

# Partner in Performance

We desire a world in which automation helps people and also keeps them safe at the same time.

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## At the Cutting Edge

*Germany is well known for its variety and diversity of industries and companies. Some are more in the focus of public attention. Others are not, even though myriads of people benefit from the results of their work. ASO has no problems with this. After all, who cares for popularity when expertise and innovative solutions are needed. And that is what customers expect, and get, from ASO Safety Solutions – one of the leading developers, producers and distributors of safety solutions for doors, gates and plant engineering.*

Since the company was established more than 30 years ago, protection and safety have been the most important aspects governing daily operations at ASO. From the very start, communication with customers about their experiences on a regular basis has been important in order to align production and distribution with real demand. The company has also invested in research and development to be prepared for the future demands of ever increasing safety needs in industry and society. And it has been precisely this innovative approach which has given the company with its traditional craftsmen skills the technological advantage. This gives us the opportunity to play an important part in forming the dynamic developments in this industry.

ASO meets the great challenges of globalisation by focussing on core competences, carefully adapting operational structures and systematically expanding an international presence. At present, 170 employees worldwide produce safety contact elements, controls and customer-specific sensor solutions, and many other products. In addition to head offices in Germany and the US, global distribution is in the hands of distribution centers all over Europe and a global dealer network.



5.000 m<sup>2</sup>  
production area



## Helmut Friedrich

Managing Partner

*"You cannot achieve success on your own, nor do you own it alone. Only by contributing to our customers' added value can we claim to be successful. That, nothing more and nothing less is what makes us a Partner in Performance for our customers. My greatest satisfaction is to see that my expectations and implementations are recognized.*

*This is why, I am looking forward to a future that is shaped by a spirit of true partnership – within and outside the company."*

# Partner in Performance



## Our claim: To be more than a mere supplier

*Nobody knows better than our customers what sets ASO Safety Solutions apart from other suppliers. They trust our competence. They count on our innovative potential. They appreciate our notion of true partnership. They know that we will do everything to understand their problems and find the best solutions.*

ASO customers expect, and receive, premium quality products. That is a given and therefore we don't stop there. Because ASO delivers far more than mere products; ASO creates added value. We do this as a dialog partner whose consultation expertise is in demand even during the development stage of end products. Often, it is interdisciplinary insights that are way ahead of the general standard and enable us to find the right responses to new challenges.

Our customers benefit from such experience, not just every day but particularly when the focus is on getting their own development processes started or accelerated. ASO product developments are the results of committed teamwork. Everything is thought through down to the finest detail and tailored, for clearly described functions. Partner in Performance is not just an empty phrase adopted by ASO, but the guiding principle of our vision of effective and efficient customer relations.



# 1.000

mat tests  
per day



## Passion for Quality and Technology

*It is one thing to demand the most perfect safety measures possible and another to actively work towards making our world a little safer every day. This is what is expected of us – no more and no less. And we face up to this challenge. From competent advice at the start to a customized solution. To achieve that, we mobilize what lies at the heart of our strength: Conviction and passion. Professionalism and outstanding technology. Highly motivated staff in the engineering offices and at the workbench. Because everyone in their workplace knows and supports our common goal: Safety technology that is progressive in the best sense of the term, because its purpose first and foremost is to protect people.*



Stops reliably  
and within seconds.

**SENTIR**  
*bumper*

More than **1.000.000** cycles



More than **1.500** protected  
machines and plants per year

# 100 percent

Sustainability thanks to efficient recycling processes

## Environment and Revenue in Harmony

*As a company, we can only achieve success in the long term, if our actions are in harmony with the goals and interests of society. For that reason, our initiative, creativity and expertise are also needed for the long-term protection of habitats and the environment.*

