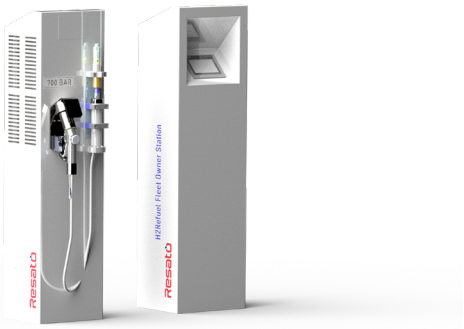
FOS 350/700 bar
H2Refuel Fleet Owner Station

Safe. Cost efficient. Maintenance friendly.



Refueling Pressure
350/700 bar

Maintenance
developed for easy maintenance

Flow Capacity
4 kg/h

▶ The H2Refuel Fleet Owner Station (FOS) is designed to provide fleet owners, governments, and entrepreneurs with a cost-efficient solution to hydrogen refueling of FCEVs with 350 and/or 700 bar. With its lean design costly components like accumulator storage and deep cooling of hydrogen prior to filling are avoided. The station concept is attractive for the development of a hydrogen mobility infrastructure requiring little capital investment when compared to full-sized stations. The FOS consist of three components: The compression compartment, the dispenser module, and the control panel. To warrant safe operation, this design allows for the separation of components from explosive areas close to the compression compartment. The Resato gas booster technology is integrated into the station to provide safe high pressure gas supply to the vehicle.

Benefits & Features

- Reliable filling is made possible by the use of a Resato hydraulic-driven gas booster with a flow till 4 kg/ hour at an outlet pressure till 700 bar.
- Flexible hydrogen supply via bottle rack system, tube trailer, electrolyzer or pipeline. Supply pressure range between 30 and 300 bar. Outlet pressure 350 or 700 bar.
- Small footprint: About only 16 m^2 floor space required exclusive bottle racks.
- To provide safety during refueling, the dispenser is equipped with a communicating nozzle.
- Supporting growth by simple relocation when network is expanding within two days using the station's forklift patches.
- Safe hydrogen gas compression due to separation of the gas chamber from the hydraulic section to avoid oil contamination.
- Dangerous situations caused by air traps inside the gas booster are prevented with a nitrogen flushing system

Application Areas

- Refueling of light vehicles
- Distribution centers with many forklifts and intensive use
- Refueling of trucks for dispatching companies
- Refueling of boats
- Refueling of cleaning vehicles
- Refueling of buses

MADE IN THE NETHERLANDS

YOUR HIGH PRESSURE EXPERT.

Technical Information

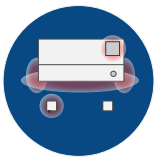
Compressor Module	
Dimensions (WxHxL)	1285 x 1650 x 2275 mm
Weight	± 1,500 kg

Dispenser Module 350/700 bar	
Dimensions (WxHxL)	406 x 1610 x 306 mm
Weight	± 80 kg

Operating Module	
Dimensions (WxHxL)	406 x 1610 x 306 mm
Weight	± 80 kg

General

Item	Specification
Outlet Pressure Range	350 or 700 bar
Inlet Pressure Range	30-300 bar
Flow Capacity Range	>4 kg/hr at supply pressure 300-50 bar >2 kg/hr at supply pressure 50-30 bar
Noise Level	±70 dBA
Temperature	-20° to 40° C environment
Power Supply	400V 3Ph/ 50 Hz 22KW 63A-C/30MA
Internet Connection (for VPN support)	Min. 512 kbps download / 256 kbps upload (RJ45) RJ-45 connector
Certifications	CE marked, ATEX certfied



Risk Assessment - ATEX

Hydrogen refueling stations have to be safe to use. Therefore, a common risk assessment is used that results in the certification. Our experience in the oil & gas industry gives us extensive knowledge in certifying our products for safety and reliability.

Hydrogen Supply

The hydrogen supply for the station is versatile. It is possible to connect gas bottles, a tube trailer, or an electroyzer to the station. The modular design of the gas booster makes a change in the supply at a later stage simple and cost-efficient.

Since 1991.

Resato is a Dutch provider of smart high pressure solutions with the aim to increase the productivity of its worldwide customers. We develop and manufacture waterjet cutting systems as well as components and systems for pressure testing, injection, and controlling up to 14,000 bars with the mission to meet and exceed the expectations of our customers. Since 2017, we are developing hydrogen filling solutions and high pressure equipment.

YOUR HIGH PRESSURE EXPERT.

Need more advice?
Contact EHL -
solutions@ehlsolutions.com

EHL GROUP
AUSTRALIA / NEW ZEALAND / OCEANIA