

Valve World 2022 – News

October 2022

AS-Schneider will present the new Digital Valve Kit, valves for hydrogen applications as well as valves for use with fugitive emissions at the Valve World 2022:

Solutions for a sustainable and digital future

Nordheim (Germany) – October 13, 2022 – A highlight from the AS-Schneider Group at the Valve World at booth B20 in hall 03: Expanding on the static digital twin valve solution Digital Product Pass, AS-Schneider presents the new dynamic digital twin solution, the so-called Digital Valve Kit. The new Digital Valve Kit, providing plant operators with remote access and remote control of their valves, as well as indicating the current health status of the installed valves. In addition, the specialist for industrial valves will present valves and manifolds as well as the DBB ball valves for hydrogen applications and for use with fugitive emissions (TA-Luft 2021).

Digital Product Pass (DPP)

Every year, technicians install millions of mechanical components in brown- and greenfield plants - a large proportion of which are valves and valve manifolds. To take advantage of the IIoT, suppliers, plant engineers and operators should include these valves in the digital twin of the plant. This is exactly where the AS-Schneider Group comes in, developing valve solutions that can be easily integrated into the global and digital industrial infrastructure of the future.

Starting a few years ago, AS-Schneider has been offering its customers the so-called Digital Product Pass for valves, which fulfills the requirements of DIN SPEC 91406 (IEC 61406). The E Series Valves and Manifolds, Monoflanges, VariAS-Blocks and DBB Piping Ball Valves are marked with a unique QR code. The user can scan this or enter the individual serial number at www.qr4v.de. That QR-code provides easy access to static

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product information like technical specification, activity - specific docs, individual drawings, certificates, and spare parts.

Having joined the Digital Data Chain Consortium ([Digital Data Chain](#)) recently AS-Schneider will now move this to the next level by norming the data according to VDI 2770 and providing the data package via 3rd platform (so-called cloud-based information exchange platform). The first insights are shared by AS-Schneider at booth B20 in hall 03.

Digital Valve Kit (DVK)

In addition to the static Digital Product Pass, AS-Schneider is currently working on a dynamic solution to sense or capture data, the so-called Digital Valve Kit.

The Digital Valve Kit provides plant operators with remote access and remote control of their valves as well as indicates the current health status of the installed valves. The DVK provides all alerts to the maintenance team in a timely manner. This enables them to react in time and initiate further measures at an early stage. The system is compliant with all industry-relevant standards (e.g. NAMUR standard).

A live demo of this can be seen daily at Valve World at 11 a.m., 02 p.m. and 04 p.m. at the AS-Schneider booth B20.

Valves for hydrogen applications

AS-Schneider's valves have been successfully used for hydrogen for more than 20 years - all valves and manifolds as well as the DBB ball valves are suitable for this purpose. The instrumentation and piping valves can also be used safely in natural gas applications with, for example, a 20% hydrogen blending. This feature is particularly interesting for natural gas plant operators and gas network operators who want to convert their natural gas pipelines for hydrogen.

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AS-Schneider recommends austenitic stainless steel 316 or 316L as the optimum material for instrumentation and pipeline valves in the hydrogen industry. Other materials are also possible.

Those responsible should ensure on top that non-metallic valve materials such as seals and lubricants are compatible with the hydrogen medium. There are lists of these in the standards and norms (Sandia, ISO/TR, SAE).

When the user selects the appropriate valve head unit, he must first check whether the operating environment is closed or open. If the environment is open, he can use the standard valve head unit from AS-Schneider. If the valve is mounted in a closed, non-ventilated environment - which could be a protective enclosure or a container - then increased tightness requirements. Those will be covered with special valve inserts (Fugitive Emission Standards like TA-Luft or bellow sealed valves).

Plant operators can get advice from the hydrogen experts at Valve World to find the right material and valve head units for their specific requirements.

