ASPROC

GAS SAMPLE PROBES
AND SAMPLE CONDITIONING SYSTEMS

+39 055 9705134 info@asproc.net www.asproc.net

API 14.1, GPA 2166
ISO 10715 Probe Compliance

With Genie® Probes & Probe Regulators, a Genie® **membrane is inserted directly into a pipeline** or vessel which allows for separation of entrained liquids at the **prevailing line pressure and temperature conditions**.

By separating entrained liquids at line pressure and temperature, sample integrity is maintained.

Genie® Probes™ also remove all entrained liquids in a gas sample, making them the most effective filters on the market for protection against liquid damage during upset conditions.

The GP2™ probe consists of a housing and a membrane tip probe. The housing is installed in a depressurized pipeline through a vertically mounted thread-o-let or flange, and contains a “foot valve” in its lower end.
Retracting the probe from the housing closes the foot valve, making it possible to perform probe maintenance **without depressurizing** the pipeline.

The GPSD™ is designed specifically **for small diameter** 2” or 3” pipelines. The GPSD™ uses proven Genie® Membrane Technology™ to extract a representative gas sample and provide a safety net for protecting gas analyzers against liquid damage.
Pressure regulator as option

The two-piece GPR™ consists of a housing containing a foot valve on its lower end, and a membrane tip probe regulator. **Sample pressure is then reduced immediately downstream of the membrane, inside of the pipeline.** The heat then transfers from the pipeline to the regulator to prevent excessive Joule-Thomson cooling during pressure regulation.

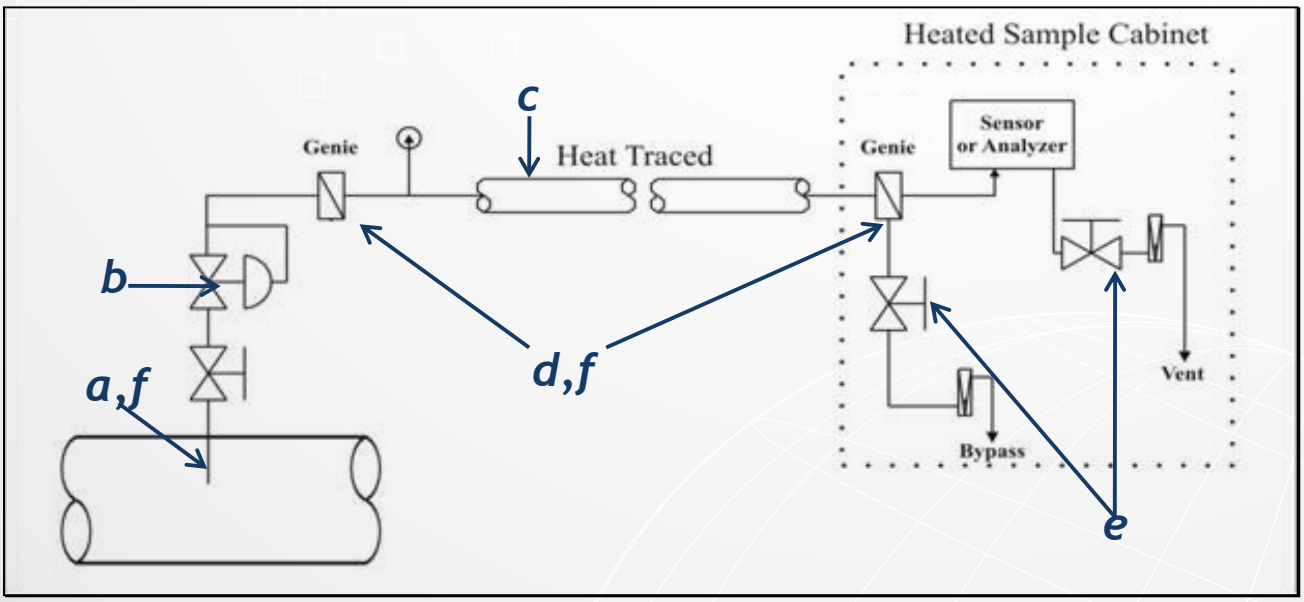
The Model 755™ **is an adjustable length**, membrane tip probe regulator designed to sample transmission quality natural gas. **The pressure regulator is built into the probe immediately downstream of the membrane, inside of the pipeline**. Heat is transferred from the flowing pipeline gas to the regulator to prevent excessive JouleThomson cooling, helping to prevent condensation during pressure let down.
This model **can be inserted and extracted from a pressurized line through a full opening valve** without the use of a special insertion device.

Genie® Model 701 **Portable Insertion Probe** is a simple, safe and economical solution to extract a representative vapor phase sample from a gas source. The **exclusive Pressure Balance**™ technique allows for effortless insertion of the probe without the need for additional tools or pneumatic and hydraulic methods.

Genie® Model 702 Permanent Insertion Probe™ is a simple, safe and economical solution to extract a representative vapor phase sample from a gas source. **The 702 is designed for sampling at a specific depth in a pressurized pipeline**; each length is customized up to 10 feet to fit your application. Our **exclusive Pressure Balance**™ technique allows you to effortlessly insert the probe without the need for additional tools.

The 100 Series Genie® Supreme Membrane Separators™ incorporates the legendary phase separation Genie® Membrane. The Genie® Membrane Technology ™ allows only vapor to pass through while any liquids or particulates are rejected and thus kept out of the analyzer.

