

EDmobile::H2

EDAG'S MOBILE H2 FILLING STATION

MOBILE HYDROGEN REFUELING & REFILL STATION



YOUR GLOBAL MOBILITY ENGINEERING EXPERTS

With the EDmobile::H2 for industrial applications, EDAG is supporting the development of the H2 infrastructure and making a further contribution to the transformation of transport towards sustainable mobility.

At the heart of the EDmobile::H2 are the concept and the design of the filling station, which factor in the intelligent use of the storage pressure of each of the storage tanks, with subsequent compression and decompression as needed.

The advantage: Energy-efficient refueling of the vehicles in the shortest possible time.

Tank (Pressure vessel) expansions, compressor cascading, active cooling modules and various methods of connection to H2 supply technologies complete the range.

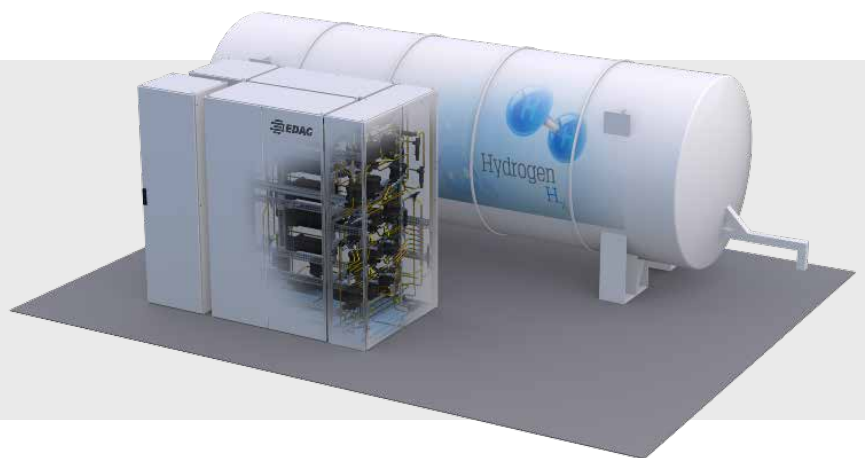
Special features:

- Reliable, fast & energy-efficient
- Compact dimensions / modular design
- Simple, autonomous operation possible
- Only Supplies required:
 - Compressed air
 - Electricity (230 V)
- H2 cylinder bundles are used as an intermediate storage system
- Automated alternating pressure flushing (nitrogen – hydrogen)
- Initial filling of, e.g. type 4 containers
- Electronically controlled pressure ramp of < 0.25 bar/min at 0 – 875 bar
- Gas recovery up to 875 bar inlet pressure (H2, N2)
- Pressure levels: 350 bar and 700 bar

Concrete applications

Mobile, flexible refueling of:

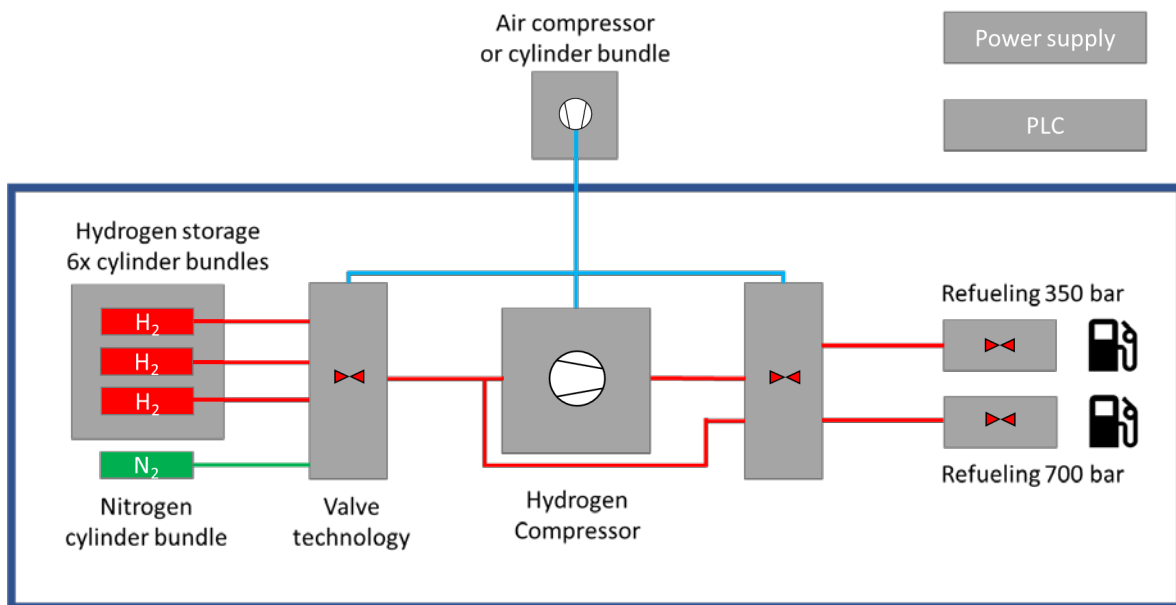
- Busses (350 bar)
- Commercial vehicles (350 / 700 bar)
- Passenger vehicles (700 bar)



Technical Data

Dimensions & weight	
Dimensions (length x width x height)	2450 mm x 1200 mm x 2400 mm (with roof)
Weight (empty, without gas storage tanks)	Approx. 1200 kg
Electrical power & compressed air supply	
Mains connection (Factory)	1 AC, 230 V, 50 Hz, 10 A
Compressed air (e.g. 300 bar cylinder bundles/compressor)	8 – 10 bar, max. 4500 NI/min (operating power)*
Ambient / operating temperature	-20°C to 40°C
Flow rates	
Average H2 flow rate at 700 bar	10 kg/h (Average value: overflow + compressor)
Average H2 flow rate at 350 bar	20 kg/h (Average value: overflow + compressor)
H2 inlet pressure	10 to 300 bar
H2 compressor performance	5 kg/h
H2 pressure ramp during initial filling (0 to 25 bar)	< 0.25 bar/min

Technical overview:



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We offer customised solutions for your application.

We look forward to discussing your individual project with you.

* depending on configuration