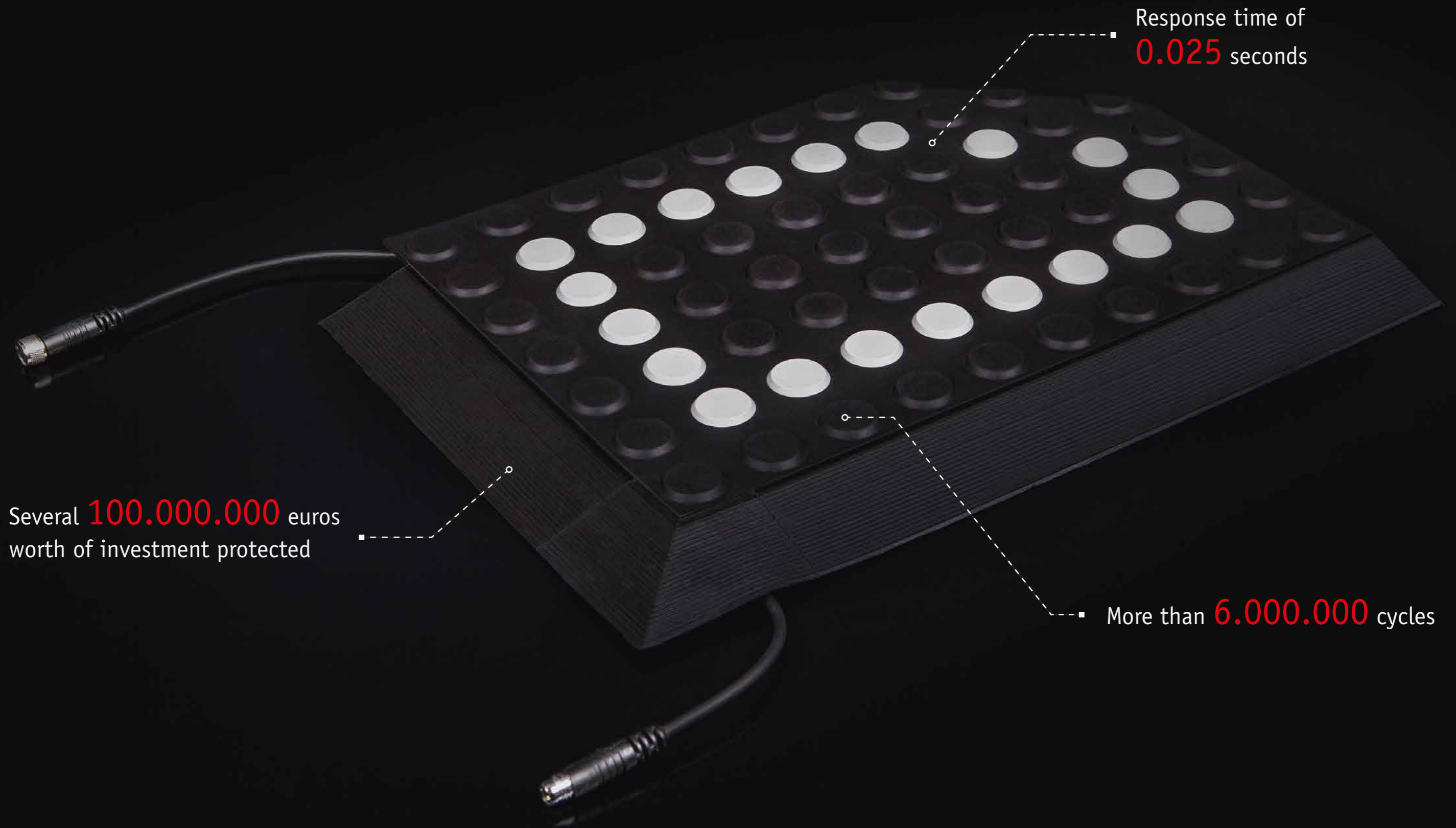
We know now: The vision of a future worth living can only become a reality if we succeed in the long-term conservation of natural resources. This is a basic conviction that we share with the majority of people and certainly with those in positions of responsibility in our country. These views are also in perfect harmony with the objectives of a company whose products are mainly aimed at preserving the physical integrity of human life. For that reason, sustainability and future viability are benchmarks that we accept out of the deepest conviction and that we actively support in our daily work wherever possible. Just one example. A degree of discarded material and waste cannot be avoided in our production. But instead of just throwing away leftover elastomer, it is recycled and used for testing. Also, the waste heat from our plants is used to heat the entire production area. This allows us to achieve significant savings in terms of raw materials, but also of costs. A result that benefits the environment and our customers equally.





