

October 2020

Digital Product Pass of valves and manifolds:

Static digital twin functionality for Valves and Manifolds

Nordheim (Germany) – 01 September, 2020 – The Armaturenfabrik Franz Schneider GmbH + Co. KG (shortly: AS-Schneider Group) provides for free a new Technical Service Platform – the Digital Product Pass for Valves and Manifolds (shortly: DPP).

The E Series Valves and Manifolds manufactured by the AS-Schneider Group are now marked with an unique QR-code. That QR-code provides easy access to static product information like material properties, certificates and physical dimensions via CAD drawings. It also includes operating and installation instructions or spare parts or replacement information.

Digital twin of mechanical components

The Industrial Internet of Things (IIoT) is getting more and more traction. The IIOT promises to transform processes of the industry. It demands the securing and availability of far higher amounts of data, at far greater speeds. Often the data is moved into cloud for big data processing. Connectivity and scalability are mandatory.

OEMs, EPCs, and end-users that have embraced the IIoT have seen significant improvements in respect of time, cost savings, efficiency, safety, and profitability. Experts expect this trend to continue and even accelerate.



October 2020

With all the enthusiasm, we often ignore one fact. Engineers don't only build process systems out of intelligent, digital, and communicative devices. Technicians install millions of items of technical equipment each year into green or brownfield applications. A big chunk are pure mechanical components like valves and manifolds. For a holistic system view, we need to include those components into the digital twin, too.

Such a system needs secure, biunique, and standardized IT based identification. It will offer invaluable benefits to both owners/operators and OEMs.

Unique product ID

The unique ID provides easy access to static product information of the OEM like material properties, certificates and physical dimensions via CAD drawings. It also includes operating and installation instructions or spare parts or replacement information. Operators link this information into their respective asset and operation management system. This system adds value to many project phases. It results in:

- More straightforward planning and installation via the mechanical properties of the product
- ✓ Automated error free equipment identification at the incoming good inspection and during the field installation
- ✓ Easier and faster maintenance and repair cycles. This is possible due to direct access to spare parts or replacement units
- The environmentally responsible disassembly and disposal. This process is possible because all material properties and disposal guidelines are at hand.



October 2020

Standards and regulations

The DIN SPEC 91406 released at the end of 2019 supports the implementation of such a system. It offers a clear standard for the automatic identification of physical objects. Users can also identify information on physical objects in IT systems, particularly IoT.

Digital Product Pass

Since 2019 AS-Schneider Group has worked on the implementation of the Digital Product Pass. This digital pass is now available for one of the high volume portfolios - the E-Series Valves and Manifolds.

During the agile development, the AS-Schneider Group evaluated different technologies and approaches in close cooperation with their valued customers.

- RFID vs. NFC vs. printed code
- App vs. Landing Page
- Duration of data storage
- a.s.o.



October 2020

Lasered QR-code

The final decision was to laser a 2D-code in the form of a QR-code onto the product. The serial number appears on top in plain text underneath.

This kind of product identification offers many benefits to the end-user:

- ✓ No temperature limitations
- Readable also without a supporting device like mobile device or 2D reader. A pen and paper are enough.
- ✓ Robust and proven marking method (laser printing)

Digital Technical Service Platform

If the end-user has such a valve or manifold with QR-code in his hand or installed in his plant, he can now access the product information very easy. The access is straightforward. Scan the QR-code on the product with any QR-code reader on the smart device. Or, he can enter the plain text serial number lasered on the product on <u>www.qr4v.de</u>



October 2020

The DPP Service Platform offers the end-user access to:

- ✓ Product photo and description
- ✓ Product details including date of production
- ✓ Material properties
- ✓ Manuals
- ✓ Certificates (only after login)
- ✓ Drawings (only after login)
- ✓ Contact form
- ✓ Partially prefilled "request for offer" form for certificate, accessories, product (re-order)

Want to give it a try? Enter the sample serial number **SC-08-19-UT606001** on <u>www.qr4v.de</u>

Or, scan the QR-code below:



Scope: 4,757 characters including spaces



October 2020

Captions:



Picture 1: Process description of the Digital Product Pass.



Picture 2: Static digital twin functionality for valves and manifolds.

Press contact:

Armaturenfabrik Franz Schneider GmbH + Co. KG Anastassija Kinstler - Marketing and Public Relations Bahnhofplatz 12 - 74226 Nordheim - Deutschland/Germany Tel. +49 7133 101 187, Fax +49 7133 101 160 a.kinstler@as-schneider.com, www.as-schneider.com



October 2020



Picture 3 Enter the sample serial number **SC-08-19-UT606001** on <u>www.qr4v.de</u>. Or, scan the QR-code lasered on the prodct.



Picture 4: Access to DPP Service Portal: Simple scan the QR-code on the valve or manifold.

Press contact:

Armaturenfabrik Franz Schneider GmbH + Co. KG Anastassija Kinstler - Marketing und Public Relations Bahnhofplatz 12 - 74226 Nordheim - Deutschland Tel. +49 7133 101 187, Fax +49 7133 101 160 a.kinstler@as-schneider.com, www.as-schneider.com



October 2020

Pictures by: Armaturenfabrik Franz Schneider GmbH + Co. KG

About AS-Schneider

The family-run company, AS-Schneider, was founded in 1875 and with over 350 employees, is one of the leading manufacturers of Instrumentation Valves, Manifolds and Double Block & Bleed Valves worldwide. In the market segment for Large-Bore Diesel Engine Valves such as those used in marine propulsion and the generation of electricity, AS-Schneider is even the world market leader. With our own subsidiaries in Romania, Singapore, Dubai (UAE) and Houston (USA) and professional partners in more than 20 countries worldwide, we are located everywhere our customers need us.

Press contact:

Armaturenfabrik Franz Schneider GmbH + Co. KG Anastassija Kinstler - Marketing und Public Relations Bahnhofplatz 12 - 74226 Nordheim - Deutschland Tel. +49 7133 101 187, Fax +49 7133 101 160 a.kinstler@as-schneider.com, www.as-schneider.com