

# WORKING TOGETHER TO MAKE HYDROGEN HAPPEN.



SCHMIDT KRANZ GROUP



## H2-WORLD OF SK GROUP



hydrogen.sk-group.com

As a family-run holding company in the 4th generation, Schmidt Kranz Group has been working with hydrogen for over 20 years. While in our founding days, in 1885, the focus was almost exclusively on the mining industry and raw material processing, we are now also active in high-pressure technology and automation, combining our knowledge with hydrogen applications in these industries. We have significantly focused on the hydrogen value chain, from production to refueling for the following reasons:

1. We see hydrogen as a necessary complement to other technologies (e.g. batteries) for us to have any chance of achieving climate goals.
2. As an energy carrier, hydrogen can technically already replace fossil energy carriers today.
3. The use of hydrogen is already economically viable in some areas (e.g. bus transportation) and will revolutionize more applications with increasing CO2 costs.
4. Locally and globally, hydrogen will be available in sufficient quantities in the long term, due to the availability of renewable energies.

Building on Maximator's high-pressure technology and the experience of the MAT Team in Vienna, we were able to elevate hydrogen refueling stations to a new performance level. At the same time, we continued to focus on the lifecycle of these solutions and transferred this business-area to Maximator Hydrogen. Maximator VETEQ is now also an independent company, delivering highly complex testing systems for hydrogen containers to its customers worldwide.

At the same time, FEST was able to combine fifty years of experience in the automation sector with its know-how for rectifiers and iGas energy's product range to scale up its production of PEM-electrolyzers. Integrated turnkey hydrogen solutions are also part of FEST's repertoire, while iGas energy now is actively engaged in the utilization of (liquid) organic residues for hydrogen production.

At SK Group, our strength lies in uniting individual teams and companies, then directing our focus towards the development of hydrogen products that result from this collaboration. Through further investments, we can now cover a significant part of the hydrogen value chain: from the production on green hydrogen using renewable energies, to the development and production of series testing systems for hydrogen containers, to refueling and filling at our hydrogen refueling stations. Above all, we aim to accompany and support our customers in the application of our products beyond their lifecycle.

Our goal, as a united group of specialists, is to establish hydrogen already today, as the energy carrier of the next generation.



Mortimer Glinz, Managing Director in the 4th generation, has been managing the SK Group since 2016

# 3 QUESTIONS TO THE MANAGING DIRECTORS OF SOME OF OUR H2 CHAMPIONS



Mathias Kurras  
Maximator Hydrogen, Nordhausen

## What does Maximator Hydrogen GmbH do?

Maximator Hydrogen is a leading provider and developer of hydrogen refueling solutions and manufacturer of complete H2 refueling systems. As a fast and efficient partner for the planning, construction and operation of hydrogen infrastructures in road, rail and marine transport, Maximator Hydrogen GmbH offers highly reliable and modern hydrogen refueling stations from a single source, enabling scalable projects for your customers through modular systems.

## What technologies and market launches are you currently working on?

We are currently working on our expanded MAX Compression System 2.0, the new MAX Dispenser 1.5 and the MAX Mobile Refueler, a mobile H2 refueling solution for construction and agricultural machinery.

More information:  
[www.maximator-hydrogen.de](http://www.maximator-hydrogen.de)



## What is your company's main focus for the coming years?

Our focus over the next few years will be on rolling out our Max Compressor 2.0 technology, which enables larger volumes to be filled per service station without the need for intermediate storage. This will significantly reduce the costs for operators per refueling in the medium term. With this high-performance and safe technology, we are contributing to the long-term establishment of hydrogen technology for mobility solutions that are genuinely Co2-free - our contribution to the 1.5 °C target.



Matthias Authenrieth  
FEST GmbH, Goslar

## What does FEST GmbH do?

With over 50 years of experience in the implementation of industrial processes, FEST today develops, manufactures and supplies electrolyzers and integrated hydrogen solutions for customers in the mobility, process industry and energy sectors. Our aim is to deliver technologically mature and reliable systems and thus make a sustainable contribution to the energy transition.

## What technologies and market launches are you currently working on?

We are currently further developing our modularized and PEM-based electrolyzers in container design for scaling up to 50 MW. In complete industrial solutions, we are expanding these with corresponding units for storing, compressing and using hydrogen.

More information:  
[www.fest-group.de](http://www.fest-group.de)



## What is your company's main focus for the coming years?

We will move into our new company headquarters in Goslar in 2024. We will then be able to deliver 250 MW of highly standardized electrolyzers per year. We are focusing on our new 5/10MW platform for rapid scalability of market requirements and are working on comprehensive overall solutions from energy supply to hydrogen production and commercial use. We are developing new solutions to increase efficiency, such as the use of optimized components and heat recovery, with an open approach to technology.



