

## HYDROGEN REFUELING STATION

### Portfolio

# DESIGN INNOVATION SERVICES

H2

J-J-J-J



The MADIC group hydrogen stations are designed to refuel any type of land or maritime vehicle, at 350 or 700 bar, at a public or private site.



### Innovation

Our hydrogen stations are scalable, connected, and available with 24/7 credit card payment.



Our teams handle the sizing, installation, commissioning, and maintenance of hydrogen stations.

### Hydrogen station

### + PRODUCT

- Payment facilitated by credit card or badge
- Adaptability of the station to scalable demand
- Service teams accustomed to the requirements of multi-energy distribution stations

### DESIGN

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Hydrogène

 $\cdot$  A Small / Medium / Large range of hydrogen stations for all mobility uses (road, maritime, rail)

 $\cdot$  Utilization of filling protocols (pre-cooling) recommended by SAE J2601 and EN 17127

• Simultaneous or back-to-back fillings to ensure optimal filling times (approximately 5 minutes for a passenger car/LCV at 700 bar and around 10 minutes for a bus at 350 bar)

 $\cdot$  Compliance with current regulations and requirements of legal metrology (OIML R139)

 $\cdot$  Scalable station design to reduce CAPEX and footprint

NERGIES

• Risk analyses and use of specific equipment to ensure station safety (UV/IR cameras, leak detectors, pressure relief valves, etc.)



ClubVision

Hydr@gène





### INNOVATION

 $\cdot$  Payment facilitated by credit card, badge or QR code through our payment terminal, a market leader in the French gas station industry

 $\cdot$  OPEX optimization through the use of our innovative compressor

• Remote monitoring through our MagView supervision tool to

facilitate interventions and predictive maintenance operations • Anticipation of the future F-GAS 2030 standard through the use of clean refrigerants to reduce the station's environmental impact

#### SERVICES

• Installation, commissioning and multi-level maintenance provided by the group's teams

• Hydrogen station training facility in Saint-André-de-Cubzac (33)

• 8 branches and 450 technicians across Europe, trained in the

risks and requirements of hydrogen

• 50 years of experience in constructing multi-energy stations (EV charging, CNG, conventional fuels)

• Strong environmental commitment rewarded by our ISO 14001 certification and our Ecovadis CSR performance rating of 74/100

Station portfolio	Mobile (from 2025)	Small	Medium	Large
Applications	Passenger cars / LCV 700 bar, HDV / construction / forklifts 350 bar	Passenger cars / LCV 700 bar, HDV / buses / coaches 350 bar	Passenger cars / LCV 700 bar, HDV / buses / coaches 350 bar	Passenger cars / LCV / HDV 700 bar*, HDV / buses / coaches 350 bar
Distribution, kg/day	5-50	5-300	300-1000	1000 and more
Compression capacity, kg/hr		20-100	40-200	80-300
Storage capacity, m3		3-10	5-30	10-150
Recommended hydrogen source	Bundle, Tube trailer	Electrolyzer, Tube trailer, Pipeline	Electrolyzer, Tube trailer, Pipeline	Tube trailer
Compression container		20'	Up to 2 x 20'	From 2 x 20'
H35	Х	Х	Х	Х
H35HF		Х	Х	Х
H70	Х	Х	Х	Х
H70HF				X*
H2 Pre-cooling	Optional	Optional	Standard	Standard
Payment	Credit card, badge, QR code OIML R139 certified	Credit card, badge, QR code OIML R139 certified	Credit card, badge, QR code OIML R139 certified	Credit card, badge, QR code OIML R139 certified
Average layout, m2		100	300	500
Evolutivity	No	Yes	Yes	Yes
Standard of conception	ISO 19880-1	ISO 19880-1	ISO 19880-1	ISO 19880-1

\* As soon as the fueling protocols and vehicles are available on the market



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𝒮 ISO 9001 𝒮 ISO 14001