Good advice knows no borders

In its cable manufacturing plant, a US company in the electronics industry would like to use machines from Finland that comply with prevailing law: two different markets with differing legal requirements on the safety of machinery. If this challenge is to be overcome, cross-border know-how and a knowledge of the applicable standards and directives are essential.

Differences in legislation present a particular challenge for multinational companies and their customers. Even in the domestic market, it is crucial to know and keep an overview of the standards and laws governing the safe use of plant and machinery. Things are usually more complicated when it comes to exports, because machinery that complies with the directives and standards of one country may not conform to those of another. Exporters are therefore faced with complex compliance and legal issues whenever they import machinery from one country into another. The situation becomes particularly challenging when the company manufactures at several locations in a number of different countries.

Hand in hand for safe, compliant machines

The safety officer has the task of harmonising the company’s internal requirements for standardised production processes with safety guidelines that vary from country to country. This demands close collaboration between the manufacturers of machinery, those responsible for compliance with standards and realisation of the safe design and, finally, the operators. The particular application may call for individual solutions that require precise analysis and a knowledge of the local circumstances specific to that country.

Worldwide expertise

So how can the Finnish machine constructor and its US customer get their project up and running? The manufacturer from Finland turned to their Pilz contact for advice. The worldwide network of 42 subsidiaries includes more than 300 experts in the fields of consulting, engineering and training. They have the cross-industry, international know-how required to support projects with the necessary expertise.

Continued on page 2
Dear Readers,

It is no secret that companies which are successful in the long term do not concentrate only on their local market or just on technology expertise. Internationalisation must therefore be part and parcel of any strategic orientation!

Demand from abroad, such as in mechanical engineering, has kept on rising in recent years, and the response has been to establish additional facilities in the key foreign markets. That’s all well and good. However, the rules and regulations in an ever more complex global world have also mushroomed. The SME sector in particular finds itself being pulled here and there by the latest decisions of politicians and consequences that are difficult to assess. Is Brexit happening or is it not? How are customs duties, for instance, to be calculated when trade disputes such as those between the USA and China are escalating and existing flows of goods have to be reconfigured? There’s no point in complaining – whatever the size of the company, decisions need to be taken. The production and supply chains may need to be reorganised or rerouted in order to minimise risks. This is something we have always been good at – thanks to the “Made in Germany” label and an outstandingly well-qualified workforce. Let’s keep it that way!

Best regards,

Tassilo Zywietz,
Managing Director IHK-Exportakademie GmbH

Pilz’s range of training courses

An increasingly digitalised and networked world poses new challenges for automation and for machinery safety. International standards are just as important here as national regulations. Pilz supports its customers with a wide range of training courses to an internationally uniform level.

> 15,000 people across the world take part in the training every year
> Pilz offers training courses in 50 countries
> 100 trainers in Pilz subsidiaries around the world
> More than 100 training topics worldwide
> Over 4,500 people have qualified as CMISE (Certified Machinery Safety Experts) since the launch in 2012
> 3 TÜV NORD certified courses at expert level

A constant transfer of knowledge with international colleagues is absolutely vital if we are to keep up with the latest developments in standardisation and legislation. This allows the Finnish Pilz subsidiary, which has already obtained CE markings for similar machines to those of the current customer project, to ensure that the machines conform to the legal requirements in the USA. The US subsidiary provides support along the entire process and can see to the final arrangements with the local authorities in the USA.

Customised solutions

The threads for multinational projects run together in the Pilz International Services Group, based in Ireland. “Some of our customers have their own supply regulations and specifications when it comes to machinery safety. It is important for the customer to ensure that the machine meets all requirements, preferably even during the design process, but at any rate before steps towards CE marking and interpretation of the standards reliably and with the necessary quality.

