

A woman with brown hair and glasses, wearing a dark blue blazer over a white top with red stars, stands in a factory or industrial setting. She is holding a document and looking towards the camera. The background shows various pieces of machinery and equipment.

**SYSTEMS AND
SOLUTIONS PROVIDER
FOR MACHINERY
SAFETY**



SCHMERSAL
THE DNA OF SAFETY

The Schmersal Group



Minimising risks when people and machinery work together: that's the goal that we consistently pursue.

With the commitment of around 2,000 employees. The Schmersal Group is a world leader in this challenging field.

CORE COMPETENCE

THE SAFETY OF MACHINERY

We have been shaping this market for nearly 80 years with ongoing research and development and products and services that continue to set standards for the safety of machinery.

The goal – the safe collaboration of people and machinery – has not changed. What has, is the way in which we achieve it. In the past, our primary focus was the development and production of safety switchgear. We still do that, but offer consultancy, training and testing as well. We configure individual system solutions and develop safety concepts for new machinery and systems. In addition, our consultants support machinery users around the world, helping them optimise the safety aspects of their production and implement proposed measures, in collaboration with qualified partners.

The next major development phase is here: the integration of machinery safety into the ‘Smart Factory’.

We have recently begun to shift the focus of our development efforts to innovations that enable data exchange and networking and that are suitable for integration into Industry 4.0 concepts. With these, we can offer you tomorrow’s systems and solutions to ensure that your factory or plant stays safe today. This requires us to think ahead, far into the future, without ever forgetting our roots as a medium-sized, owner-managed company. Doing this will make sure that even as we move forwards, we continue to live up to our mantra: The DNA of Safety. Because the safety of machinery is and will remain our core competence.

