

Airport Security

Your project service provider



Airfield Security Lighting

> more on page 6



Road holding position light

> more on page 11

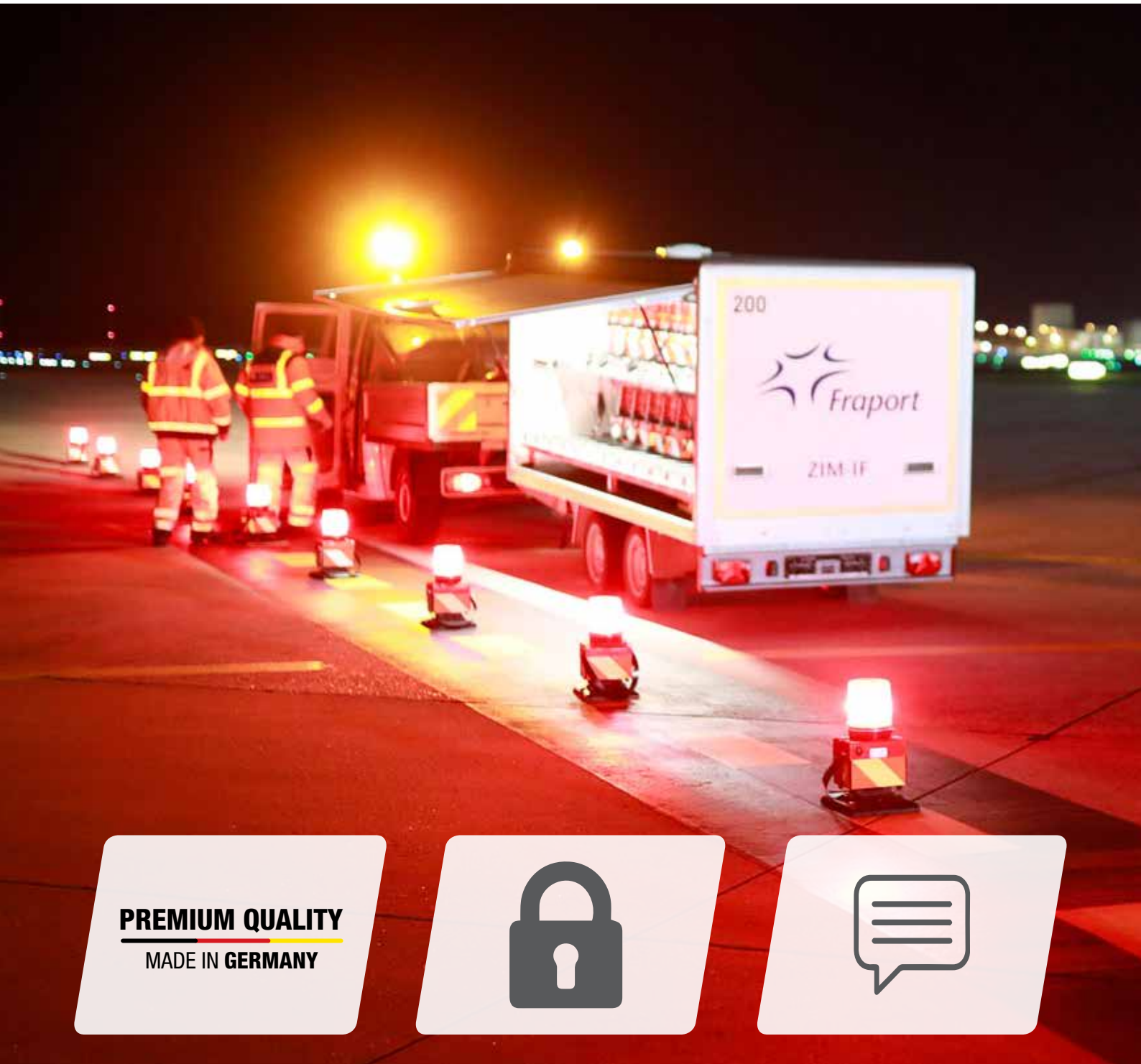


Protection

> more on page 12



Tradition, innovation & responsibility at horizont



PREMIUM QUALITY

MADE IN GERMANY



"Made in Germany"

Our Airport Security products as well as many accessory parts are developed and produced in Germany. Taking into account the extremely low failure rates which ensure high availability and reliability of our devices we can offer long warranty periods to our customers.

