TANAKA

Automatic Petroleum Tester

X-RAY SULFUR METER model RX-360SH

RX-360SH determines **total sulfur in petroleum products**, such as gas oil, fuel oil, crude oil and naphtha, using energy dispersive X-ray fluorescence (EDXRF) method, which is an accurate, non-destructive, economical and yet quick method prescribed in ISO 8754 and ASTM D4294-03.

HIGH PRECISION: Digital pulse height analysis is automatically carried out at each measurement to adjust the system. This innovative system design has further improved the precision.

WIDE RANGE OF SAMPLES: Patented "Diamond Parameter Method" accurately compensates for measurement error caused by different carbon/hydrogen(C/H) ratio of individual sample. This state-of-art technology enabled measurement of wide range of samples of different C/H ratios with uncompromising precision.

AMBIENT TEMPERATURE AND BAROMETRIC PRESSURE COMPENSATION: Compensation for ambient temperature and barometric pressure are made automatically to drastically minimize the drift.

AUTOMATIC CALIBRATION: Set certified calibration standards and start automatic calibration program to carry out automatic calibration. Either multiple point calibration at up to 10 points or two points calibration starts.

EASY OPERATION: Minimum numbers of membrane switches are located on the operation panel along with an LCD for easy dialogue type operation.

COMPACT DESIGN/2-WAY POWER SOURCE: Compact design unit with carrying handle and 2-way power source (100-240VAC*[1] or 12VDC battery*[2]) allows such applications as spot-checking in the field.

*1: When used with the provided AC Adapter

*2: When used with optional 12VDC cord with lighter plug

LOWER RUNNING COST: The Teflon sample cell is permanent and used with a small piece of disposable Mylar film. The only other consumable is the printing paper, making the running cost at minimal.

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X-Ray Sulfur Meter, model RX-360SH

SPECIFICATIONS:

TYPE:

Total sulfur analyzer for petroleum products by energy-dispersive X-ray fluorescence method

CONFORMING STANDARDS:

ISO 8754, ASTM D4294-03, etc.

NUMBER OF TEST:

One(1)

SAMPLE VOLUME:

3-5ml

MEASURING RANGE:

0-6.00wt%

REPEATABILITY: (Typical)

Range	Repeatability	Measuring Time
0.008wt%max	10ppm*	300sec x 3times
0.05wt%max	20ppm	100sec x 3times
0.05-0.50wt%	40ppm	100sec x 3times
0.51-1.50wt%	60ppm	100sec x 3times
1.51-2.00wt%	100ppm	100sec x 3times
2.01-4.00wt%	200ppm	100sec x 3times
4.01-6.00wt%	400ppm	100sec x 3times

*: ASTM D4294 designates the repeatability in the range(r). In terms of standard deviation, 5ppm.

C/H RATIO COMPENSATION:

Automatic with 0.003wt% max of compensation error when a 1wt% sample is tested.

MEASURING TIME:

10-990sec with a 10sec increment. 1-99 times.

CALIBRATION:

*Automatic two point calibration

*Manual two point calibration

*Automatic multiple-point calibration(up to 10 points)

*Manual multiple-point calibration(up to 10 points)

X-RAY SOURCE:

X-ray tube operated at 7kV-0.15mA

SAMPLE CUP:

2-piece Teflon cup with disposable Mylar film

PRINTER:

Built-in impact dot matrix printer (W57mm)

DISPLAY:

LCD (20 characters x 4 lines)

X-RAY LEAKAGE:

0.6 micro Sv/Hr or less on instrument surface

DATA OUTPUT:

RS-232C 1 channel

OPARATING TEMPERATURE/HUMIDITY:

10-30℃ with a temperature drift within 10°C in a day.
RH to be within 80%.

POWER SUPPLY:

DC12V (with the provided AC Adapter or optional 12VDC cord with lighter plug)

SAFETY:

Interlock mechanism against accidental X-ray leakage

DIMENSIONS/WEIGHT:

Test head: 420mmW x 350mmD x140mmH/11kg

AC Adapter: 50mmW x 115mmD x 25mmH/0.25kg

ORDERING INFORMATION:

STANDARD ACCESSORIES:

1.AC Adapter	1pc
2.Teflon sample cells (5pcs/box)	1box
3.Sample cell assembling jig	1set
4.Sample cell disassembling jig	1pc
5.Sample cell stand	1pc
6.Mylar film (200mm x 1,000m)	1roll
7.Printer roll paper	3rolls
8.Spare Printer ink ribbon	1pc

OPTIONAL ACCESSORIES:

12VDC cord with lighter plug (3.0m)

START-UP KIT (needs to be ordered separately)

Certified Reference Material (requires when set-up)
(0.0%,100ppm,500ppm,0.1%,0.2%,0.5%,1%,2%,3%, &4%)

SUGGESTED SPARES:

1. Teflon sample cells (5pcs/box)	1 box
2. Mylar film (200mm x 1,000m)	1 roll
3. Printer roll paper	25 rolls
4. Printer ink ribbon	5 pcs

Specifications subject to change without prior notice.

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