



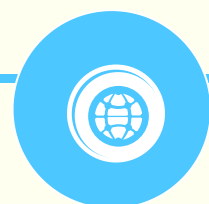
WELCOME TO INNOVATION

ONE STOP SOLUTION FOR GREEN HYDROGEN

Presented By: **VJ INDUSTRIES**



+91 814 901 0859



www.vj-industries.com



Introduction

VJ INDUSTRIES is revolutionizing the Industrial Gas sector with innovative, sustainable solutions. Since our inception in 2022, we have quickly established leadership through successful installations and supplies.

Our business spans the supply of industrial, calibration, and specialty gases, as well as the manufacture, supply, and installation of Hydrogen Quads/Cascade Gas storage systems. We also specialize in biogas generation and consultancy for Green hydrogen production.

Collaborations with HORIBA and XWM-Blue Planet drive our mission for a safe, economical, and sustainable future. Committed to quality, our solutions are rigorously tested to meet the highest standards, ensuring excellence for our customers.



Vission & Mission

VISION

To be the global leader in green hydrogen solutions, advancing the adoption of sustainable energy practices across industries.

MISSION

To innovate and deliver high-quality hydrogen storage and distribution systems that empower businesses to achieve their sustainability goals, while contributing to a cleaner planet.



Our Value

Innovation, Sustainability, Integrity and Quality define VJ Industries. We advance technology, create eco-friendly solutions, and build trust through transparency and high-quality products, driving a sustainable future for all.

01.

Innovation

Sustainability

02.

03.

Integrity

Quality

04.



Hydrogen Gas Storage System –
Type 1, Type 3, Type 4 and Metal Hydride

HORIBA–
Make GAS ANALYSER

Kimpex Make –
Gas Leak Detectors

Baumer India pvt ltd –
Make pressure transmitters
& Sensors

**One stop
solution for
Hydrogen
Gas**

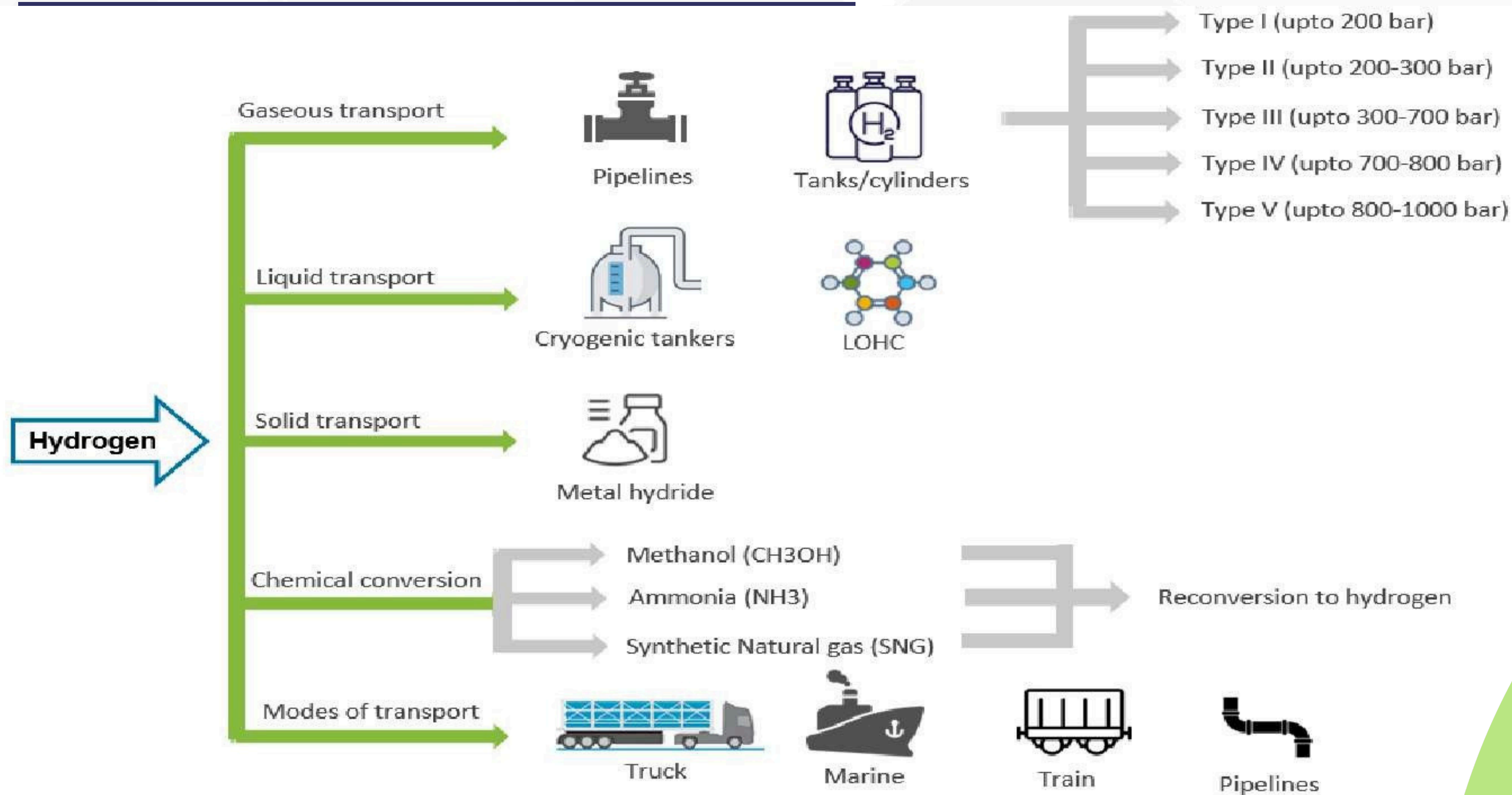
**Supply of UHP / Green
Hydrogen Gas– 99.999%**