Reliable products

All horizont Airfield Security products go through extensive functional and endurance tests before they are warehoused, respectively delivered to the customer. With your decision to go for one of our products you decide for safety you can rely on.

Consulting service

The horizont team looks forward to your call, e-mail or your fax. We are pleased to assist you planning your project or solving any problems. Our sales representatives are available worldwide.

Established 1945

Familiar to all pilots: the artificial horizon in the airplane cockpit. One member of the team, who developed the artificial horizon which is nowadays a technical standard, was the electrical engineer Dr. Heinz Müller. Founding his own company later in 1945, he named it "horizont" in memory of this invention.

For more than 70 years horizont has been developing products facilitating everyday life of farm holders as well as increasing safety in animal husbandry.

However we do not rest on what we have achieved in the past but rather strive every day to be able to say even in decades to come: horizont - committed to tradition and quality!

Made in Germany

Since its foundation, almost 75 years ago, the brand "horizont" has been synonymous with "Made in Germany". All production steps for the manufacturing of electronic components and for almost all products made of plastics are carried out in our production facilities in Germany.

horizont today

The horizont group gmbh today consists of a network of companies, each a specialist in its respective business field. Currently more than 500 people are employed within the horizont group. Central distribution and logistics are handled from Korbach, in the heart of Germany.



1945
Establishment



>500
Employees
worldwide



~ 30
Trainees



6
Locations
worldwide



>50
Patents and
utility models



>25,000 m²
Production
and storage
area

Your project - service partner providing an all-inclusive service package



Our core competencies include the following sectors:

- Development and construction
- Toolmaking
- Plastic injection moulding
- Printed circuit board assembly
- Protective coating
- Coil winding/transformer construction
- Screen printing
- In-mould process
- Pad printing
- Hot stamping technology
- Digital printing
- Logistics

PREMIUM QUALITY
MADE IN GERMANY

horizont has specialized for decades in the development and production of electronic articles and products made of plastics.

horizont not only manufactures the assortment for modern fence management and the extensive range of products for road safety at its headquarter in Korbach, but it is also a partner for the external production of numerous well-known companies in the region "Nordhessen". Our innovative products are developed and continuously improved according to the latest technical standards. We are, of course, certified according to DIN EN ISO 9001. Due to comprehensive implementation of product quality measures as well as on on-going training of our employees we continuously adapt to the market requirements.

Precision tools are designed and built in the toolmaking department at our production facilities in Korbach. CNC-controlled milling machines,

EDM machines and surface grinding machines are used. The tools are sampled at the Korbach site, allowing us to offer optimum service. Plastic injection moulding is a further important production mainstay. The production of housings for pasture fence devices, electronic flashing lights and delineators is just as important as the fast and precise realisation of customer-specific ideas.

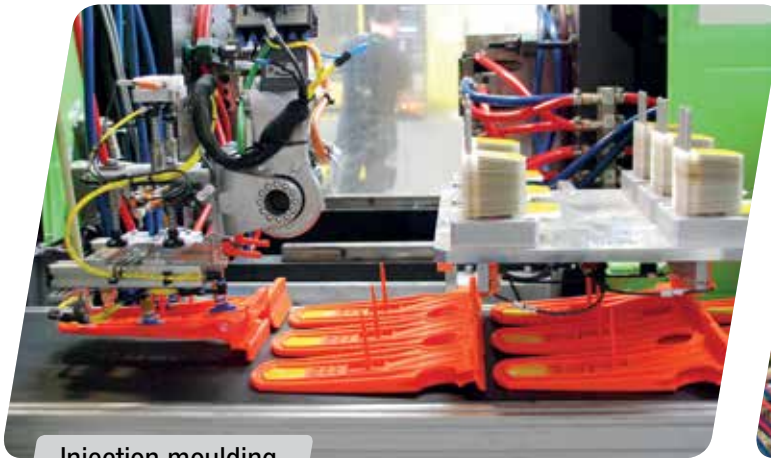
Our electronics production includes the manufacture of PCBs in fully automated SMD technology (SMT) as well as in manual assembly (THT). From the sample circuit board to series production, we consistently implement our many years of experience. A relevant topic in this sector is the handling of fragile and stress-sensitive assemblies. To protect them from malfunctions and failures due to unfavourable environmental conditions (especially humidity), they are treated with a protective coating. The fully automated coating application can be done on one or both sides. In addition to the pure manufacturing of

the products, their optical design is also becoming increasingly important. Depending on the requirements, we use different printing processes to make our products visually appealing: Screen printing, pad printing, hot stamping and digital printing. This allows us to print on various, different surface shapes. The use of digital printing enables the direct printing of plastic parts already for batches of size 1.