Thinks ahead  
when you don't.

**SENTIR**  
*mat*



Response time of  
**0.025** seconds

Several **100.000.000** euros  
worth of investment protected

More than **6.000.000** cycles

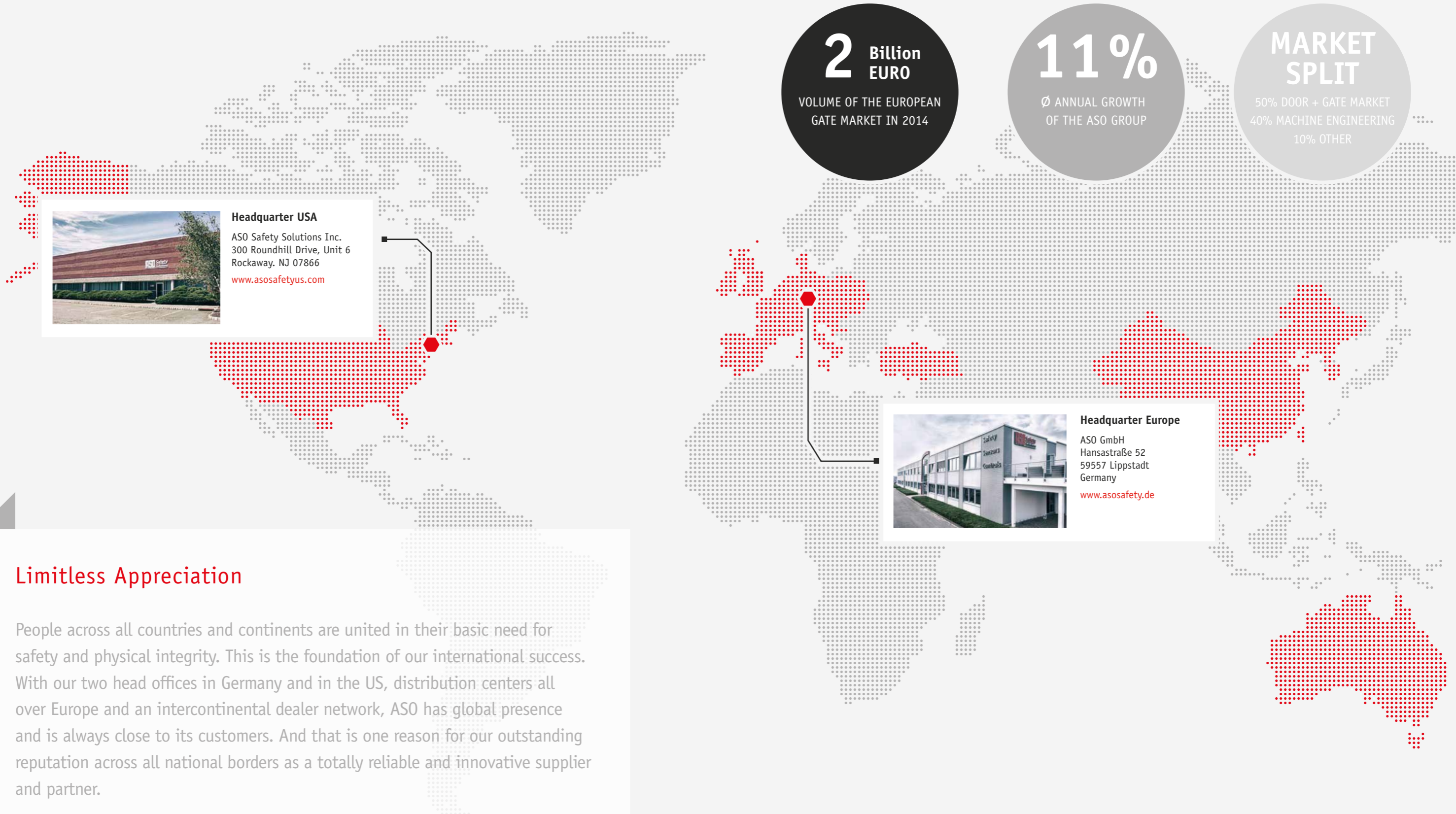
## Advantage through Innovation

*Crucial criteria of a successful innovation are the quality of the idea, its constructive plausible implementation, and first and foremost: added value for the customer. ASO manages to score convincingly in each of these categories.*

Actual market requirements and specific requests from our customers are decisive factors in the ASO product portfolio. However, we see the current range as a constantly developing offer, and we do everything we can to make improvements happen fast. This is a real challenge, because ultimately it means constantly testing the limits of feasibility in order to overcome them with innovative solutions. If we progress on this path faster than others, this is