# PROVIDING **SAFETY**

# WE PROTECT YOUR most valuable asset YOUR WORKFORCE









Experts in machinesafety

Our sales engineers will be happy to recommend the products that best fit your industry and machinery. Our products and support contribute to a safe as well as efficient work environment, where the strictest safety requirements are being met.



Only premium prodcuts and brands

We are the supplier of high-quality safety systems. The products we represent, stand out by their quality, functionality and durability and were designed for many years of carefree use in the most severe industrial conditions.



Service is not a department but an attitude

We always strive to deliver the best service aiming to stand out in everything we do.

We are passionate about the brands we represent as well as about finding the best solutions for our customers. We show pride, enthusiasm and commitment in everything we do

**Safety switches** | Controlled and safe access to machines and processes can be regulated by use of safety switches. We supply very robust safety switches for the severest industrial conditions, as well as compact modular switches with many different integrated control functions.





tGard is an entirely modular and cost-competitive way of machine protection.

This compact access and control system makes it possible to merge any combination of mechanical key locks, electric safety locks, push buttons and selector switches into a single robust configuration.

tGard offers total electromechanical safety solutions suitable for usage in SIL2 (EN/IEC 62061), Category 3 (EN 954-1) and PLd (EN/ISO 13849-1) applications. TGard is certified by TÜV SUD.

With more than 4 million configuration opportunities, it is easy to supply customer-specific solutions for every access and control application as a standard product.

- Autonomously decide about your configuration and choose from more than 50 different modules.
- tGard is available with 6 different plug connections (quick disconnectors) or with a wiring terminal.
- Use our coded safety keys to prevent entrapment
- Every tGard unit is only 40 mm wide and is manufactured entirely from powder-coated aluminium with INOX 316 contact areas.





SIL<sub>2</sub>

**PLd** 





amGard Pro is the product group of modular safety door switches and locks for heavy duty applications.

The modular structure makes it possible to easily compile configurations yourself, amGard Pro offers total electromechanical safety solutions suitable for usage in SIL3 (EN/IEC 62061), Category 4 (EN 954-1) and PLe (EN/ISO 13849-1) applications. This product group is certified by TüV SUD.

- From robust switch to all-in-one solution
- Resistant to more than 10,000N tensile force
- Large alignment tolerance +/- 12 mm
- Determine your configuration yourself by modular structure
- Safety keys prevent hazard of entrapment (with or without mandatory key removal)
- Internal release in one single action
- Different actuators and levers available
- Entirely metal casing and INOX contact areas
- Suitable for outdoor use (IP67)
- Available in ProfiNet and Ethernet IP design



# **Profinet communication module**

amGard pro is also available with a ProfiNet communication module. Here, the safety switch safely communicates via PNIO (ProfiNet Input Output).

In addition, the following ProfiNet functions are supported:

- Complies with PROFINET IO Conformance class B
- SNMP with support for the following mibs: LLDP
- · LLDP is supported (Topologi scan)
- MRP is supported on selected configurations







amGard S40 modular safety switches are manufactured entirely from INOX 316 and suitable for extreme conditions.

The 40 mm casing perfectly fits on the uprights of almost all common guards and can be expanded by use of push buttons, key adapters and an internal release.

The modular structure makes it possible for you to easily compile configurations. amGard \$40 offers total electromechanical safety solutions, suitable for usage in SIL3 (EN/IEC 62061), Category 4 (EN 954-1) and PLe (EN/ISO 13849-1) applications.

- Entirely INOX 316 (IP69K)
- From robust switch to all-in-one solution
- Resistant to more than 10,000N tensile force
- Large alignment tolerance +/- 12mm
- Determine your configuration yourself, using modular
- Safety keys prevent hazard of entrapment (with or without mandatory key removal)
- Integrate an emergency stop, access request and reset
- Ergonomic INOX operation lever







**FRANK** | Unauthorised access to production environments may lead to unnecessary standstill of machines. Using FRANK, only previously authorised employees can get access to the installation, simply using the already existing ID cards.