Gas Booster Pump and Compressor
Coming soon

H2 Storage License Consulting
PESO

BOP Integration – SS316
Tubing, Fitting's, Regulators, Valves, Connectors,
Purification Panels and Installation

Hydrogen Transport path ways

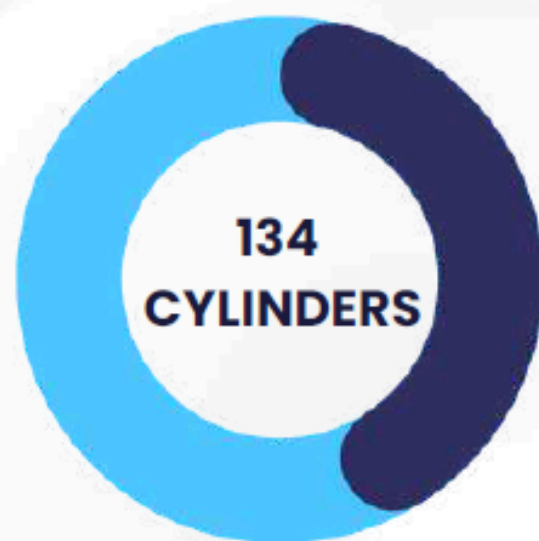


Hydrogen Cascades



HYDROGEN
STORAGE

TO



HYDROGEN
STORAGE



VJ Industries provides customized hydrogen cascade storage solutions, ranging from 2-cylinder to 134-cylinder systems. These tailored setups ensure safe, efficient hydrogen storage for diverse industrial needs, supporting clean energy initiatives.

Size of Cylinders

For the domestic market all cylinders are manufactured as per IS 7285, BIS certified and approved by the Chief Controller of Explosives, Government of India, Nagpur.

Water Pressure 15° C	Test Pressure	Water Capacity (l)	Gas Capacity (Cu.m.)	Outside DIA 'D' (mm)	Length (L) Approx. (mm)
150 Kgf / cm ²	250 Kgf / cm ²	10	1.5	140	845
		24	3.6	232	735
		27	4	232	830
		34	5	232	1030
		40	6	232	1200
		40.5	6.07	232	1215
		45	6.7	232	1330
		46.7	7	232	1370

Water Pressure 15° C	Test Pressure	Water Capacity (ltr)	Gas Capacity (Cu.m.)	Outside DIA 'D' (mm)	Length (L) Approx. (mm)
204 Kgf / cm ²	340 Kgf / cm ²	50	10	232	1465
		80	16	267	1742
		160	32	356	1990