mainly due to methodically incorporating customer suggestions, everyday experiences and investment in the right kind of equipment (such as our own extrusion plants) into our innovation strategy. The outcome benefits us and our customers, because innovations remain the best way to reveal new perspectives and improve market opportunities.



830.000 m  
of extrusion products  
per year



## Limitless Appreciation

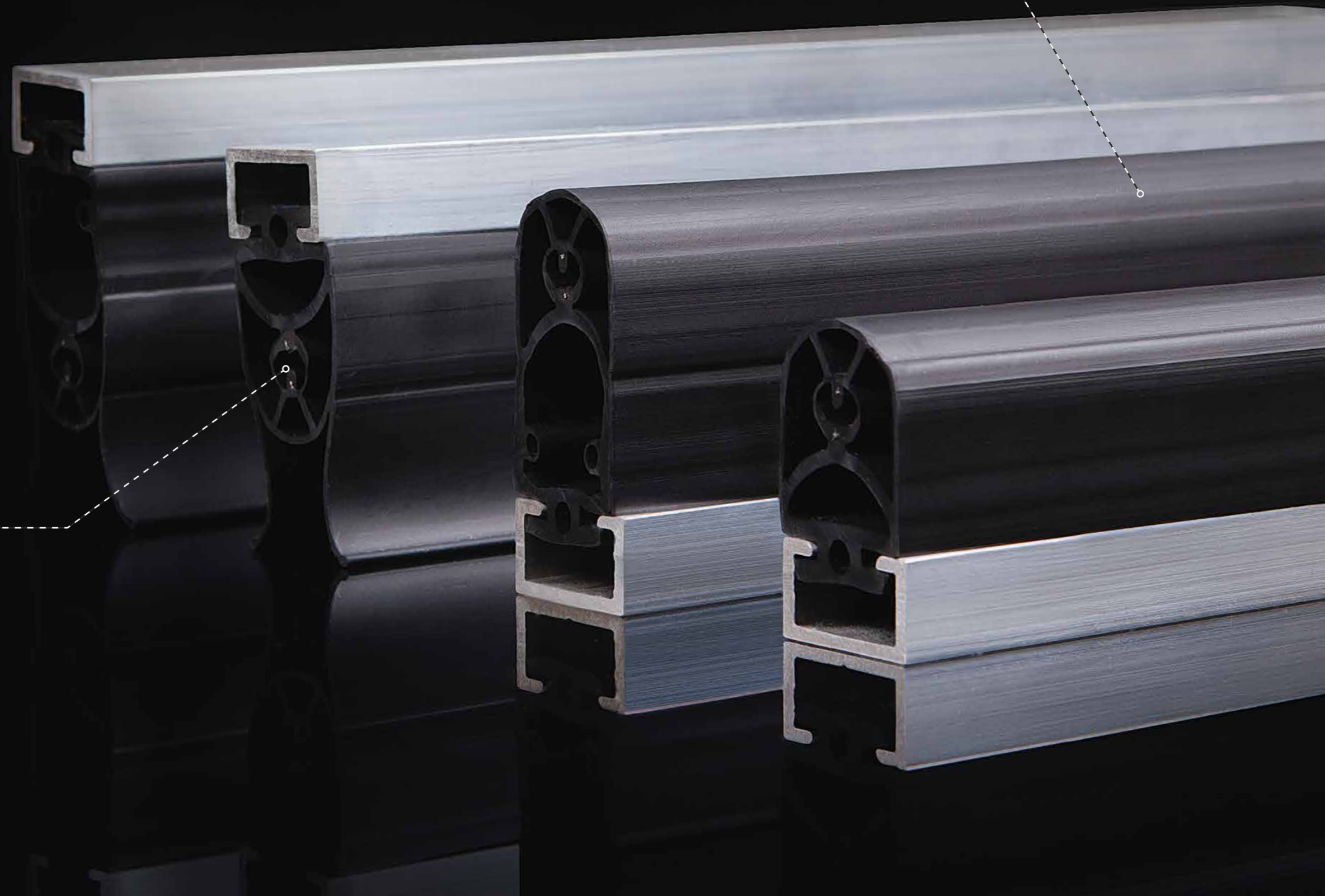
People across all countries and continents are united in their basic need for safety and physical integrity. This is the foundation of our international success. With our two head offices in Germany and in the US, distribution centers all over Europe and an intercontinental dealer network, ASO has global presence and is always close to its customers. And that is one reason for our outstanding reputation across all national borders as a totally reliable and innovative supplier and partner.