### **FRANK**

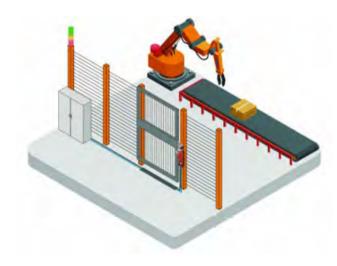
Without the registration of events, often it is not possible to determine the cause of a machine standstill and take subsequent action. This could make it difficult to identify who entered the protected zone and how long it took to resolve the problem.

FRANK software registers the access and access times, which ensures a better productivity analysis. Also it provides more insight as to when preventive maintenance had best be carried out. In addition, FRANK can also be used for the monitoring of inspections and taking samples.



Integrating access control systems into existing industrial networks and door switches can be a complicated operation. External card readers are often not sufficiently robust for industrial applications. Besides, additional cabling, network interfaces and reprogramming of the PLCs are always required.

FRANK is fully integrated in our existing amGard Pro product group of robust safety switches. As such, additional cabling, interfaces with IT networks and reprogramming of the PLC's can be avoided. Using just a single and easy industrial controller, FRANK controls the access and provides a few simple inputs for the existing PLC for this, just like a push button.



Full access control



Insight in your productivity



### Prevent unauthorised use

The FRANK RFID module can be placed in any available push button position of our amGard Pro safety switches. The user himself can select the ID card type (e.g. 125 Hz) and use the outputs to be able to grant access.

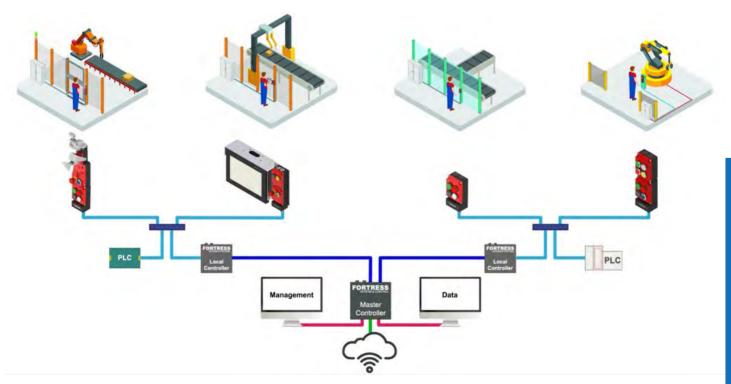
In addition to the management of entering and exiting production environments, FRANK RFID modules can also be used for the monitoring of other actions in the process. For instance, for the use of an HMI, programming a robot or use of a CNC machine.

FRANK works separately from the safety entrances of the safety switch, by making use of non-safety contacts only.



## FRANK system architecture

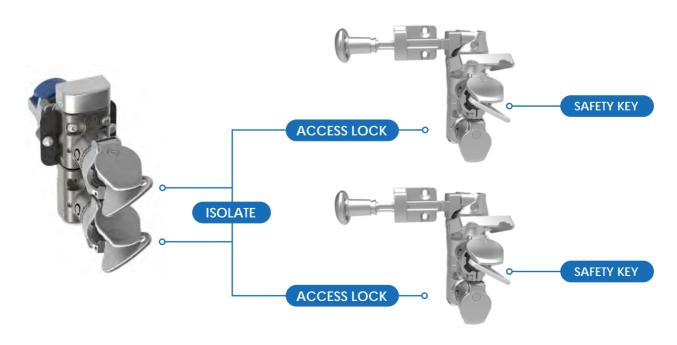
In contrast to other access control systems, FRANK system is very easy to integrate in your current control. The FRANK controller monitors the authorisation of the employee when they present their ID card. If the employee is authorised, the inputs will be processed by the PLC and access can be given to the protected zone. All activities are subsequently reported to the master controller. This master controller documents all activities and manages the authorisation. Also, integration with 3rd party software, such as SAP, is possible.