Green Hydrogen Cylinder Cascades



**4 CYL @200 BAR –
3.57 Kg H2 Storage**



**16 CYL – @ 140 BAR
10 Kg H2 Storage**

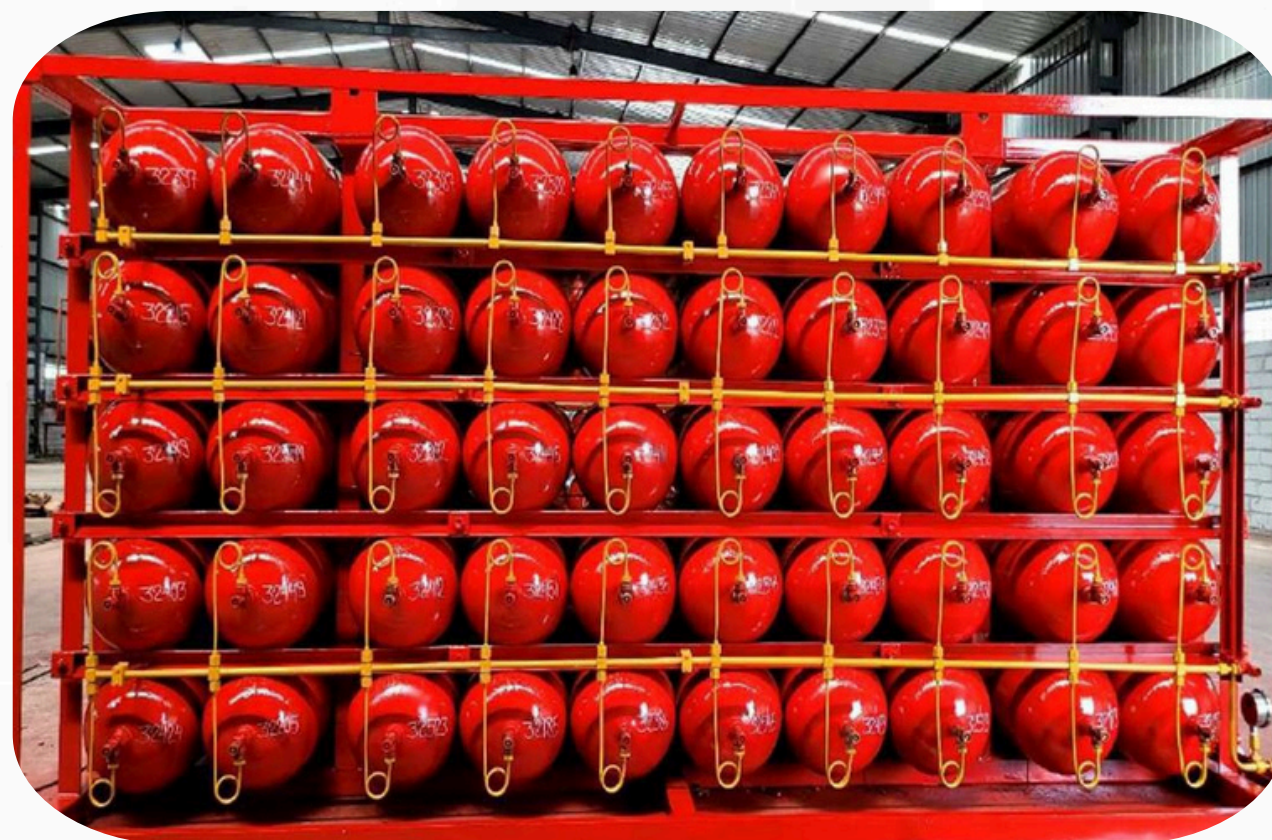


**42 CYLINDER – 200 Bar–
67 Kg H2 Storage**

Green Hydrogen Cylinder Cascades



**12 CYL @ 200 BAR
30 KG H2 STORAGE with Copper
Tubing & Brass fittings**



**50 Cyl @200 Bar
125 Kg H2 Gas Bank**

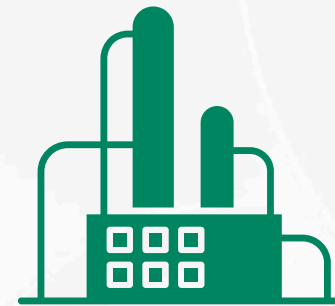


**12 cyl.@ 200 bar
30 kg h2 Storage with SS
Tubing and Fitting**

500 Bar Type1 Hydrogen Cylinders



EKC Received PESO Approval for Type-1, 500 Bar Hydrogen Cylinders in 2023



Manufacturing

1st in India, only EKC has manufacturing approval.
Manufactured at Gandhidham - Gujarat.



