



# DEHN protects.

WyRefueler from Wystrach

## Customer

**Wystrach**  
Customized solutions in high pressure

Wystrach GmbH

## Project overview

### Industry

Hydrogen

### Application

Concept development and implementation of the external lightning protection system for a mobile hydrogen fuel station.

### Hardware

HVI Lightning Protection system  
(Insulated lightning protection system for maintaining separation distances)  
Ex pipe clamp  
Equipotential bonding bar  
DEHNguard

# DEHN protects.

## WyRefueler from Wystrach



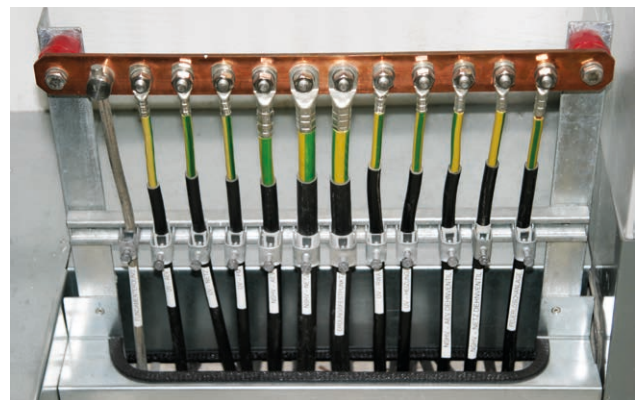
Wystrach is a full-service provider in the field of high-pressure solutions for the stationary and mobile storage of hydrogen and other gases. The product range includes stationary bundles, containers of a wide variety of sizes, tank systems for trains, buses and lorries, as well as storage solutions for, for example, power-to-gas applications and hydrogen fuel station solutions. In addition to in-house design and production, Wystrach offers complete service packages for installation, commissioning and maintenance and also provides support in relation to approvals. With more than 30 years of experience in the field of high-pressure storage equipment, the company has developed a special focus on quality and safety.

### Challenge

A hydrogen fuel station mainly consists of two components: the tank container and the fuel station. Both systems must be protected against lightning and surges in order to ensure seamless operation and to offer safety for people and the environment. When processing hydrogen, special requirements must be met, since hydrogen is more explosive than normal gases. In particular, functional lightning protection and equipotential bonding are indispensable for mobile hydrogen fuel stations.

### Solution

Due to the different Ex zones, choosing conventional lightning protection was not possible. The HVI system is suitable for use in hazardous areas. For the protection of the installations, the practice-proven modules of the HVI system were used for the isolated lightning protection. These meet all the requirements of DIN/IEC TS 62561-8 for components for an insulated lightning protection system. The HVI system ensured that safe operation, personnel and environmental protection and maximum system availability could be achieved.



### Benefits of the DEHN solution

#### The right solution for every application

- All from a single source: external lightning protection, surge protection, equipotential bonding, earthing
- Safe operation in hazardous areas
- Over 15 years of experience in the field of insulated lightning protection systems: an effective, tried-and-tested and long-lasting system.
- Cost reduction and installation time saving due to optimum design of the external lightning protection and equipotential bonding.
- Service: Technical support on site