ATOM | The ATOM lockable safety switches is resistant up to no less than 7,500 N tensile force and has a very large alignment tolerance of 7.5mm in every direction. The casing is robust and manufactured entirely from steel with INOX 316 contact areas. This very compact safety switch is provided with OSSD contacts and offers a choice between a M12 5 pin or a 8 pin plug connection, the ATOM is suitable for usage in and ISO 13849-1, Category 4, PLe (SIL3) applications and is 3rd party approved door TÜV SUD.



**Trapped Key Interlocks** | The use of interlock systems is a proven method for predominantly mechanical securing of machines and processes. The principle of interlock systems is based on releasing and locking of uniquely coded keys in a predetermined sequence.







### Key switches

Use our XMR or S safety key switch for the disengagement of the installation. Turning the first key will engage the safety contacts and releases the key(s).

The released keys can be used to safely unlock doors and hatches. Only after all keys have been returned, the first key can be turned once again to restart the machine.

- Suitable for usage in SIL3 (EN/IEC 62061), Category 4 (EN 954-1) and PLe (EN/ISO 13849-1) applications
- · 200,000 unique key codings
- Robust INOX 316 casing or Zamac (zinc aluminium alloy)
- Can be used as a coded safety switch in accordance with FN14119
- Modular structural design for easy addition of doors/hatches
- Flush mounted or surface mounted (IP67) versions available







# Lockable key switches

Does your machine have a running down time or should the door/hatch not be opened at any time? Then use our SS safety key switch with magnetic coil lock for a controlled stop.

After engagement of the coil, the keys can be turned and removed to subsequently use them again for opening of access doors or hatches.

- Suitable for usage in SIL3 (EN/IEC 62061), Category 4 (EN 954-1) and PLe (EN/ISO 13849-1) applications
- 200,000 unique key codings
- Robust INOX 316 casing or Zamac (zinc aluminium alloy)
- Can be used as a coded safety switch in accordance with FN14119
- Modular structural design for easy addition of doors/hatches
- Flush mounted or surface mounted (IP67) versions available









DM and DMSK door locks are opened with the released access keys from the key switch. As long as the door is open, the key cannot be removed, as a result of which the machine cannot be restarted. Door locks are available in Zamac (DM), INOX 316 (DMS) and a fully hygienic INOX 316 variant (DMSK).

- 7,500N tensile force
- Suitable for usage in SIL3 (EN/IEC 62061), Category 4 (EN 954-1) and PLe (EN/ISO 13849-1) applications
- 200,000 unique key codings
- Head is rotatable in 4 steps of 90°
- Can be used as an encrypted door interlock in accordance with FN14119
- Entirely mechanical (no cabling required)
- Very robust design resistant to moist, vibrations and dust
- To be used in EX zones 1, 2, 21 and 22









### Door locks with Safety Key

DM2 and DMSK2 door locks offer the possibility for the (mandatory) taking of personal safety keys to prevent hazard of entrapment. Only if the door is closed and this safety key has been put back, the access key can be removed in order to restart the installation.

Double door locks are available in Mazac (DM2), INOX 316 (DMS2) and a fully hygienic INOX 316 variant (DMSK2).

- 7,500N tensile force
- Suitable for usage in SIL3 (EN/IEC 62061), Category 4 (EN 954-1) and PLe (EN/ISO 13849-1) applications
- 200,000 unique key codings
- Head is rotatable in 4 positions of 90°
- Can be used as a coded door interlock in accordance with FN14119
- Entirely mechanical (no cabling required)
- · Very robust design resistant to moist, vibrations and dust
- To be used in EX zones 1, 2, 21 and 22
- · Available with different actuators/actuators.
- · Optional mandatory removal of safety key for extra safety







### **Bolt locks**

Bolt locks are used for locking of among others, isolating switches, valves, ball valves or level-operated switches.

By applying a cylindrical bolt, these energy sources can be mechanically locked in the "off" position, after which a key can be taken as a safety key or to be used for the engagement of another energy source or the opening of a door /hatch.

