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Press Message

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**Pilz at Hydrogen Technology World Expo
in Hamburg, Hall 5, Stand: H2O -
Automation for the H2 future - safe,
smart, scalable**

Ostfildern, 23.09.2025 - **Whether it's for production via electrolysis, refuelling or combustion, Pilz offers tailor-made solutions for the hydrogen industry. The automation expert will present its comprehensive range at Hydrogen World Expo in Hamburg from 21 to 23 October 2025. Experts from Pilz will also provide insights into the norms and standards that are important for the development and integration of hydrogen technologies.**

Hydrogen production requires the very highest safety standards. At Hydrogen World Expo, Pilz will use an electrolyser model to demonstrate how the small controller PNOZmulti 2 and the automation system PSS 4000 reliably safeguard processes in alkaline or PEM electrolysis. Among other things, the safety controllers monitor sensors for gas and flame detection and automatically initiate measures such as valve venting in the case of danger - in compliance with the international standard ISO 22734. Visitors to the stand will also gain practical insights into how access regulations for electrolysis plants can be implemented safely.

Failsafe control at hydrogen refuelling stations

Permanent view of pressure and temperature monitoring, as well as filling and emptying speeds: the safe small controller PNOZmulti 2 from Pilz offers reliable analogue value processing for transfer processes at hydrogen refuelling stations. Pilz experts on the stand will explain how pressure ramp monitoring can be used to safely control changeable process variables and detect any anomalies or errors at an early stage. The “Safe ramp monitoring” block integrated in the software tool PNOZmulti Configurator keeps a reliable eye on the limit parameters for pressure monitoring. Thanks to safety-related accuracy of 1 per cent, a PNOZmulti 2 analogue input guarantees precise limit value setting with dynamic limit value monitoring up to safety level SIL 3 in accordance with IEC 62061. 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.

Burning hydrogen - but safely!

Pilz offers certified burner controllers as well as comprehensive services such as risk assessments for furnaces that are being converted to hydrogen operation or are already “H2 ready”. Implementation is in accordance with the standards ISO 13577 and PAS 4445:2025. The focus is on safe monitoring of invisible flames, leakages and the gas control section. Experts from Pilz will be available at the exhibition to advise visitors on burner management systems.

Pilz at Hydrogen Technology World Expo 2025: Hall 5,
Stand: H20

- [Further information on safety solutions for the hydrogen industry is available online in the Pilz press centre at www.pilz.com/hydrogen](http://www.pilz.com/hydrogen)



Caption: Industry-proven solutions from Pilz enable the safe monitoring and control of processes across the whole hydrogen added value chain. Experts from Pilz will provide information at Hydrogen World Expo. (Photo: © Pilz GmbH & Co. KG)

You can find texts and images for downloading at:

<https://www.pilz.com/en-INT/company/press/messages/articles/246627>

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



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

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