Specification

Type 1 - as per IS 7285 part 2						
Pressure (Bar)	WC (L)	Cylinder Length	Dia	THK	Test Pressure (Bar)	Gas Weight (Kg) Approx
500	780	8725	406	26.2	750	24

Clientele & Past Experience By OEM EKC 500 Bar Type 1 Cylinder



16 Cylinders
3 Banking System.
End User: NTPC
Location: Noida



7 Cylinders
3 Banking System.
End User: BPCL
Location: Kochi



8 Cylinders
1 Banking System.
End User: IOCL
Location: Haryana



Truck-Mounted Hydrogen Cylinder Cascade



Advanced Hydrogen Fueling Solutions for Clean Mobility



**H2 Filling Nozzle for Cars and
Buses**



**H2 Filter for Vehicle Filling
Station**



H2 Hoses

Advanced Hydrogen Fueling Solutions for Clean Mobility



H2 Breakaway Couplings



H2 Filling Dispenser

Customized Laboratory Gas Distribution Systems

We design and Supply customized laboratory gas distribution systems for all types of gases, covering low- to high-pressure applications. Our complete lab setups include SS tubing, tube fittings, valves, regulators, pressure gauges, flow meters, gas purification systems, and customized gas control panels. Engineered with appropriate safety precautions and reliable gas handling practices, our solutions provide safe, efficient, and precise gas distribution for laboratory and industrial applications.

