Product Information

May 2022

AS-Schneider is committed to Power-to-X technologies:

Expert interview: "No energy transition without hydrogen"

Nordheim (Germany) – May 26, 2022 – Power-to-X technologies (P2X) are considered the favored solution in the energy industry when it comes to becoming independent of fossil fuels. In 2018, the German engineering association (VDMA) founded the platform Power-to-X for Applications (P2X4A) to address the specific challenges of P2X projects. Valve manufacturer AS-Schneider is a member of this network and wants to actively shape climate change. Björn Bofinger, hydrogen consultant at AS-Schneider, explains in an interview how the VDMA P2X4A network supports mechanical and plant engineering in the topic of P2X applications.

The principle of Power-to-X technology is simple: renewable electricity from wind, water or sun as primary energy is converted into an energy carrier. "In this way, we absorb fluctuations and increase the flexibility of grid management," explains Björn Bofinger, who has been part of the AS-Schneider family for 16 years and is involved in the VDMA network "Power-to-X for Applications". The platform supports mechanical and plant engineering companies in overcoming the challenges of P2X applications. "Hydrogen plays an important role in reducing greenhouse gas emissions in Germany. At the same time, P2X and hydrogen processing technologies are at an early stage of research. Both scenarios present us with an exciting puzzle that we can help solve together," Bofinger explains.

The VDMA's central, cross-industry information, communication and cooperation portal serves the entire P2X community. It integrates all relevant stakeholders and key players involved in the value chain. These include developers of production processes, manufacturers of synthetic

energy and raw materials that use P2X technologies, and end users. Bofinger adds, "The P2X network has now grown to over 60 companies in Germany, Austria and Switzerland. The number is growing, and we are still reaching more engineers in Europe as a result." The members' activities revolve around three goals: Promote a holistic and technology-open approach to the transformation of energy systems, raise public awareness of environmentally sustainable energy use and mobility, and identify new trends and opportunities to further reduce greenhouse gases.

Hydrogen as an energy carrier

Hydrogen has emerged as a suitable candidate for the seasonal storage of renewable energy. It is also one of the cleanest and safest energy carriers available. The simplicity of the molecule and its ability not to burn into CO2 are ideal conditions for P2X under Power-to-Hydrogen (P2H2). In this process, hydrogen is created through electrolysis - water molecules are broken down into oxygen and hydrogen by applying electricity. "The cost is lower with electrolysis than with other processes. That's why it became the backbone of P2H2. Research to improve efficiency, reliability, and scalability, however, is still ongoing," Bofinger explains.

The separated hydrogen serves various purposes, for example as fuel for electricity generation or as industrial feedstock. Production is usually ready for immediate use. In the long term, hydrogen must be stored in gaseous or liquid form for further transport. But the energy carrier also has other sought-after properties: it can be converted into methane, synthesis gas or liquid fuels. A great combination to displace fossil fuels in the heat, transport, and industrial sectors.

Björn Bofinger sums up: "Mechanical and plant engineering is a crucial sector for climate protection, which is why we are exploiting its potential. Our goal in the network is to guide manufacturers and users toward efficient and emission-reducing technologies. Supporting the complex "energy transition" process is the crowning achievement.

For more information on this topic, see the interview with Björn Bofinger (Link).

Scope: 3,934 characters including spaces

Captions:

Image 1: Without hydrogen and its derivatives, there can be no energy transition. At the same time, mechanical and plant engineering is a crucial industry for climate protection.

Pictures by: Armaturenfabrik Franz Schneider GmbH + Co. KG

About Björn Bofinger

Björn Bofinger has been with the AS-Schneider Group for almost 16 years and has successfully managed sales for the Western Europe business unit for the past three years. He has a broad technical knowledge in the areas of instrumentation and double block & bleed valves and their applications. His great passion belongs to the topics of new technologies, innovation, and design thinking. Besides being a member of the AS-Schneider family, Björn Bofinger is also a member of the VDMA network "Power-to-X for Applications".

About AS-Schneider

The family-run company, AS-Schneider, was founded in 1875 and with approx. 400 employees, is one of the leading manufacturers of Instrumentation and Double Block & Bleed Valves. 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), Houston (USA), India 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 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