#### OGA 2023 - News

June 2023

AS-Schneider will present the Digital Valve Kit, valves for hydrogen applications, valves for usage acc. to fugitive emission regulations as well as the Schneider DirectMount System (SDMS) for natural gas measurement at the OGA 2023:

# Solutions for a sustainable and digital future

Nordheim (Germany) – June 15, 2023 – A highlight from the AS-Schneider Group at the OGA at booth 1203 in hall 01: Expanding on the static digital twin valve solution Digital Valve Plate (DVP), AS-Schneider presents the dynamic digital twin solution, the so-called Digital Valve Kit. The Digital Valve Kit, providing plant operators with remote access and remote control and health status indication of their valves. Furthermore, Thomas Weisschuh (Director Product Management and Innovation at the AS-Schneider Group) will give a technical speech on the topic: "Digital Valve Kit and Digital Name Plate – Opportunities and challenges digitalizing pure mechanical components".

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 (ISO 15848-1 and TA-Luft 2021).

#### Digital Valve Plate (DVP)

Every year, technicians install millions of mechanical components in brownand 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.

#### OGA 2023 - News

June 2023

Starting a few years ago, AS-Schneider has been offering its customers the so-called Digital Valve Plate for valves, which fulfills the requirements of 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 product information like technical specification, activity-specific docs, individual drawings, certificates, and spare parts.

Having joined the Digital Data Chain Consortium (<u>Digital Data Chain</u>) focused on the global chemical industry recently AS-Schneider will now move this to the next level by norming the data acc. to VDI 2770 and providing the data package via 3<sup>rd</sup> platform (so-called cloud-based information exchange platform). The first insights are shared by AS-Schneider at booth 1203.

But this is just the start – the aim is to also support the International Association of Oil&Gas Producers CFIHOS standard for information handover based on a similar approach.

#### Digital Valve Kit (DVK)

In addition to the static Digital Valve Plate, AS-Schneider has recently launched a dynamic solution to sense or capture data, the so-called Digital Valve Kit.

The Digital Valve Kit provides plant operators with remote access for their manual valves or by integration of an intelligent actuator also remote control. By adding sensors and complementing them with process related data also indication of the current health status of the installed valves can be given and an alert can be provided to the maintenance team for further measures at an early stage. The system is compliant with all industry-relevant standards (e.g. NAMUR standard) and can be adopted to customer specific requirements.

### OGA 2023 - News

June 2023

You can see a live demo of this at our booth 1203 at OGA 2023 or join Thomas Weisschuh's (Director Product Management and Innovation at the AS-Schneider Group) technical speech focusing on:

"Digital Valve Kit and Digital Name Plate – Opportunities and challenges digitalizing pure mechanical components"

#### Valves for hydrogen applications

AS-Schneider's valves have been successfully used for hydrogen for more than 20 years - all valve and manifold as well as the DBB ball valve designs combined with the option "hydrogen" 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.

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 could apply. Those will be covered with special valve head units (Fugitive Emission Standards acc. ISO 15848-1 or bellow sealed).

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

### OGA 2023 - News

June 2023

Valves for use with fugitive emissions - meets specifications of the ISO 15848-1 and 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 valve head units and sealing systems that are type-tested according to ISO 15848-1 or meet the requirements of the TA-Luft amendment.

Already the standard valve head units 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 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 OGA 2023: Hall 01 I Booth 1203

Join Thomas Weisschuh's technical speech focusing on:

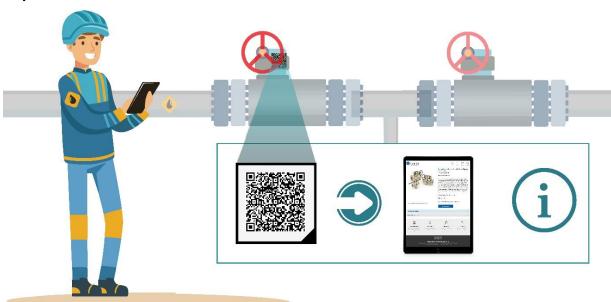
"Digital Valve Kit and Digital Name Plate – Opportunities and challenges digitalizing pure mechanical components"

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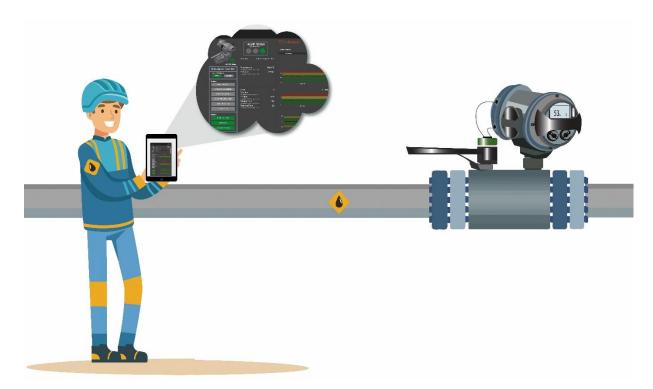


June 2023

#### Captions:



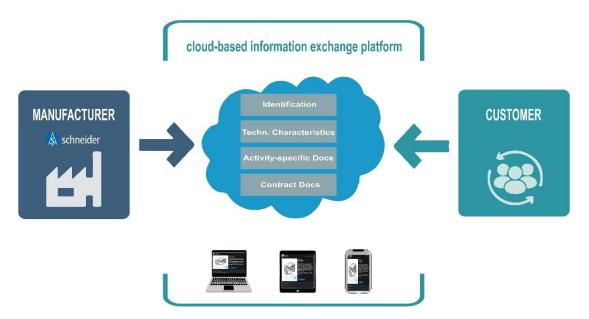
Picture 1: The Digital Valve Plate provides easy access to static product information.



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



June 2023



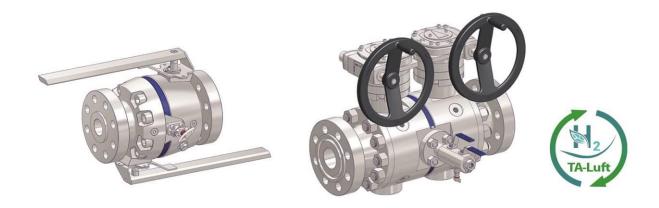
**Picture 3:** AS-Schneider norms the data according to VDI 2770 and provides the data package via 3<sup>rd</sup> platform (so-called cloud-based information exchange platform).



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



June 2023



**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.



**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



June 2023

#### **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 2021). 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 IEC 61406 compatible Digital Valve Plate 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.