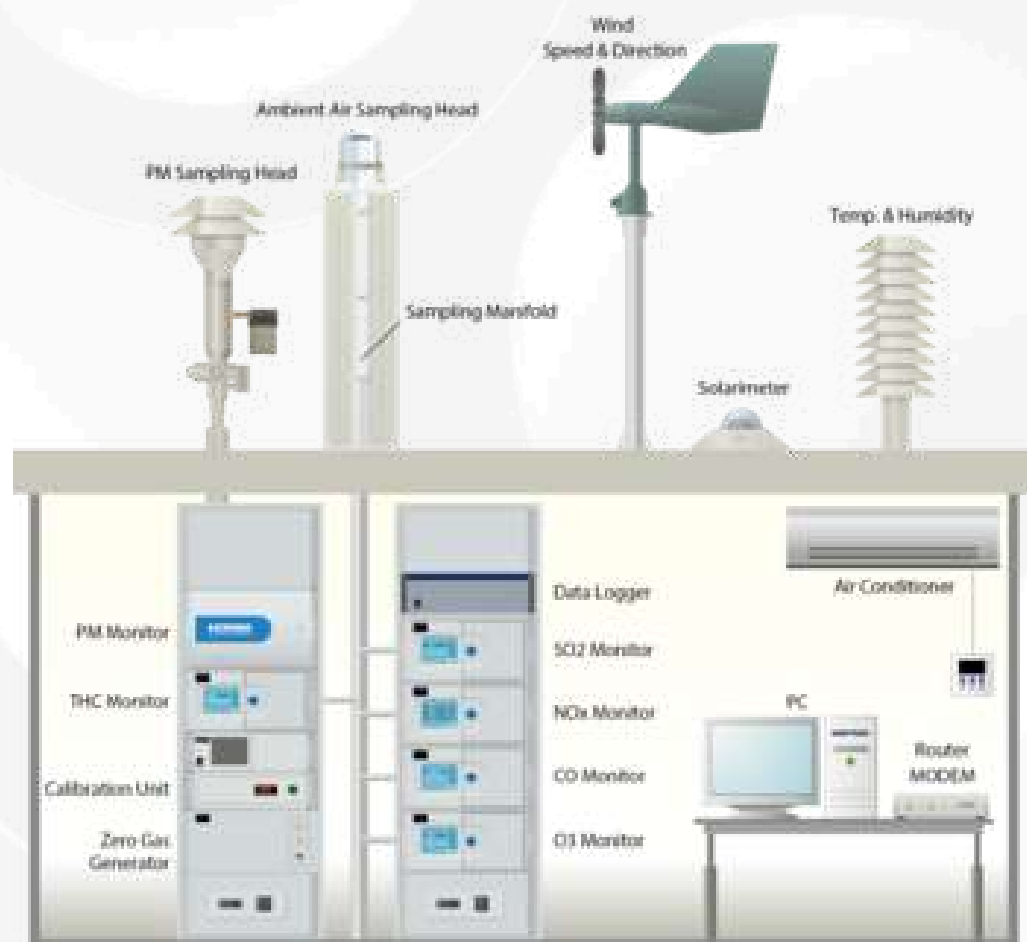


HORIBA GAS ANALYSERS

HORIBA Gas Analyzers offer precise, reliable measurements for emissions testing and industrial applications. Their advanced technology ensures compliance with environmental regulations, providing accurate data on pollutants like CO, NO_x, and hydrocarbons.



AQMS- Air Quality Monitoring Analyzer



Fixed Station



Mobile Station



**Air Pollution Monitor
AP-370**

AQMS- Air Quality Monitoring Analyzer



**Real-time particulate &
Elemental Monitoring
PX-375**



**On-line/Off-line TOC
analyzer for the low
measuring range**

WQMS- Water Quality Monitoring Analyser



**COND/TURB/PRESS TW
series**



**COD/BOD/TSS/PH OPSA-
150**



**Oil Content Analyzer
OCMA series**



**Nitrogen/
Phosphorus
TPNA-500**

WQMS- Water Quality Monitoring Analyzer



**pH/ORP/RHO/COND/RC/DO/F
TURB/COLOR/MLSS/NH4-N
H-1 series, 48/96 series**



**Gel-filled self cleaning
pH electrode
6122 series**



**pH/ORP/DO/COND/SAL/TD
S/SSG/TEMP/TURB/Depth U-50
Series**



**Total Organic
Carbon Analyzer
T1-TOCADERO
Series**

Process Gas Analyzer



**Process Laser Gas
Analyzer PLGA-1000**



**CO₂/CH₄/Siloxane VA-
5000 series**



CO/CO₂/CH₄ GA-370



**Explosion-proof Gas
Analyzer 51 series**

Emission Monitoring Analyzers



**NOX/SO2/CO2/CO/O2
ENDA-5000**



**CO/CO2/NOX/O2/SO2/CH
4/ PG-300 Series**



**Tunable Laser Gas
Analyzer TX-100**



**NOX/SO2/CO/CO2/O2/
NH3 GI-700**

Baumer India Pvt. Ltd

Innovative Sensors and Measuring Instruments:

Baumer India Private Limited is a subsidiary of Baumer Group and is responsible for India's subcontinent. The main purpose of setting up an Indian subsidiary is to be close to the customers in the region & also to support our distributors more effectively. Baumer India was established in 2007 and is headquartered in Pune. The office in Pune is well equipped and has a very modern and up-to-date training and demo center for Baumer Products.



Baumer Systems & Solutions



**Pressure
Transmitter for
Industrial High
Pressure
Applications**



**Combi Flow
PF75H Flow
Sensor**



**Hygienic
Pressure Sensor**



Pressure Sensor

Baumer Systems & Solutions



GAM900
Vibration /
Acceleration
Sensor



**FlexTop 2202 /
2212 / 2222**
(Temperature
Transmitters)



**Ultrasonic
Sensors**



**Light Barrier /
Optical Sensor**
(O330 family)

Stages in Green Hydrogen Productions & Applications for Process Sensors

Electrolyzes / BOP (PEM & Alkaline only)

1. Electrolyte level monitoring in main tank & buffer tank.
2. Water pressure monitoring.
3. Hydrogen pressure monitoring.
4. Level monitoring for water removal in dryer / separator (post electrolysis).
5. Pressure and temperature Measurement in Balance of plant.

