

The Sheffield Separator Sample Conditioning Panels

The safety, reliability, and functionality of Sheffield Separators is now available in Sample Conditioning Panels. Kinetic Separation Technology is the most innovative technology on the market today for sample conditioning. Now this technology is available to clean and condition samples at the sample collection point.

- Delivers a clean, conditioned sample to the laboratory
- Protects the environment
- Promotes employee safety
- Improves analyzer performance
- Reduces analyzer maintenance

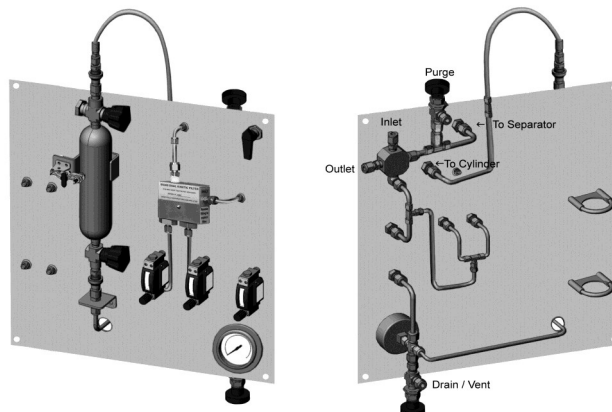
The Sheffield patented Dual Chamber Kinetic Separator provides maximum separation of heavy particulate. Although kinetic energy will physically separate impurities, it will not alter the chemical composition of the sample.

Now the benefits of the Sheffield Dual Chamber Kinetic Separation are available to condition laboratory samples either in the field or in the laboratory.

Features		Benefits
Allows Sample Conditioning in the Field. Removes condensables and particulates		No lab exposure to harmful chemicals
Continuous Fast Loop Flow through first chamber		Extends filter life. Saves time by providing continuous fresh samples
Custom Panels Available		All Models of Sheffield Separators available with customer specified peripherals
Versatile Applications		Field Liquid Samples; Field Gas Samples; Lab Liquid Samples, Lab Gas Samples.
Sheffield Reliability and Low Maintenance		Designed for 24 x 7 operation with one filter change per year
Kinetic Energy Separation		Prevents hardware failure due to particulate fouling
Returns Spent Sample to Unit		Eliminates waste disposal

The SS 300 Gas Sample Conditioning System for Field Applications.

More heavily contaminated samples may require the SS700 Sample Conditioning System or the SS1200 Sample Conditioning System.



The Sheffield Separator uses kinetic energy to separate the representative analyzer sample from impurities found in a process stream. This is accomplished by establishing a flow path through the 1st chamber and reversing the flow of a relatively small Bypass sample. Solid contaminants and immiscible liquids in the liquid samples will not negotiate this complete reversal of flow direction and exit the bottom of the separator. The Kinetic Energy caused by this reversal initially removes the impurities from the Bypass stream through gravity and inertia. To further effect this separation and filtration a second kinetic chamber with a hydrophobic filter polishes the sample. The second chamber also experiences Kinetic Separation and removes the remaining impurities from the slip stream. The sample is lighter than the immiscible liquids and solids (particulates) in liquid samples.

How The Separator Works

The **First Chamber** of the Sheffield Kinetic Separator is designed for installation directly in-line to the Fast Loop sample transport system or in the Bypass Loop. Most of the contaminants are separated in the first chamber. This chamber is aided with a special Teflon®-lined, hydrophobic, self-cleaning low pressure drop filter.

The **Second Chamber** separates and filters only the relatively small amount of Slip Stream sample going to the analyzer which greatly enhances filter life. Finally, both chambers exit the top of the separator to a common juncture with the return flow or vent.

Any Sheffield Separator is Available in a Panel for Either Field Sampling or Lab Sample Conditioning



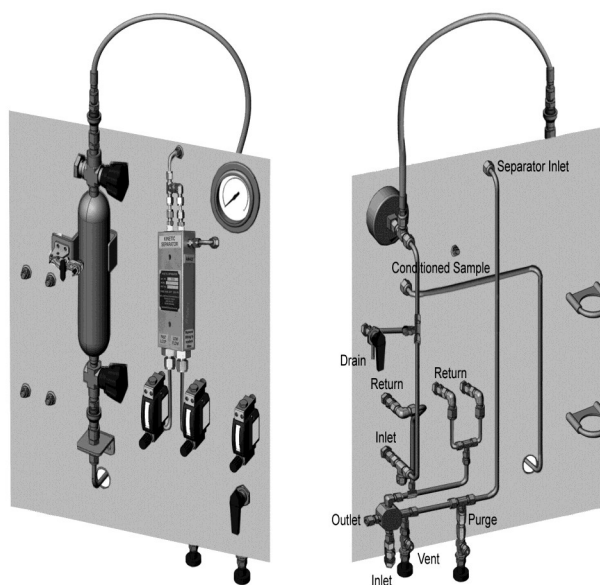
Visit our website: www.sheffieldseparators.com

email: info@sheffieldseparators.com

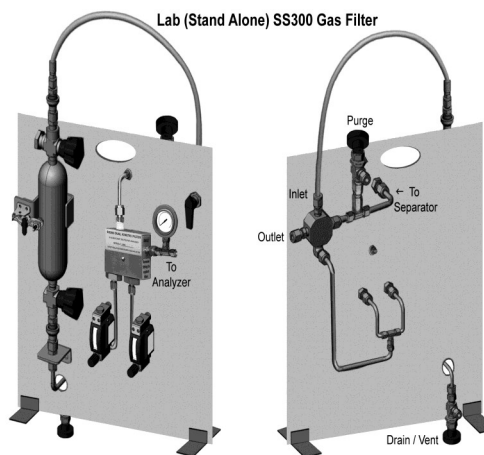
Ph: 409-945-2168



The SS 700 Gas Separator for Field Applications



Lab (Stand Alone) SS300 Gas Filter



The SS 300 for Laboratory Applications

Teflon® is a registered trademark of E.I. DuPont

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Patent # 6,444,001 of the Sheffield Kinetic Separator (other patents pending. Sheffield Separator Trade mark 2009. Copyright 2015