

Degassing unit – Avoid inaccurate results in your process

Sampling Conditioning Systems (SCS) from Metrohm Process Analytics

HIGHLIGHTS

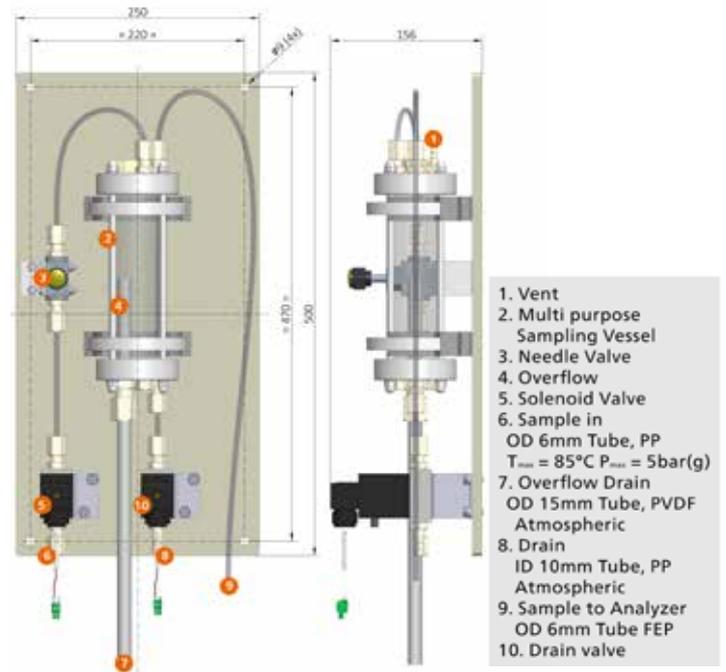
- **Increased analyzer uptime** due to problem free sampling
- **Enhance your analysis accuracy** by avoiding bubbles formation
- **SCS fully controlled** by your Metrohm Process Analyzer
- **Easy upkeep** due to simple design with few moving parts
- **Increased analyzers reliability** by removing dissolved gases from the sample stream
- **Continuous flow** – Reduce dead volumes from sample point to analyzer, shortening cycle times

Push your analytical analysis with optimal sampling systems

This sample conditioning system is designed for the removal of dissolved gases and bubbles from the incoming sample stream prior to entering a process analyzer. Without the removal of the sample bubbles, the analyzer would not be able to obtain a representative sample to measure, since bubbles change the sample volume. The bubbles would potentially cause baseline fluctuations and retention shifts, which would interfere with dispensing precision and analytical accuracy for any process analyzer.

OPERATION PRINCIPLE

With a simple design, liquid samples can be flushed into the vessel of this degassing unit. By means of a needle valve (N° 3), the sample flow is finely tuned to a workable flow rate into the vessel. With the drain valve (N° 10) in the closed position, fresh sample enters the Multi-Purpose Sampling Vessel (MPSV) and it is allowed to «degas». This «degassing time» is calculated on a time basis controlled by the analyzers user program depending on the amount and type of dissolved gases or bubbles present. When the sample is free of bubbles and vented to atmosphere, it is transferred to the analyzer (N° 9) by opening a valve which is connected to the sample entrance valve in the process analyzer. The



Degassing unit front and side view.

remaining sample is drained and the vessel is rinsed with fresh sample. The integrated Metrohm Process Analytics analyzer has the programming flexibility to control valves and sensors to guarantee high dispense accuracy and reliability.

SPECIFICATIONS

Instrument	
Dimensions	250 x 500 x 156 mm (W x H x D)
Material Options	Polypropylene, Glass, Stainless steel
Volume vessel	100–500 ml
Allowable sample temperature*	4–80°C
Max. Allowable sample pressure*	10–600 kPag (0.1–6 barg)
Sample flow rate	5–60 L/h
Connections	Inlet 6mm Compression Outlet 10 mm OD to Atmospheric Drain Multiple Top Mounted Ports
Sample sensor Options	Float NO/NC, Conductive SS Rods

* The total system design must be considered when applying the maximum allowable pressure and temperature ratings.