# 3 QUESTIONS TO THE MANAGING DIRECTORS OF SOME OF OUR H2 CHAMPIONS



Dr. Alexander Müller & Carl-Leonard Glinz  
Maximator GmbH, Nordhausen

## What does Maximator GmbH do?

As a manufacturer of gas compressors and compressor systems (up to 2,400 bar) as well as valves and fittings (up to 10,500 bar), we offer one of the most comprehensive portfolios for the pressurization and handling of hydrogen. We are a pioneer in the field of high-pressure technology and have been offering our customers innovative solutions for hydrogen compression for more than 20 years.

## What technologies and market launches are you currently working on?

In addition to our gas compressors and valves, we have further developed our modular compressor systems over the past year. Depending on the flow rates, either pneumatic or electro-hydraulic drive systems are used to achieve a high level of efficiency. We are also working on innovative solutions in the area of our high-pressure valves and screw connections in order to offer durable and safe solutions for a sustainable hydrogen future.

## What is your company's main focus for the coming years?

We want to continue to reliably supply our customers with innovative and sophisticated product solutions in order to facilitate the expected massive expansion of the hydrogen industry.

More information:  
[www.maximator.de](http://www.maximator.de)

**MAXIMATOR®**  
maximum pressure



Carl-Leonard Glinz  
Maximator VETEQ GmbH, Iserlohn

## What does Maximator VETEQ GmbH do?

We develop and produce series testing systems for hydrogen containers, including for mobility solutions (cars, trucks). Since 2022, we have been operating as a spin-off unit of Maximator as an independent company under the name Maximator VETEQ in Iserlohn.

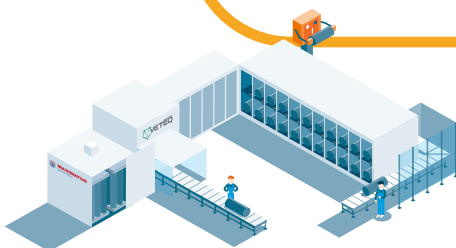
## What makes your system technology so special?

Our automated testing systems for hydrogen pressure vessels are simple and highly efficient for the customer thanks to our sophisticated modularization. Output quantities of 30,000 - 50,000 containers/year are possible.

## What is your company's main focus for the coming years?

Our main focus is on the further development of our fully automated test benches for hydrogen pressure vessels for passenger cars, light-duty vehicles, heavy-duty vehicles and off-highway vehicles. A major goal is to reduce testing costs for our customers as well as test and cycle times. Together with the market and our customers and partners, we want to grow sustainably in order to exceed the requirements of the future.

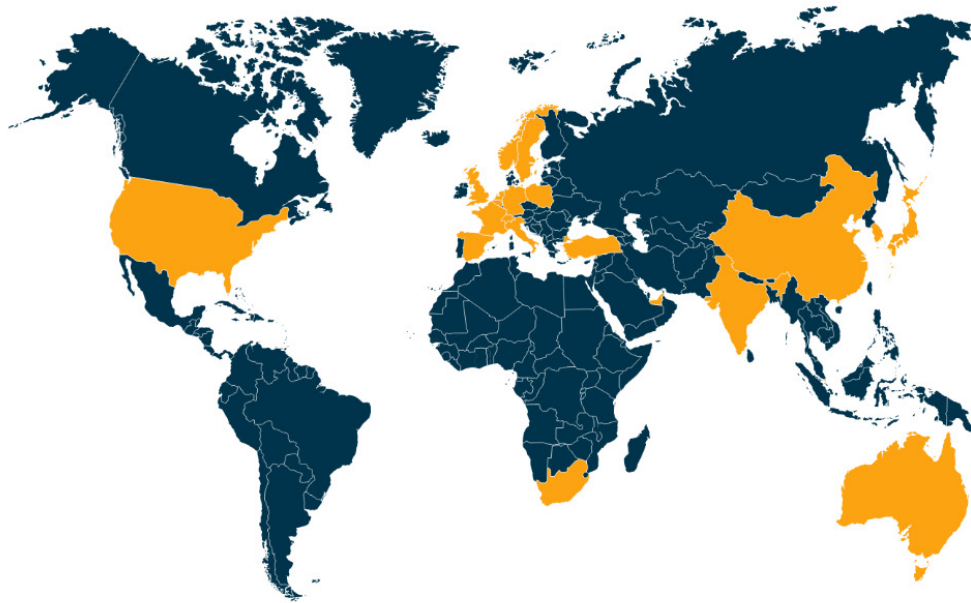
More information:  
[www.maximator-veteq.de](http://www.maximator-veteq.de)



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MAKE HYDROGEN HAPPEN.**



## **WHERE YOU CAN FIND US**



- **HYDROGEN COMPETENCE FOR 20+ YEARS**
- **SPECIFIC HYDROGEN EXPERTISE**
- **HYDROGEN SOLUTIONS THROUGH COMBINATIONS**

03/2024

**More informationen:**  
**[www.sk-group.com](http://www.sk-group.com)**



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