An additional process for surface design is the in-mould process. This production process refers to in-mould film injection in plastic injection moulding.

All of the customer's expectations are met here - operating instructions, logos, graphics, patterns and photorealistic images are applied to the products in a targeted and effective manner.

We are sure our technology and our service will inspire you.



Injection moulding



Injection moulding



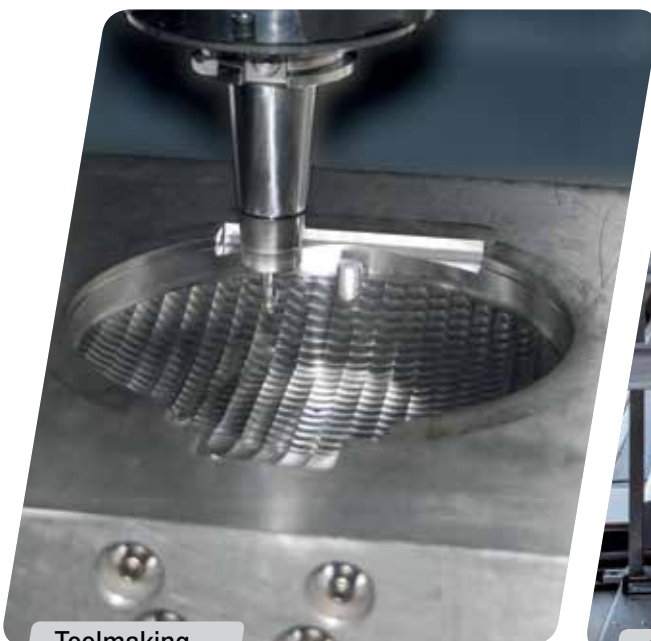
Printing



Installation



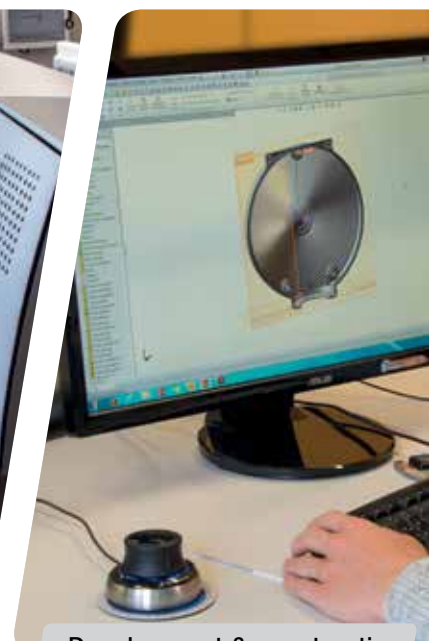
Electronic assembly production



Toolmaking



SMT printed circuit board



Development & construction

Airfield Security Lighting in use at airports

Service

Good service plays a key role at horizon. Whether in sales or in the repair service - at horizon, our experts provide you with advice and support.

Our professional office staff will appreciate to answer your questions and to provide individual assistance with any problem. Do you have a specific concern and would like a personal visit on site? No problem! One of our sales representatives will be pleased to meet with you.



”

*Almost all major airports are already among our customers.
Furthermore, many construction companies have also
recognized the advantages of our products:
they are meanwhile indispensable during
airport renovation works.*

“

Our references

Our products have already been installed at airports for several years now and provide more security there.

Among others, Airport Cologne/Bonn uses our Airfield Security Lighting device. Also the Frankfurt Airport is convinced of the necessity of these safety products.



Airport Security Lighting

Art. No.: 50262Z

Taking advantage of the knowledge and experience in developing traffic safety technology gained over decades, horizon created a special warning lamp which is in daily use at the Cologne/Bonn airport.

It is the perfect visual reinforcement for defining security perimeters or marking of temporary construction sites. Furthermore the Airport Security Lighting is also ideally suited for markings on the airport apron and taxiways whenever flexible structures are required and therefore fixed lights cannot be used.