Valves for use with fugitive emissions - meets specifications of the TA-Luft amendment

Strict legal requirements force certain industries to capture and reduce fugitive emissions by using emission control equipment.

In such cases, we recommend plant operators and plant builders to use industrial valves with special valve head units and sealing systems that are type-tested according to ISO 15848-1 or meet the requirements of the TA-Luft amendment.

The valves from AS-Schneider meet the requirements of the new TA-Luft, which came into force on December 1, 2021 as the amended Technical Instructions on Air Quality Control. It sets stricter limits for pollutant emissions from plants requiring approval. The most important change in the

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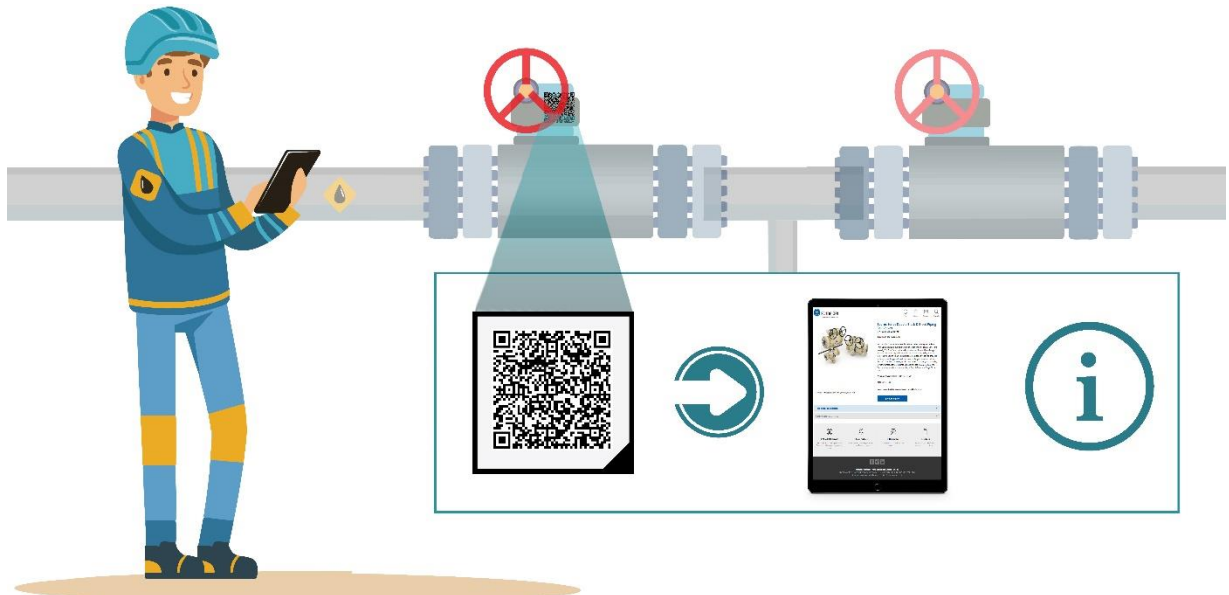
specifications is the adoption of the ISO 15848-1 standard, which clarifies how a valve is to be tested and specifies the parameters for classification. After the end of the transition period in 2025, valves must comply with this standard. For plants in the planning or installation phase, it is important to ensure that valves, pumps, compressors or even flange connections directly comply with the specifications of the TA-Luft amendment.

AS-Schneider is very experienced in this field and was actively involved in working out the amendment.