**SENTIR**  
*edge*

The right impulse  
at the right time.

More than **60.000** secured  
door and gate systems per year

Actuated **10.000** times  
and fully functional



## ASO Product Range

Crushing and shearing points of automated gates, movable stage elements and machines constitute a significant risk of potential damage to people and material. SENTIR edge safety contact edges provide reliable protection in these cases. Pressure-sensitive sensors that act as protection for closing edges and guarantee optimum overtravel as well as an extremely fast switching reaction. Our proven Plug 'N' Sense System ensures simple and fast assembly.

- ✓ Plug 'N' Sense System
- ✓ Double chamber with integral protected switching chamber
- ✓ Optimum overtravel distance
- ✓ Extensive modification options
- ✓ Various sizes available from stock
- ✓ Numerous standard versions of the base
- ✓ Different grades of chemical resistance

### SENTIR edge



As indispensable connector between tactile sensor and plant control, ASO ELMON safety relays ensure constant monitoring of all sensors, irrespective of whether they are SENTIR safety contact mats, edges or bumpers. All devices are certified according to DIN EN 13849-1 and the new EU directive on machinery 2006/42/EU and are constantly optimized with the use of cutting-edge technology.

- ✓ Various housing options
- ✓ Also available in 115V versions
- ✓ Single or dual channel design
- ✓ Dry contact semiconductors

### ELMON



### SENTIR bumper



Adaptable, extremely versatile and totally reliable. These qualities are the hallmarks of our SENTIR safety contact bumper. They are highly valued as a guarantee of safety in transport vehicles and industrial trucks, high-shelf warehouses, production lines, mobile systems. In fact, wherever great flexibility of safety equipment is required and a wide selection is demanded in terms of form, color and size.

- ✓ Individual mounting options
- ✓ Insensitive to vibration
- ✓ Switching contact even in extensive operation
- ✓ Customer-specific measurements, to the last mm
- ✓ Encapsulated sensor
- ✓ Flexible coloring
- ✓ Coating options with a range of resistance grades

### INDUS



ASO INDUS signal transmission systems ensure the maintenance and wear-free transmission of signals from the movable safety contact edge to the evaluating device. They can be used for any movable equipment such as automatic sliding gates and vertical doors as well as high-performance doors. Evaluation has built-in redundancy, ensuring optimum safety. The design of the INDUS inductive signal transmission systems is based on the latest safety standards.