A focus on knowledge transfer

It often makes sense for even in-house experts to be trained with the right know-how for machinery safety and automation. That’s why Pilz offers a comprehensive training programme dedicated to “sharing and spreading knowledge”. The trainers offer courses ranging from the basics right through to TÜV-certified qualifications at expert level in the relevant national language. The new international qualification programme is another opportunity to meet individual requirements in the company for additional qualifications. This is of interest both to smaller companies looking to bring their global workforce up to the same level of knowledge and larger organisations which can deliver complete continuous professional development programmes in partnership with Pilz. The training delivery,” explains Jürgen Bukowski, Senior International Engineer in the Pilz International Services Group. “Of course, these requirements must not conflict with statutory provisions. As part of our international compliance services for our customers, therefore, we can also ensure conformity with such local and national standards.”

Assuming responsibility

Pilz has been offering comprehensive safety services tailored to the individual requirements of each company throughout the entire machine lifecycle across the world for more than 30 years already. The area of standardisation and legislation in particular is in a constant state of flux (see article about the new Machinery Directive on p. 7). As it seeks to help shape the future, the Pilz team makes an active contribution to standards organisations and research bodies. CE marking – verifying compliance with the requirements of the Machinery Directive – is vital for access to the European market. Pilz’s customer support team acts as the agent for its customers, assuming responsibility with its technical expertise for taking the necessary courses are internationally harmonised and offered to a uniform level globally.

Further training and the transfer of knowledge are crucial if companies are to keep on top of machinery safety, automation and the associated trends across the world. At Pilz, new know-how flows into both services and new product developments. Products are tailored to different markets; the safe voltage monitoring relay PNOZ s60, for instance, which meets the requirements of a Safety Lockout System (SLS), is designed for the American market. Pilz offers the mix of service, products and further training so that it can support and deliver cross-border projects professionally.

If plant and machinery are to be used across international borders, familiarity with the local standards and laws is essential. That’s why the worldwide branches and subsidiaries of Pilz work closely together.

That’s all well and good. However, the rules and regulations in an ever more complex global world have also mushroomed. The SME sector in particular finds itself being pulled here and there by the latest decisions of politicians and consequences that are difficult to assess. Is Brexit happening or is it not? How are customs duties, for instance, to be calculated when trade disputes such as those between the USA and China are escalating and existing flows of goods have to be reconfigured? There’s no point in complaining – whatever the size of the company, decisions need to be taken. The production and supply chains may need to be reorganised or rerouted in order to minimise risks. This is something we have always been good at – thanks to the “Made in Germany” label and an outstandingly well-qualified workforce. Let’s keep it that way!

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“Long-term relationships are important to us”

Giving customers around the world individual, high-quality support: the new System Partner Programme was launched in order to ensure that customers in all regions have a local expert for machinery safety and automation solutions from Pilz. Falk Ritzau, Business Development Manager at Pilz, is interviewed about the details.

Mr Ritzau, Pilz has launched a new System Partner Programme. What were the reasons behind this?

Pilz already has a strong worldwide presence. But we want to get even closer to our customers and offer them our products and solutions with the customary service worldwide. The overall aim of the programme is to expand our global presence and availability. We know that having a personal point of contact plays an important role and that geographical proximity, particularly to end customers, makes good collaboration easier. That’s why we developed the System Partner Programme.

What services do they offer?

They support machine manufacturers or end-users when implementing automation projects. This begins with project planning and management for plant and machinery projects and continues through the integration, design and programming of the systems to commissioning. Our system partners select the appropriate components and make use of Pilz solutions for the automation technology. They also train the machine operators and maintenance personnel in Pilz products. This ensures that customers receive integrated solutions that combine the system partner’s engineering accomplishments with Pilz’s safety expertise – all in one place.

And what precise form does the collaboration between Pilz and the system partners take?

It is important for us to build long-term relationships with our system partners. To ensure they meet our high quality standards, they are subject to strict requirements and are audited by Pilz at regular intervals. This allows us to make sure that the engineering services such as system integration and validation are at the highest level and are compliant with standards and directives. We complement this partnership with our own Pilz consulting services. We have made a commitment to our customers that these services will always be delivered by our own machinery safety experts.