**Heinz Schmersal and Philip Schmersal,
Managing Directors**

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WE ARE ALWAYS HERE FOR YOU

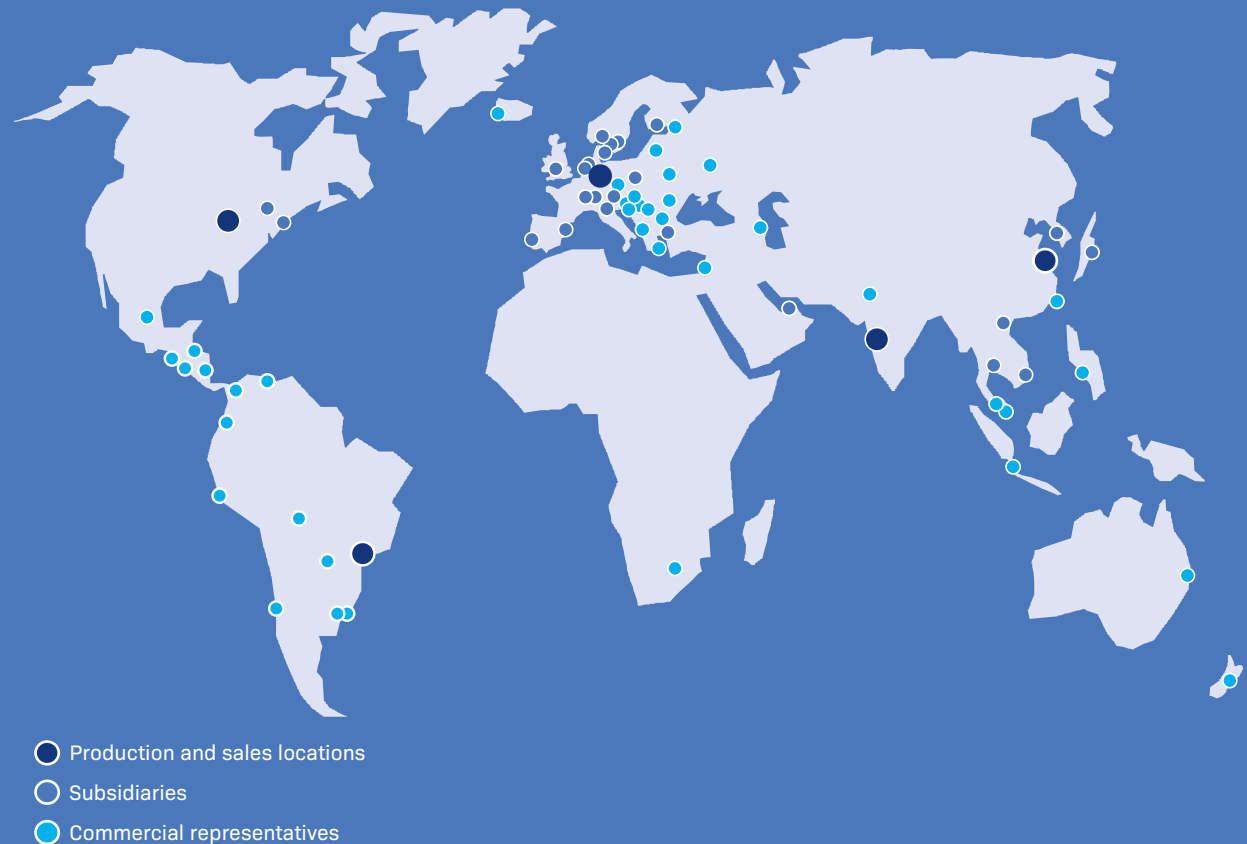
WHEREVER YOU
ARE LOCATED

For a globally networked world, the safety of machinery is an absolute must, a challenge and an opportunity all rolled into one. In a fiercely competitive environment, intelligent safety solutions provide an opportunity to increase productivity by not only ensuring a protection function but also making a contribution to increasing machinery availability. The Schmersal Group supports its customers in all aspects of the safety of machinery, providing a one-stop shop solution: expertise and consultancy, components and systems, hardware and software.

We develop and produce to uniform standards on three continents. We have our own national representatives in more than twenty countries. In a further fifty, we partner with qualified sales and consultancy partners. Our Safety Functional Engineers support the manufacturers and users of machinery in more than fifty countries, offering consultancy, development and services.

This means that we are here for you – wherever in the world you are! ■

The Schmersal Group's customers include both global players in divergent industries and medium-sized enterprises in machinery and systems engineering across the globe. We are wherever our customers are.



FACTS, FIGURES AND DATES

THE SCHMERSAL GROUP AT A GLANCE

Schmersal at a glance: What characterises us? What's special about Schmersal?

We have put together a summary of the key information for you.



Employees

Schmersal employs around 2,000 people around the world, 48 % of whom are based in Germany, 26 % in Brazil, 8 % in China, 7 % in India, 2 % in the USA and 9 % in our global sales organisations.



Sustainability

We determine our energy consumption at all of our locations and continuously seek to lower our consumption wherever economically and technically feasible – not just in production, but in our office administration too. We also work to raise the awareness of our employees across all of our production locations to internal environmental protection by carrying out regular training.



Patents

The Schmersal Group currently owns around 350 active international patents. All in all, Schmersal has applied for several thousand patents over the years, most of which relate to the safety of machinery.



Product range

Our standard range alone encompasses more than 18,000 products designed to enhance the safety of machinery. On top of that, we have a large number of products that we have developed in close collaboration with our customers, and continue to develop, to meet specific application and project needs.



Quality management

We have defined our goals and the principles of our quality policy on a binding basis for the whole Schmersal Group. All producing subsidiaries in the Schmersal Group work to the principle of a quality management system, which has been certified in accordance with DIN EN ISO 9001. The cross-site validity of the quality rules goes well beyond the structures of the management system. Far-reaching, uniform standards apply to all domestic and international sites, and uniform procedures and tools are in place.



Research and development

Our development work takes place at our site in Wuppertal alongside all other sites in our global production network. This approach means that we retain proximity to our customers and local requirements and can work side by side with our colleagues to produce new products and bring innovative solutions to market maturity. Our budget for research, development and construction is around 5.5 % of turnover. The Schmersal Group employs more than 120 designers and developers around the world.



Production sites

We produce at eight sites, four of which are in Germany and one each in Brazil, China, India and the USA.



Testing technology

There is no development – and no production – without testing, and nothing could be more true than for safety components in machinery and systems engineering. Our testing technology specialists are involved in the creation of new products from the very outset. They develop automated testing systems to carry out function and quality control alongside production, and program test system software for flow control and test data capture.



Corporate culture

Schmersal's employees adhere closely to our core corporate values, which means that we provide secure employment, avoid any kind of discrimination and treat everyone with respect. In addition, we offer employees at all locations divergent opportunities for training and development and advancement within the company. It's an approach that our employees appreciate: our locations in Brazil, India and Germany have been awarded the Great Place to Work® certification.

THE RANGE

THE IDEAL SOLUTION
FOR EVERY CHALLENGE



The Schmersal Group offers its customers the world's largest range of products and systems for personal and machinery safety, all from a single source.

Why?

Because we want to give machinery engineers and the users of the machinery a solution that matches the challenges of every situation.