- ✓ Attractive design
- ✓ Various types for all areas of application
- ✓ Efficient mounting options
- ✓ Long-lasting and wear-free
- ✓ Compact construction

"Stop!" A clear command that prevents people from putting their lives at risk and warns unwanted "guests" against entering a particular area. The waterproof SENTIR safety contact mats, equipped with an anti-slip surface, are ribbon switch sensors used across the industry as a whole to safeguard hazardous areas and for automated production plants. Stepping onto the mat triggers an immediate stop command, thus preventing access to a dangerous zone.

- ✓ Easy to clean away dirt and contamination
- ✓ Standard sizes and customized shapes possible
- ✓ Single-component moulding in a range of colors
- ✓ Lasting protection thanks to single-component moulding
- ✓ High water resistance (IP65)
- ✓ More than 6 million cycles
- ✓ Several switching zones possible

### SENTIR mat



Compact design and optimum flexibility are typical features of DRICO drive controls. Various options are available for communication links. The drive control has been optimized for all the latest safety transfers. Frequency converters ensure the gates start moving and stop smoothly. There is no need for an additional safety-oriented evaluation. DRICO gate controls are extremely robust and reliable, even under extreme conditions.

- ✓ Suitable for different types of gates
- ✓ Outstanding safety and conformity with all European standards
- ✓ Energy-efficient
- ✓ Intelligent and easy to use

### DRICO



### STEPTU



STEPTU foot switches are available where special features are required. STEPTU foot switches can be found for example on medical equipment where they are used to trigger and control automatic functions. Thanks to the single-mould process, these contact switches provide ideal mechanical and hygienic conditions, thus making cleaning easier.

- ✓ Single moulding protects against external factors such as dust and moisture
- ✓ Easy to clean, even in clinical environments
- ✓ Fixing options for mounting on the subsurface
- ✓ Long product life and great wear resistance

### NONTAC



In some situations, it is advisable to avoid potential hazards from machines and plants before a possible collision. NONTAC sensors, i.e. non-tactile sensors, complement the SENTIR product range to protect closing edges and danger points. For example, fitting a concealed NONTAC light curtain at a vertical door enhances the gate's appearance, while at the same time permitting high operating speeds.

- ✓ Non-tactile early detection of obstacles
- ✓ Practical and unpretentious design
- ✓ Additional safety sensor technology for closing edges

Gates that close automatically  
have to be controlled safely.



**HERAS**

**The protection of people and values** is top of the agenda of two reputable companies. Shared values unite. For that reason, HERAS, leading manufacturer of gates and fence systems, and ASO Safety Solutions, one of the leading producers of safety solutions and drive controls for gates, have been working as partners for the last 15 years.

Where wood shavings fall,  
ASO is involved.



**Wooden objects** represent an important part of our culture and thus are rightly sought after and appreciated today. To offer the best possible protection to operators in the machine processing of these firm to extremely hard materials, SENTIR bumpers were developed specifically for HOMAG Group which offer maximum safety and also blend in perfectly with the machinery design.

A wide-angle photograph of a grand, ornate theater interior. The stage is framed by a large, arched, gold-colored decorative structure. A deep red curtain hangs across the stage. The theater's architecture is highly detailed with gold leaf, intricate carvings, and multiple levels of balconies. The audience seating is visible in the foreground, filled with people. The lighting is warm and focused on the stage area.

Safety for a  
great performance.

## waagner biro

When the curtain finally rises, the audience's pent-up expectation reaches its climax. They lean back in their seats to relax and enjoy the entertainment provided. However, few people are aware of how many others need to do a good job so the performance can run smoothly. It is a distinct advantage when the event organizer can count on the reliable support from ASO Safety Solutions' sensors, whether underneath, above or right in the middle of the action.





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