
www.bauhaus-dessau.de

Product training for ERCO employees

Before new ERCO products are introduced to designers and lighting professionals worldwide, they must first pass the test of a highly critical team: the lighting advisors from ERCO’s offices and showrooms worldwide, who gather at the Lüdenscheid head office at the end of each year to be introduced by the internal training organisation to new products before these are released on the markets. In-depth workshops give the practically-versed experts the opportunity to examine the use and performance of the latest innovations. Once again, this year’s experts were soon delighted by them, and we hope their enthusiasm will infect you, too!

Contact your regional ERCO expert – find your contact at: www.erco.com/contact

Photos: Johan Elm, Stockholm

Products and Technology for Museums Exhibition, Beijing, 28 – 30 October 2012

The State Administration for Cultural Heritage is responsible for aspects such as cultivating the Chinese museum landscape: art, culture and tradition are understood as elements that define the country’s identity; international standards are applied in the dynamic modernisation of existing, and the establishment of new, museums. Good times for suppliers of high-quality technology and equipment for museums who met for the fifth time at the relevant trade fair in Beijing last October. 59 Chinese museums, including 21 leading state institutions and 38 industry or privately funded museums, presented themselves to the public alongside selected international museums and 132 companies offering relevant technical solutions, from audio guides through to display cabinets. The lighting is, of course, a key factor in the effective staging of permanent and temporary exhibitions – ERCO’s stand therefore met with keen interest and incidentally also received the “Best Design Award” from the organisers.

Photos: Xu Bing, Beijing
http://cme2012.chinamuseum.org.cn
Villa Romersa, Bologna
Architects: Project Industry, Nicola Ceciliot, Simone Baldan, Capriccio di Vigonza (Padua).
Photos: Thomas Mayer, Neuss