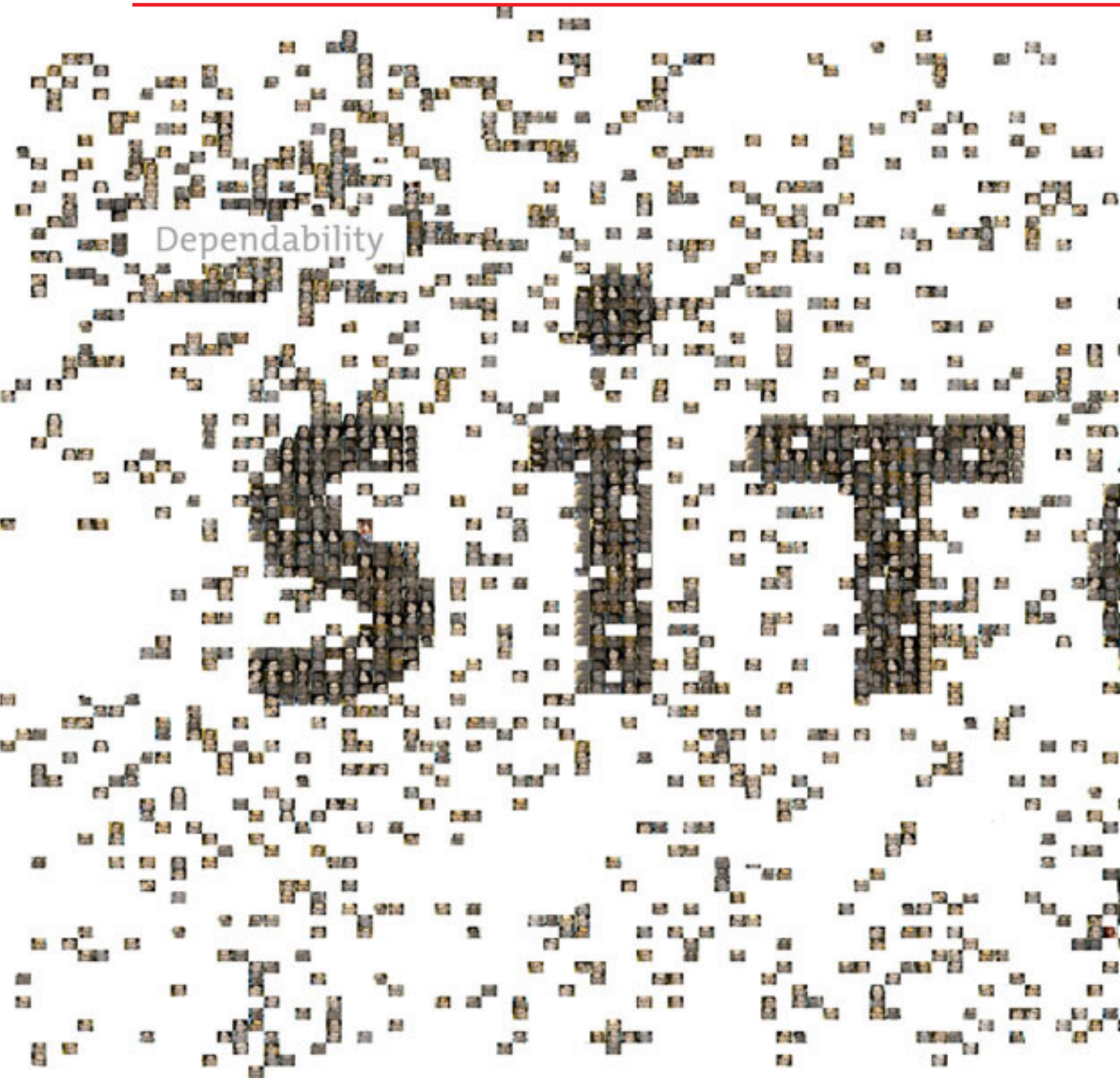
Lighting Tools Exterior

Introduction and Contents

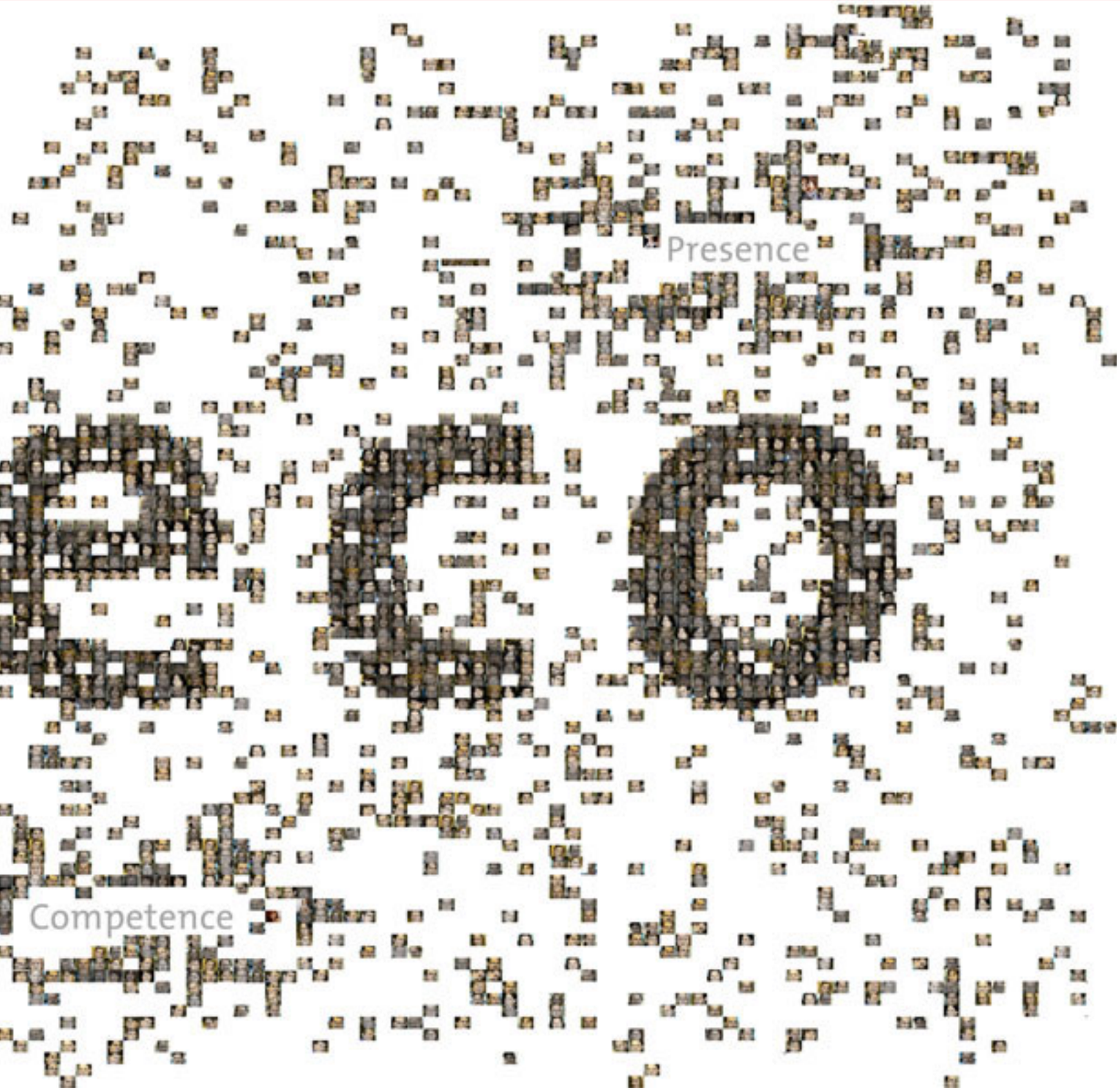
siteco
AN OSRAM BUSINESS



Our Employees

Light for People

Dependability, presence and expertise. Our lighting tools are created on the basis of these values, principles that are as unique as our employees who are active for us around the world. They share a common enthusiasm for the medium of light and a passion for excellent service. The knowledge, curiosity and creativity of our experts enables us to develop new technologies and to implement innovative lighting instruments. This takes place within the frame-



work of a close dialogue with our customers, permanent communication with other lighting experts and with a special consideration for ecological and economical factors.
The result is excellent products for lighting solutions in the application areas of office, industry, traffic, shopping, public and sports – in fact everywhere where people need good light and luminaires as tools for creativity.