How can you ensure that your partners act to the same quality standard?

The programme is built on technical support and training from Pilz and high-quality certification. Our partners also get support in project management. Continuous qualification is a central part of the System Partner Programme. Training in current technologies, Pilz products and international safety standards is a fixed part of the programme and a prerequisite for certification. We also train our system partners to become Certified Machinery Safety Experts (CMSE). CMSE is recognised around the world as a machinery safety qualification and is certified by TÜV NORD.

What benefits does the collaboration have for system partners?

In Pilz, our partners have a strong company by their side. Pilz is known across the world for safe automation “Made in Germany”, and our system partners benefit from that reputation. In addition, they can now also offer their own customers solutions based on safe automation that - thanks to the regular training - are always consistent with the state of the art and the latest standards.

And how do customers profit from the System Partner Programme?

Our system partners enable us to offer our customers the optimum support as well as contacts in their area. The industry expertise of our system partners means they can also develop appropriate solutions for special applications. What’s more, they always have our products in stock. The rapid availability of parts thus results in shorter downtimes for our customers. On top of this is the fact that the regular audits ensure the system partners operate consistently in accordance with our high standards.

One relay family, many possibilities

In 1987 Pilz patented the first emergency stop relay to protect man and machine – and it now ensures safety millions of times over the world. Safety remains key, but above and beyond their basic functions PNOZsigma safety relays allow a wide range of applications to be realised.

These basic functions of the safety relays PNOZsigma include their ability to monitor safety functions such as emergency stops, safety gates and light guards as well as two-hand monitoring. They are designed in such a way that it is not possible - it used correctly - for their safety function to be compromised by an internal fault or by a fault with external causes due to a sensor or an actuator. Redundant positive-guided contacts ensure that normally open and normally closed contacts can never be closed at the same time.

On every On/Off cycle this self-monitoring unit automatically verifies whether the relays of the safety device are opening and closing correctly.

Monitoring voltages and brakes

The speed monitor PNOZ s30 is used wherever the speed, stackheight, position, direction of rotation and speed range of machines have to be monitored. PNOZ s30 devices also use a safe output signal to indicate when values exceed or fall below defined warning thresholds. Up to three safety functions can be logically linked together using AND and OR connections. Typical applications for speed monitoring are balancing machines, high rack storage systems, centrifuges, filling systems, wind turbines and even amusement parks.

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Right in the heart of things

Experiencing the “spirit of safety” live and finding out about the latest developments in automation – where better to go than the Pilz trade fair stand? That’s why safety ambassadors are present at more than 50 leading automation and industry trade fairs in 26 countries across the world. These are where industry experts meet to explore the latest developments and innovations for the factory of the future.

Hands-on automation

The recognition factor ensures a consistent look across the world: the Pilz logo and uniform stand elements show visitors to the fair where the experts from Pilz are presenting the latest automation solutions. Illustrative models and exhibits make safe automation accessible and demonstrate up close just how Pilz components and package solutions interact. Alongside a realistic race feel, for instance, the new interactive driving simulator offers visitors the opportunity to see Pilz Motion Control (PMC) solutions at work for themselves in a fun setting: the visitor sits down on the driver’s seat and drives along a virtual race track while the simulator responds with realistic motion. The six-axle simulator was developed by Pilz China and first exhibited at the Industrial Automation Show in Shanghai in 2018.

New markets, new trade fairs

In Germany the driving simulator will be in action at SPS – Europe’s leading trade fair for electrical automation – in Nuremberg in November, when the fair is celebrating its 30th birthday. One of the original exhibitors, Pilz has been back there every year since. It has also been exhibiting for many years at the SPS satellite events in China and Italy, presenting innovative automation solutions that will turn the factory of the future into reality.

