HORIBA Scientific

NEW

Sulfur-in-Oil Analyzer

SLFA-60

Technical Specifications

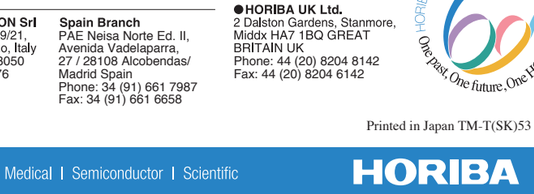
Measurement Specifications	
Measurment principle	Energy Dispersive X-ray Fluorescence Analysis Method (EDXRF)
Measurement sample	Sulfur in Petroleum products such as heavy oil, naphtha, and crude oil, light oil
Measurement range	0 - 9.9999 %
Repeatability	15 ppm or less (with a 1 % sulfur sample)
C/H error correction	± 50 ppm or less per C/H (with a 1 % sulfur sample)
Lower detection limit	20 ppm or less (three times the standard deviation with a 0 % sample)
Number of calibration curves	5 lines × 3 sets (Total 15 lines)
Calibration curve order	Linear or quadratic (both automatic selection and manual settings available)
Calibration	Calibration made using calibration points: (5 - 20 points)
Sample requirement	4 - 10 ml
Measurement time	10 - 600 sec
Spectrum measurement	Energy Axis: 0 - 10 keV, spectrum analysis to verify instrument preformances.
External output	USB connect with PC, USB memory

Ambient Conditions	
Temperature	+ 5 ℃ ～ + 40 ℃ (+ 41°F ～ + 104°F)
Humidity	80% max relative humidity in temperature range + 5 ℃ ～ + 30 ℃ (+ 41°F ～ + 86°F). Linear decrease to 50% relative humidity in temperature range + 31 ℃ ～ + 40 ℃ (+ 88°F ～ + 104°F).

Power and Housing	
Power supply	AC 100 - 240 V ± 10 %, 50/60 Hz
Power consumption	80 VA
Dimentions [W x D x H]	230 x 400 x 140 mm (9 x 15.75 x 5.5 in.)
Weight	9 kg (20 lbs.)

Comformity Standards
ASTM D4294(USA)·ISO 8754·JIS K2541/B7995

Dimentional Outlines (Unit : mm)



Please read the operation manual before using this product to assure safe and proper handling of the product.

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HORIBA celebrates its 60th anniversary in 2013. One past, One future, One HORIBA

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IMS
HORIBA Group is operating Integrated Management System
ISO9001 JQA-0298
ISO14001 JQA-E-90099
OHSAS18001 JOA-OH0068

Explore the future Automotive Test Systems | Process & Environmental | Medical | Semiconductor | Scientific HORIBA

SLFA-60 for a new generation of petroleum products

HORIBA introduces the new standard of transportable sulfur-in-oil analyzers, the SLFA-60.
This instrument introduces new software and hardware features to meet the growing changes in the petroleum industry.
The instrument has expanded storage of calibration curves and data can be exported using USB output.
The measurement range has increased to 0-9.9999 wt% to cover high sulfur crudes and shale oil markets.

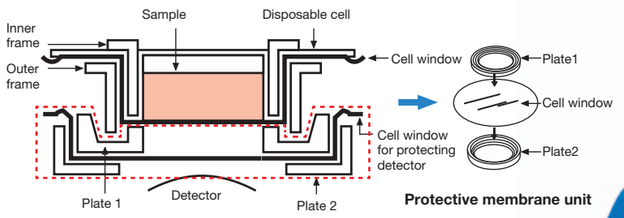
- Simple operation
- Easy maintenance
- Lightweight
- Compact
- Robust construction

Data output

The printout is available in an 80 mm wide format for easy comprehension.

Safety mechanism

The SLFA-60 has a protective membrane covering the cell window to prevent the detector and X-ray tube from accidental sample leakage. This protective membrane unit is simple to assemble and replace.



Cross section of sample cell and detector

Large screen display for easy viewing

The screen will display real-time data to check the measurement conditions.

USB memory

Your measurements can be recorded three different ways; by printout, exported to a USB memory device, or exported to an external PC through a USB interface, making it possible track and analyze the information throughout the lifetime of the unit.

Measurement Procedure

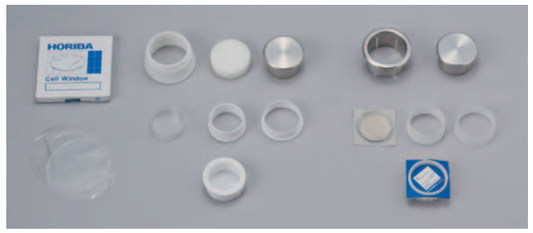
1. Pour the sample into the sample cell
2. Place the sample cell on the sample holder
3. Set to the measurement condition
4. Press the "MEAS" button to start the measurement
5. Instrument displays the results and data output

Calibration

New Software features allow up to 15 separate calibration curves. There are three sets and each set represents 5 separate calibration curves.
The Software also allows the users to choose between linear or quadratic curves. Calibration curves are restored manually without having to recalibrate as long as coefficients value/calibration data are on hand.

Original Sample Cell

To ensure accuracy and reliability of the analysis, HORIBA has maintained its original sample cell. By using the sample jig tool provided, you can easily seal the sample so that it is leak free.



Expanded Measurement Range (0~9.9999wt%)

This new model can measure a wider range of sulfur content. It has an expanded range to measure from 0-9.9999 wt% sulfur, due to the higher sulfur concentrations of crude and shale oil markets.

Large printouts

Printouts show important information, including sample ID, X-ray spectrum, date and time, measurement average value, standard deviation and calibration curve graph.