

GAS SAMPLING PANEL Hydrogen (H₂)

The sample system collects Hydrogen samples from pipelines in industrial installations for laboratory analysis and quality control. Only representative samples will help to reduce costs by process optimization and preventing production loss. Hydrogen samples can be of grey, blue, or so-called green Hydrogen.

GREEN HYDROGEN SHALL MAKE AN IMPORTANT CONTRIBUTION TO THE ENERGY TRANSITION AND CO2 REDUCTION



Green hydrogen, also known as 'renewable Hydrogen', is Hydrogen that is produced with sustainable energy. The best-known method is electrolysis, in which water (H2O) is split into Hydrogen (H2) and Oxygen (O2) via green electricity. The output of the electrolyser is Hydrogen and Oxygen as a gas composition and might be saturated with water vapor. To take in a wet gas a representative Hydrogen sample can be complex, because laboratory analysis and most analysers are not suitable for wet gasses.

Mechatest is an independent organization that focuses on hydrogen applications/installations, sampling and analyzing solutions that can improve the safety and efficiency.

We like to help to accelerate the development of hydrogen as an important fuel as part of a climate-neutral energy economy.

- High pressure max. 124 bar(g)
- One-hand operation (dual connected 3-way valves)
- Sample circulation
- Depressurizing of quick connects
- Optimized safety for operator and environment
- Closed loop sampling (zero emission, no pollution)

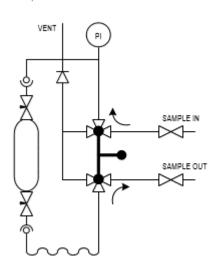
BYPASS/CIRCULATION CONFIGURATION

For low temperature and high-pressure Hydrogen gas samples, Mechatest bypass configuration is designed to get a representative sample by using a continuous bypass (circulation) of your process sample flow.

Closed loop sampling (emission free) can be performed under process conditions by using one handle operation.

MAIN MATERIALS

- ▼ Sample/Bypass Valves 3-way SS316
- ▼ Gas Sample Cylinder 500 cc incl. with Needle Valves and Quick Connects
- Flexible Hose PTFE/SS Braided
- ▼ Pressure Gauge SS316
- ▼ Check Valve SS316



OPTIONS

- ▼ Spring Return Handle
- ▼ DB&B Inlet Valve
- ▼ Lockable Valve Handle
- Sample Cooler SS316
- **▼** Flow Indicator

- Alloy Materials or NACE
- Protective Enclosure
- Support Standpipes SS
- Heating for Enclosure
- Vent Absorption Filter

Please note: the above is a basic standard configuration only. Our sampling team can be offered with a wide variety of options, please do not hesitate to contact us.

MECHATEST SAMPLING SOLUTIONS

Mechatest (statutory name: Doedijns BV) is a certified industrial sampling systems division with 30 years of experience in design and manufacturing of manual and automatic sampling systems for gas and liquid applications. Mechatest became part of the Vydraulics Group, is merged into Doedijns BV and relocated in Doedijns' premises in Zoetermeer.

Sampling group contact details:

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Volume

Sample cylinder volume 500 cc, other volumes on request

Pressure Rating

Design pressure 124 bar(q)

Temperature Rating

Process from -20 °C to 148 °C Ambient from -20 °C to 65 °C Operator safe sampling @ max. 70 °C

Wetted Parts

Standard SS316, other high Alloy materials on request

Pressure Gauge

Range o - 160 bar(q)

Connections

Bulkhead fitting 1/4" or 6 mm OD Flange connection on request

Dimensions

800 x 600 x 150 mm (HxWxD)

Weight

Approx. 20 kg

HS-Code

90268080



MANUAL SAMPLERS HYDROCARBON GAS - HYDROCARBON ANALYSER SYSTEMS - AUTOMATIC SAMPLING SYSTEMS