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BOOM  Buitenverlichting N.V.  B-2870 Puurs

BEGA  Lichttechnische Spezialfabrik Hennenbusch · D-58708 Menden

A specialist lighting factory for high quality luminaires used in and on buildings, in gardens and streets, in sports facilities, for underwater installation and a host of other special lighting functions.

GLASHÜTTE LIMBURG · Glashüttenweg D-65549 Limburg · Tel. +49 (0) 6431 2040

A glassworks which manufactures luminaires made of glass. Elegant luminaires for private houses and for public buildings. And glass for the lighting industry across the globe.

BOOM  Buitenverlichting N.V.  B-2870 Puurs

A special manufacturer of exterior luminaires. The luminaires produced are used on private houses, in gardens and in pedestrian precincts. These luminaires are notable for a design which can blend in with a host of architectural styles.
Dear Reader,

The great stream of visitors to the “Vulcania” volcano park is proof of the fascination that fire inside the earth exerts on us. Glowing streams of lava and mighty geodynamic forces remind us of the history of the Earth’s creation. The vulcano has been a symbol of Genesis since time immemorial but it also stands for the greatness of human creativity. According to Greek mythology, Hephhaestus, god of fire and metal craft, lived in a vulcano. Prometheus is supposed to have saved mankind from destruction with the help of fire and wisdom. By stealing both from the gods and bringing them to Earth, he created the basis for craftsmanship, science and art.

We too trust in the ancient power of fire and the skilled craftsmanship of our employees in the manufacture of our products. Primarily of course in the manufacture of illuminating glass which is melted at Glashütte Limburg. Red-hot and viscous, it is only through the skill of our glassmakers that it becomes what is finally intended: a durable product of high-quality and good design. This also satisfied the jury once again this year in the allocation of the iF Design Award. Of the five products from our group of companies which received awards for exemplary industrial design, three were equipped with glass from Glashütte Limburg. The award-winning products are presented in this magazine.

Heiner Gantenbrink
VULCANIA – part of the Earth’s history

The Auvergne region is situated in Central France and covers the highest areas of the Massif Central. A plateau over 600 metres high, on which volcano massifs, single volcanos and layers of lava rest. Chaîne des Puys - 4000 years old - is one of the youngest volcano ranges in the Auvergne. It comprises 112 extinct volcanos in a chain stretching 30 km to the west of the capital city Clermont-Ferrand.

To encourage development in the Auvergne, a search had been underway for a long time to find a promising project with symbolic character, a unique experience worldwide in the field of volcanology. With this objective in mind, it was decided to create the Vulcana European Volcano Park. The location selected was a former military site of 57 hectares on the edge of the Chaîne des Puys mountain range. Embedded in this impressive landscape, the Vulcana scientificaly orientated park allows visitors a fascinating insight into our Earth’s history. They can see with their own eyes the geodynamic forces exerted on our Earth, and the phenomenon of volcanism connected therewith. Visitors can journey into time, fly over planets and observe the work of volcanologists on site. A concept with great appeal. The operators’ expectations have been far surpassed with over 500,000 visitors since the park was opened.
Austrian architect Hans Hollein was entrusted with the planning of the complex. Hollein, who has already built large parts of the Museum in Salzburg underground, also planned up to three-quarters of this project underground. A site formed from basalt lava which is incorporated harmoniously in the unique landscape of the Auvergne. By using the volcanic rock, the complex is carved into a solidified stream of lava. Inside, Venetian stucco in Pompeii red and natural red stone from the Jura give the visitor the feeling of being in the glowing core of the Earth. A cone 22 metres high, an over-ground landmark, is the symbolic connection between heaven and earth. A golden relief inside which is covered in basalt lava outside reflects the daylight. Artistically staged, it appears at night like an active glowing volcano. A great many BEGA in-ground floodlights were used for this creation.
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Drive-over in-ground floodlights
Pressure load 1000 kg · IP 67
with symmetrical or asymmetrical light distribution for
• tungsten halogen lamps
  low voltage QT 12-ax
  high voltage QT 32
• fluorescent lamps TC-TEL
• discharge lamps HME · HIE · HSE
Stainless steel · Clear safety glass
Reflector of pure anodized aluminium

2 M 26 x 1.5 cable entries
8005 · 2 PG 13.5 cable glands
8029 · 8034 · 8036 · 8038
with electronic ballast
T = operating temperature in the centre of the glass
Ring louvres are accessories and must be ordered separately. Other accessories and the full programme of drive-over in-ground floodlights for pressure loads up to 5000 kg are given in the BEGA Main Catalogue.