SPS Automation Middle East, held in Dubai in 2018, was the first specialist event in the Middle East to cover all aspects and applications of automation. It was a landmark event, because both the United Arab Emirates and Saudi Arabia presented their “Vision 2030”, which aims to promote the development of non-oil industries such as automation. This year Pilz again presented itself in the Dubai World Trade Centre as the expert in safe automation in the Middle East. The company’s presence at SPS Automation Middle East is ultimately a major step towards establishing and expanding relationships in the region and emphasising the high importance attached to safe automation.

In brief ...

New design principles for instruction handbooks for plant and machinery

Instruction handbooks are an integral part of the supply of plant, machinery and products. Instruction handbooks must contain all the information needed in order to prevent intolerable risks for the user, damage to the product, malfunctions and inefficient operation. Work is currently proceeding on a new standard for instruction handbooks, ISO 20607. It lays down basic requirements for the design of instruction handbooks for machinery. Safety components are also affected because the new standard will be harmonised with the Machinery Directive. While the standard has not yet been finally adopted (publication is expected later this year), the current draft of the new standard can already serve as a reliable basis for development work in the mechanical engineering sector.

DIE APP ZUM SPS-MAGAZIN

ALLE Wichtigen Automatisierungs-News von A bis Z Sofort Erfahren!


JETZT KOSTENLOS DOWNLOADEN!
Packaging in quick times, high unit quantities, a wide range of formats and high quality: to meet these requirements, Wächter Packautomatik redesigned its Tablomat LE box erecting line and revamped the control and safety technology in partnership with Pilz. The configurable, safe, small controller PNOZmulti 2 and the safe safety gate system PSENslock now contribute to a flexible operating concept, rapid format changes and smooth operation.

Wächter Packautomatik GmbH & Co. KG has devoted itself to the automation of packaging processes and it plans, designs and builds predominantly customised machinery. The industry demands solutions enabling rapid changes to new packaging formats alongside the fast, uncomplicated adjustment of actuators and sensors. The Tablomat LE box erecting line toks and glues a wide variety of formats. The previous model no longer met the increased demands on efficiency and performance, and the formerly relay-based hardware was swapped for software systems offering greater flexibility and reliability. That necessitated the software-based optimisation of the safety solutions.

Finding a solution together
"We worked with Pilz to develop a solution that would best satisfy both our own needs and those of our customers," emphasised Jürgen Schulte, head of electrical manufacturing at Wächter. The family-owned business places high demands on the availability, reliability, flexibility and diagnostics of the system. Diagnostic data from the sensors were to be made available to the machine controller in real time via an EtherCAT or PROFINET gateway so that the system operator has an overview of the status of the machine at all times.

Non-stop secondary packaging
The automated Tablomat tray and case erector from Wächter Packautomatik is capable of outputting up to 30 secondary packaging items every minute. Changes of format can be executed quickly and flexibly. First, a tray, a prepunched cardboard box, is pulled into the infeed from the magazine and then pushed towards the tray punch. Next, the raw product is pre-folded in an intermediate station and the glue for final assembly is applied. In the last step, the punch pushes the carton through the format shaft and erects the tray for the finished secondary packaging. The risk assessment produced by Wächter resulted in a required Performance Level PL r according to EN ISO 13849-1 of d. To make the application safe for the operator, four safety gates and emergency stop buttons are installed on the erecting line.

Small controller doing a big job
The protective devices are safely monitored by the configurable, safe, small controller PNOZmulti 2. Their individual diagnostic data are communicated to the PLC by fieldbus module. It just takes a few clicks in the software tool PNOZmulti Configurator to both select the hardware and create the safety circuit intuitively via drag and drop. All the elements in a safety circuit are available as icons or in selection menus on a graphics-based user interface conforming to the Windows standard. Extensive diagnostic options reduce downtimes. As an open control system that communicates with any standard fieldbus, PNOZmulti 2 can be used flexibly and across any industry, regardless of the higher-level operational or plant control system. The safe small controller is certified worldwide and can be used internationally for safety and automation functions, irrespective of the machine and plant type or industry.