The Technology and Design Centre

Forum for Inspiration

The technology and design of luminaires are processes that are in a constant state of flux, and their development is continually progressing. The Siteco Technology and Design Centre accompanies these processes, and is a forum for our guests, customers and partners, in fact for everyone that values good light. Within the Technology and Design Centre there is room for communication and interaction, and from this visions are developed for new lighting solutions and inspiration gathered for innovative lighting instruments.

A process of dialogue leads to optimal solutions

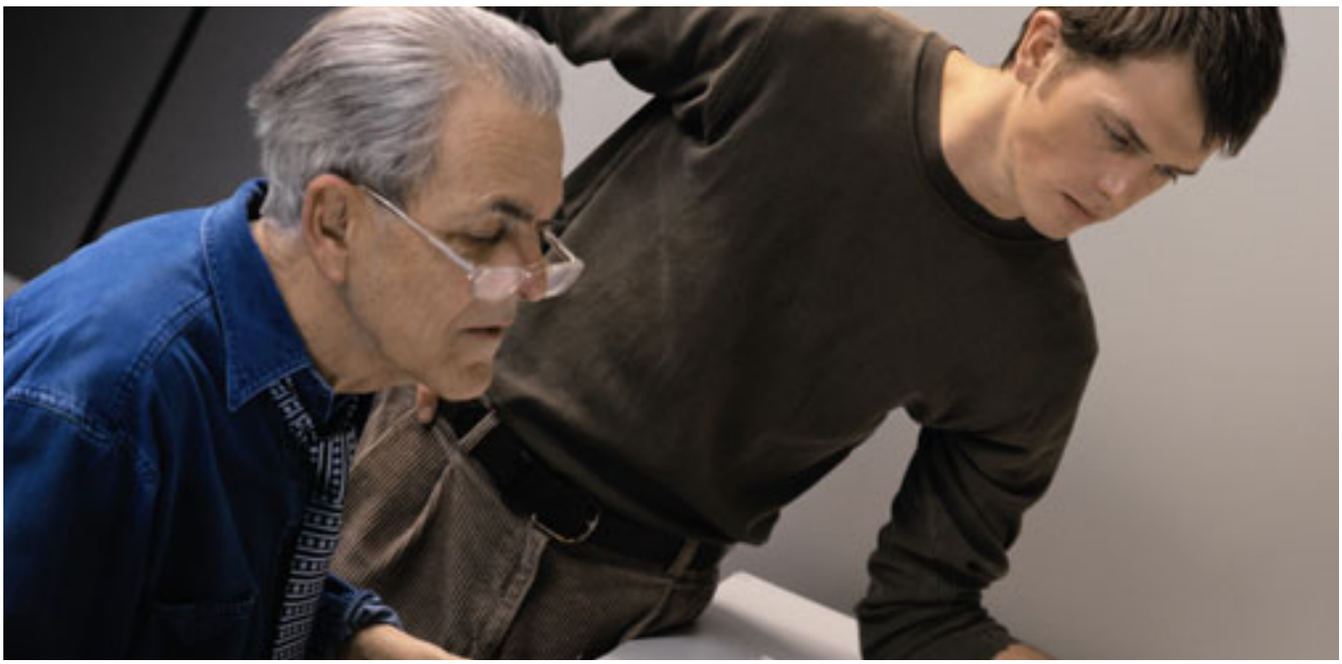
From expert to expert

Thoughts come about in the head, are formulated into ideas and grow to become solutions.
The more heads used and the more knowledge, experience, creativity and passion brought into the processes, the better is the result. Our customers are the experts for their specific requirements.