- Robust casing in Zamac (zinc aluminium alloy) or INOX 316
- 200,000 unique key codings
- Different sequences possible
- Modular structure for extension with multiple locking mechanisms
- · Well resistant to moist, vibrations and dust
- To be used in EX zones 1, 2, 21 and 22







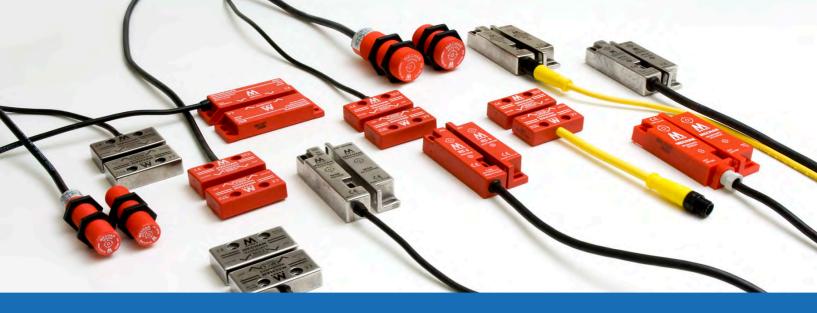


### Valve locks

Sofis, formerly Smith Flow Control (SFC), valve locks are used to make sure that the operators use the correct sequence when manually locking and unlocking valves. The valve lock or valve interlock is mounted on every individual valve in the process, to exclude human failure. Valve locks are available for valves with levers (QL lock) or handwheel valves (GL lock).

- Determine the key sequence yourself
- · Detect optional key removal
- · Fits on every valve by means of adapter set
- Entirely mechanical (no cabling required)
- To be used in EX zones 1, 2, 21 and 22
- Version for handwheels (GL) and ball valves (QL)





Safety sensors | Safety sensors, also known as contactless safety switches or safety contacts, check the status or position of a door, hatch or other moving object, for safe access. We supply a wide array of safety sensors for every application and industry.





amGard NCT is the product group of magnetically coded INOX safety sensors. The substantial switching interval and robust structure make NCT switches ideal for severe industrial conditions. The INOX 316 casing also makes it possible to deploy this product in the food industry as well.

The magnetic coding by means of HALL-sensors ensures a safe and stable protection of doors and hatches. NCT switches are suitable for usage in SIL3 (EN/IEC 62061), Category 4 (EN 954-1) and PLe (EN/ISO 13849-1) applications.

- Robust INOX 316 casing
- Suitable for outdoor use and wet areas (IP69K)
- Large switching interval and status LED
- Can be used as a coded safety switch in accordance with EN14119







Mechan HE serie The HE series contactless switches of Mechan Controls operates by means of both magnetism and electronics. This technology prevents manipulation and has a significant switching interval and is, as such, very suitable for poorly aligned doors or hatches.

In addition, hybrid switches are also very well resistant to moist and vibrations. By optionally making use of the SCU controller, Mechan supplies a total solution for the protection of machines without running down time. HE switches are suitable for usage in SIL3 (EN/IEC 62061), Category 4 (EN 954-1) and PLe (EN/ISO 13849-1) applications.

- Available in ABS and INOX 316
- **Dual Colour LED status indication**
- Very well resistant to vibrations
- To be used with or without the SCU controller
- IP67 and IP69K
- Use the HED switch for the monitoring of two doors with only one single switch





Mechan MagnaSafe is a very complete product group of contactless magnetically operated safety switches for machine safety applications. This product group uses Reed contacts in combination with a solid ABS (or INOX) casing. The MagnaSafe switches are easy to install and the 10 mm+ switching interval ensures tolerance in the alignment of doors and hatches. The switches are ideal for damp, dusty and wash down environments and sealed to IP67 and IP69K. MagnaSafe switches are suitable for usage in SIL3 (EN/IEC 62061), Category 4 (EN 954-1) and PLe (EN/ISO 13849-1) applications.

- Available in ABS and INOX 316
- Different construction forms, contact options and connection options
- · Competitively priced safety sensor
- Operation by means of Reed contacts
- Version for temperatures up to +125 °C
- Switch up to 2A

**Mechan SS** The Mechan SS product group of electronic stand-alone contactless safety switches is designed for use in combination with any type safety relay.