Fuel Cell

1. Acid Temperature Monitoring.
2. Water temperature monitoring.
3. Level monitoring.
4. Pressure monitoring (SOFC) low pressure.

Storage tank / Liquid Organic Hydrogen Carrier

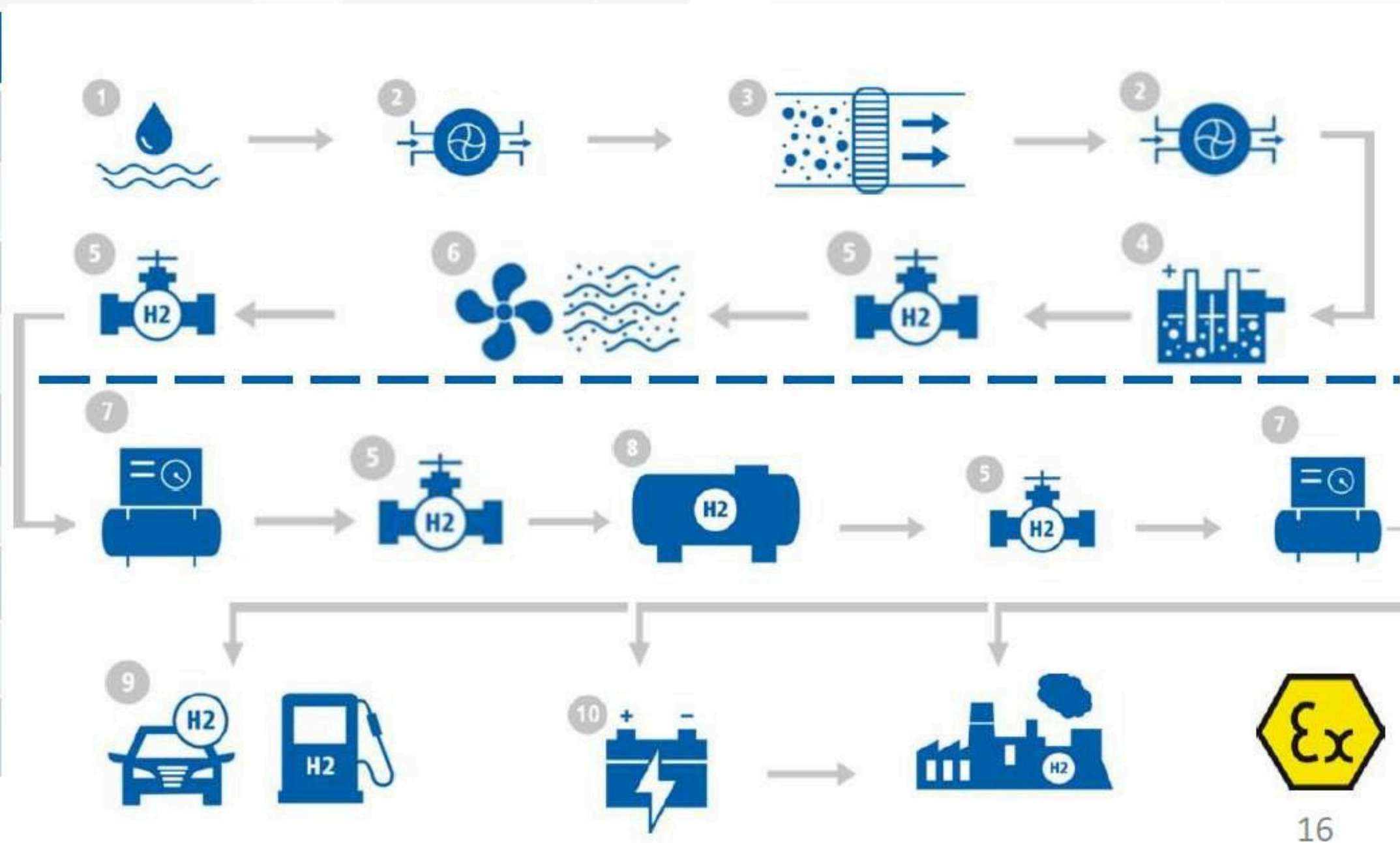
1. Hydrogen pressure monitoring (upto 350 bar).