We are the experts for lighting in the office, industry, traffic, retail, public and sports application areas and specialists for suitable lighting tools.
Together we have a rich source of experience gained from countless successfully implemented projects.
When this source of knowledge flows together into a permanent dialogue between experts, optimal solutions are created that are ideal for the specific lighting tasks of our customers.

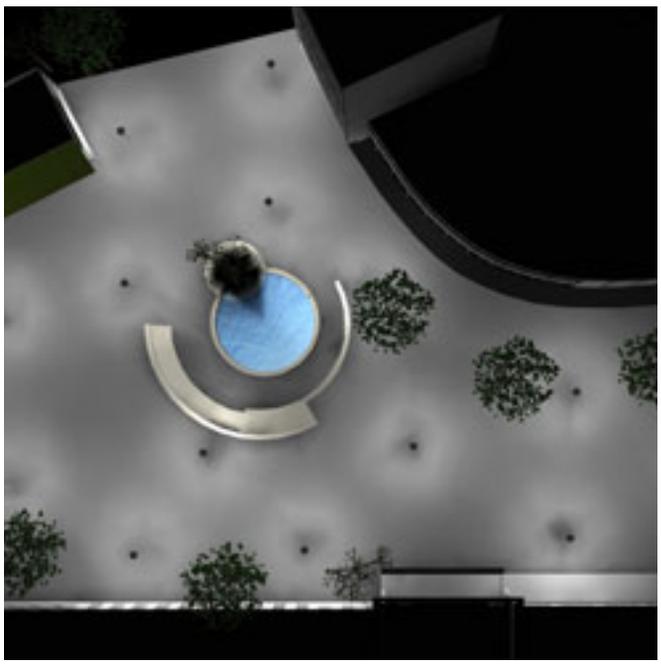
Information and added value

Instruments for lighting design



Specific information concerning the technical characteristics and exact specifications of luminaires are the preconditions for efficient planning and creative lighting design. We make available information about our lighting instruments at **www.siteco.com** as an additional service and added benefit. This information comes about as a result of intensive communication with our customers and also a precise knowledge of their work processes.
The permanent development and fine-tuning of these planning tools goes hand in hand with the development of new, application-related technology and products. Such as the Street Lighting Energy Optimizer (SLEO) for example.

SLEO is a browser-based tool that enables the highly rapid specification of efficient road lighting solutions with Siteco outdoor luminaires. The tool informs about energy consumption and carbon dioxide immissions of old systems, energy consumption and carbon dioxide immissions of the new system and suitable, efficient Siteco lighting tools. The results list also specifies further useful instruments for daily work: the electronic catalogue with product data in all common formats, tender texts,
installation instructions, application and product images and 3D models as well as plug-in libraries for PC planning software. This information is available offline via the Toolbox CD, and of course via personal dialogue with our employees from the customer service centre.




siteco

Continuity and actuality

Into the future with lighting tools

We are faced with a huge challenge, but also have excellent chances of success: reducing the global consumption of energy and confronting the problem of carbon dioxide immissions. Energy efficiency is the buzzword.
More than 150 years lie between the first arc lamp from Siemens & Halske, the nucleus of today's Siteco, and the LED tools for lighting that we currently manufacture. But motivation over all those years has remained the same: to conceive and manufacture luminaires that are outstanding in terms of lighting technology and highly efficient with regards to energy.

2011 Siteco renounces the production of luminaires with high pressure mercury vapour lamps

2011 Development and production of the Streetlight 10 LED. The modular LED road luminaire is the reference for efficient, sustainable lighting for the future

2010 Siteco LED lighting tools for indoor and outdoor applications usher in the digital revolution in lighting technology

2010 Development and introduction of electronic control systems for reduction of luminous flux, for full exploitation of the potential for LED efficiency

2009 Development of the LED Module 520 as an efficient, innovative light source for classic town and park luminaires

2008 Development and market launching of the Siteco DL® 10 LED – the first LED road luminaire for the energy-efficient, standard-compliant lighting of main roads and ancillary roads