The handling of the devices is extremely easy - just like their storage in a simple shelving system which also serves as a charging station.

Thanks to the certification by the German Federal Waterways and Shipping Administration, this light is a professional solution for every airport!

Airfield Security Lighting Accessories

Splash-proof vehicle charging socket

included in scope of delivery (50262Z)

- charging cable available in two versions (2 m, 3 m)
- splash-proof according to German standards for vehicles (KFZ-DIN)

Even the German fire brigades as well as the German police confirmed their positive experience over years using our charging socket.

horizont products are completely adapted to the needs of our customers.

Thanks to our extensive experience, we can draw back on existing components from our comprehensive range of products and use the latest technical standards and innovations to supplement them.

Multichannel power supply unit

Art. No.: 50268

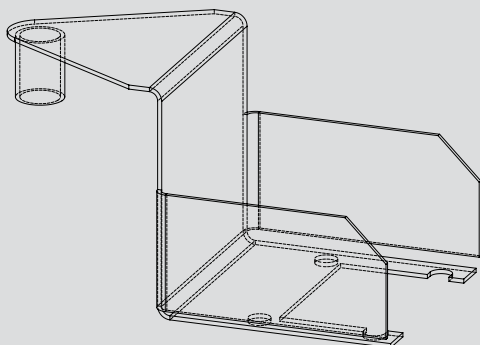
- simultaneous charging of max. 10 Airfield Security Lighting possible
- with convenient charge indicator



Bracket on wheel deflector

Art. No.: 50344

- the bracket ensures the firm sit of the Airfield Security Lighting on the runway - even in strong winds



Advantages:

- low costs
- particularly high durability
- outstanding quality
- high availability

Technical equipment:

- long-life 8-fold LED light; light intensity more than 10 Cd according to ICAO Annex 14
- revolving light 360° horizontal; 180° vertical
- operation by two batteries 12Ah
- selectable operation modes: "automatic twilight control" and "day and night"
- splash-proof vehicle (DIN) charging socket
- sturdy plastic casing for heavy use
- battery box is equipped with reflecting sheeting
- secure stand due to large, (removable) anti-slip base plate with 8 kg weight of light
- high breakage resistance on contact due to flexible rubber adapter which connects the lamp with the base plate

Anti-slip removable base plate

included in scope of delivery (50262Z)

- quick and easy mounting and dismounting of the Airfield Security Lighting
- secure stability of the Airfield Security Lighting is permanently guaranteed

Removable carrying strap

included in scope of delivery (50262Z)

- a practical, removable carrying strap makes the Airfield Security Lighting mobile and easy to transport

Optimal storage and charging of the Airfield Security Lighting



Airfield transport trailer

Art. No.: 50347

Fully equipped, the Airfield Transport trailer holds up to 70 Airfield Security Lightings. The vehicle's dimensions are: 5,200mm x 1,600mm x 2,059mm (LxWxH). It comes with a ball-head trailer coupling and has a maximum permissible gross vehicle weight of 2,000 kg - with a maximum permissible payload of 1,400 kg. The airfield transport trailer is designed in compliance with road traffic regulations applicable in Germany, STVZO. Its roof fan with integrated ventilator prevents from undesired heat accumulation in the interior.

The shelving system for the interior fittings consists of two levels for holding the lights including their charging equipment. A transport lock for all lights guarantees their firm position and prevents from possible damages during transport. It also has a drain for any dripping water or rainwater that may remain on the lights after use.

The interior can be set up and equipped individually on request.

Stop signals during take-off and landing

“
At medium solar intensity the road holding position light runs theoretically unlimited.
”

Arno Dombrowski (Technical engineer at horizon)

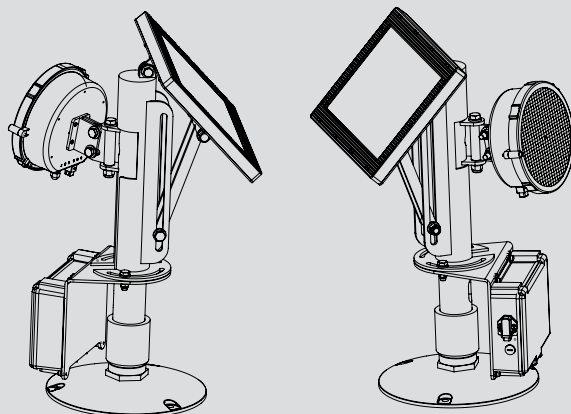
Road holding position light

Art. No.: 50326 (Also available as synchronous version)

horizont Road holding position light is the perfect visual support in holding zones in front of airport taxiways. It is installed at the height of the holding positions on both sides of taxiways crossings and provides a clearly visible stop signal even in worst visibility conditions with its bright flashlight.

