

Press and IR Release

H2Giga hydrogen flagship project

Schaeffler develops new technologies for the industrialization of hydrogen production

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- Schaeffler is the consortium lead for the sub-project “Stack Scale up – Industrializing PEM Electrolysis” of the H2Giga hydrogen flagship project
- The sub-project aims to develop new, scalable technologies and production processes for PEM-low-temperature electrolysis stacks
- Schaeffler’s expertise in production technology and electrochemistry is a decisive success factor in this growing market

The energy chain of green hydrogen is a pathway to a carbon neutral, sustainable future. Consequently, it offers significant potential in the fight against climate change. Schaeffler excels in technologies that can be used at both ends of this chain: hydrogen use in fuel cells, and hydrogen production by means of electrolysis. “One of the key milestones along the road to achieving a clean energy chain based on green hydrogen is the ability to produce hydrogen on an industrial scale,” said Dr. Stefan Spindler, CEO Industrial at Schaeffler and a member of Germany’s National Hydrogen Council. “Thanks to its technological capabilities, Schaeffler is well positioned to act as a strategic partner at many stages in this process, for example by providing products for electrolysis stacks.”

Hydrogen strategic business unit in Industrial division

The huge opportunities offered by green hydrogen feature prominently in Schaeffler’s Roadmap 2025 strategic blueprint. As an integrated automotive and industrial supplier, Schaeffler is able to leverage collaboration and synergies across multiple disciplines to develop and produce technologies for the hydrogen industry.

Schaeffler’s Industrial division has a Hydrogen strategic business unit that brings together and coordinates all of the division’s various hydrogen activities. “We are a long-standing provider of components and services that are integral to the reliable and cost-effective production of renewable energy, particularly wind energy,” said Bernd Hetterscheidt, head of Schaeffler’s Hydrogen strategic business unit. “This means we are already very closely aligned with the systems that generate a major share of the green electricity used to make hydrogen by electrolysis. Our strong relationships with customers in this area, combined with our established expertise

in rapidly scalable production systems and electrochemistry, are decisive factors to be successful in the market.”

H2Giga: Industrializing Water Electrolysis

Over 130 companies and research institutions are involved in H2Giga, a hydrogen project that has received around 500 million euros of funding from Germany's Federal Ministry of Education and Research (BMBF). The objective of the project is to develop systems and methods for the industrial production of electrolyzer systems and components needed to make green hydrogen widely available and cost effective. Schaeffler is acting as the consortium lead for one of the sub-projects, **“Stack Scale up – Industrializing PEM Electrolysis”**. Comprising nine partners from industry and research, the sub-project aims to fast-track the development of stack technologies and large-series production processes for low-temperature electrolysis core components. In this project, Schaeffler's core competencies in materials engineering, materials forming, surface technology and electrochemistry will play a decisive role in the development of new products and solutions for hydrogen technology. Moreover, its expertise in industrialization will help to translate the resulting innovations rapidly into large-series production.

Schaeffler Group – We pioneer motion The Schaeffler Group has been driving forward groundbreaking inventions and developments in the field of motion technology for over 75 years. With innovative technologies, products, and services for electric mobility, CO₂-efficient drives, chassis solutions, Industry 4.0, digitalization, and renewable energies, the company is a reliable partner for making motion more efficient, intelligent, and sustainable – over the entire life cycle. The Motion Technology Company manufactures high-precision components and systems for drive train and chassis applications as well as rolling and plain bearing solutions for a large number of industrial applications. The Schaeffler Group generated sales of EUR 16.3 billion in 2023. With around 84,000 employees, Schaeffler is one of the world's largest family-owned companies and one of Germany's most innovative companies.

Schaeffler's core competencies in materials engineering, materials forming, surface technology and electrochemistry will play a major role in the development of new products and solutions for hydrogen technology.

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Dr. Stefan Spindler, CEO Industrial at Schaeffler and German National Hydrogen Council member: “Thanks to its technological capabilities, Schaeffler is well positioned to act as a strategic partner at many stages.”

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