

QSITM Probe System Quick Silver Inertial Separation

System Features:

- Provides a particulate-free gas sample (up to 4 slpm)
- Temperature controlled to alleviate any sample artifacts
- Can be run continuously with minimal maintenance
- Compact design allows for easy movement to multiple sampling locations
- Convenient control box, allowing for easy monitoring and control of the complete system



Patent No: US 6,736,883 B2

The **QSITM** Probe System is a flue gas extraction system designed to provide particulate-free flue gas samples without altering the original vapor-phase elemental, oxidized, and total mercury concentrations. The **QSITM** System is the front-end system that couples with any sample conditioning system followed by a commercially available elemental mercury measurement system.

The unique part of the system is the **QSITM** Filter, which consists of an assembly with a porous filter element. Particles entrained in the gas stream are prevented from depositing on or penetrating into the porous filter wall by the high-speed scouring gas flow. The finer particles form a permeable subsurface, which does not allow the passage of contaminants smaller than the filter pore size.

A thermal insulating boot covers the **QSITM** Probe to maintain appropriate operating temperatures of the gas extraction system.