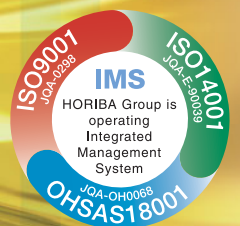


Sulfur-in-Oil Analyzer

SLFA-60



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

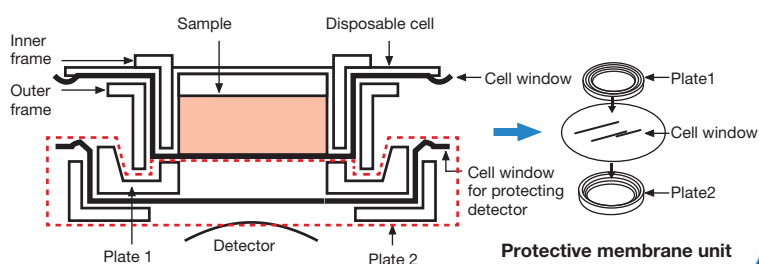
Robust construction

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

Protective membrane unit

Large screen display for easy viewing

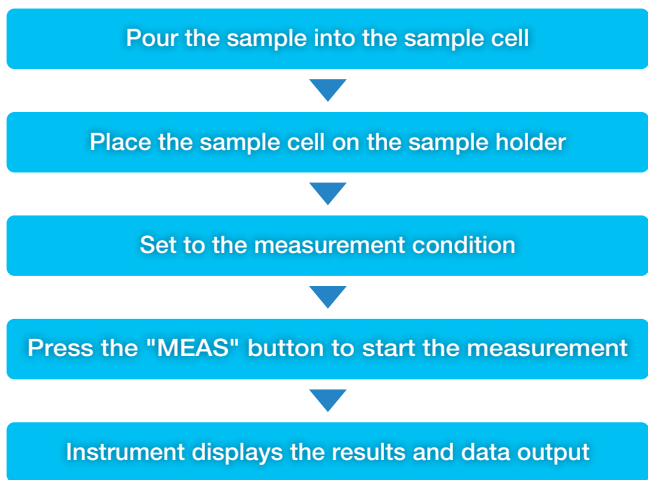
The screen will display real-time data to check the measurement conditions.

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



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.

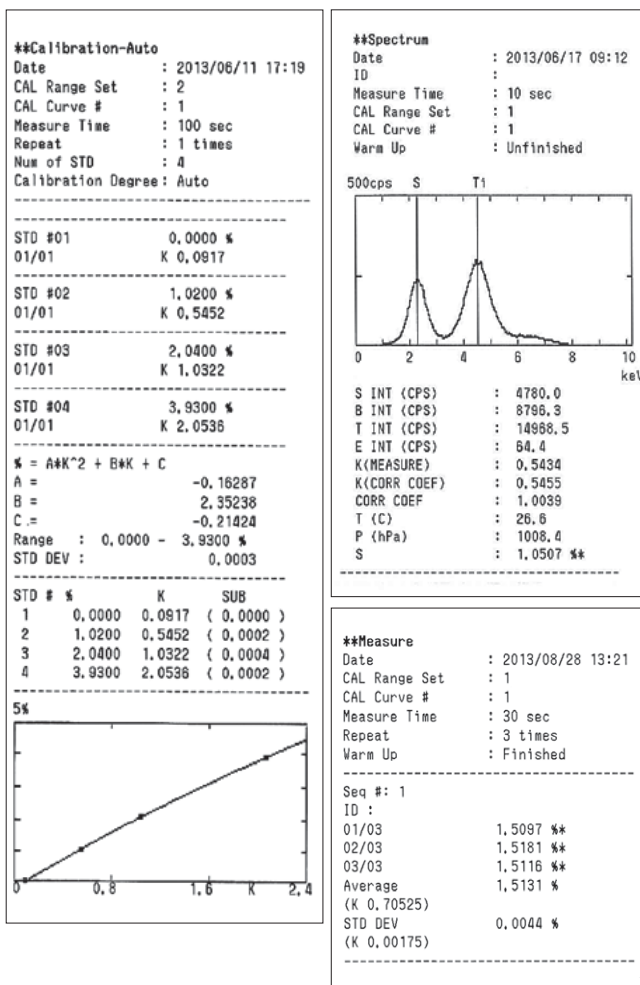


Expanded Measurement Range (0~9.9999wt%)

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.



Technical Specifications

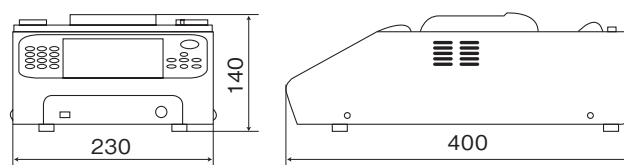
Measurement Specifications	
Measurement principle	Energy Dispersive X-ray Fluorescence Analysis Method (EDXRF)
Measurement sample	Sulfur in Petroleum products such as heavy oil, naphtha, and crude oil, light oil
Measurement range	0 - 9.9999 %
Repeatability	15 ppm or less (with a 1 % sulfur sample)
C/H 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 x 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 performances.
External output	USB connect with PC, USB memory

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

Power and Housing	
Power supply	AC 100 - 240 V ± 10 %, 50/60 Hz
Power consumption	80 VA
Dimensions [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	

Dimensional 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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