1998 Development of ELDACON® microprismatic system for the glare-free lighting of VDU workstations

1998 Development of the radial facetted reflector for highly precise and efficient road lighting

1990 Market launching of the first daylight system

1990 Development and market launching of the first electronic ballast (ECG)

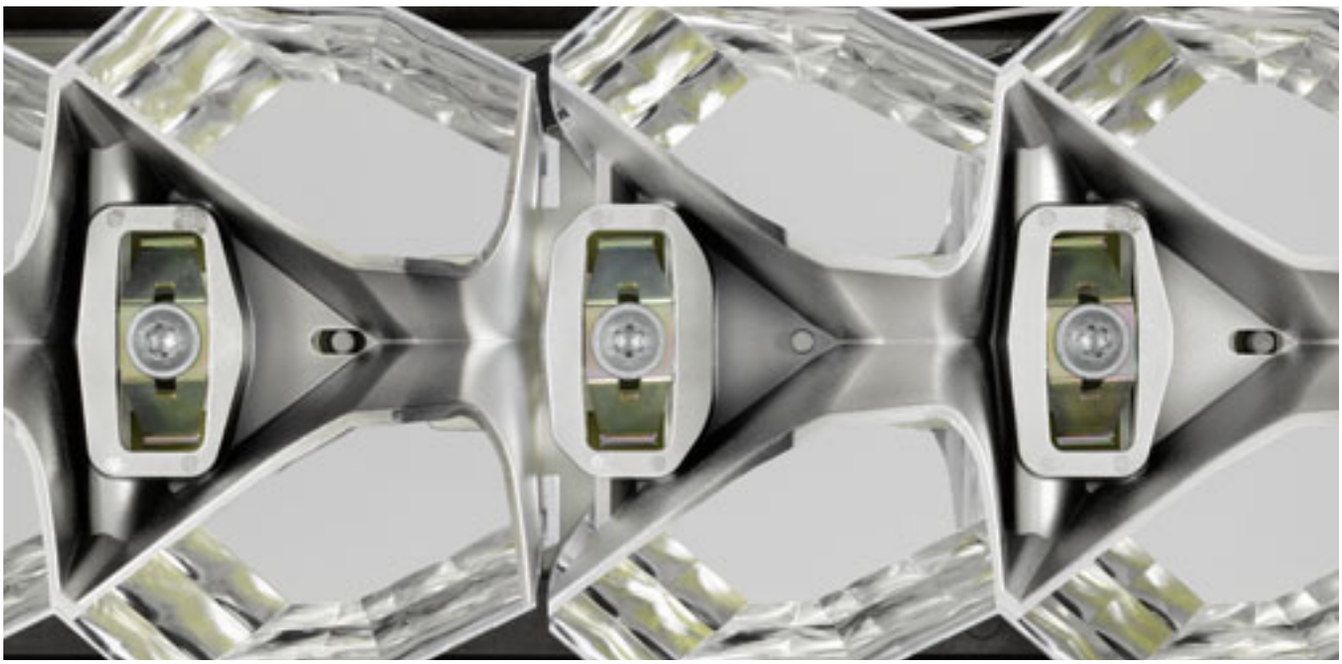
1981 Development and market launching of the first CAT2 luminaire for the standard-compliant lighting of VDU workstations

1975 Development and market launching of the first trunking system

1971 Development and market launching of the first 3.5 kW/h high performance projector for the Olympic Games in Munich

LED technology

The future in a new light



The future of efficient lighting, predominantly for outdoor applications, will be determined by the key technology of LED. The service life of these innovative light sources, their luminous efficacy, the precision of their light distribution and their options for intelligent electronic control are outstanding. The main challenge is to be able to integrate LED technology into luminaire concepts so that they can make the most of their complete energy efficiency potential and can simultaneously offer a quality of light that complies with and exceeds all of the standards. In this regard we are currently experiencing completely new approaches to product design and the design of light in general. One thing is sure:

the future has already begun –
and we'll be helping to shape it.

Intelligent control

Efficient lighting for all needs

Only as much light as required by a specific traffic situation, the progress of the day or the weather. Only as much light as required by standard-compliant lighting. Suddenly this becomes reality thanks to the key technology of LED. The pre-condition: the luminaire features corresponding control functionality. And with us, all LED outdoor luminaires have this as standard. The intelligence is integrated into the LED operating electronics and can therefore be used without requisite lighting management systems. In this way, light according to needs becomes available for everyone, and the potential of the highly efficient LED technology is further increased: with the Plus control package available for all Siteco LED outdoor luminaires, up to 80% of energy and therefore carbon dioxide immissions and costs can be saved compared to luminaires with conventional lamps.


M.A.
M.A.
SALE

The best light comes from the sun

Siteco daylight systems

Our daylight systems transport natural light to exactly where it is needed: to people within buildings. Daylight systems use the advantages of daylight (light colour, dynamics) and compensate for its disadvantages (heating up of rooms, glare).

The first step to a daylight system is to design a highly efficient and yet translucent solar protection. Daylight systems utilise optical laws such as reflection, transmission and refraction to deflect hot, direct sunlight and to guide the cool, diffuse daylight into the interior.
this reduces energy consumption needed for lighting and air-conditioning, and therefore also lowers the operating costs for building technology.

Daylight systems can be subdivided into:

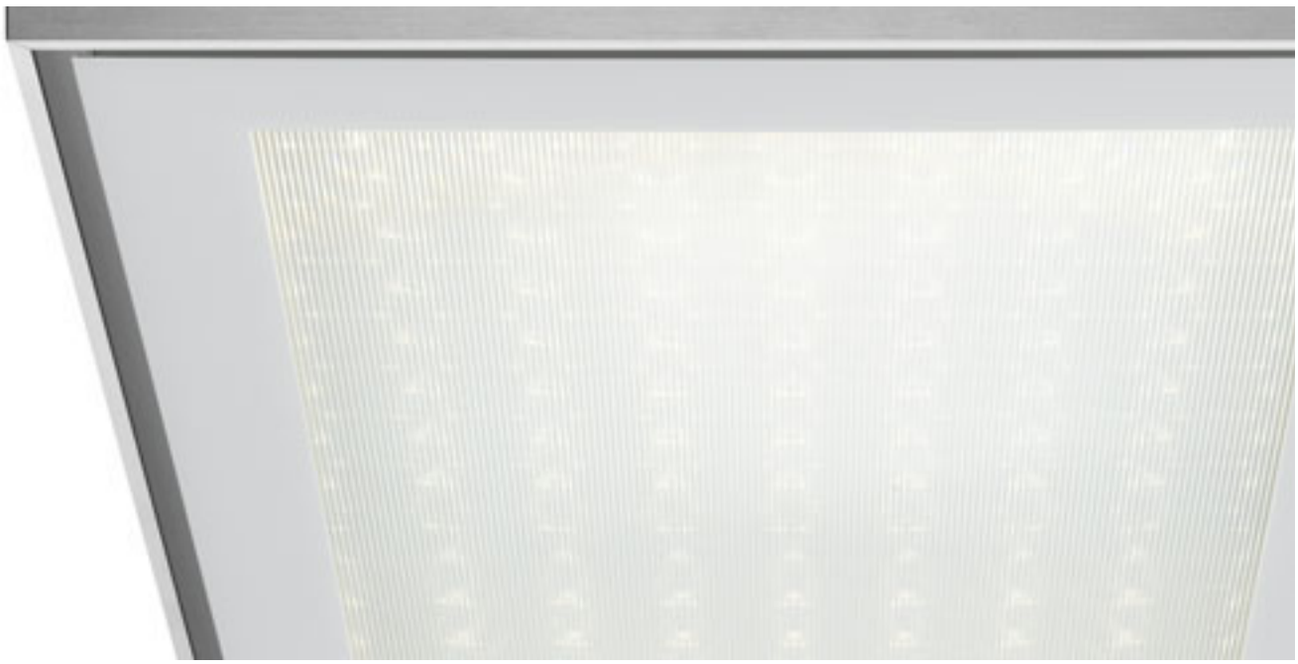
1. **Prism systems** that use the high transparency of the aterials used (acrylic glass) and the optical laws applying to prisms (total reflection, refraction, reflection on thin aluminium surfaces)

