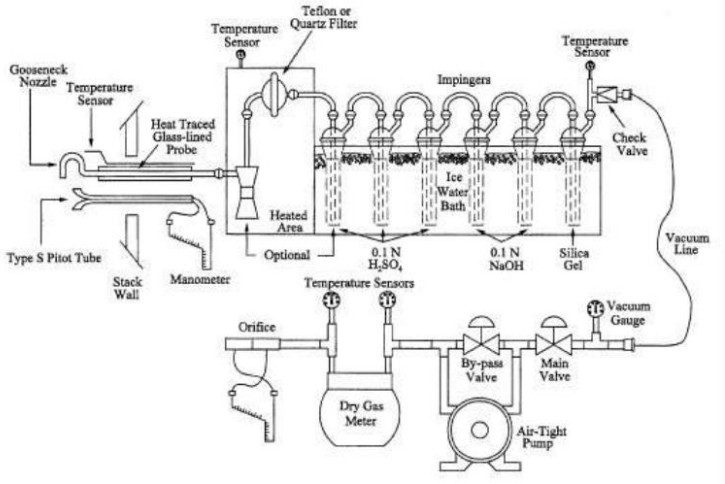
METHOD 26A—DETERMINATION OF HYDROGEN HALIDE AND HALOGEN EMISSIONS FROM STATIONARY SOURCES ISOKINETIC METHOD

- ✓ Complete set of base equipments & all accessories
- ✓ Modular design for easy setup on site
- ✓ Technical assistance
- ✓ Training on Methods
- ✓ Training on sampling & collection
- ✓ Lab analysis
- ✓ Quick turn-around Emissions reports
- ✓ Low cost & reliable

MAJOR APPLICATIONS

- ✓ Stack gas sampling
- ✓ EPA Emissions reporting
- ✓ Backup for CEMS
- ✓ Baseline studies
- ✓ Process improvements



[Halogen Sampling Train]

Gaseous and particulate pollutants are withdrawn isokinetically from the source and collected in an optional cyclone, on a filter, and in absorbing solutions. The cyclone collects any liquid droplets and is not necessary if the source emissions do not contain them; however, it is preferable to include the cyclone in the sampling train to protect the filter from any liquid present. The filter collects particulate matter including halide salts but is not routinely recovered or analyzed. Acidic and alkaline absorbing solutions collect the gaseous hydrogen halides and halogens, respectively. Following sampling of emissions containing liquid droplets, any halides/halogens dissolved in the liquid in the cyclone and on the filter are vaporized to gas and collected in the impingers by pulling conditioned ambient air through the sampling train. The hydrogen halides are solubilized in the acidic solution and form chloride (Cl−), bromide (Br−),and fluoride (F−) ions. The halogens have a very low solubility in the acidic solution and pass through to the alkaline solution where they are hydrolyzed to form a proton (H +), the halide ion, and the hypohalous acid (HClO or HBrO). Sodium thiosulfate is added to the alkaline solution to assure reaction with the hypohalous acid to form a second halide ion such that 2 halide ions are formed for each molecule of halogen gas. The halide ions in the separate solutions are measured by ion chromatography (IC). If desired, the particulate matter recovered from the filter and the probe is analyzed following the procedures in Method 5.

Bill of Material for IILLCS-22 Method 26A Add-on Kit

Basic Kit	Impinger insert, Greenburg smith, kit	Filter, PTFE, round, 82mm	
Impinger bottle, 500 ml glass bottle	Impinger connector, glass	Impinger insert, short kit	Ball joint clamp, #28

[USEPA Method 26A Link]

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