AS-Schneider at the Valve World 2022: Hall 03 | Booth B20

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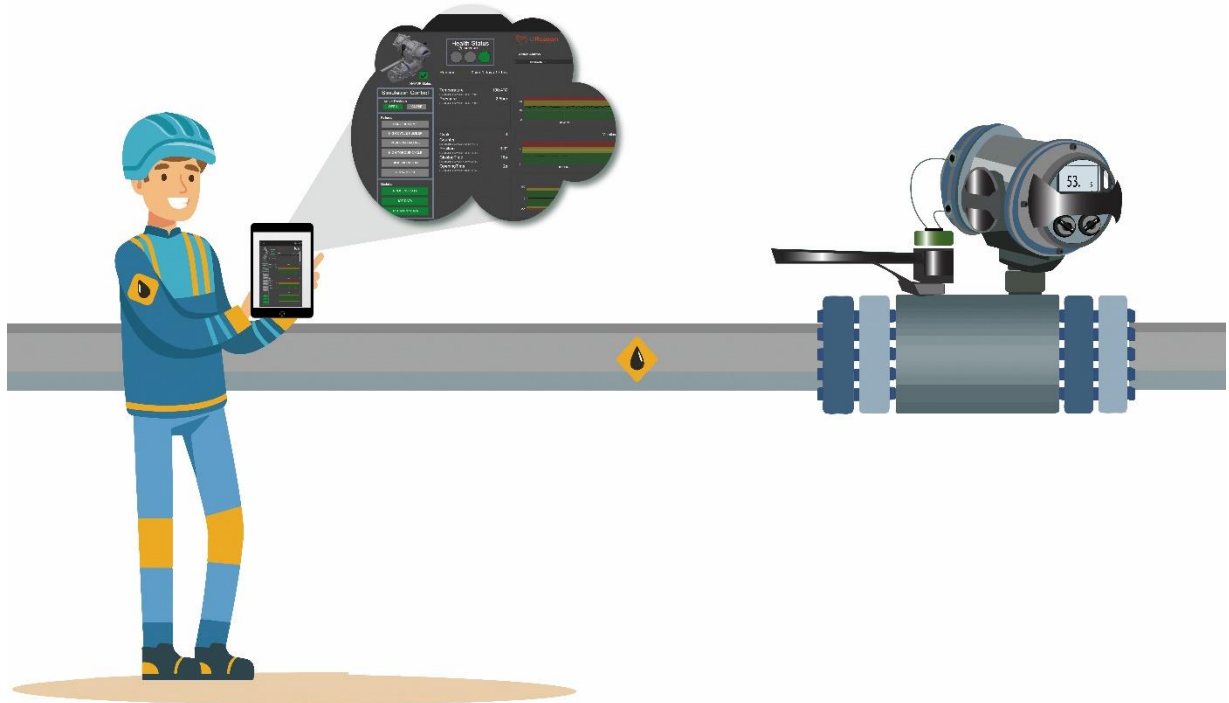
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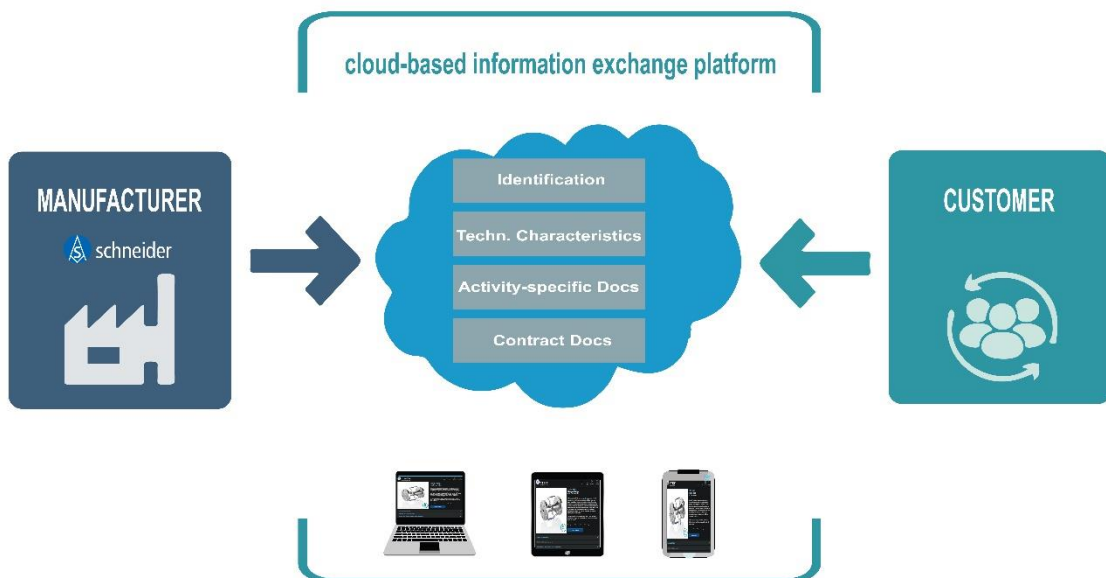
Picture 1: The Digital Product Pass provides easy access to static product information.