Our products and systems should integrate seamlessly into the surrounding construction. They must ensure the required level of safety without impairing the productivity of the machinery or process so that there is no incentive for operating personnel to tamper.

With this in mind, we produce safety switchgear in very compact design and as a heavy-duty version as well. We offer solutions for electromechanical or electronic position monitoring of guard doors and safety-oriented optoelectronics for contactless safeguarding of hazard points and hazardous areas.

We also offer a comprehensive range of products for fail-safe signal evaluation, ranging from safety relay modules to configurable and programmable safety systems. These enable straightforward, scalable implementation of 'safety-separated' concepts.

In communication systems, customers also have a wide range from which to choose, including ASi-Safety at Work, a proprietary SD bus protocol for the transmission of status, diagnosis and operating data, as well as connection to higher-level IT infrastructure via OPC UA and MQTT.

Plus, we are also available for consultation when it comes to choosing the right safety solution for the application and integrating the solution into machinery and systems.

In a nutshell, the Schmersal Group is a reliable partner to its customers, whether for the delivery of simple components or the planning and realisation of more complex projects. ■



THE SAFETY OF MACHINERY IN INDUSTRY 4.0 ENVIRONMENTS

ENHANCED SAFETY
THROUGH NETWORKING



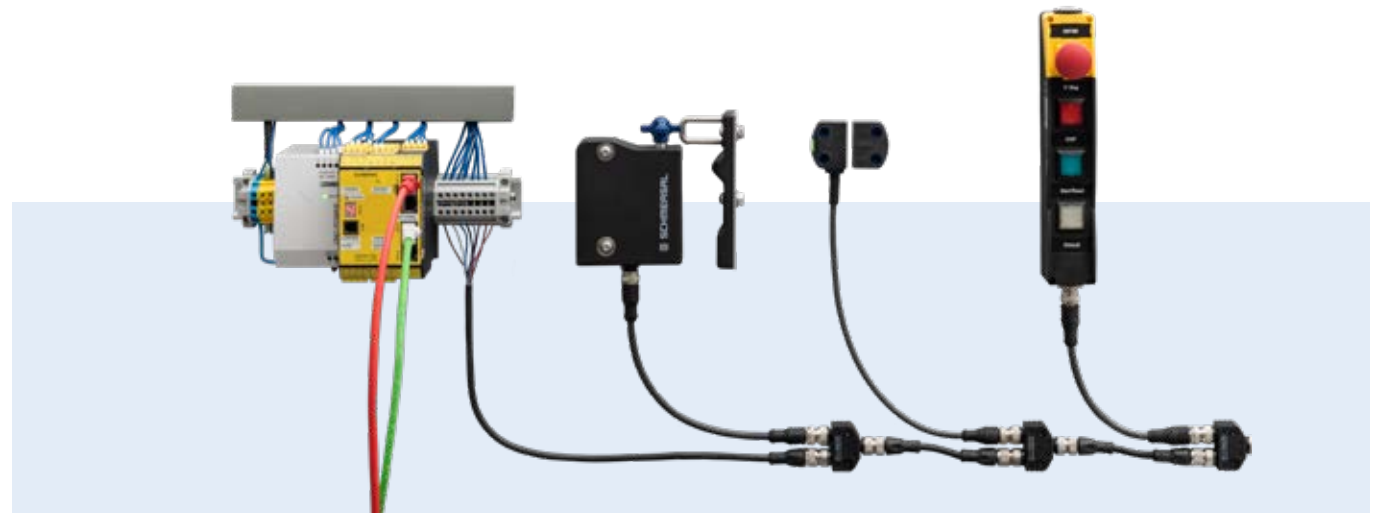
Production that largely organises itself. Products that independently move through production – accompanied by their ‘digital twin’. Production of one-off, unique pieces – as economical as large-scale series production. Machinery and systems that can identify abnormalities and notify maintenance personnel before failures occur.

These are the basic ideas underlying Industry 4.0 or the ‘Internet of Things’ (IoT). Many smaller and larger businesses are trialling this concept in model projects.

What role does the safety of machinery play in this? One example is the integration of safety switchgear and safety systems into predictive maintenance concepts. With the SD Bus 4.0 communication protocol developed by Schmersal, all electronic safety sensors and interlocks equipped with an integrated SD interface can transmit comprehensive status and diagnosis data to a higher-level machinery control system.