Position monitoring with process guarding
To protect the four safety gates of the Tablomat LE, the non-contact, costed safety gate system PSENslock from Pilz was installed. It combines safety gate monitoring with a non-contact magnetic interlock within one unit. That makes PSENslock suitable for universal use and compliant with the highest safety requirements. Signals from the emergency stop pushbuttons and safety gate systems PSENslock are evaluated through PNOZmulti 2, with the status displayed on the operator panel as part of the diagnostic function.

"Together with Pilz we have achieved all the stated objectives on the Tablomat LE: the case erector is impressive with its clear, streamlined wiring and it can be reconfigured for new tasks in the shortest possible time. The line is enjoying virtually trouble-free operation, and the operator has a comprehensive overview of the current machine status at all times," says Jürgen Schulte.

Where the previous mechanical safety switches were prone to problems, the safety of the case erector is now ensured by non-contact safety gate systems PSENslock from Pilz on the four safety gates of the Tablomat LE.

Clear and compact: the new wiring system with PNOZmulti 2 in the control cabinet of the Tablomat LE from Wächter Packautomatik.

Three minutes with ...

... Katrin Reinhardt
Senior Manager Trade Fair & Event Management

What do you think is the attraction of a trade fair?
Trade fairs address all the senses and are an ideal marketplace for getting face to face with customers and prospects – particularly in the digital age! Potential customers can see and test the products in action right there and then. That builds confidence in the company, the brand and ultimately the products and services as well.

What is the greatest challenge when it comes to planning global trade fairs?
For me the challenge lies in planning and coordinating all the various tasks so that everything runs smoothly when the fair begins. This often requires improvisation and rapid decisions. Since we have a global presence through our subsidiaries, we frequently organise a number of fairs that take place concurrently or just after each other – which only works if the logistics are planned meticulously.

Do you notice trends such as digitalisation on fair stands as well?
Of course! And not just in the form of multi-media presentations or LED walls: the networking of exhibits and models has now become very complex. One such example of that is our Smart Factory, which vividly demonstrates Industrie 4.0. To support the staff at the information desk, we use the "Fair manager" program at our large stands. This is a tool that indicates who is currently there on the stand and enables digital communication with the stand personnel. Communication in and around the trade fair is also becoming increasingly digital.

What “trade fair moment” do you remember most fondly?
There have been a whole lot of moments. One that stands out of course was the Hannover Messe in 2015, when Angela Merkel visited our stand. And then there was SPS in Nuremberg in 2017, when we organised a surprise party on the stand to say goodbye to Renate Pilz.

The Wächter Tablomat LE. The machine produces up to 30 ergonomic, elegant secondary packaging items per minute, depending on the requirement.
Safety on the radar

Whether due to rain, dust or sparks, optoelectronic sensors often find their effectiveness limited. Not so with radar technology – rugged ambient conditions are exactly where its strengths come to the fore. Essentially insensitive to external influences, it offers safe zone monitoring.

The world’s first safe radar system solution from Pilz and Inpecx Sp.A. can be used productively even in extremely tough conditions, such as those prevailing in heavy industry, woodworking or the outdoor sector. It comprises a control unit and up to six radar sensors, depending on the application. These are complemented by the configurable, safe, small controller PNOZmulti 2. In the event of a fault and when the protection zone is violated, PNOZmulti ensures that the reaction that is triggered is safe and reliable. The safe radar system solution can be used up to SIL 2, PL d, category 2.

Monitoring with a system

Each sensor can monitor a maximum range of 4 m and cover a narrow area of 50° in the horizontal and 15° in the vertical or a wide area of 110° in the horizontal and 30° in the vertical. The safety-related functions offered by the system solution include the “detection function”, i.e. when a machine is switched to a safe state as soon as a danger zone is violated, plus the restart interlock, which prevents the machine starting automatically if there is anyone in the danger zone.

