better analysis counts

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Sindie 7039 G3

Sulfur Analyzer

Sulfur Analysis with Unprecedented Precision

No compromises in detection, performance and reliability - the SINDIE 7039 G3 analyzer is the ideal sulfur analytical solution for the energy industry. From ultra low sulfur diesel and gasoline to heavy fuel oil and crudes, the analyzer delivers unprecedented precision and accuracy. The Sindie 7039 G3 bench-top analyzer is easy-to-use, robust and complies with both ASTM D7039 and ISO 20884 methods. Plug it in and measure. Results with one touch. Unrivaled precision.

Application Areas:

- Total sulfur analysis from ultra low sulfur fuels to crudes.
- For use in refinery labs, pipeline terminals, additive plants, testing vans and inspection laboratories.
- Complies with ASTM D7039 and ISO 20884.

Features and Benefits:

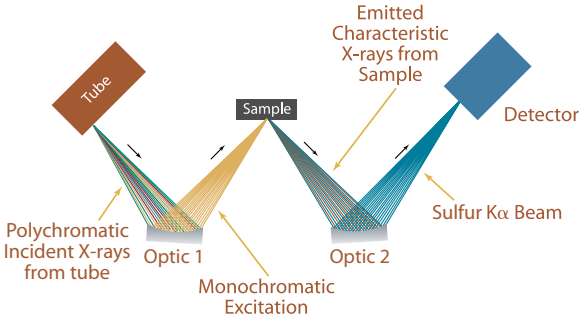
- LOD: 0.15 ppm at 300 s.
- Dynamic Range:
  Standard: 0.15 ppm to 3000 ppm
  XR package: 0.15 ppm to 10%
- Available with 8 cell auto-sampler.
- Fits on any bench and compatible for use in mobile labs/vans.
- Plug-it-in and measure: power is only utility.
- Touch screen user interface.
- Utilizes ACCU-CELL pre-assembled and pre-vented sample cups for enhanced precision, extreme ease-of-use and enhanced productivity.
- User programmable measurement time: 30-900 s.
- One calibration curve will run both diesel and gasoline up to 3000 ppm.
- No conversion gasses, heating elements, quartz tubes or columns.
- 75 W air-cooled excitation tube.
- Robust polyamide window for easy cleaning.

Options:

- Extended Range package: from 0.15 ppm up to 10%.
- 8 cell Autosampler.
- LIMS data output software capability.

MWD XRF

Monochromatic Wavelength Dispersive X-Ray Fluorescence (MWD XRF) utilizes state-of-the-art focusing and monochromating optics to increase excitation intensity and dramatically improve signal-to-background over high power traditional WD XRF instruments. This enables significantly improved detection limits and precision and a reduced sensitivity to matrix effects. A monochromatic and focused primary beam excites the sample and secondary characteristic fluorescence x-rays are emitted from the sample. A second monochromating optic selects the sulfur characteristic x-rays and directs these x-rays to the detector. MWD XRF is a direct measurement technique and does not require consumable gasses or sample conversion.



SINDIE Autosampler

- 8 sample cell capacity
- Increases productivity
- Utilitizes XOS Accu-Cell cups

ACCU-CELL Sample Cups

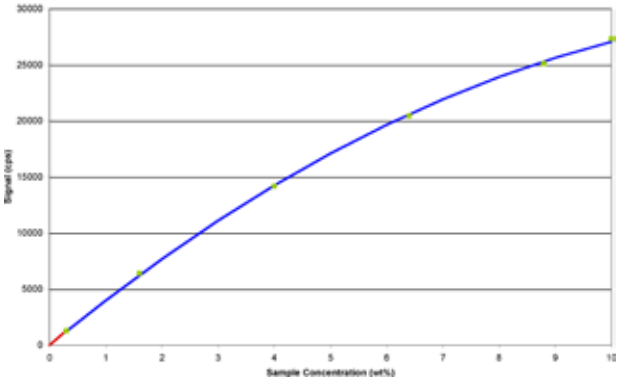
- No assembly of separate film & cup components
- Pre-vented sample cups
- Eliminates sample & cup contamination
- One discharge of 1 ml pipette will fill the cup

Precision

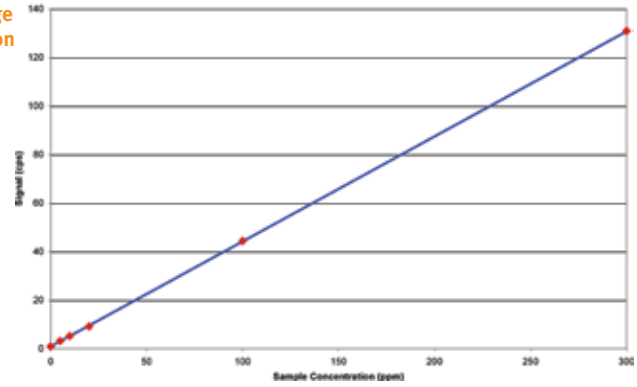
Typical repeatability (r) and reproducibility (R) values in diesel fuel, at 95% confidence. 300 s measurement time.

Sulfur Concentration (ppm)	r	R
2	0.3	0.7
5	0.5	0.8
8	0.6	1.0
15	0.8	1.4
100	2	4
500	5	10

SINDIE-XR Calibration Curve



Low Range Calibration



Product Specifications

Test Method	ASTM D7039 and ISO 20884
Dimensions	37 cm (w) x 50 cm (d) x 34 cm (h)
Power	100-120 VAC, 47-63 HZ at 6.0 Amps/200-240 VAC, 47-63 HZ at 6.0 Amps
Sample Cup Volume	1 ml
I/O Ports	Ethernet 10/100 base T, RS232
Optional Computer Interface	Pentium, 100 MHz, 32 MB RAM/Windows 98 or newer operating system
Ambient Temperature Requirements	5-40° C (40-104° C)
Dynamic Range	Standard: 0.15 – 3000 ppm, XR Package: 0.15 ppm – 10%
Measurement	User selectable: 30-900 s
Calibration	8 calibration curves. Automatic and Manual Calibration functionality

XOS®

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