

Tekran 2600 Natural Gas Sampling and Analysis

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Tekran[®] provides a suite of products for the measurement of natural gas and similar process gases. This system implements an enhanced version of ASTM Method D-6350.

The Tekran Model 2641 Mercury Grab Sampling System enables direct sample collection from high-pressure sources. This avoids all issues with Joule-Thompson cooling that arise with traditional pressure let-down samplers. The high pressure sample gas passes directly through gold-coated quartz cartridges, capturing mercury. The remaining gas passes through the trap and is totalized after the pressure let-down step.

The cartridges are removed from the sampler for subsequent analysis. The 2600-NG analyzer is a rugged and compact atomic fluorescence system containing with cartridge heater, fixed analytical trap, and AF detector. The entire system is controlled by a PC through a single USB port. Calibration is done by vapor injections from a temperature controlled calibration source.

Tekran Quartz-Gold Sampling Trap

- Custom made quartz substrate for high surface area, low back pressure, and reproducibility
- New, precisely controlled, optimized, high purity plasma deposition process
- Blank and batch testing to meet strict recovery and carryover criteria

Model 2641 – Mercury Trap Sampling System

- Unique system allows high-pressure sampling
- All pre-collection paths are Silconert coated to ensure complete transfer of mercury through the sampling system
- Complete system is pressure driven – no power is required for operation
- Minimalized dead volume for quick equilibrium

Model 2505 - Calibration Unit

- Suitable for field or laboratory use
- Thermo electric temperature controller: no water bath required
- Operates from 12 VDC or line power
- Precision temperature measurement with digital display. Resolution: 0.001 °C

Tekran Gold-Quartz Sampling Trap



Model 2641 Mercury Grab Sampling System



Model 2505 Calibration Unit

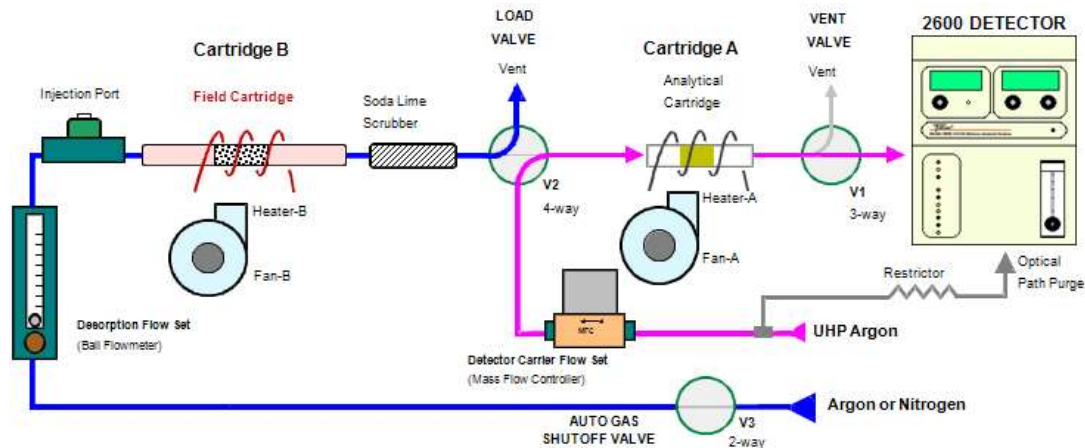


Model 2600 AF Mercury Analyzer

Applications

- Natural Gas (ASTM D-6350, ISO 6978-2)
- Process Gas Sampling

Model 2600-NG Analytical Flow Diagram



Model 2600-NG System Features

- Suitable for field or laboratory use
- Desorbs industry standard ¼" OD x 5" to 6" long friction fit cartridges eg: Tekran Gold-Quartz Cartridge
- Ultra-sensitive Atomic Fluorescence (AF) detector: Typical MDL < 1.0 ng/m³
- Dual-stage gold pre-concentrator and thermal desorber:
 - ◆ Continuously variable heaters allow ramped heating
 - ◆ Internal cooling fans provide faster cycle time
 - ◆ Teflon Load & Vent solenoids reduce sample path contamination
- All Teflon & glass sample train
- Precision mass flow controller for superior stability
- Auto carrier shutoff to conserve carrier gas
- 24 bit A/D converter provides wide dynamic range
- Automated desorption cycle
- Calibration using any saturated vapor injection source eg: Tekran Model 2505
- Controlled via newly updated Tek-MDS 2.5 software by any Windows™ based PC through single serial port
 - ◆ The new application is faster, more reliable and offers a wide range of new capabilities including software access to hardware settings and feedback for trouble shooting and full control
 - ◆ Calibration and final results are calculated directly in ng/m³
 - ◆ Fully programmable desorption cycle parameters to tailor system for any special application
 - ◆ Notebook PC allows portable operation

Due to continuing development, all specifications are subject to change.