**Floodlights · symmetrical**

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<thead>
<tr>
<th>Lumen</th>
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**Floodlights · asymmetrical**

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<th>C</th>
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Photo: CHRISTIAN RICHTERS
Light from low mounting heights

Bollards with single-sided or four-sided light output for
- tungst. halogen lamps
  QT 18  75 W
- discharge lamps HIT 35 W – G12
Protection class IP 67 · Die cast aluminium, aluminium, stainless steel
Cylindrical lens of crystal glass
2 M 26 x 1.5 cable entries
3 x 4² connecting terminal
Cable length of 0.3 m required above ground level for introduction of luminaire body. Mounting plate for bolting to a foundation or anchorage unit.

Colour: graphite – article number silver – article number + A

Other technical data are given in the BEGA Main Catalogue and in the assembly instructions for these luminaires.

<table>
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<td>8731</td>
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<td>896</td>
<td>Anchorage unit for 8730 · 8731</td>
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<tr>
<td>8770</td>
<td>four-sided 360° QT 18 75 W</td>
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<td>896</td>
<td>Anchorage unit for 8770 · 8771</td>
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VULCANIA – in the core of the Earth

It is important for architect Hollein to incorporate the construction (which is mainly underground) perfectly into the protected Auvergne landscape. To ensure that the lighting is also an integral, discreet element in this overall concept, the lighting planner decided on BEGA luminaire 8731 for pathway illumination. This luminaire is from a series of bollards which are available in two sizes to illuminate surfaces from extremely low mounting heights with glarefree and highly concentrated light. Available either with single-sided or two-sided light output, these luminaires are extremely robust, and therefore particularly suitable for open areas. As accompanying pathway illumination, their function is to orientate, indicate, guide and also demarcate.
Product Design Award 2003
Impact-resistant wall + ceiling + pillar luminaires

These luminaires of highly stable construction have protection class IP 65. They are corrosion-resistant and made of die cast aluminium and stainless steel. The thick-walled crystal glass with optical texture distributes the light very uniformly.

The special appeal of these luminaires lies in the high-contrast interplay between light and dark.

These luminaires with their expressive, clear shape are versatile elements in solving lighting tasks in modern architectural lighting whether as single luminaire or group configuration.

Luminaire 2634 received the Product Design Award 2003 from Industrie Forum Design Hannover for excellent design quality.
Wall + ceiling + pillar luminaires for
- incandescent lamps  A 60  75 W
- fluorescent lamps TC-D  18 W
- fluorescent lamps TC-TEL  26  32  42 W
2639 with electronic ballast
Protection class IP 65
Die cast aluminium and stainless steel
Crystal glass with optical texture

Colour: graphite – article number
      white    – article number + W
      silver   – article number + A

### Incandescent lamps

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### Fluorescent lamps

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<tr>
<td>2639</td>
<td>3200</td>
<td>220</td>
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Surface washers with asymmetrical light distribution

Wall luminaires with versatile burning position adjustment for metal halide lamps or sodium vapour discharge lamps 70 – 400 W. These luminaires with small dimensions and high light outputs are economic in operation, flood-lighting walls, ceilings and ground surfaces.

A high-quality optical system creates broad spread asymmetrical light distribution.

Ballasts are installed inside the luminaire. Adjustability of the light opening, rotation of the lamp axis and the high protection class allow these luminaires to be used in many applications for the most diverse tasks.

The lamp manufacturer’s regulations relating to the burning position of the lamps must be observed.