Distribution Hydrogen Dispensing System

1. Hydrogen pressure monitoring at nozzle outlet, process inlet, vent line (upto 350 bar).
2. Coolant level monitoring
3. Temperature measurement at process inlet.

Hydrogen Applications – Pressure Value Chain

#	Function, Application
1	Water source
2	Water pump
3	Micro-filtration unit
4	H ₂ Electrolyzer
5	H ₂ Piping
6	H ₂ Dryer
7	H ₂ Compressor
9	H ₂ refuelling station
10	H ₂ Stationary fuel cell



Hydrogen Applications – Pressure Value Chain

Y923: Low Pressure ≤ 400 bar



Pressure Range	Part Number	SAP Art. Code
0...10 Bar	Y92-3.5G.B22.R/2164/7912	11253447
0...25 Bar	Y92-3.5G.B26.R/2164/7912	11253446
0...40 Bar	Y92-3.5G.B27.R/2164/7912	11264403
0...60 Bar	Y92-3.5G.B29.R/2164/7912	11253448
0...100 Bar	Y92-3.5G.B31.R/2164/7912	11251857
	Y92-3.5G.B35.R/2164/7912	11251858
0...400 Bar	Y92-3.5G.B38.R/2164/7912	11251860

PBMN: High Pressure ≥ 600 bar



Pressure Range	Part Number	SAP Art. Code
0...600 Bar	PBMN-29B39RA11499400010/7912	11256055
0...1000 Bar	PBMN-29B41RA11499400010/7912	11256134
0...1200 Bar	PBMN-29B99RA11499400010/7912	11256079

/7912: Option for Hydrogen Applications

- Pressure port Stainless steel 316L Goldcoated 15µm
- Extern Sealing EPDM
- Wetted parts free of oil and grease

Gas Solutions for Every Application:

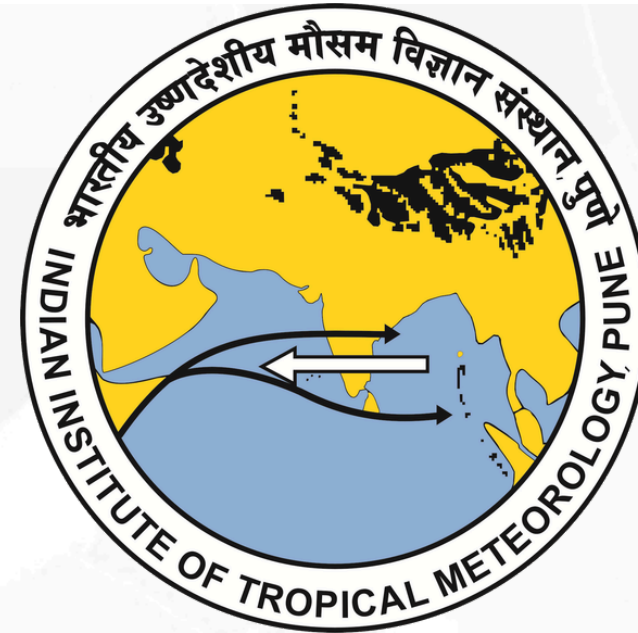


Gas Solutions for Every Application:

Acetylene C_2H_2	Argon Ar	Argonite $CaCO_3$	Butane C_4H_{10}
Calibration Gases Kr He C_2H_6 Xe NO	Carbon Monoxide CO	Carbon Dioxide CO_2	Ethane C_2H_6
Ethylene C_2H_4	Gas Mixtures Kr He C_2H_6 Xe NO	Helium He	Hydrogen H_2

Inergen ArN_2CO_2	Krypton Kr	Methane CH_4	Nitric Oxide NO
Neon Ne	Nitrogen N_2	Nitrogen Dioxide NO_2	Nitrous Oxide N_2O
Propane C_3H_8	Oxygen O_2	Sulfur Dioxide SO_2	Sulfur Hexa Fluoride SF_6
	Zero Air O_2+N_2	Xenon Xe	

Key Customers



Thank You



*ONE STOP SOLUTION FOR
GREEN HYDROGEN*

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**Keep in
Touch**