

Looking ahead

Digitalisation of safety technologies

As digitalisation progresses, cybersecurity is a major topic of discussion, and rightly so. Safety technologies have also moved on considerably in the course of this development. Dipl.-Ing. Rainer Lumme, Product Manager Extreme at steute Technologies, explains the changes in an interview with Andreas Mühlbauer.

Mr. Lumme, what changes have safety technologies, especially machine and plant safety, undergone in the past years of increasing digitalisation?

In the field of safety technology for general mechanical engineering, many functions which were for a long time electromechanical are now controlled at the software level. Digitalisation has progressed tremendously – but always bearing the special stipulations of machine safety in mind. With our switching devices, we are necessarily at home in niche markets. Our safety-related products include heavy-duty safety position switches, robust safety sensors, emergency pull-wire switches, safety foot switches and in particular a wide range of safety switches for explosive zones.

In these specialised application fields, digitalisation has not yet progressed as far as it has in the industry as a whole, meaning that this trend only impacts us up to a point. There are fewer safety switching devices per plant, and they are not as extensively integrated. But of course some exceptions prove the rule. For example, we provide a manufacturer of tunnelling machines with heavy-duty emergency pull-wire safety switches with a plug connection which are equipped with "Dupline Safe" communi-



cation modules. This considerably reduces the cabling necessary in tunnel drilling projects stretching for kilometres.

How do you see further development in the field of safety, and what will it mean for companies like steute?

In other areas of business, such as intralogistics or medical technology, we are

observing real leaps towards integration and digitalisation – and are in fact driving this development ourselves. Innovations in these fields and in general automation technology will in time "seep into" the niche applications of machine safety in which we are active.

Here we can profit from in-house information transfer, for example in the use of highly reliable communication protocols, cabled or wireless, which we have already developed for medical applications.

Image: steute Technologies GmbH & Co. KG