Modular structure for flexible applications

The protection zone and the system can be set up in modular form at the place where the safe radar system solution is installed: multiple sensors, each of which can be configured individually, can be freely combined with each other. The size of the protection zone can be wide or narrow, depending on the characteristics of the area to be monitored. The actual protection zone of the sensor depends on the height at which the sensor is installed, the inclination (horizontal/vertical) of the sensors and the configuration of the warning zone. The system solution can even develop a variety of protection zones via the number and inclination of the sensors, e.g. to form a circular arrangement. Steel refineries, foundries and even the woodworking industry will benefit from such a safe solution that withstands not only rain, dust, sparks, but also light and vibrations. Outdoors, too, the radar system solution safeguards cranes and floor conveyor systems, bulk cargo ports or storage facilities even in fog, snow and up to moderately heavy rain.
On the test bench

Like every good set of rules and regulations, the Machinery Directive must also be subject to regular review: Does it still sufficiently fulfill the requirements made of it? Are there new technical developments that need to be considered?

The EU Commission has now published a roadmap for the revision.

Machines that are first brought onto the market in the EU must conform to the requirements of the Machinery Directive. It regulates the formal and technical requirements that need to be met before a machine can be brought onto the market and commissioned. Currently more than 750 standards have been harmonised under the Directive making it the most significant set of regulations for machines and machinery safety, and the only one of its kind in the world. It creates stable parameters for the most significant set of regulations for machines harmonised under the Directive making it the most significant set of regulations for machines.

The Directive thus meets its goal of ensuring the free movement of goods and increasing safety. It is common practice for the EU to evaluate its regulations at regular intervals and adapt them to new standards and requirements. That led the European Commission to launch an initiative in order to determine the need for adaptation. At the start of 2018 the European Commission presented a report entitled "Evaluation of Directive 2006/42/EC on Machinery – Final Report". This evaluation report highlights the effects that the Directive has had to date in terms of suitability and performance with regard to the machinery market, machinery safety, costs and harmonisation.

The assessment came to the conclusion that "the Directive is generally relevant, effective, efficient, coherent and has EU added value," but that specific improvements and simplifications were required.

Not least due to the progress of technology: after all, when the functional safety of a machine had previously been approved according to the specifications of the Machinery Directive, plant operators no longer had to worry about safety as long as no substantial changes had been made to the machine. In the smart factory, however, which is built on networking and flexibility, the framework conditions for machinery safety are also changing: safety guidelines must be adapted to the flexible processes of the modular plant, while at the same time security aspects must be given even greater consideration.

The EU Commission has published a roadmap for the possible revision of the Machinery Directive. The aim is to present a proposal for an amended Directive to the European Council and the EU Parliament by 2021. With one year for consultation and a two-year transition period, the new Machinery Directive would then be expected to apply from 2024. This will have huge consequences for all machine constructors and manufacturing companies! If the changes are not taken into account, it will not be possible to bring machinery onto the market. Constructors of machinery are thus well advised to address this issue at an early stage. By participating in standardisation bodies and the working groups of industry associations, Pilz is actively involved in ensuring both that the legal parameters are practicable and that they bring safety and economy into harmony. Pilz will then keep the industry informed of further developments!

A successful combination

Service robotics in intralogistics

The Pilz service robotics modules allow industrial and non-industrial service robotics applications to be implemented flexibly. The 24-V connection of the manipulator module PRBT makes it particularly suitable for mobile applications. This has been demonstrated in an application by Torwegge, a provider of intralogistics systems. The combination of robot arm PRBT, automated guided vehicles (AGV), camera and two-finger gripper was realised in full within three months using the open source framework ROS. The application shows up new possibilities for intralogistics processes: the positioning accuracy of the AGV was improved, for instance, and the camera technology allows the manipulator to detect the position of the crates and grip them precisely.