When the solar module is optimally aligned, the road holding position light operates almost independently. State-of-the-art LED technology, in combination with solar power supply and a rechargeable battery which is proven and tested over many years, ensure long maintenance intervals.

The synchronous version of the road holding position light uses the time signal of the radio transmitter "DCF 77", which is freely receivable in Europe within a radius of approx. 2,000 km from Frankfurt/Main. In the event of a time-signal failure due to bad weather conditions, for example, the road holding position light continues to run for up to four hours without any visible deviation.



Safe, reliable and highly visible | Digital Signage

Mobile LED variable message signs

Our mobile LED variable message signs are state of the art in terms of safety, reliability and visibility for the protection of construction sites and hazardous areas as well as for information use at events.

Through continuous further development, we have developed an optimal product in the areas of power consumption, anti-reflection coating of the surface and phantom light.

A wide range of variants, multiple applications and state-of-the-art LED technology in a robust heavy-duty design ensure a significant increase in safety and information.

In addition to better recognisability, the main features of the system for practical use are the wide range of available information, such as speed

limits, detour recommendations and numerous general information items.

Texts in several languages can also be used to address road users and guests without German language skills.

With the optional HOT remote control, the displayed traffic signs and information can be conveniently adapted to the respective worldwide traffic situation from the computer in the office.

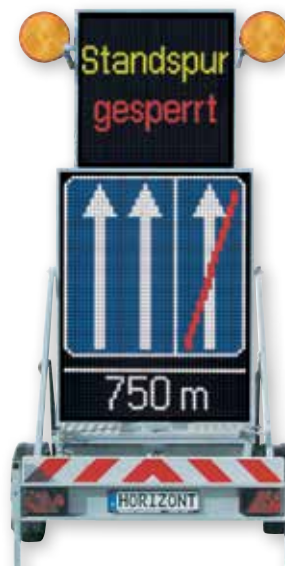
For every practical application there is a suitable LED two-way traffic sign from horizon: different sizes, different colour representations, with and without chassis and different control options.

The following illustrations can be realised:

- Motion pictures and text at the same time
- Static-blinking-alternating-dynamic symbols

and signs

- freely programmable; memory for up to 1,500 characters/texts
- 9 brightness levels and automatic brightness adjustment



PARKING
TERMINAL C



OPEN



Digital Signage

Our mobile digital signage solutions are produced in Germany on customer request. For example, you can choose the display size, the trailer body, the paintwork and the control options for the display.

Technical data of LED display:

- Display size (WxH): 1500 x 2500 mm
- Pixel pitch: 3.9 mm
- Resolution (WxH): 384 x 640 pixel
- Power consumption: 7 - 12 amperes
- Power supply: 230V AC
- Luminosity: 2500 nits (cd / m²)

Trailer data

- Dimensions set up: Height 3500 mm
- Weight: 1000 kg

✈ DEPARTURES ✈

TIME	DESTINATION	FLIGHT
11:30	BERLIN	TU 4709
12:45	KIEV	UA 6385
14:10	HONG KONG	JP 8290
15:20	DAKAR	WP 5098
15:50	NAIROBI	NF 0887
16:30	NEW YORK	CA 2556
17:05	ROME	ZO 1047
18:00	PARIS	PE 4823
18:05	CHICAGO	CX 1302
19:20	AUCKLAND	OA 4161
20:10	CAPE TOWN	QJ 4161
21:30	BERLIN	TU 4709
12:45	KIEV	UA 6385
14:10	HONG KONG	JP 8290
15:20	DAKAR	WP 5098
15:50	NAIROBI	NF 0887
16:30	NEW YORK	CA 2556
17:05	ROME	ZO 1047
18:00	PARIS	PE 4823
18:05	CHICAGO	CX 1302
19:20	AUCKLAND	OA 4161
20:10	CAPE TOWN	QJ 4161

Flight TU 4709
to BERLIN
today from
Terminal C



Moving safely on the airport premises

Airport security

horizont has specialised in traffic safety for more than 40 years and uses innovative traffic safety products to secure danger spots and operational sites - the areas in which road and construction workers, fire brigades, technical emergency services and of course the police are operating.

horizont, one of the leading manufacturers of an extensive range of product for road safety, today holds over 50 patents, utility models and trademarks. The innovative business activity resulted in continuous success.