2. **Reflector systems** that use the reflection characteristics of the high quality material and the special form for each specific function (solar protection/light control)

Buildings equipped with daylight systems demonstrate that the optimisation of solar protection and maximum light ingress under consideration of photometric comfort requirements is possible. In addition to ecological savings (shorter switching times for luminaires, improved lamp service life etc.), optimal visual conditions according to natural daylight conditions are achieved that satisfy both individual and collective requirements.

Glare-free light for VDU workstations

ELDACON®



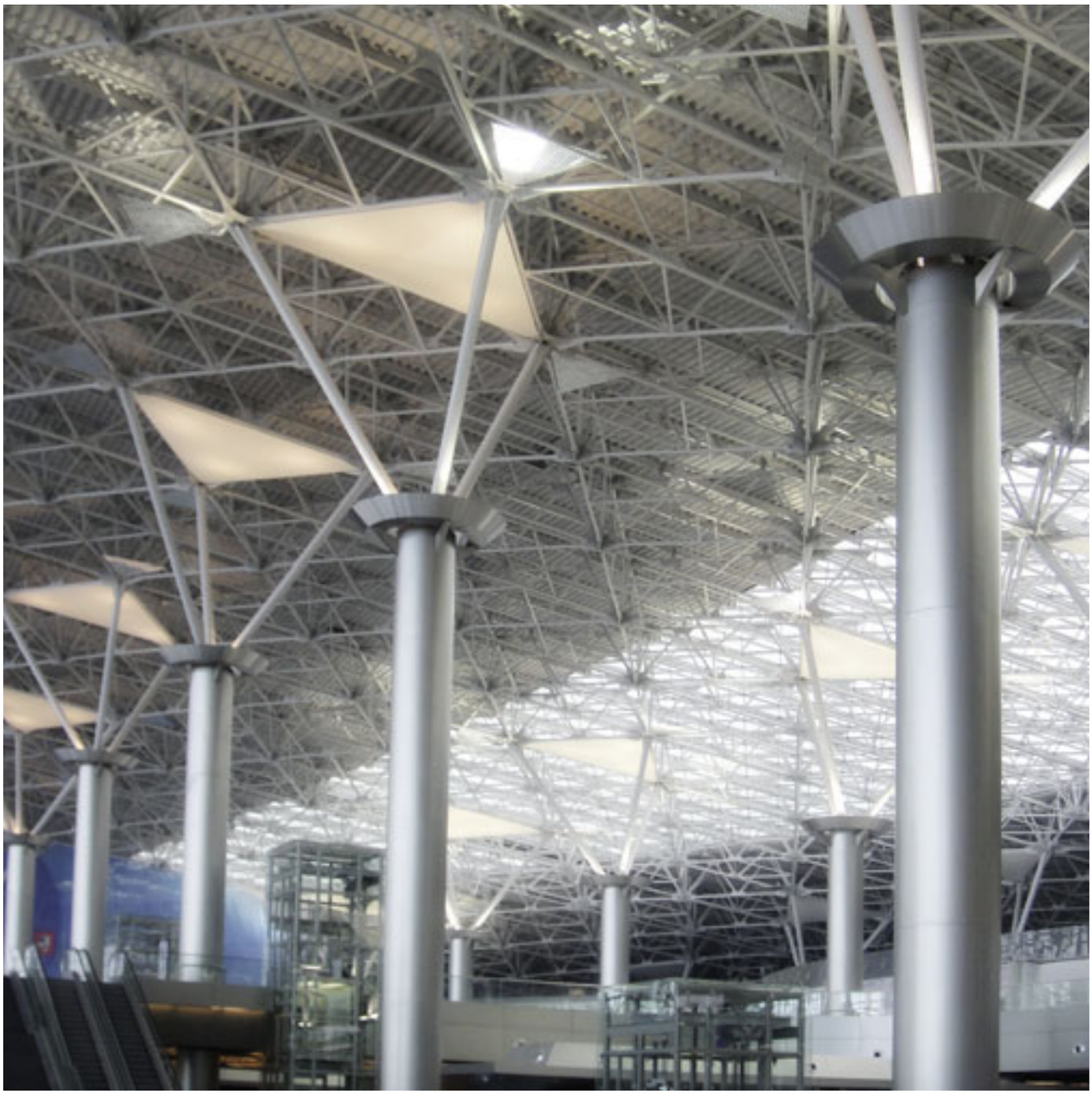
The functional specifications for the illumination of VDU workstations are ambitious: on the one hand high levels of illuminance, and on the other low luminance and low glare. Patented ELDACON® light control technology enables the fulfillment of these criteria. The light is directed via a highly precise microprismatic structure without glare and with a high level of uniformity onto the working plane.

Lighting instruments featuring ELDACON® achieve especially high light output ratios that aid in the achievement of energy-efficient architecture. In addition, ELDACON® opens the way for new creative possibilities: ELDACON® luminaires because of their special characteristics can be freely arranged within the room, independently of the arrangement of VDU workstations.