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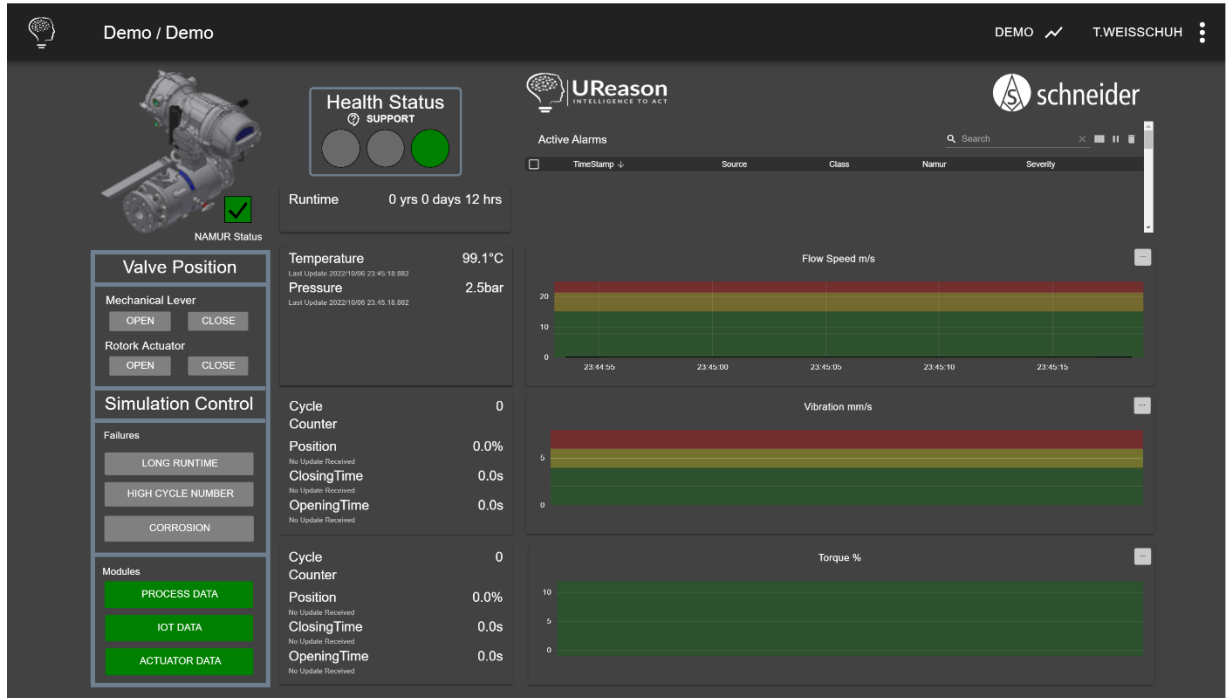
Picture 2: The Digital Valve Kit provides plant operators with remote access and remote control of their valves.



