

New Products from the ELAFLEX HIBY Group

The challenges for the chemical and process industry have become more extensive and multi-layered than years ago. The hydrogen economy, CO₂-neutral production as well as new bioprocesses and technologies develop even greater potential in the future. The ELAFLEX HIBY Group, as a system supplier of hose assemblies, couplings, nozzles and expansion joints, has been watching this development for some time.

At the forthcoming Achema 2022 show in Frankfurt, we will be presenting new technical solutions on the **Elaflex stand C94** in **hall 8.0**. for the transfer of H₂ Hydrogen, LNG, chemicals and other media.

Solutions for H₂ Hydrogen for Low-Pressure Range

The process industry already uses hydrogen in many ways. Among other things, certain substances are hydrogenated with the help of hydrogen or pure hydrogen is fed into fuel cells to generate energy.

In order to run these and other processes safely and cleanly, flexible connections are needed.

With **H₂ Hydrogen Hoses for the low-pressure range**, Elaflex has developed connection hoses for the transfer of 100% hydrogen. The robust hose construction with 20 bar (2,0 MPa) operating pressure has a very low permeation, evidenced by an independent notified body. The H₂ hoses in sizes DN 13 - 50 are available with crimping ferrules, or SPANNLOC or SPANNFIX clamps.



For pumps and compressors used to pump hydrogen, the new **ERV-H2+ rubber expansion joint** is offered for the mechanical decoupling of pumps and pipelines. ERV-H2+ has a low permeation and is therefore suitable for the transfer up to 100% hydrogen as well as for 100% methane or other mixtures, so-called 'Hythane'. The operating pressure is 25 bar (2,5 MPa).

Solutions for Compressed H₂ Hydrogen

For loading and unloading of hydrogen cylinders or the transfer of compressed H₂ hydrogen, Elaflex has expanded its product range to include **ball valves, check valves and quick couplings up to 1"** for the high-pressure range. Our equipment allows much higher flow rates than conventional H₂ refuelling components, suitable for operating pressure of 350 bar (35 MPa).

Meet us
Achema
Frankfurt, Germany
22-26 August 2022
Hall 8.0, Stand C94



Solutions for cryogenic and other gases

For cryogenic gases such as LNG, helium and oxygen, the **DCC Dry Cryogenic Couplings** and **CBC Breakaway Couplings** are available in sizes up to 10". The range for handling LNG has been extended. For this purpose, the new **N-LNG** coupling with **LNG 25 fill hose assembly** can be used. Additional in the scope of the LNG refuelling system is the **VC-LNG vent coupling** with **LNG 13 vent hose assembly** and the SB-LNG Safety Break.

Solutions for Chemical Plants

For the highest demands on hygiene and resistance to aggressive chemicals and solvents, Elaflex offers **ERV expansion joints with additional black, conductive PTFE lining**. The FDA conforming lining is suitable for applications in potentially explosive areas or with electrostatic charge. Depending on the application and medium, matching bellows with electrically conductive inner and outer lining are available.

ERV with PTFE Lining



Stainless Steel Hose Reel



Elaflex as a system supplier offers **Hose Reels ready-assembled with hoses, couplings or nozzles**.

For the chemical industry, stainless steel hose reels are available with a range of chemical hoses e.g. FEP, UTS, Polypal Clean and PTFE, suitable for various hose diameters from DN 50 (2") to 200 (8"). The dimension of the hose reel depends on the hose length and installation options. All hose reel types are available with different rewind mechanism: manual, spring-rewind, motorised (electrical, hydraulic or pneumatic).