Precise light control via secondary reflector technology

Siteco Mirrortec®

Lighting instruments with Siteco Mirrortec® technology create light effects that are characterised by optimal glare reduction, a high level of energy efficiency and superior visual comfort. With secondary reflector systems the light of a projector is emitted with a narrow beam onto a facetted reflector. The light point resolution reflector reflects the light onto the surface to be illuminated, free of glare. This technology was implemented for the first time by Siteco under the name of 'Mirrortec', and was further developed with use of Fresnel optics.



People work at desks

Light for office applications

Offices are spaces for creativity, communication, interaction and inspiration. Good lighting conditions and homogenous illumination help people to feel comfortable at work. This increases motivation and productivity levels. High, uniform lighting levels, bright vertical surfaces and absence of glare on computer screens are the criteria for good office lighting.
In addition, offices today are not only places for work but increasingly integrate the corporate philosophy into their design. They become representative spaces that are taken into account during the design of architecture. In this respect, lighting tools are required that are able to harmoniously fit into the holistic concept or that can set formal accents.

People work with machines and tools

Light for industry applications

The demands for lighting within industry are complex. A large application spectrum exists with precisely specified tasks. Factors such as visual requirements, safety and security aspects and special ambient conditions must be considered. In addition to requirements specified by current standards, solutions are strived for that support well-being at the workplace and therefore aid in increasing productivity. Lighting for the industrial sector also becomes a matter for financial consideration when it is considered in terms of energy efficiency: the higher the power consumption, the higher and more interesting is the potential for saving, and therefore the more sustainable are the effects that can be achieved with individually adapted lighting instruments.

People move with vehicles

Light for traffic applications

The quicker people move, the more important lighting becomes for traffic routes. Rules and regulations exist both nationally and internationally that specify when and where requirements need to be fulfilled. As well as the specific character of lighting effects, ease of maintenance, robustness and optics are all of major importance. They lastingly determine the balance between environment, energy and costs. In view of this, how individually a lighting system can be adapted to the specific tasks at hand is relevant: the more flexible the lighting instruments are, the better the system is in terms of environment, balance of costs and inevitably better for people as well.


ÖBB

People buy goods and services

Light for retail applications

To present goods in the right light, to animate customers into making purchasing decisions and to do this in pleasant surroundings that at the same time emphasise the unique character of the retail outlet are the demands placed upon shop lighting. With the combination of the right light colours, lighting levels and distribution of light, our lighting tools create optimal light for discounters and supermarkets as well as for high quality department stores and boutiques.