Safety switches make use of Mechan's unique frequency-based switching system which prevents manipulation or bridging of the safety switch. Another feature of this technology is the quite accurate switching interval and extreme reliability.

- To be used in combination with any type safety relay
- · Very reliable technique based on frequency
- Very accurate switching interval
- Different connections, construction forms and contact options are available
- Can be used as a coded safety switch in accordance with FN14119

**Mechan RSS** safety sensors are high coded by making use of RFID transponder technology, in order to prevent manipulation.

In contrast to other RFID, the market uses the RSS range voltage-free contacts instead of OSSD contacts, so the switch can also be used as stand-alone.

- To be used in combination with any type of safety relay through volt free contacts
- IP69K and IP67
- 4,000,000 unique codings
- Type 4 coding in accordance with EN14119
- Different connections, construction forms and contact options available

SSP SAFIX 1 RFID safety sensors make use of the latest RFID technology, as a result of which up to 80 switches can be connected in daisy chain without significant loss of response time. Additionally, SAFIX 1 switches are easy to install on existing safety relays or PLCs.

- Available as highly encrypted (reteachable) switch in accordance with and ISO 14199.
- 80 switches in series without loss of safety by means of OSSD
- Uses just one single signal for diagnosis
- Status indication with clear multi-colour LED
- Can be connected immediately by use of M12 8 pin plug
- Very small actuator available for mounting on doors or hatches with a small radius



























**Lockout-Tagout** | Lockout-Tagout or LOTO is a procedure whereby safety locks, lock outs and tag outs are used for the safe and energy-free activities on machines or processes. In this instance, all energy sources are isolated, locked and provided with a tag before commencement of the work.







# Safety padlocks

Safety padlocks are designed for Lock-Out, Tag-Out, Try-Out, a.k.a. LOTO[U.1], applications and are used for the locking of energy sources. By making use of colour codings (and optionally laser engravings), the function and the owner of the padlock can be identified.

Personal safety padlocks work in accordance with the principle:

1 employee = 1 padlock = 1 key (OSHA Standard 1910.147). If 1 employee needs multiple padlocks or group-lockout has been used, in general, keyed alike padlock sets are applied.











### Locks

Lockout-Tagout-Tryout locks are designed especially for locking of energy sources during maintenance or cleaning activities. These lock-outs are positioned on the isolation point of the energy source and subsequently locked with a safety padlock and marked by a safety tag.

The Lock-Out auxiliaries are available for the following energy sources:

Locks for valves, electricity, bal valves, butterfly valves, pneumatics, steering wheels, enclosed spaces, blind flanges.



### **Lockout Stations**

Lockout stations or padlock stations are used for the organised and comprehensible storing of lockout-tagout materials. The LOTO procedure becomes clearer as well as safer by placing them near the relevant installation and providing them with the required materials to safeguard this installation.

- Available in different measurements
- Made from steel or impact-resistant plastic
- Permit to work station combines a group lock box with a pad lock station for added functionality
- Lockout stations can be provided with storage bins for the storing of lockout materials
- Possibility for the production of shadow boards in different sizes



### **Group Lockout**

Group lock boxes are used for group-lockout.

The principle of this is that an authorised employee isolates and locks all energy sources with a set of keyed alike safety padlocks.

Subsequently, the key of this set is placed in the (group) lockbox after which every employee working on the relevant installation places his padlock on this lockbox.

Only after all padlocks have been removed from the lockbox, the key can be removed to unlock the energy sources and engage them



# Safety tags

A safety tag with safety padlock is placed on isolated, locked energy sources, as a safety message that works are being performed. This tag states who is performing the work activities and when the work activities will be taking place. Additionally, safety tags are provided with a warning pictogram with related text.

Identification tags are placed permanently near the isolation points, for identification purposes. The numbers on these tags can subsequently be found on the procedure sheet.