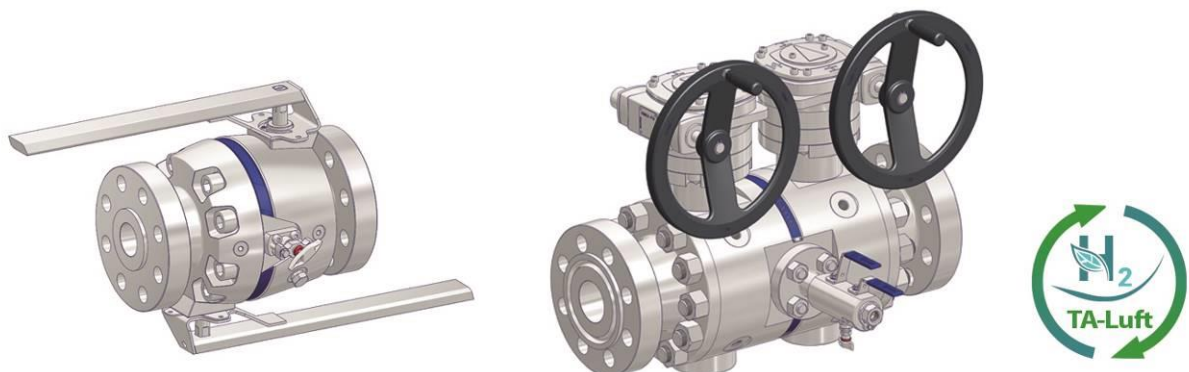
Picture 3: AS-Schneider norms the data according to VDI 2770 and provides the data package via 3rd platform (so-called cloud-based information exchange platform).

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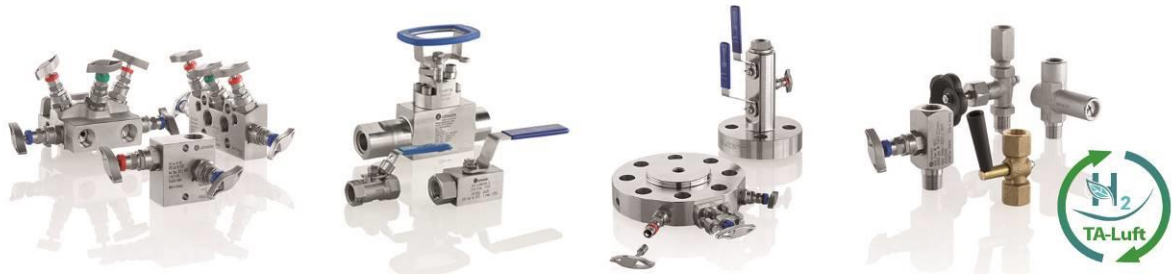
Picture 4: With the Digital Valve Kit, users can permanently check their valves via software to ensure that they are working properly.



Picture 5: Hydrogen and TA-Luft compliant DBB piping ball valves can also be used safely in natural gas applications with, for example, a 20% hydrogen blending.

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Picture 3: Hydrogen compliant instrumentation valves from AS-Schneider have been successfully used for hydrogen for more than 20 years and meet the requirements of the TA-Luft amendment.

Pictures by: Armaturenfabrik Franz Schneider GmbH + Co. KG

About AS-Schneider

AS-Schneider is one of the world-wide leading manufacturer of Instrumentation and DBB Valves. Our 145 years of experience are built upon the close cooperation with our customers and engagement in industry associations.

Our purpose is to help our customers to make their application more safe, efficient, and environmental friendly (e.g. by the fulfillment of the TA-Luft). Since 20+ years we offer valves supporting the media hydrogen. Our portfolio is suitable for up to 100% hydrogen service. On top, we support the digitalization of the process industry e.g. by our DIN SPEC 91406 (IEC 61406) compatible Digital Product Pass which provides easy access to technical product information or our Digital Valve Kit for remote access and remote control of the valves as well as the ability to monitor the current health status of the installed valves.

With our own subsidiaries in Romania, Singapore, Dubai (UAE), Houston (USA), India and professional partners in more than 20 countries worldwide, we are located everywhere our customers need us.