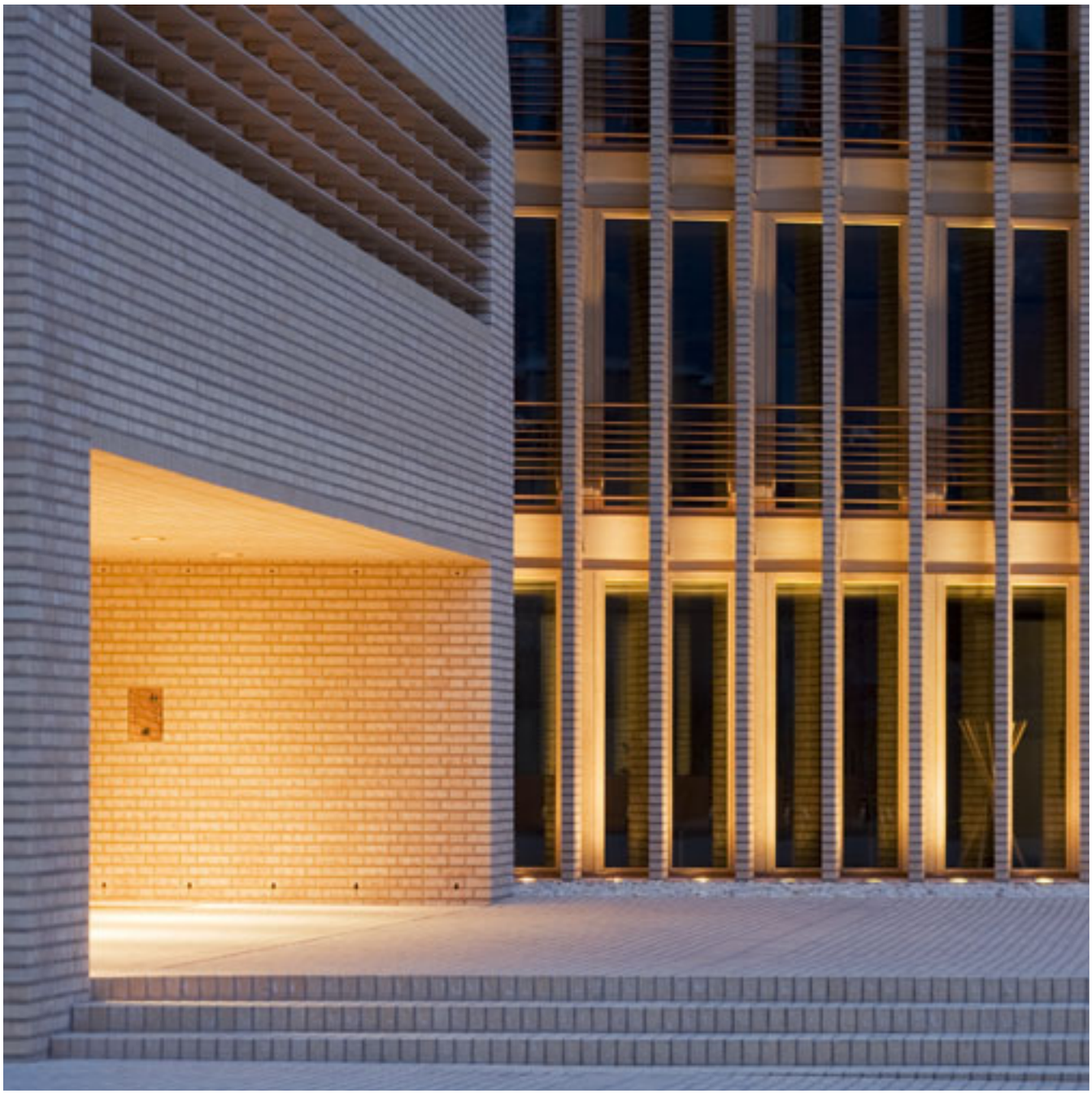

GALERIA
KAUFHOF

People move and meet in public buildings

Light for public applications

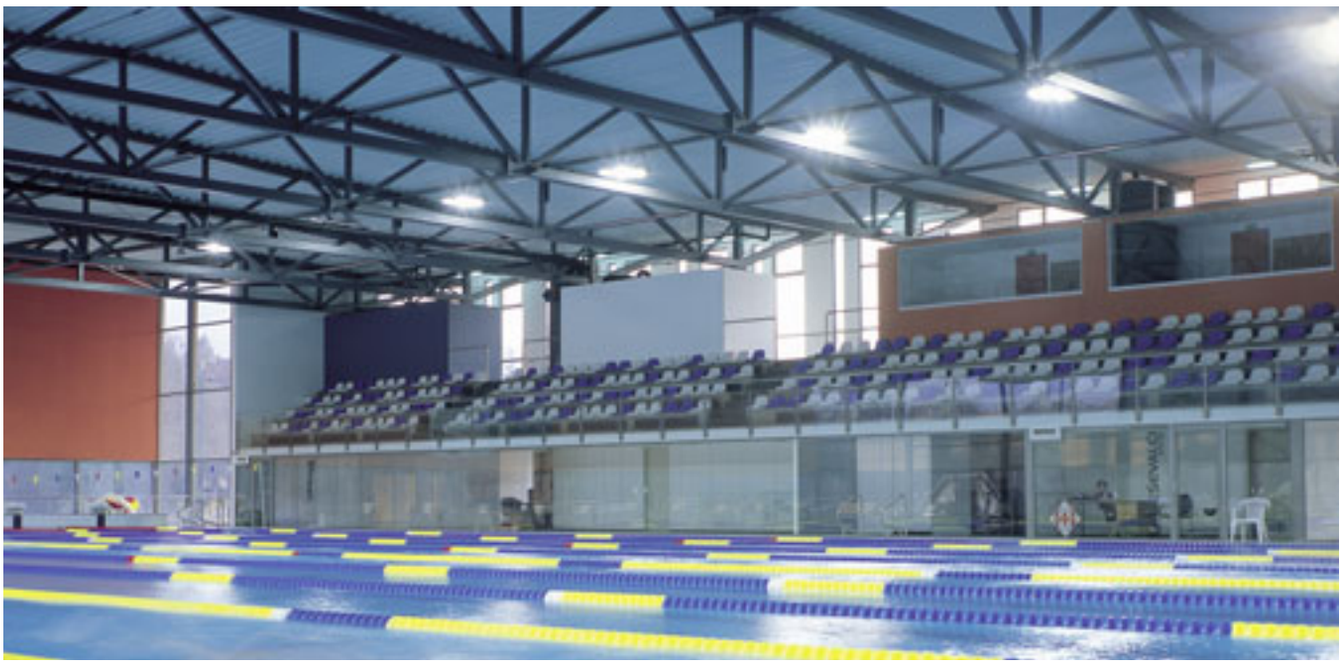
Publicly accessible spaces, whether inside buildings or outdoors, should communicate to people a positive feeling, ensure safety and orientation and make available important information.

At the same time such spaces have a representative character or else are situated in exposed locations with particular functions: as prestigious representations, marketplaces or pedestrian zones for example. Rooms within the public sector require lighting instruments that react sensitively to the demands of people, the functional lighting tasks of the area and the specific features of the architecture.



People play sport

Light for sports applications



The illumination of sports arenas is a supreme discipline. As well as optimal light for a variety of applications, highest levels of efficiency are required. Because ever more sports facilities are characterised by entrepreneurial organisation and are assessed according to their energy balances. Sport in addition is not only toughening up, training and competition but increasingly an approach to life, entertainment and the focus of major events. Sport is set in scene – both for spectators as well as for sponsors. Quality of light here plays a central role. Because modern media technology such as HDTV sets very specific demands for lighting instruments, and therefore heightens the evaluation criteria for the illumination of sports arenas.

From now on without high pressure mercury vapour lamps!

Siteco renounces the production of luminaires with high pressure mercury vapour lamps. With this measure we have the future in view, because from 2015 the sale of high pressure mercury vapour lamps will be banned across Europe.

The reason: the luminous efficacy (lumens/watt) of high pressure mercury vapour lamps is much lower than modern, energy-efficient lamp technologies or LED technology. These light sources thus unnecessarily increase energy consumption and the environmental burden.

For this reason and from now on, all Siteco outdoor luminaires are only fitted with energy-efficient and therefore environmentally compatible lamp technology. So take the decision today for our efficient outdoor luminaires, and you can be sure of selecting an economically attractive and ecologically compatible solution to 2015 and beyond.

BERGMEISTER LEUCHTEN

Siteco Exclusive

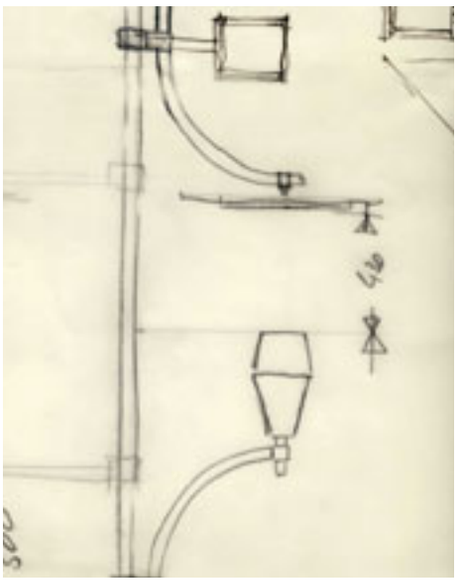
Design your individual lighting solution with us, with a unique luminaire from the Bergmeister manufactory.
Further information can be found on the following page.

