

Liquid Sampling

Mechatest® NeSSI-Sampler

General Description

The Mechatest NeSSI Liquid Sampler is designed to take liquid samples, manual or automatic, directly onto the ANSI/ISA 76.00.02 base compliant sampling system substrate or platform.

NeSSI the New Sampling Sensor Initiatives is the state-of-the-art and next-generation modular sampling system designs for process analytical applications. The miniaturization result in maintaining productivity and quality while achieving drastic reductions in resource and waste generation.

The Mechatest NeSSI sampler features a body with three port configuration. We designed two versions; Version 1 provide sample inlet, bypass and vent connection and version 2 is more regular for straight line flow thru for sample inlet/outlet and a vent connection in the middle.

On the bottom you place the Mechatest modular “needle sampler”.

On the top you can place any valve control device, both connections also based on the ANSI/ISA 76.00.02 – 38.2 mm small footprint.

Grab or Composite Sampling

Control element selection on the ANSI/ISA-76 format is quite varied. Valves (ball, diaphragm, metering, needle, solenoid) are available in different control formats as manual, pneumatic or electronic actuation. Depending on the valve action the sampler can be used as manual or automatic (time or flow based) sampler.

The system can be easily designed in that way for unmanned multi-batch collection of representative batch and spot samples of many liquids for laboratory analysis.

Miniature and Modular

The NeSSI Gen I sample conditioning system is a block that is 38.2 mm wide (1.50 in.). It has three sample transfer passages, each with an inside diameter of 2.8 mm (0.110 in.). These passages might seem small but they easily pass 3 l/min of gas or liquids (up to the viscosity of diesel fuel).



Features

- Body (standard 316 SS wetted parts) also available in exotic materials.
- Replaceable Needle assemblies for Process and Vent needle, independent to choose in smaller or larger sizes. Needles made of small bore full hard temper tube SS316, standard with very sharp Lancet style pointer, automated machined for long lifetime.
- Replaceable seats for the needles and in a width range of materials available.
- Bottle holders are designed for Schott Duran bottles with screw cap and septum in volumes 50, 100, 250, 500 and 1000 ml.

Replaceable bottle holder makes the sampler very flexible, possibility to change later from bottle volume.

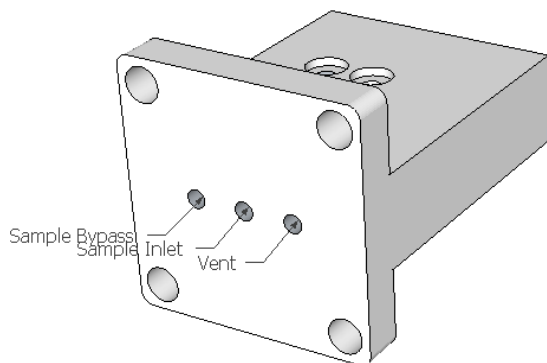
The modular design has a lot of advantages, can be used with standard Schott Duran bottles and is suitable on all kind of liquid sampling applications commonly used on this platform.

The Mechatest NeSSI sampler is a typical “needle” sampler for closed loop and emission free sampling of toxic, dangerous or volatile liquids and is the same type trusted for many years used in other Mechatest sampler products and applications.

The Mechatest Sampling Systems are widely used on process analytical systems in the chemical, petrochemical and pharmaceutical industries.

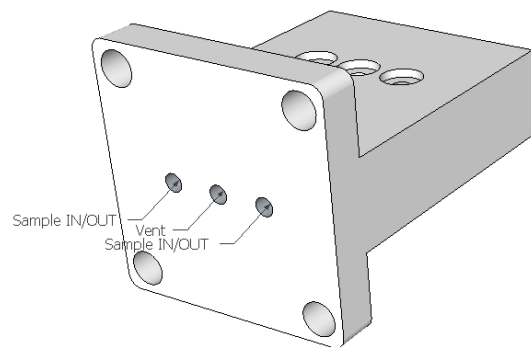
Benefits

- Compliant with ANSI/ISA 76.00.02 38.2 mm (1.5 in.) footprint.
- Three Port configuration: Sample Inlet, Bypass and Vent.
- Quick and safe operation, low dead volume design with bypass.
- Manual or Automatic sampling
- In-line Sampling
- Closed Loop and Emission Free Sampling
- Easy in operation



NeSSI body version-1

Specific designed for 2-ports NeSSI valve components.



NeSSI body version-2

Specific designed for 3-ports NeSSI valve components and more regular straight line flow thru in the NeSSI substrate or platform.

