

# Two critical elements with one instrument

Sindie® +Cl is a two-in-one instrument enabling trace analysis of both sulfur and chlorine with one analyzer. It is the ideal solution to certify sulfur levels in finished products, assess chlorine for corrosion mitigation, and optimize process parameters.

## APPLICATIONS

- Total sulfur analysis from ultra low sulfur fuels to crudes
- Total chlorine analysis from aqueous solutions and aromatic products to heavy fuels and crudes.
- For use in refinery labs, pipeline terminals, additive plants and inspection laboratories

## FEATURES AND BENEFITS

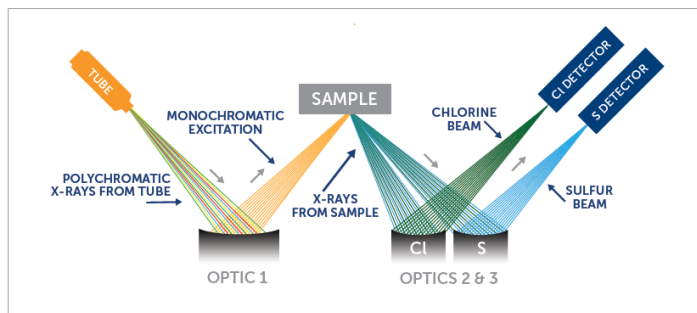
- Sulfur
  - **LOD:** 0.4 mg/kg (ppm) at 300s, 0.28 mg/kg (ppm) at 600s\*
  - **Dynamic Range:** 0.4 mg/kg (ppm) to 5 wt%
- Chlorine
  - **LOD:** 0.3 mg/kg (ppm) at 300s, 0.21 mg/kg (ppm) at 600s\*
  - **Dynamic Range:** 0.3 mg/kg (ppm) to 3000 mg/kg (ppm)
- Automatic sulfur correction saves time and improves accuracy and precision on high sulfur samples
- **Easy to use:**
  - Intuitive 10-inch touch screen
  - Just plug in and measure
  - **Measurement time:** 10-999 s
- **Low maintenance:** no gasses, or heating elements
- Traditional 43 mm XRF sample cups or XOS Accucells – decided at time of order
- Small footprint
- LIMS integration for data management and transfer
- Custom sample presets to save data entry time and minimize mistakes on common samples
- Bar code reader autofills sample name to reduce data entry time
- Storage capacity for more than 50,000 measurement results
- Supports up to 30 calibration curves
- USB connectivity in front and back for connecting to printer, keyboard, mouse, and memory stick
- Supports USB and network printers
- Large, easy-to-remove side panels for easy serviceability
- Advanced error reporting and diagnostics



ASTM D2622, D7039 D7536,  
D4929, ISO 20884, EN 16997,  
and SH / T 0842

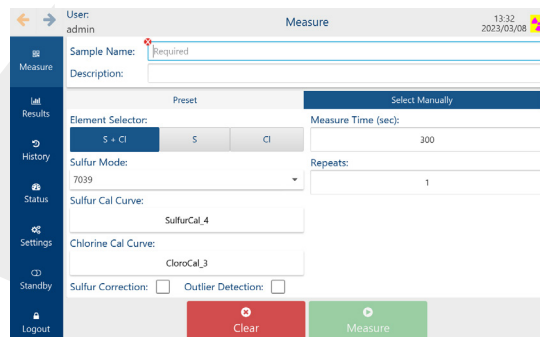
## TRUSTED PRECISION

Sindie +Cl is powered by Monochromatic Wavelength Dispersive X-Ray Fluorescence (MWDXRF®): an elemental analysis technique offering significantly enhanced detection performance over traditional XRF technology. Using the industry's most advanced optics, doubly curved crystals, Sindie +Cl achieves a high signal-to-background ratio and delivers very precise measurements of low sulfur and chlorine.



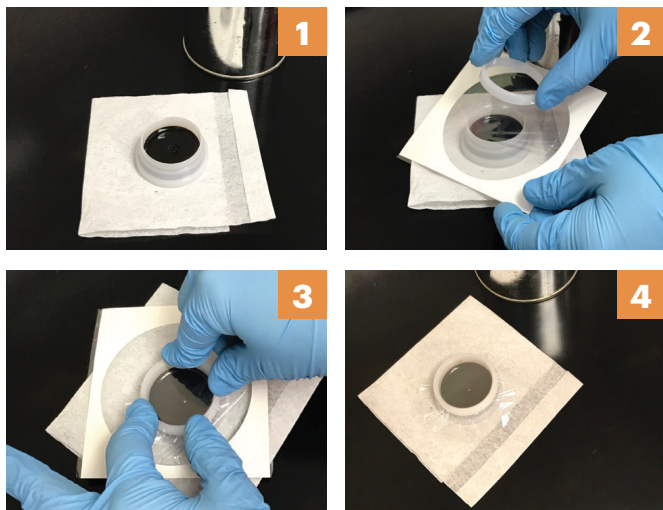
## TWO CRITICAL MEASUREMENTS

Sindie +Cl performs trace analysis of both sulfur and chlorine with one push of a button. You can measure both elements in one sample, or measure each separately by simply inserting a new sample.



## ZERO HASSLE

Sindie +Cl analyzes a broad range of liquid samples from aqueous solutions to heavy hydrocarbons (e.g. VGO or crude oil), all without the need for dilution, combustion gases, or other hassles like changing detectors, boats, injectors, furnaces, etc.



## PRODUCT SPECIFICATIONS

<b>Model</b>	Sindie +Cl
<b>Test Method</b>	ASTM D2622, D7039, D7536, D4929, ISO 20884, EN 16997, and SH / T 0842
<b>Dimensions</b>	42 cm (h) x 40 cm (w) x 54 cm (d) 16.5 in (h) x 15.8 in (w) x 21 in (d)
<b>Power</b>	100-120 VAC, 47-63 HZ at 6.0 Amps/ 200-240 VAC, 47-63 HZ at 2.5 Amps
<b>Minimum Sample Cup Volume</b>	Traditional - 5 mL, Accucell - 1 mL
<b>Optical Path</b>	Vacuum

\*Longer cycle time increases counts and lower LOD, but sample conditions over time must be considered. For further inquiries, please contact us at [info@xos.com](mailto:info@xos.com).