



## CS744 Series: Carbon/Sulfur by Combustion

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LECO's CS744 Series will redefine the way you determine carbon and sulfur in primary steels, ores, finished metals, and other inorganic materials. Using extensive customer feedback and innovative engineering, our latest instrumentation takes advantage of our Cornerstone® brand software platform, powered by a touch-screen interface to increase usability and lower the cost-per-analysis.

Additional features—such as a high-frequency combustion furnace, improved IR cell design, rugged design, and available automation—make the CS744 Series a valuable resource for any industrial environment needing accurate analysis of carbon and/or sulfur.



## User-Friendly Cornerstone Brand Software

LECO's exclusive Cornerstone brand software with touch-screen interface enables the user to have complete access to analysis control, method settings, diagnostics, reporting, and more in a highly organized and immersive environment. Designed through a collaboration of customer feedback and innovative engineering, Cornerstone allows the user to conduct all of their day-to-day operations within a single Analysis screen designed for speed and ease-of-use. Our innovative grouping of sample data into sets and replicates simplifies the data output and automatically calculates relevant statistics, alleviating the need for additional data processing.



## Software Features & Benefits

Cornerstone brand software is divided into four main sections—Analysis, Diagnostics, Settings, and Instrument—for simplified navigation and organization. Toolbars, sliders, and drop-down menus make it easy to set parameters for calibration and data processing. The software also includes real-time ambient monitors, with fully animated system diagrams. Advanced diagnostic features include a thorough digital on-board manual, maintenance animations, photo illustrations, and screen captures that quickly provide the direction needed without having to refer to multiple manuals. Cornerstone also supports extended data archiving and flexible reporting capabilities.



## Instrument Highlights and Features

### High-Frequency Furnace

- 18 MHz, 2.2 kW induction furnace for rapid and consistent combustion
- Integrated oxygen lance floods crucible with high-purity oxygen to promote complete combustion and improved recovery
- Replace a combustion tube in less than 10 seconds with the modular tube assembly



### Improved IR Cell Design

- Thermostatic construction provides increased protection from ambient temperature fluctuations
- Optimized emitter control and detection circuitry improves the IR cell lifetime and long-term stability, resulting in superior accuracy and precision
- Individual wide-range IR detection for both carbon and sulfur simplifies set-up and calibration

### Features and Benefits

- High-velocity HEPA vacuum system keeps dust and debris contained
- Optional 10- and 60-sample autoloaders available for hours of worry-free operation
- Expanded interactive diagnostics and color-coded plumbing aid in troubleshooting and serviceability



CS744 with optional autoloader

### Optional Packages

**Monitor:** Includes an instrument-mounted touch-screen and six-axis boom mount for improved ergonomics

**Cleaner:** Upgrades the manual cleaner and manual combustion tube removal systems to the automatic versions, reducing downtime and increasing safety

**Performance:** Add the incoming carrier gas purifier and scrubber, and heated flow controller for improved baseline stability and precision

**Performance Sulfur:** Upgrades the standard flow controller with a thermally stabilized flow controller for improved baseline stability and precision



CS744 with high-velocity vacuum system

## Models

CS744 Carbon/Sulfur Determinator Specification Sheet 209-214-001

C744 Carbon Determinator Specification Sheet 209-214-002

S744 Sulfur Determinator Specification Sheet 209-214-003

## Options

Sample Autoloader	Printer	Interfaced Balance Kit	<del>SmartLine</del> Remote Diagnostics
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NOTE: Multiple configurations of options are available. Please contact your local LECO Sales Engineer for more details.

## LECO—Your source for total analytical solutions



### ONH Series: Oxygen/Nitrogen/Hydrogen by Fusion

- Oxygen, nitrogen, and hydrogen by inert gas fusion
- State-of-the-art infrared and thermal conductivity detectors with no moving parts and no manual adjustments
- Custom software interface designed specifically for touch-screen operation
- User-friendly Cornerstone brand software

### Glow Discharge Atomic Emission Spectrometers

- Bulk elemental or bulk elemental/composition depth profile models available
- Spectral range of 120 to 800 nm (configuration dependent)
- Wide dynamic range. Detection from ppm to 100% by weight
- Short analysis time (minutes)



### Inorganic Consumables

Get the best results from your LECO instrument by using genuine LECO consumables. Visit [www.leco.com](http://www.leco.com) for featured items, specials, and ordering information (Form number 203-959).

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Delivering the Right Results

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