In addition, the SD Bus 4.0 – combined with the PSC1 safety controller – also has an OPC UA connection. This means that the data generated by the safety switchgear are available for data exchange independent of the manufacturer – from machine to machine or for cross-plant exchange.

With this, Schmersal is taking the next step towards end-to-end communication, and offering machinery and system users real added value. In addition to ‘safety’, we never lose sight of ‘security’ when it comes to data. ■





RESEARCH AND DEVELOPMENT

HIGHLY NETWORKED
WORLDWIDE

There are more than 120 designers, developers and test engineers around the world working to develop new technologies and products to give Schmersal's customers a real competitive edge.

All development departments at Schmersal, whether in Germany, Brazil, China or India, have access to identical databases, tools and processes. This creates the prerequisite for optimal use of our international competences in every development project for the benefit of the customer.

The cross-site development teams also work on interdisciplinary topics, including new software solutions for safety technology. They also work to develop application-specific products and solutions for customers on site. This is an important prerequisite for our customers, and their customers, to benefit from optimal safety equipment for their machinery and systems, while gaining maximum productivity and practicality from the machinery.

To facilitate this, we cooperate with countless international research institutes and higher education facilities. Through our investments in start-ups, we can integrate the latest technologies into what we develop.

Our own accredited test laboratory in Wuppertal documents how we eschew fashionable outsourcing processes and instead rely on our expertise and resources in research and development. The laboratory can independently qualify low-voltage switchgear based on the requirements of international standards.

For our customers, one helpful side effect of this is the short distances and development times, as well as the fact that we can perform much of the essential certificate work ourselves. ■

INDUSTRY EXPERTISE

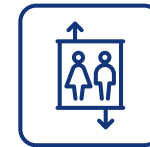
PRACTICAL SOLUTIONS
FOR DEMANDING
APPLICATIONS



Close cooperation with our customers and a preparedness to develop the ideal solution for every use case and under all environmental conditions is why Schmersal has such **well-founded industry expertise** and, as a consequence, a strong market presence in key areas of machinery engineering.



A central requirement in **food-processing machinery engineering** is the concept of 'hygienic design': not only does Schmersal have extensive experience in this area, it has also developed a special range of hygiene-compliant products for the food industry.



For manufacturers of **lifts and escalators**, Schmersal offers a comprehensive range of lift controllers, switchgear and software solutions. In this area too, we have developed innovative technologies, including the universal bp048 lift control module and our Lift2CLOUD® cloud solution.



Another traditional industry focus is the **packaging industry**. The machines and systems are often embedded into complex production lines and work at high speeds with short cycle times. For these applications, Schmersal produces ranges which contribute to increasing machine availability.



In **machine tool engineering**, productivity and flexibility are determinative factors. With this in mind, the Schmersal Group develops high-performance systems for machine-tool construction.



We have more than six decades of experience in **heavy industry**: Schmersal supplies to the global cement and coal industry, the bulk goods processing industry, ports, power stations and many more with consistent system solutions which guarantee productivity, quality and safety in equal measures.



In **intralogistics**, there are strict demands on productivity and system reliability, for which Schmersal's range of safety solutions is ideally suited: intelligent safety components with enhanced diagnosis functions can provide a wide range of operating data, thus helping to support process monitoring.

Safety Services offered by tec.nicum

Services for the safety of machinery

academy

Education center

- Training courses
- Customer-specific trainings
- In-house seminars
- Certified courses (mce.expert and FSE)



consulting

Analysis and documentation

- Technical support
- Risk assessment
- CE conformity assessment
- Evaluation of machines and production lines
- Reports



engineering

Planning and design

- Technical project planning
- Conceptual project development
- Electrical and mechanical design
- Executive project management



integration

Practical application

- Turnkey approach
- Installation
- Retrofit



digitalisation

Software integration

- tec.ps (Product Service System)
- tec.ssm (Schmersal Smart Machine)
- tec.cvs (AI and Computational Vision Solutions)
- tec.dloto (Digital Lockout Tagout)
- tec.ems (Energy Monitoring System)



outsourcing

Serial solutions

- Plug & Play products
- Engineer to Order projects
- Systems and cabinets



tec.nicum

The safety of machinery is a challenging, multifaceted issue which represents a real challenge for both machinery manufacturers and operators. Safety solutions for the industry must not only meet technical requirements, but must also comply with different national standards, laws and directives.