Siteco Exclusive

Siteco Exclusive

State-of-the-art lighting technology is combined with a quality of workmanship rich in tradition. Inspired from an idea for an individual lighting solution, this dialogue of concepts has given birth to something unique that will have relevance for decades.

Siteco Exclusive are exterior luminaires that have been conceived by Siteco and are handcrafted by the Bergmeister manufactory. This gives our customers complete freedom of design for their lighting solution and the guarantee of highest quality materials and workmanship, paired with state-of-the-art lighting technology. Small-scale series can only be profitably manufactured with craft manufacturing. In this way, luminaires are created with the highest levels of care and attention, and with materials, surfaces, quality and functionality that cannot be improved upon. Exclusively for our customers.



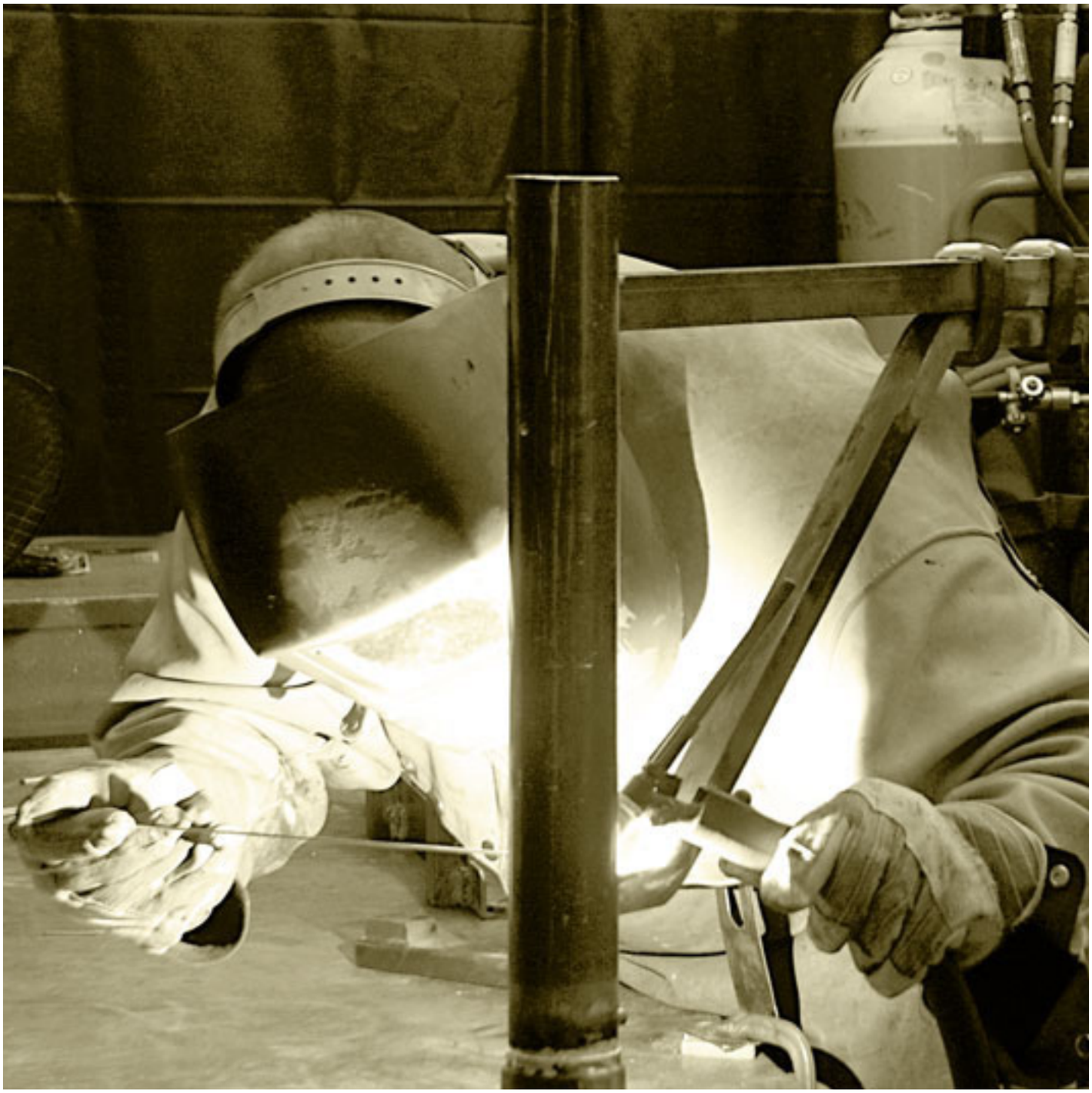
Unique materials
Art and skilled craft in a perfect symbiosis of processed materials; a combination only to be found with the traditional production methods of craft manufacturing. Materials such as copper, bronze and stainless steel are brought to life and given a sense of materiality with lifespans and durability not to be beaten.

Perfect processing
Each individual luminaire is handled with the utmost attention to detail and with the highest quality requirements during its complete craft manufacturing cycle. The effort is seen in the result: precision in every detail and spotless surface processing make each luminaire an outstanding, unique object.

State-of-the-art lighting technology
Lighting technology fit for tomorrow and innovation direct from the Siteco laboratories is combined with hand-crafted housings from the manufactory.
A luminaire is thus produced with a character that is unmistakable and with an efficiency and performance that conforms to all relevant standards and optical requirements.

BERGMEISTER
LEUCHTEN

Siteco Exclusive



+ Implementation of an idea into a concrete, individual lighting solution
+ Overall supervision of complete process via one contact partner
+ Highest quality materials and state-of-the-art lighting technology combined within one luminaire
+ Perfect results in terms of manufacturing quality and lighting quality
+ Conformity with all standards and demands for the lighting task
+ Complete freedom of design for space and architecture