Special safety delineators with high reflective sheetings as well as powerful LED warning lights safely guide motorists past the danger points during the day and at night. Sturdy and resistant safety barriers made of plastics prevent pedestrians from falling unintentionally into excavation pits.

State-of-the art LED variable message signs warn road users of dangerous areas and provide recommended detour information. Warning boards mounted on trailers are designed to protect the people working behind them during motorway construction sites.

In addition to securing construction sites to protect road users and construction workers, horizont products help to maintain a constant traffic flow and thus reduce traffic jams.

horizont products are not only designed to improve and ensure the safety on our roads by assuring a smooth traffic flow, but also safeguard workers and passengers at numerous airports throughout Germany nowadays.



StrahlMax - for full and partial closure

- ready to use integrated red and amber warning lights for partial and full closure
- central battery compartment and central control
- very efficient – quick and easy installation
- warning lamps sturdily installed prevent from theft and vandalism
- state-of-the-art, energy saving and durable LED technology



TopFlash

Modern Xenon flash technology bundled in a compact and stable housing. With its 2 Joule flash, the TopFlash achieves an excellent warning effect for securing operational sites.

horizont TopFlash can be mounted quickly and toolfree on any standard traffic cone using the optionally available cone adapter "DrehFix".

Just plug and twist and the TopFlash lamps is fixed so firmly on the cone that you can even use the lamp for carrying the cone.

Technical details:

- high light output, more than 600 cd
- compact and sturdy housing
- quick and tool free mounting





Combination rack for delineators, bases and Vario Safety Barriers

For the transport and storage of:

- 20 base plates
 - 10 Vario Safety Barriers
 - 10 delineators of any horizontal delineator system
 - transportation and storage with mounted lamps is possible
 - can be loaded from all sides with forklift/pallet truck
 - with tilt protection during forklift loading
- Scope of delivery does not include delineators, base plates, vario safety barriers or lamps



Collapsible delineator and WarnMax with reflective sheeting, self-synchronising

- sequential light, self-synchronising via integrated radio modules when switched on
- panel and base plate sturdily connected with two robust hinges
- panel in bright red, for optimum daytime visibility; with recessed sheeting area
- quick and easy assembly, safe and non-slip stand
- high quality reflective sheeting type RA2 C, red/white, horizontal stripes
- operation with four LR14 batteries (baby cell), not included



horizontal guide curb with Leitboy III and Leitboy bollard

- temporary lane separation for construction sites of shorter or longer duration
- no need of any great physical effort to use it for permanent lane separation
- lane separation for different group of road users (cars, bus, cyclists, aircrafts)
- merging of different traffic lanes
- traffic management in urban and rural areas

Horizontal guide curbs do not have to be glued to the road surface. Additional fastening with ground screws is also not required. Compared to marking nails or films, there will stay no adhesive residues on the road surface. This eliminates the danger of so-called "ghost markings". Guide curbs can be equipped with visual signs of various sizes and hatchings (Leitboys) or Leitboy bollards.



MS 340 LED

Directional advance warning lamps are installed to warn road users at an early stage of operational sites and hazardous areas. It is particularly recommended to warn motorists of lane changes in due time and of course any other danger spot ahead, e.g. pedestrian crossings, airfield crossings, passages with height limits, construction sites, etc. Advance warning lamps of class WL 7 are also often used for vehicle protection.

Technical details:

- very low power consumption
- durable LED technology with 4 high-performance LEDs
- dual circuit LED system, deep discharge protection switches off circuits in succession
- 5-fold snap closure for easy and quick opening
- **EN12352** L9H / L9M, **TL** WL 7





Consultation

Do you have questions concerning safety at airports?
Contact us, we will be happy to advise you personally.



Repair Service

Our repair service is reliable, competent and fast. A defective device can be easily repaired by your local dealer or by our team in Korbach, Germany.



Website





Discover our website and find further articles, highlights, campaigns, films, tips and much more.

We are looking forward to seeing you!

 www.horizont.com

horizont group gmbh Traffic Safety


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