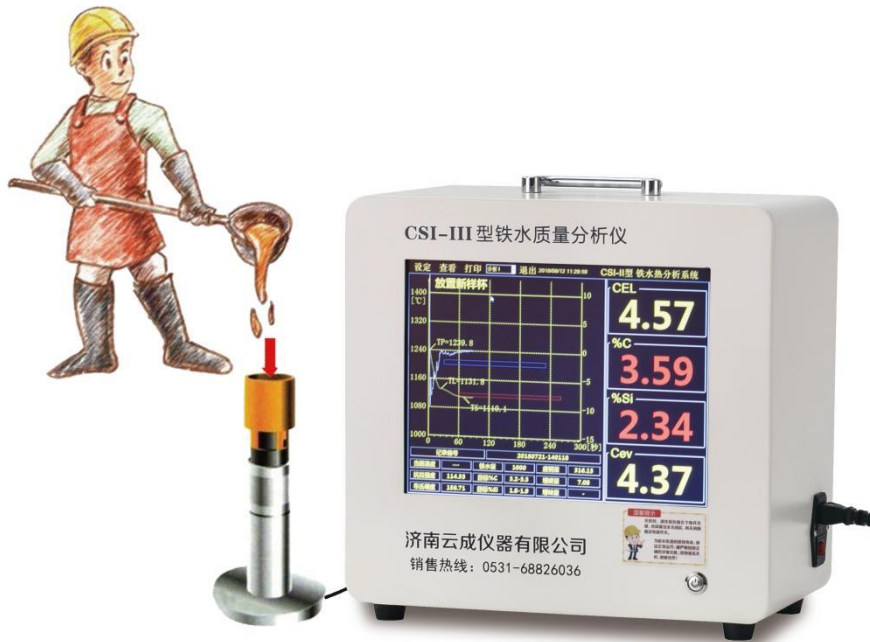


CSI-III Intelligent Carbon-Silicon Analyzer



➤ Overview of Applications:

CSI-III Intelligent Carbon-Silicon Analyzer enables rapid determination of carbon equivalent, carbon content, silicon content, spheroidization rate, tensile strength, and hardness assessment for raw molten iron such as gray iron, malleable iron, ductile iron, and vermicular iron at the furnace front. Featuring simple operation, high measurement accuracy, and excellent stability, this instrument is widely used in metallurgy, foundry, and machining industries.

➤ Key Features:

- (1) 15-inch LCD display with large fonts for simultaneous display of cooling curves and measurement data, providing clear and intuitive readability.
- (2) Built-in industrial-grade computer with ultra-long lifespan, stable performance, and strong anti-interference capabilities, ensuring reliable long-term operation of the equipment.
- (3) Proprietary industrial control operating system ensures crash-free operation even during power outages with built-in data protection. Self-developed analysis software features innovative curve trend charts. Lifetime free upgrades included.
- (4) China's first-of-its-kind "multi-channel curve mode" allows users to choose their preferred

settings.

- (5) Features a proprietary multi-channel high-precision (0.1°C) temperature acquisition module with robust anti-interference capabilities. Provides up to 3000V DC opto-isolation to prevent damage to peripheral equipment from high voltage on lines, ground loops, or oscillations. Supports 100ms high-speed sampling to meet high-speed response/high-precision requirements. Compatible with RS-232 and long-distance RS-485 communication protocols.
- (6) USB data interface for communication with computers, enabling functions such as data storage, database queries, and data output.
- (7) Up to 8 distinct detection lines can be configured to accommodate various application scenarios.
- (8) Simple operation: automatically calculates the required additions of carbon additive, ferrosilicon, and scrap steel based on measured composition levels, preset molten iron volume, and target composition, enabling rapid adjustments at the furnace front.
- (9) Features a top-tier Taiwanese brand “Meanswell” voltage regulator for enhanced reliability.

➤ **Technical Specifications:**

Measurement Parameters: Measure C, Si, CEL, ΔT , ΔTM ; calculate tensile strength R_m , hardness HB, quality factor R/H, agglomerate count MEG, graphitization factor K.

Measurement Range: C% value: 2.1–4.2% Si% value: 0–20% CE value: 2.5–5.0% Spheroidization rate: 40–100%

Measurement Accuracy: C% value $\pm 0.039\%$ Si% value $\pm 0.10\%$ CE value $\pm 0.047\%$ Spheroidization rate $\pm 10\%$

Measurement time: $\leq 3\text{min}$

Resolution: 0.1°C

External Dimensions (Length \times Height \times Width): 345*340*200mm

Weight: 14kg

➤ Random Standard Configuration:

序号	名称	规格	数量	备注
1	Host	CSI-III	1PCS	
2	Sample Cup Base	Square or round	1PCS	
3	Power cord		1PCS	
4	Temperature measurement line		3M	Mounted on the sample cup base
5	Fuse		1PCS	Plug into an electrical outlet
6	Wireless Mouse and Keyboard		1PCS	Includes receiver
7	Sampling spoon		1PCS	
8	Packing List		1PCS	
9	Product Manual		1PCS	
10	Certificate of Conformity		1PCS	
11	Product Warranty Card		1PCS	