



HIGH-PERFORMANCE SOLUTIONS FOR **HYDROGEN**

Hydrogen is rapidly developing into a central energy source of the future. In a world demanding sustainable, environmentally friendly, and efficient solutions, hydrogen plays a key role - whether in energy supply, mobility, or industrial applications. As a leading company in the production of metal wire mesh, filter elements, and customized filtration systems, PACO is your experienced partner for high-quality solutions in this promising industry sector.

Our solutions for the hydrogen sector

The PACO Group offers an extensive product range precisely tailored to the requirements of the hydrogen industry. Our solutions make a crucial contribution to the efficiency and safety of your applications.

Electrolysis

Efficient Separation of Hydrogen & Oxygen



Electrolysis is a key process for producing green hydrogen. PACO supplies high-precision metal wire mesh used as electrodes in electrolyzers. These meshes offer excellent electrical conductivity, high corrosion resistance, and optimal porosity for maximum performance and durability. They serve as carrier material in the diaphragm and as Porous Transport Layer (PTL) in PEM electrolyzers. By selecting the appropriate weave pattern, we optimize cross-flows within the mesh. We manufacture using stainless steels, nickel, Crofer and special materials, with additional coatings available through our partners when needed.

Fuel Cells

Maximum Efficiency & Durability



Fuel cells efficiently convert hydrogen into electrical energy. PACO metal wire meshes play a crucial role in gas distribution and current conduction in fuel cells. They ensure an even distribution of reaction gases and provide high electrical conductivity. This increases efficiency and extends the lifespan of both low- and high-temperature fuel cells.

Transport

Safe & Efficient Hydrogen Transport



Transporting hydrogen requires special safety and efficiency measures. PACO develops metal wire meshes and filtration systems specifically designed for the safe transport of compressed hydrogen. Our products ensure reliable filtration and help minimize contamination, ensuring that hydrogen reaches its destination in optimal condition from production to use. Our coalescence filters remove the finest liquid droplets from the gas stream, protecting against moisture and other impurities that could compromise the quality and safety of hydrogen during transport and use.

Gas Filtration

Purity for Maximum Efficiency



Hydrogen filtration is essential to avoid contamination and ensure the performance and safety of systems. PACO develops filter elements specifically for gas filtration in hydrogen production and use, ensuring consistently high purity and protecting key components. This ensures that hydrogen processes run smoothly and efficiently.

PACO GROUP



Founded in 1953, the **PACO Group** has continuously evolved from a traditional metal weaving company into one of the most powerful providers in the field of metallic filter media and the end products made from them - all "Made in Germany." With over 70 years of experience and expertise, PACO develops innovative filtration technologies that not only offer top performance and efficiency but also conserve resources and minimize the ecological footprint. Together with **HETA Verfahrenstechnik**, a member of the PACO Group and a globally operating engineering specialist and manufacturer of complete, highly specialized systems for demanding filtration and separation solutions, the PACO Group is the only manufacturer in Germany that offers metal wire mesh, filter elements and process technology from a single source.

Everything from one source

PACO supports you at every stage of your hydrogen projects, from conception to production and commissioning. We offer a comprehensive range of solutions that cover all aspects of your requirements:

Engineering

Our engineering expertise enables us to develop customized solutions for hydrogen production and utilization. From concept to implementation, our engineers are by your side to efficiently realize your projects. Through collaboration with leading research institutes, we guarantee innovative, future-proof solutions at the cutting edge of technology.

Metal Wire Mesh

PACO produces high-precision metal wire mesh, which plays a key role in electrolysis and fuel cells. Our mesh ensures excellent conductivity, gas distribution, and chemical resistance, all of which are essential throughout the hydrogen process chain. As a weaving company, we can tailor the mesh to your individual requirements.

Filter Elements

Our filter elements ensure safe hydrogen filtration at all stages, from production to end-use. They are designed to efficiently remove contaminants and ensure the smooth operation of your systems. With robust construction and high resistance to temperature and corrosion, they are ideal for demanding applications. Our filters are available in various materials and pore sizes, offering customized solutions for your filtration needs.

Systems & Plant Construction

We not only offer individual components but also complete filtration systems and customized plant solutions. The filtration systems of our subsidiary, HETA Verfahrenstechnik, are specifically designed to meet the challenges of hydrogen filtration. Unexpected pressure spikes can cause blockages or system shutdowns, so filters and sealing materials must be precisely aligned with the process, pressure, and temperature.

Documentation

Smooth operation and compliance with all regulatory requirements demand precise and comprehensive documentation. PACO provides detailed documentation for each product and system upon request, ensuring that you have all the necessary information to successfully pass audits and quality controls.

Contact

