

CS-9000 series high-frequency infrared carbon sulfur analyzer

CS-9000 series high-frequency infrared carbon sulfur analyzer, consisting of automatic constant pressure oxygen supply, high frequency induction furnace, infrared detectors, computer, electronic scales and printers, it is a fast, accurate, reliable automatic analyzer. Analysis process as follows: When the sample combustion in a high frequency furnace, element of carbon & sulfur it contains is oxidized to CO₂, CO and SO₂, oxygen-vector will be sent into infrared detector, generates an electrical signal via the infrared detector enlarge evacuation computer data processing, final results of the analysis like percentage content of carbon and sulfur can be printed out.

CS-9000 series high-frequency infrared carbon sulfur analyzer induction furnace with a reverse sweep with automatic dust removal function can automatically remove dust, ensure that the analysis results are accurate and reproducible, reduce manual cleaning, improve efficiency, de-dust power comes from the combustion exhaust gas, truly saving and environmental protection.

Common Parameters

Analysis time: 30 ~ 50s

Measuring principle: High-frequency combustion infrared absorption method

Analysis gas: pure oxygen 99.5%

Power gas: Nitrogen or compressed air without water

Power: 220V ±5%

Weight: 85 kg

Dimensions: 565×465×720 mm

CS-9001 High-frequency Infrared Carbon Sulfur Analyzer

CS9001 series of high-precision high-frequency infrared carbon and sulfur analyzer, adopt high-frequency combustion system and infrared analysis system; Integrated structure, with four sets of infrared detection system.



Specifications:

Measuring range: Standard sample weight

Carbon element:

C1: 0.001 ~ 50% expandable up to 100%

C2: 0.00001 ~ 0.5%

Sulfur:

S1: 0.1 ~ 60% expandable up to 100% (optional)

S2: 0.00001 ~ 5%

Sensitivity: 0.1ppm

Repeatability:

Carbon R S D \leq 0.5%

Sulfur RSD \leq 1.5%

Accuracy:

Carbon: better than ISO 9556 standard

Sulfur: Better than ISO 4935 standard

CS-9002 High-frequency Infrared Carbon Sulfur Analyzer

CS9002 series of high-precision high-frequency infrared carbon and sulfur analyzer, adopt high-frequency combustion system and infrared analysis system; Integrated structure, with two sets of infrared detection system.



Specifications:

Measuring range: Standard sample weight

Carbon element:

C1: 0.0001 ~ 20% expandable up to 100%

C2: 0.00001 ~ 0.5% (Optional)

Sulfur:

S1: 0.1 ~ 60% expandable up to 100% (optional)

S2: 0.00001 ~ 5%

Sensitivity: 0.1ppm

Repeatability:

Carbon R S D \leq 0.4%

Sulfur RSD \leq 1.0%

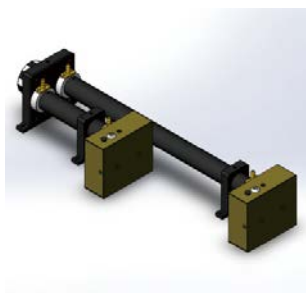
Accuracy:

Carbon: better than ISO 9556 standard

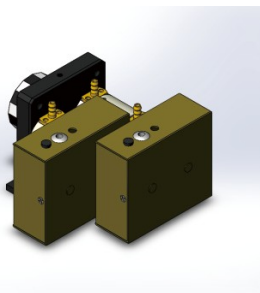
Sulfur: Better than ISO 4935 standard

Optional

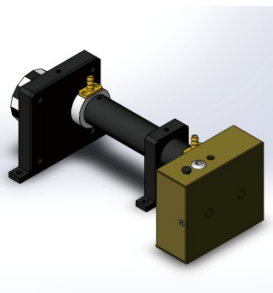
Detection module system



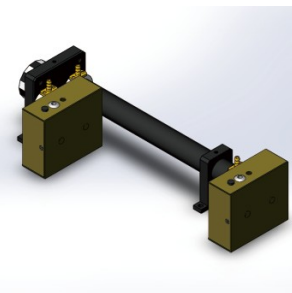
Double sulfur detector



Double carbon detector



CO detector



Carbon & sulfur detector

Processing system

CS1000 Processing system is specially designed processing device to use high frequency infrared carbon sulfur analyzer accurately analyze minerals, geology, clay and etc containing crystalline water or organic sample, it used U.S. Patent water molecules separating techniques to separate water molecules from mixed gas combustion which generated in combustion, and drain water molecules through built circulation system, so as to ensure accurate detection of CO₂ and SO₂ are



not impact by moisture; Compact structure & long service life, either pre-integrated inside the instrument can also be installed as an independently accessories.

Control Software

- Multiple preset curve, system can be stored a maximum of 80 carbon & sulfur curve.
- User setting curve is supported. Multi authority control, can be divided according to grade different privileges.
- Temperature, flow rate, peak width, carbon monoxide compensation, system is stable and reliable.
- Analysis results automatically recorded in the database, support query, print and mathematical statistics, data can be output as Excel sheet.
- Experimental results playback function.
- Support for single-point or multi-point calibration function.
- Self-test and alarm functions can be set in software.