The factory of the future also presents challenges for the European Machinery Directive – from networking through to security.

With Mat P. on his automation tour

Whether dealing with applications from the fields of packaging, automotive, traffic engineering or metal processing – as an expert, Mathias P. travels the world with automation solutions by and for Pilz. He often talks to his wife about his experiences ...

• Mat, what have you recently experienced whilst hiking in Bavaria?

I experienced something really extraordinary, because I was on top of Germany’s highest mountain, the Zugspitze! Did you know that it has a new cable car system there now? Known as the aerial tramway, it is record-breaking, climbing a massive 1,945 metres along a length of 4,467 metres. The two cabins carry up to 580 people up to the mountain station and back down to the valley every hour – and I was one of them.

• Those are dimensions that are hard to imagine ...

Exactly! Up to 5,000 passengers travel on the Bavarian Zugspitze cable car every day. And of course safety is of paramount importance for the operators. That’s why Frey AG Stans, one of the cable car experts of the Doppelmayr/Garaventa group, turned to Pilz. Together they developed a safe automation solution that controls the entire cable car system. The automation system PSS 4000 ensures safe control and communication between the overall system and the subsystems, such as the drive controller, remote monitoring system or visualisation.

• Does the safety concept cover all eventualities?

The safety solution also includes special deactivation concepts. These are measures that ensure continued operation even if individual subsystems fail. So passengers needn’t worry while they’re in the cabin. Let’s take a trip to the Zugspitze. The view from there is absolutely breathtaking.

Apropos ...

Website: web44615
Online information at www.pilz.com
World’s first safe radar system solution

New to the Pilz portfolio is the world’s first safe complete solution for protection zone monitoring, based on radar technology. It consists of the safe radar system “LBK System” from Inxpect S.p.A. and the configurable, safe, small controller PNOZmulti 2 from Pilz.

In the event of a fault and when the protection zone is violated, PNOZmulti 2 ensures that the reaction that is triggered is safe and reliable. The safe radar system solution can be used up to SIL 2, PL d, category 2. This complete solution provides safe, economical monitoring even in the most rugged environments – in extreme production environments such as dust in woodworking, for example – or with complex plant structures.

One of the benefits of the safe radar system solution is high plant or machine productivity, despite the most rugged environment.

The actuator can be glued or screwed on. The glue-on version is ideal for applications on Plexiglas, for instance. Thanks to this versatility, users profit from a high degree of freedom when it comes to designing plant and machinery.

The actuator offers a safe switching distance of 6 mm, regardless of the substrate.

The safe radar system “LBK System” from Inxpect S.p.A. and the configurable, safe radar system solution can be used up to SIL 2, PL d, category 2. This complete solution provides safe, economical monitoring even in the most rugged environments – in extreme production environments such as dust in woodworking, for example – or with complex plant structures.

The actuator can be glued or screwed on. The glue-on version is ideal for applications on Plexiglas, for instance. Thanks to this versatility, users profit from a high degree of freedom when it comes to designing plant and machinery.

The safe switching distance of 6 mm, regardless of the substrate.

Extended functionalities

The software tool PNOZmulti Configurator for configuring the safety controllers PNOZmulti 2 offers two new features in the version 10.10. When combined with the reading unit PTTreader, the base unit PNOZ m B1 of the PNOZmulti 2 can be used to realise access rights for plant and machinery – thus offering safety and security in a single solution.

The new software modules mean that the user can now set up the access rights – ranging from simple approval to a complex hierarchical rights matrix – easily in the PNOZmulti Configurator. The version 10.10 now also makes it possible to create macros for the base unit PNOZ m B1, allowing logical connections defined between inputs and outputs to be combined into macro elements. The user can then store them in the macro library for further configurations. The simple import and export function and the ability to edit macros within the editor reduce the engineering time.

The new PSENeCode low profile actuator is currently the world’s lowest profile actuator. The new actuator offers manipulation protection with the smallest space requirement.