- Available as one-off tags and rewriteable tags (Guardian Extreme)
- Metal detectable version available for the food industry
- Designing tags yourself is also possible in addition to tags with sequential numbering





### **Procedures**

Drawing up and implementing a successful lockout tagout procedure can be a complex matter. In order to draw up a procedure as efficiently and safely as possible, an assessment of the current safety procedures (work permits), skills of the operators and analysis of the installations, is required.

If a lockout tagout procedure is drawn up or maintained incorrectly, this could lead to production loss, hazardous situations and even injury.

A proper lockout tagout procedure complies with legislation and directives, but has also been implemented in all layers of the organisation and with all employees and is, as such, not merely a policy document.

We can support your organisation with 3 different modules during the implementation of your lockout tagout procedure.

### **Loto-training**

Being a good employer requires you to enable your staff to work safely on machines and installations.

Lockout-tagout training days are a very efficient tool in order to correctly follow the LOTO procedure and detect any hazards.

In cooperation with Pilz Nederland, Unique Safety Products has developed a training programme in which all aspects of the implementation of lockout-tagout are discussed.

For more information, please contact us.



**Machine guarding** | Our machine fencing offers maximum safety and complies with the latest Machine Directive. All our shielding is modular and can be customised to your demands, by use of standard products. This will shorten the delivery time and ensures a very good price-quality ratio. In addition, it is also possible to have your safety fencing installed by USP and have it fittled with the safety components you desire.

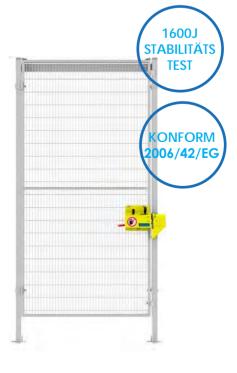


### **Modular SmartFix systeem**

Panels are available in different versions; from the mesh panels ST20 and ST30 that require a safe distance of at least 120mm, to the PC panel that provides a good view on the area and can be positioned near the installation.

In addition, there is the ST full sheet panel that meets the requirements regarding protection against weld spatters, dust and liquids. Also this panel can be positioned near the machine.

In case of outdoor installation or usage in wet spaces, all Troax parts can be hot-dip galvanised.





### **Measuring service**

Unique Safety Products offers free measuring service for the placing of the machine guarding. In doing so, we guarantee that the right products are supplied customised.

During the measuring, possible placing issues can easily be prevented, while the most efficient distribution of panels and uprights is determined by our specialists.

The measuring service is a free of charge service offered by Unique Safety Products when drawing up a quotation.

### **Assembly service**

In case you do not have time to assemble the fencing yourself, we will be happy to offer our assembly service.

Our experienced technicians will visit you on the day of your choice and place the shielding exactly in accordance with the installation drawing. Minor adjustments can be carried out by our technicians as you wish (if sufficient material is available).

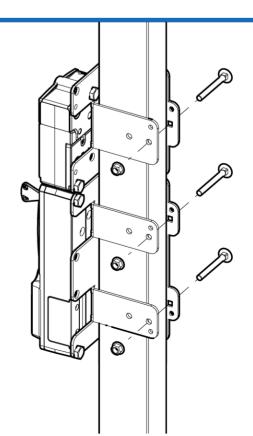
Doors are built up and aligned, uprights will be firmly anchored and, if you have also chosen our Safe Locks or Fortress Interlocks safety switches with mounting brackets, then these will be placed on the doors directly, by our technicians.

# **Mounting panels**

Use the official Troax mounting brackets for the assembly of all types of Fortress Interlocks safety switches and interlocks.

The assembly kit ensures a robust and ergonomic mounting of door switches on all Troax door types. As a result, alignment of these door locks will never again be a problem.

The kit is included directly ex-factory with your machine guarding and will be installed on the door immediately, if you have chosen our assembly service.



### Hygienic INOX shielding

The High-Line of NTF-Aalborg by Troax is a hygienic shielding system in INOX, designed for hygiene as well as safety. The system has open profiles and welded mesh without horizontal surfaces, allowing efficient and hygienic cleaning. This makes the system very suitable for the food processing and pharmaceutical industry.