For this, Schmersal's Services business division offers professional support. Under its tec.nicum brand, Schmersal advises machinery builders and operators on all essential issues relating to the safety of machinery and occupational safety – with absolute competence and fully manufacturer independent. Functional Safety Engineers certified by TÜV Rheinland are building a tight and powerful global consulting network. We also train our own Safety Engineers on our TÜV Rheinland certified 'Machinery CE Certified Expert – mce.expert' training courses.

In 2024, tec.nicum significantly expanded its range of safety services, especially those for digitalisation and complete solutions for the safety of machinery. In addition, the division also intends to more closely integrate global activities and competences, bringing them together under the umbrella of tec.nicum – Solutions & Services GmbH. ■



Production to uniform standards worldwide

High quality demands, wide variety and short lead times: These are the central elements towards which our production is focused.

With this in mind, the depth of production is deliberately great and the technologies that we use are diverse. This way, we remain flexible and can steer the entire production process chain as we require. Our global production facilities work to uniform and strict standards. This allows us to produce multiple product lines in different plants while always maintaining the same high quality standards.

Quality and flexibility

As a manufacturer of products designed to enhance the safety of machinery, it goes without saying that quality is our foremost priority. Our products must be capable of functioning reliably at all times and in every situation. That's what our quality promise is all about. At the same time, our customers expect us to adhere to short delivery times. Which is another reason why the development laboratory at the Wuppertal site is accredited as a test laboratory in accordance with DIN EN ISO/IEC 17025. This means it can independently qualify low-voltage switchgear based on the requirements of international standards. For Schmersal Group customers, this means that new devices and technologies can be tested and brought onto the market more quickly and more cost effectively.

Always centre stage: employees

Even though many production steps have now been automated, our employees are still the beating heart of production. They are the ones who ultimately guarantee the quality of our products and systems. Their knowledge, their skills and their commitment are the DNA of the Schmersal Group, something that is enshrined in our corporate mission statement (see from page 14).

A commitment to sustainability

Any industrial-scale production has an impact on the environment. We take this into consideration from the earliest product development stages and in the continuous modernisation and expansion of our production sites. Careful use of raw materials, minimising the impact on the environment and conserving energy are goals that we consistently pursue. ■

Our corporate mission statement

More than just words

Schmersal had its founding as a family business in Wuppertal, Germany, around 80 years ago. Although our company has grown significantly since that day, employing more than 2,000 people in over 20 countries, our family values are still visible in all that we do.

Our values determine how we do business and how we approach our customers, suppliers and partners in our day-to-day business activities.

THE DNA OF SAFETY



Safety is our top priority

We improve people's lives by contributing to a safer work environment across the spectrum of industries and use cases.

As a company, we develop and manufacture products and solutions that provide safety for people and machinery in a wide range of industries and applications around the world. For us, safety is part of our DNA. To contribute to a safer working environment in every organisation, our experts are deployed to our customers' plants and production facilities worldwide.

Protecting our own employees in the workplace has equal priority – not only those employees in workplaces at our production sites, but those employees who travel many thousands of miles on behalf of the company every year too. Which is why Schmersal offers professional driver safety training courses at some of our locations.

Of course, safety does not end with the workplace, nor is it limited to business situations either. We are also eager to make a contribution to people's health and safety in everyday life. With this in mind, we make donations to support organisations that are committed to the safety of people in all parts of life. ■



Showing people appreciation

We provide safe workplaces, avoid any form of discrimination and treat everyone with complete respect. We promote fairness, empathy and trust both in internal cooperation as well as in all external relationships that the Schmersal Group cultivates and maintains.

Mutual appreciation is not only a basic component of human interaction, but also the foundation for successful cooperation. Our employees are the pillars of our success, which is why we support our employees in many ways with measures such as health promotion programmes and facilities including an in-house kindergarten.

Appreciation in all of our relationships is one of our core philosophies and something that we actively practice. This is demonstrated by the 'Great Place to Work' award: ACE Schmersal, Brazil, has been awarded top placings in the domestic competition for several years now. Plus, K.A. Schmersal GmbH & Co. KG also received the coveted 'Great Place to Work®' certification in 2024 after participating in the programme for the first time.

But fairness, empathy and trust do not just characterise our internal relationships. Wherever possible, our relationships with external third parties are also long term and based on a partnership mindset that expresses appreciation for all parties involved. ■



Acting as one company

We support our employees worldwide, bring them together and include them. We support teamwork and create workplaces that offer employees professional challenges and allow them to continue to develop within the company.

Working as part of a global team is not just fun, but a decisive factor in the success of our company.

