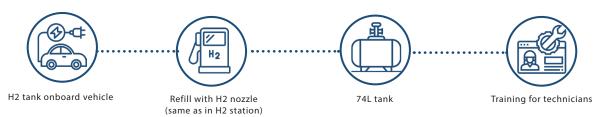


FLUIDIC BENCH

"A dedicated training tool for maintenance on hydrogen tanks"





Presentation

H2SYS and its partners have developed a fluidic bench dedicated to learn how to perform maintenance activities on integrated hydrogen tanks.

The bench represents the architecture of a tank system integrated in hydrogen powered machines and vehicles. The components are EC79/2009 and PED certified.

For training purposes and to meet safety requirements, the system operates with a hydrogen/nitrogen mixture. Interventions can be performed without ATEX risks.

The system is equipped with an electronic control unit (ECU) integrating the same operating logics as those used on vehicles.

Technicians will find standard equipment: Type 3 tank, tank head, EFV, TPRD, receptacle, pressure reducer...

The unit can even be refilled with a hydrogen nozzle (supplied as an option), just like in a hydrogen station.

Developed skills

- Identification of the main components of a H2 tank system and their respective functions.
- Measurement of pressure and temperature levels.
- · Lockout a tank from the cylinder head.
- · Performing leakage tests.
- Replacement of the fluidic line on the low-pressure part following bending plans.
- · Using and connecting double ring fittings.
- Understand the safety devices built into the tank block supervision board.
- Tank inertia.

Applications







Training centers



Piping activities

Benefits

Comparable with an H2 tank integrated in a vehicle

Operation with inert gas

R134 and PED approved equipment

Supply of consumables for training courses

Integrated automotive type electronic control unit

Refill with H2 nozzle

Technical data

TANK SYSTEM

Tank	H2 Tank Volume 74L
Туре	Туре 3
Operating pressure	350 bar
Tank approval	PED EC79/2009 R134
Refilling connection	Receptacle 35 MPa (350 bar) Compliant with SAE J2600:2002 40 micron filter and non-return valve
Interface	Available in 4 languages (EN - FR - DE - NL)
Bench sizes (H x W x D)	1000 x 1200 X 1500 mm (with transport cart)
Bench weight	125 kg

GAS CONNECTION (OPTIONAL)

Filling hose	3 meters Max. Operating pressure 413 bar
HP pressure regulator	Inlet 300 bar Outlet 0 - 200 bar Pressure gauge HP BP Nitrogen connection Outlet 1/4
Refilling nozzle	For H2 vehicle Complies with SAE J2600:2002 Protection of the connections Storage bracket

TOOL KIT (optional)

Bending case

Stainless steel tube

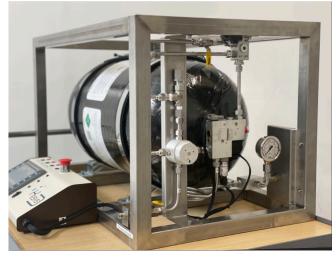
Tube deburring device

20 Double ring 1/4" fittings (2 per tube)

Bending plan

Bending machine 3/8"













DEVELOPPED IN COLLABORATION WITH









More information?
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