The system has been tested to resist an impact of 309 Joule and complies with the requirements of the Machine Directive, as the components remain linked to the shielding, even when the system is being disassembled.

The system is entirely made of AISI 304 and can also be supplied in AISI 316 on request.





### **Aluminium Shielding**

Machine guarding of aluminium profiles is an ideal solution for locations that require a lot of customisation.

The SSP aluminium fencing offers a high degree of flexibility by the entirely modular structure with a significantly high level of finishing.

In addition, all profiles are anchored together for maximum solidity of your arrangement.

Aluminium machine fencing can be placed and adapted very easily and very quickly.









**Prozess locks** | Magnet locks are applied as a process lock (preventing process disruption on machines without running down time) and can be provided with a safety sensor to be applied in safety applications. As long as there is voltage on the solenoid, the door remains locked, depending on the strength of the magnet, the holding force is maximally 1,200N.



### **HOLDX RS**

The HoldX RS a magnetic process lock fitted with a contactless safety switch with transponder technology (RFID). This makes the Holdx RS suitable for usage in SIL2 (EN/IEC 62061), Category 3 (EN 954-1) and PLd (EN/ISO 13849-1) applications. The holding force of the magnet is 600N maximum.

- · Easy and quick installation through plug connection
- Smallest process lock in the market
- Maximum of 600N tensile force
- LED diagnosis
- · Bluetooth diagnosis function by means of free App
- Available with 1 or 2 plug connections (8 or 12 pin)
- Entirely IP67
- · Provided with integrated uniquely encrypted safety sensor



### **HOLDX RL**

The HoldX RL magnetic process lock that is able to detect when the unit is losing locking power (for instance in case of pollution), by making use of a magnetic flow meter. As such, errors can be prevented (before they actually occur).

- Easy and quick installation through plug connection
- 1,200N holding force
- LED diagnosis
- Entirely IP67
- · Bluetooth diagnosis function by means of free App
- Available with 1 or 2 plug connections (8 or 12 pin)
- Provided with integrated uniquely encrypted safety sensor
- Detection of loss of magnet force
- Extensive diagnostic functions







Safety laser scanners | Safety laser scanners are used for machine safety applications up to SIL2/ PLd where a predetermined zone must be guarded continuously. When somebody enters the zone, the safety contacts will be engaged.

# HOKUYO

### **Der Hokuyo UAM-05LP**

The Hokuyo UAM-05LP for SIL2 and PLd machine safety applications is the world's smallest safety laser scanner and weighs only 1kg.

The steel casing and exchangeable lens are ideal for usage in severe industrial environments.

- Suitable for zone protection or use on AGVs
- Smallest safety laser scanner in the market; 97 x 90 x 99mm
- 1 safety zone (max. 5m) and 2 warning zones (20m)
- Robust steel casingProgram up to 32 different environments
- Detection angle of 270° maximum
- Dual zone protection possible
- Makes use of OSSD contacts
- Can be programmed by means of SD card
- Distance and intensity output via Ethernet











**Enabling switches** | Enabling switches are used for the safe operation of machine functions within a shielding. Only when pushed in the centre position, the machine functions can be operated. Squeezing or releasing will switch the machine into an emergency stop immediately.



### Zeus

The Zeus is a robustly designed modular enabling switch that can be composed to the user's wishes. Zeus has the following properties:

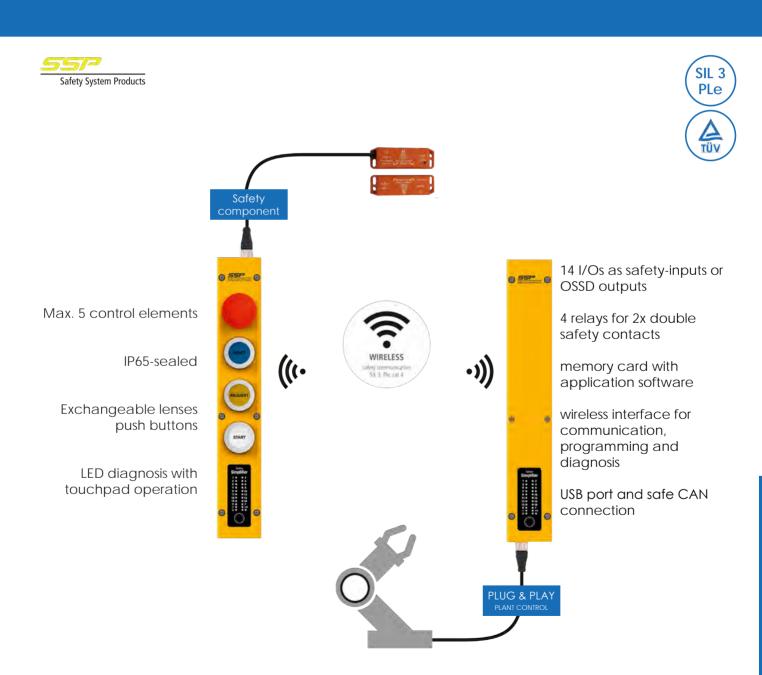
- Ergonomic design
- Robust IP67 casing
- Modular structure
- An enabling switch as well as a gate box
- Up to 61 different machine functions can be selected
- Advanced anti-manipulation by means of door hand detection
- Different connection options
- Can be provided with emergency stop, key switch and hanging detection







**Safety Simplifier** | Safety Simplifier is a fully new approach of safety. This wireless user-friendly system is ideal for the actuation of your machine-safety components, such as door switches, sensors and light screens and provides them directly with push buttons and/or emergency stops.



### A safety system in a control unit

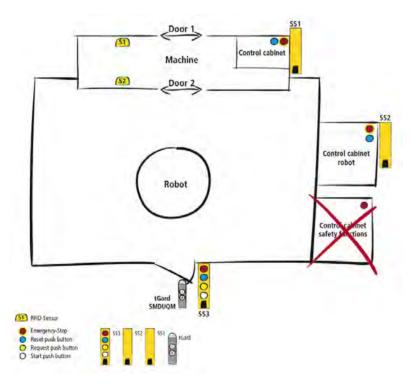
The Safety Simplifier makes it easy to add safety functions to existing and new safety systems.

Simply select the required function, such as door switch, door lock, or unlock with a time delay and connect it to the safety outputs of the safety system or directly on the machine control.

SAFETY CONTROL CABINET NO LONGER REQUIRED







# Example application of a processing machine and a robot

This application shows a processing machine that is automated by use of a handling robot.

Using the Safety Simplifier system, only 3 de-central units are required for the monitoring and evaluation of all safety functions.

As such, the traditional safety PLC and the control cabinet entirely expire.

Additional advantage is that extra doors or an extra robot can easily (wirelessly) be added to the system.

Also the reprogramming or adjustment of the functionality can be done wirelessly via the included dongle and software.

# **Easy programming**

Everyone can program, with the included simplifier software. Easily select the desired functions and conditions for every unit.

With the Wireless USB stick, the software can easily be uploaded to the units wirelessly from 100m.

In addition, every unit has a USB input for a direct connection with the laptop.





Safety radar systems make it possible to create economic safety barriers around machines or robots that, in contrast to laser scanners, are entirely insensitive to dust, grit, sparks, temperature changes, etc. The LBK system is suitable for usage in SIL 2(EN/IEC 62061) applications.



Entirely insensitive to dust, grit, sparks, moist, steam and temperature differences.



Perfect alignment between the different LBK sensors is not really required.



Easy configuration of (danger) zones by means of the included PC application.



Advanced detection of persons and possibility to set warning zones.







# **LBK System**

The LBK system consists of a controller and a single or multiple sensors which are easily installed for the detection of persons in and around machines and robots.

The LBK machine safety system is based on FMCW radar technology, a proven method for the detection of movement.

In contrast to detection systems based on laser, infrared or microwaves, the LBK system can determine the distance between a person and the machine real-time.

The LBK system is the better alternative for laser scanners, safety mats and light screens and is entirely insensitive to dust, moist, steam, grit, sparks and temperature differences.