Further technical details are given in the BEGA Main Catalogue and in the assembly instructions for these luminaires.

Luminaire 7475 received the iF Product Design Award 2003 from Industrie Forum Design Hannover for excellent design quality.
Surface washers with asymmetrical light distribution for:
- discharge lamps
  HI/HST-DE  70 · 150 · 250 · 400 W
- Protection class  IP 65
- Die cast aluminium and stainless steel
- Reflector of pure anodized aluminium
- Safety glass
- Adjustable joint
- Ballasts inside the luminaire
- The luminaire can be installed with the light opening facing upwards or downwards.

Colour: graphite – article number
  white     – article number + W
  silver    – article number + A

### Discharge lamps

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<td>7476</td>
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<td>11250 · 15000</td>
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<td>7483</td>
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<td>7484</td>
<td>400 W</td>
<td>36000 · 48000</td>
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BEGA manufactures location luminaires and floodlights with LEDs for installation in walls and ceilings and drive-over luminaires for in-ground installation. These are luminaires whose construction and shape are determined by the dimensions and technology of new LEDs and which are notable for the following characteristics:

- long life
- maintenance free
- colour stability
- low surface temperatures
- small dimensions

These corrosion-resistant luminaires are highly robust in construction and guarantee reliable and economic operation.

The complete luminaire programme with LEDs including accessories is given in the BEGA Main Catalogue. Luminaire 8635 received the iF Product Design Award from Industrie Forum Design Hannover for excellent design quality.
Drive-over recessed luminaires
LED in-ground floodlights
Protection class IP 67 · Pressure load 1000 kg
with 6 · 18 · 42 LEDs · 24 V DC
Safety class III · without power supply unit
Aluminium and stainless steel · Reflector of pure anodized aluminium · Safety glass
0.6 m connecting cable 2 x 0.75

PSU IP 65 · EN 61558/VDE 0570
230 V ~ 50 Hz / 24 V DC · 0 - 20 W

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<td>PSU</td>
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Pendant luminaires for brilliant light. The clear crystal glass cone reveals the luminaire’s lighting elements and demonstrates their function. The essential amount of light is directed downwards vertically by the optical mirror system and effectively illuminates the surface below. A minor amount of light exits above the reflector, thus providing pleasant surrounding brightness in the room. These luminaires of high material quality are made of stainless steel, aluminium and hand-blown crystal glass – masterpieces of the glass-maker’s craftsmanship.

Other pendant luminaires and ceiling luminaires from the DUATA product group with directed and wide beam light are given in the Glashütte Limburg Catalogue of Luminaires.

Luminaire 5264 received the iF Product Design Award 2003 from Industrie Forum Design Hannover for excellent design quality.
Pendant luminaires for
• tungsten halogen lamps QT 18 - B15d
• tungsten halogen lamps QT 32 - E 27
• fluorescent lamps TC-TEL
for electronic ballast
Ballasts inside the luminaire
Crystal glass · Stainless steel parts
Reflector of high gloss anodized aluminium
L = overall length

Tungsten halogen lamps Lumen A B L
5262 1 QT 18 60 W 780 100 230 2000
5263 1 QT 32 75 W 1050 140 330 2000
5264 1 QT 32 150 W 2400 200 470 3000
5265 1 QT 32 250 W 4000 250 610 4000

Fluorescent lamps
5267 1 TC-TEL 26 W 1800 200 470 3000
5268 1 TC-TEL 42 W 3200 250 610 4000

Luminaire 5264 received the iF Product Design Award 2003 from Industrie Forum Design Hannover for excellent design quality.