But team spirit is not something that develops by itself – it needs constant care and nurture. As a global company, we are active in ensuring the further improvement of our global teamwork and strengthening of our team spirit: in addition to language courses, team training events, global networking and various other measures, we also pursue more unconventional approaches to express solidarity and strengthen cohesion, including 'friendship forests' at some of our sites, with trees planted by former employees, customers and business partners. Schmersal cares for the trees – just as we take care of the relationships with people who are or have in any way been a part of Schmersal.

And team spirit is not limited solely to the workplace: our employees demonstrate their team spirit by participating in sporting events together in their free time and demonstrating that Team Schmersal can overcome any challenge together. ■



Doing the right thing

We take responsibility and our conduct is morally sound. We guard the reputation both of the Schmersal Group as a family business and of its employees by acting with openness, honesty and responsibility.

Doing the right thing can be understood differently by different people according to the context and scientific perspective.

For us as a family business, doing the right thing means acting with integrity, honesty, openness and inclusion and is about much more than just words in a philosophy book or a dusty old theory. It's a living objective that influences our daily actions.

In many cases, doing the right thing is not necessarily the easiest way to go about resolving something, but it is our responsibility as humans to endeavour to keep the consequences of our actions in mind and to choose the right path rather than the easiest path.

Schmersal bases everything that it does on the understanding that every company has a social responsibility and ethical principles. Our business decisions and actions always take into account the economic, technological, social and ecological consequences. We try our best to do the right thing. ■



Taking responsibility for the planet

We work actively and sustainably to minimise the impacts of what we do on the environment.

As such, our buildings around the world are designed to be as environmentally friendly as possible and, depending on local conditions, are equipped with photovoltaic systems or energy-saving heating and lighting systems.

Many of the Schmersal Group's companies are also actively working to reduce the amount of waste they produce and to use biodegradable or recycled packaging materials. In addition to these conventional approaches, we also use our creativity when looking for new ways to protect our environment: some of our promotional gifts are manufactured in-house using recycled material from our plastic component production, such as crushed sprues.

In addition to preventing the negatives, we also endeavour to give something back to our environment and in addition to supporting reforestation projects, protecting bees is one of our principal concerns, and something that we pursue with love and personal commitment, particularly at our headquarters in Wuppertal. For several years now, we have been pleased to house two colonies of bees on the roof of our production building, which make both an invaluable contribution to species conservation as well as delicious honey! ■



A focus on solutions and maximum performance are our job

As part of a global team, we take responsibility for what we do. In the design of our processes, products and services, we strive to innovate and put high demands on ourselves. We always act with a focus on solutions and offer our customers the maximum possible added value.

'There is always room for improvement' is a saying that features in many of the world's languages, suggesting that there is worldwide agreement on its veracity. At Schmersal, we have reached the same conclusion: even though we all give our best every single day, we should never stop trying to be even better. The pursuit of excellence, and a focus on solutions, are not an end in themselves, but a means of ensuring that we give our customers the greatest possible benefit.

As part of a continuous process of improvement, we work daily to optimise our local and global processes. We draw on our methodological skills in process optimisation at all of our sites, and continue to expand our knowledge.

The knowledge and experience of our employees is one of the key factors in the optimisation of our everyday work. Using various ideas management systems worldwide, we strive to incorporate as many of our colleagues' ideas and suggestions into our efforts as we can. ■



Awareness for social responsibility

We create an environment characterised by solidarity and respect and utilise personal and financial commitment to help bring about sustainable development in society.

Every company bears responsibility – for employees and their families as well as for the community in which the company operates. Schmersal takes this responsibility very seriously: we endeavour to give something back to local communities around the world and are therefore active as a sponsor for charitable initiatives, cultural organisations, sports clubs and more at our sites worldwide. Our sponsorship efforts are much more than just writing cheques and we consider it vital to have personal contact with those who receive our donations and to support local organisations and initiatives. In many cases, some of the money that we donate is raised or collected by our employees.

But for us, social responsibility goes well beyond just financial support and as an owner-managed company, our personal commitment is extremely important and active engagement is in our nature. So it's a matter of great pride that our own employees teach at our training centre for disadvantaged youth in Brazil, for example.

We are extremely proud that our employees around the world are actively involved, contributing ideas and actively providing support to help make the world not only safer, but also a little bit better. ■

The Schmersal Group

Safety for man
and machine



The Schmersal Group develops and produces systems and solutions for machinery safety and occupational health and safety for customers around the world. The safety of machinery is our core competence and embedded in our DNA.

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THE SCHMERSAL GROUP
SAFETY FOR MAN AND MACHINE

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