SAMPLE CONDITIONING SYSTEM TASKS

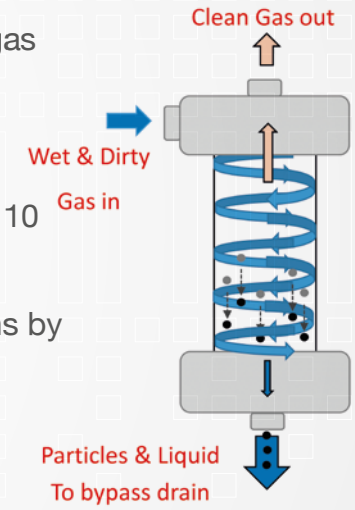


a) Extract representative sample of the gas (most important task)
b) Reduce (regulate the pressure)
c) Transport the sample to the analyzer
d) Protect the analyzer
e) Control flow rate
f) Remove contaminants

MERLIN PRE-CONDITIONING SYSTEM

- Employs cyclonic centrifugal forces
- No moving and consumable parts, Significant savings in maintenance costs
- Removes particulates up to 10 micron or finer
- No filter, No clogging issues
- Innovative break through concept for maintenance-free critical fast loop primary filtration

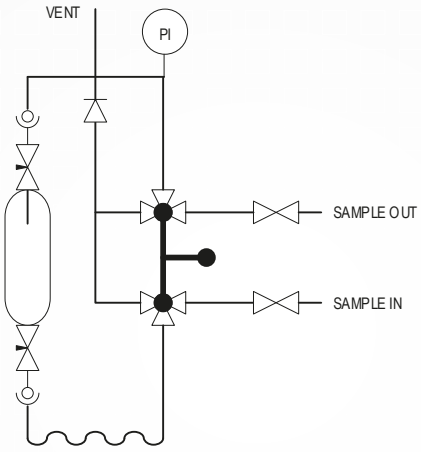
- Specially engineered for optimal separation at low gas flowrate.
- From 30-350 NL/h, tested to max. 2000 Nl/h.
- Proven to remove liquid droplets and particles up to 10 micron effectively from the gas phase.
- Good separation achieved in typical gas applications by large density difference.
  - Gas Density: typically 2-10 kg/m3.
  - Liquids/Particles Density: typically 1000 to 7750 kg/m3.



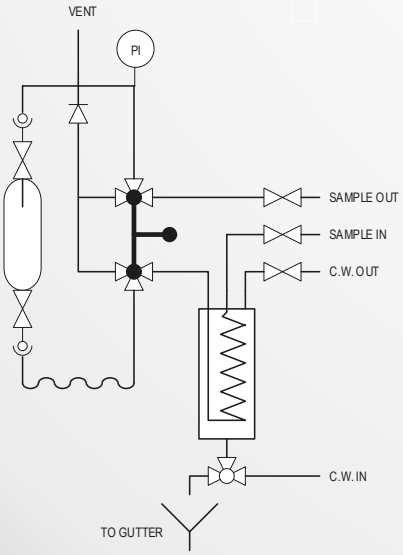
ASSEMBLED AND TAILORED SOLUTIONS

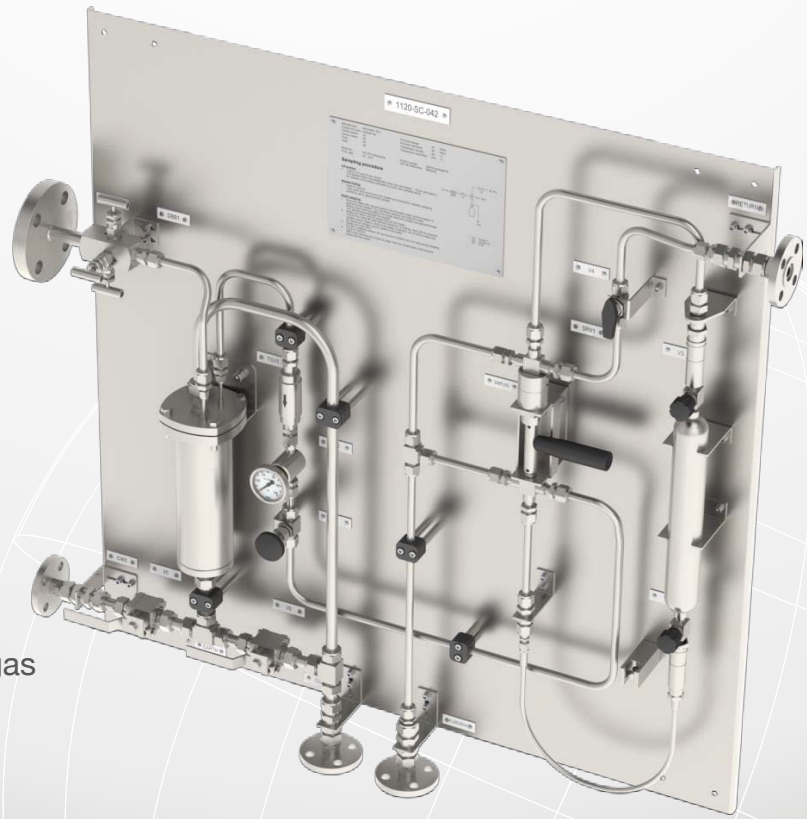
Assembled and tailored solution for each specific customer application.

MANUAL SAMPLING PANEL



Gas Sampling Panel
Bypass/Circulation Configuration
For hazardous & low temperature gas or liquefied gas samples.





Hot Gas Sampling Panel
Bypass/Circulation Configuration
For hot hazardous & low temperature gas or liquefied gas samples.