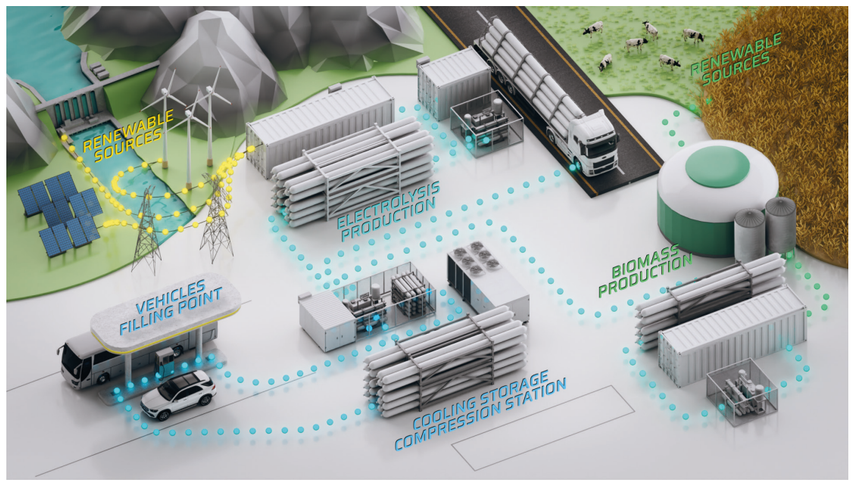
a company of CEDEM

All the services and solutions for the hydrogen distribution and production cycle in a single partner.



The skills and expertise of Petrolmeccanica and other companies in the Cedem consortium allow us to support our customers throughout the hydrogen production chain, with, for example:

- The installation of hydrogen production systems from renewable or conventional sources.
- Compression and storage systems that store hydrogen at pressures of up to 1000 bar, and can be sized according to customer requirements, such as the quantities of hydrogen to compress, and the required pressure and flow rates.
- Hydrogen filling stations and dispensers for light and heavy-duty vehicles.
- Cooling systems for pre-cooling the hydrogen before dispensing it at up to -40 °C and a pressure of 350 and 700 bar.

All images are inserted for illustrative purposes. Products may be subject to changes.

Would you like more information?

Call us at: +39 051 794 611

Write to us at: info@petrolmeccanica.it | cedem@cedem.it

PM SERVICE srl

Legal headquarters
Via Finlandia, 70 - 41122 Modena, Italy
Operational headquarters
Via Tolara di Sopra, 51 - 40064 Ozzano dell'Emilia (BO), Italy

PETROLMECCANICA.IT

a company of CEDEM

+39 059 316 4011
cedem@cedem.it

WWW.CEDEM.IT

PETROLMECCANICA

Products and services for the energy transition

HYDROGEN Solutions

H_2

PETROLMECCANICA.IT

a company of CEDEM

PETROLMECCANICA

a company of CEDEM

Successfully active for over 50 years, Petrolmeccanica has developed, produced and implemented services and solutions dedicated to fuel stations, from their design and construction to maintenance and supply of spare parts, becoming a benchmark in the fuel stations sector. Transparency, trust and continuity is the base in our relationships with customers and suppliers.

Today Petrolmeccanica is one of the leading producers that can also offer services and solutions for new hydrogen technologies, like dispensers, safety valves and a customised testing service.

International Organization for Standardization
ISO
9001:2015
Certificazione del Sistema di Gestione Qualità

Our hydrogen dispensers.

H35
Single Nozzle

General Specifications

Max. Flow rate: 7.2 kg/min
Maximum operating pressure: 437.5 bar
Temperature Class H_2: up to T40 (-40 °C<T<-33 °C)
Accuracy: OIML R-139 CLASS 2
MPE dispenser: 1.5%

H70
Single Nozzle

General Specifications

Max. Flow rate: 3.6 kg/min
Maximum operating pressure: 875 bar
Temperature Class H_2: up to T40 (-40 °C<T<-33 °C)
Accuracy: OIML R-139 CLASS 2
MPE dispenser: 1.5%

H35 - H70
Double Nozzle

General Specifications

Max. Flow rate H35: 7.2kg/min
Max. Flow rate H70: 3.6 kg/min
Maximum operating pressure H35: 437.5 bar
Maximum operating pressure H70: 875 bar
Temperature Class H_2 H35 and H70: fino a T40 (-40 °C<T<-33 °C)
Accuracy H35 and H70: OIML R-139 CLASSE 2
MPE dispenser H35 and H70: 1.5%

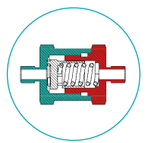
Our services, at your service.

New product developments

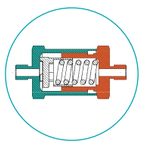
EFV Excess Flow Valves

Excess Flow Valves (EFV) are fitted in lines that supply hydrogen (gas or liquid) to dispensing dispensers in order to avoid product leaks in the event of a broken valve or stop the maximum set flow rate being exceeded in the case of a fault or malfunction.

Our EFV - Excess Flow Valves



VEF 1
Resistance to operating pressure 875 bar (for H70 dispensers)



EFV 2
Resistance to operating pressure 437.5 bar (for H35 dispensers)

How Excess Flow Valves work

1. Flow is interrupted by the fluid acting on the spring which presses on the shutter and keeps the valve open until the set maximum flow rate is exceeded.
2. Once the fault has been remedied, the valve resets automatically without needing to be reset manually by pressing a lever.
3. The maximum set flow rate is equivalent to 150% of the maximum dispenser flow rate, so from 3.6 kg/min up to 7.2 kg/min.

Services and solutions

THIRD PARTY TESTING

Petrolmeccanica can conduct tests in similar conditions to those in hydrogen filling stations.

More specifically, tests can be conducted with pure hydrogen at a high pressure (up to 1000 bar) and a low temperature (up to -40 °C).

We can therefore accompany customers throughout the test and development stages of projects and prototypes regarding individual components or complex systems for hydrogen filling stations.