Glashütte Limburg
Table lamp and floor lamp in the clear shape of a cylinder. Precious three-ply opal glass and cool metal are linked to form sculptures of light for modern rooms. Simple and upright, timeless and beautiful, they are distinguished by their soft, uniform light. Luminaire 6480 received the iF Product Design Award 2003 from Industrie Forum Design Hannover for excellent design quality.
Floor lamp

Floor lamp for
- incandescent lamps A 65 - E 27
- Three-ply opal glass
- Stainless steel + graphite metal parts
- Wiring set 2000 mm
- with foot-controlled dimmer

<table>
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<td>1 A 65</td>
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New bathroom luminaires
Protection class IP 44

Timelessly beautiful luminaires, outstanding for their pure shape and good light. High-quality, hand-blown three-ply opal glass distributes the light from the lamps softly, uniformly and in its true colour. The mirror image is illuminated pleasantly and honestly without obtrusive glare. Available in protection class IP 44, it is naturally suitable for all bathroom areas.

Enclosed wall luminaires for
• tungsten halogen lamps QT 26 - E 14
• tungsten halogen lamps QT 14 - G 9
Protection class IP 44
Satin matt three-ply opal glass
Die-cast metal parts
24 carat gold-plated · chrome-plated · matt nickel

gold-plated Lumen A B C D
8370 2 QT 26 40 W 860 50 400 95 70
8373 2 QT 14 60 W 1560 60 500 100 70

chrome-plated
8371 2 QT 26 40 W 860 50 400 95 70
8374 2 QT 14 60 W 1560 60 500 100 70

matt nickel
8372 2 QT 26 40 W 860 50 400 95 70
8375 2 QT 14 60 W 1560 60 500 100 70
Enclosed wall luminaires for
- tungsten halogen lamps  QT 26 - E 14
Protection class  IP 44
Satin matt three-ply opal glass
Die-cast metal parts
24 carat gold-plated · chrome-plated · matt nickel

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<td>8369</td>
<td>1 QT 26 60 W</td>
<td>780</td>
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<td>285</td>
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New bathroom luminaires
Protection class IP 44

Splash-proof wall luminaires in protection class IP 44.
A series of luminaires, characterized by their precious metal surfaces and high-quality glass – hand-blown three-ply opal glass, masterpieces of the glassmaker’s craftsmanship.
These luminaires are suitable both for sophisticated bathrooms and for many other lighting tasks in well designed rooms.

Enclosed wall luminaires for • tungsten halogen lamps QT 26 - E 14
Protection class IP 44
Satin matt three-ply opal glass
Die-cast metal bracket
24 carat gold-plated · chrome-plated · matt nickel

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Wall luminaires for
• incandescent lamps C 35 - E 14
Protection class IP 44
Satin matt three-ply opal glass
Die-cast and stainless steel metal bracket
Chrome-plated or matt nickel

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New surface-mounted luminaires for walls and ceilings
Protection class IP 65

A new group of square luminaires designed for compact energy-saving fluorescent lamps with built-in electronic ballasts. These luminaires are available in two sizes with high light output and high protection class. They are equipped with an opening mechanism which allows the lamps to be exchanged not only simply but also quickly. The luminaires are made of die cast aluminium and crystal glass with optical texture. The visible surface of the aluminium parts is impressive for its precise finish. The structure of the glass ensures soft, broad spread and uniform light distribution. These luminaires are suitable for a host of applications in modern architectural lighting but above all for locations where economic operation must be guaranteed by a low energy requirement and low level of maintenance. The luminaires are presented in detail in the Glashütte Limburg Catalogue of Luminaires.
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Wall + ceiling luminaires for
- fluorescent lamps
  TC-T · low loss ballast
  TC-TEL · electronic ballast
Ballasts inside the luminaire
Protection class IP 65
Crystal glass with optical texture, inside white
Die cast aluminium parts
Reflector of pure anodized aluminium
Matt aluminium

Luminaire 8344 can also be equipped with fluorescent lamps TC-TEL 26 W or 32 W.

<table>
<thead>
<tr>
<th>fluorescent lamps</th>
<th>low loss ballast</th>
<th>Lumen</th>
<th>A</th>
<th>B</th>
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<tr>
<td>8346</td>
<td>wall + ceiling luminaire</td>
<td>1 TC-T</td>
<td>26 W</td>
<td>1800</td>
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<td>wall + ceiling luminaire</td>
<td>2 TC-T</td>
<td>18 W</td>
<td>2400</td>
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