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Press Message

Pilz at Hydrogen Technology Expo Europe in Hamburg, Hall A3, Stand: 3I110 - Hydrogen – Functionally Safe and Secure

Ostfildern, 05.09.2024 - **At Hydrogen Technology Expo Europe, Pilz will show how industry-proven automation solutions protect hydrogen applications. The world’s largest supplier trade fair for hydrogen technologies will take place in Hamburg from 23-24 October 2024. The automation expert will be presenting its solutions from the fields of functional safety and Industrial Security. Pilz solutions enable the safe monitoring and control of processes across the whole added value chain.**

Fast, reliable detection of gas leaks, maintaining an overview of pressure, fill level, voltage and current, monitoring combustion processes safely – well-tried safety principles from automation can protect hydrogen applications. That’s because they help to always consider safety as an integral function of the plant, machinery and the correlations in the process. At Hydrogen Technology Expo Europe, Pilz will be presenting its solutions for functional safety in the hydrogen industry. The automation company will also be showing how hydrogen applications are protected from manipulation and misuse.

Safe, from production through to use

Safety solutions from Pilz offer additional benefits for the whole added value chain for hydrogen. From electrolysis through to steam reforming – Experts on our stand will explain the different safety-related approaches that are important depending on the way in which hydrogen is generated. The Pilz small controller PNOZmulti 2 and the automation system PSS 4000 from Pilz safeguard the generation of hydrogen via electrolysis. During alkaline or PEM electrolysis, a number of safety requirements must be observed. For example, safety controllers from Pilz monitor sensors for gas and flame detection. As soon as these sensors detect something, appropriate measures are initiated, such as the venting of valves.

Also, the automation system PSS 4000 is already proven when it comes to maintaining an overview of all the safety functions on hydrogen refuelling stations – on the cooling system and high-pressure storage tanks, and when dispensing hydrogen. Experts from Pilz will provide information on how the automation system is used to detect hydrogen leaks, flames and smoke, and to monitor temperature and pressure. Thanks to the decentralised inputs/outputs and the failsafe analogue input functions, the entire system can be controlled and monitored safely.

Holistic approach to Safety and Security

A holistic approach includes not just functional safety but also Industrial Security. This describes the protection of production and industrial plants from manipulation or misuse – whether intentional or otherwise.

One example is a remote connection to a container for hydrogen production, to check the system status. This connection must be protected, otherwise the safety-related part of the system can be viewed or modified without authorisation.

At Hydrogen Technology Expo Europe, Pilz will also be presenting its industrial firewall, SecurityBridge. Within the control network, all connections between the engineering, diagnostic or configuration tools and the controllers are protected against manipulation and enable secure external connections. With the access permission system PITreader from Pilz and the corresponding RFID transponder keys, plants can be protected against unauthorised access, and access permissions can be controlled individually and reliably.

“Pilz firmly believes that only a holistic approach to Safety and Security guarantees comprehensive protection of hydrogen applications. Because Security protects the availability of plant and machinery from manipulation and misuse”, Albert Cot, Market Development Engineer at Pilz, is keen to stress.

Pilz at Hydrogen Technology Expo Europe 2024: Hall A3, Stand: 3I110

- Further information on safety solutions for the hydrogen industry

Caption: *Industry-proven solutions from Pilz enable the safe monitoring and control of processes across the whole added value chain – when generating hydrogen via electrolysis, for example. (Photo: © iStock.com/Scharfsinn86, Pilz GmbH & Co. KG)*

Caption: *Safety solutions from Pilz are used to detect hydrogen leaks, flames and smoke, and to monitor temperature and pressure on hydrogen refuelling stations. (Photo: © iStock.com/Scharfsinn86, Pilz GmbH & Co. KG)*

You can find texts and images for downloading at:

https://www.pilz.com/en-INT/company/press/messages/articles/242336

Pilz – The Spirit of Safety

Pilz is a global supplier of products, systems and services for automation technology. As a pioneer of safe automation, Pilz creates safety for human, machine and environment. Founded in 1948, today the family business with its head office in Ostfildern is represented worldwide with 2500 employees in 42 subsidiaries and branches. The technology leader offers complete automation solutions for Safety and Industrial Security on the machine. These include sensor, control and drive technology – as well as systems for industrial communication, diagnostics and visualisation. An international range of services with consulting, engineering and training completes the portfolio. Pilz solutions are used in many industries beyond mechanical engineering, such as intralogistics, packaging, railway technology, or the robotics sector for example.

Pilz in social networks

In our social media channels we give you background information concerning the company and the people at Pilz, and we report on current developments in Automation Technology.

 https://www.facebook.com/pilzINT

 https://twitter.com/Pilz_INT

 https://www.youtube.com/user/PilzINT

https://www.xing.com/companies/pilzgmbh%26co.kg

 https://www.linkedin.com/company/pilz

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