

CSI-D Intelligent Carbon-Silicon-Manganese Analyser



➤ Purpose Overview:

CSI-D Intelligent Carbon-Silicon-Manganese Analyser enables rapid determination at the furnace front of carbon equivalent, carbon content, silicon content, manganese content, spheroidisation rate, tensile strength, and hardness assessment for primary iron melts including grey iron, malleable iron, ductile iron, and vermicular iron. It finds extensive application across metallurgy, foundry, and machining industries.

➤ Key features:

Measurement function : CSI-D employs suitable measuring cups and utilises thermal analysis methods to determine various parameters within cast iron.

Data retention function: Data may be recorded at predetermined intervals, with capacity for over

1,000 measurement results.

Calculation function: Automatic/Manual Calculation of Adjusted Ingredient Top-Up Quantity

Data output function: Optional USB port (flash drive) or RJ45 interface (network cable port) for transferring output data to other computers.

History Replay Function: Historical measurement data and cooling curve diagram reproduction.

➤ **Measurement Range and Accuracy:**

| Name of Test Item | Measuring range | Measurement accuracy |
|-------------------------|-----------------|----------------------|
| carbon equivalent (CEL) | 2.50%~4.80% | ±0.08% |
| Carbon content (C%) | 2.30%~4.20% | ±0.05% |
| Silicon content (Si%) | 0.60%~3.80% | ±0.10% |
| Manganese content (Mn%) | 0.10%~1.40% | ±0.15% |
| Spheroidization rate | 60%~99% | ±5% |
| Tensile strength | 150~400MPa | ±10MPa |
| Brinell hardness | 100~300HB | ±10 HB |

➤ **Random Standard Configuration:**

| Serial Number | Name | Specifications | Quantity | Note |
|---------------|------------------------------|-----------------|----------|--------------------------------|
| 1 | Host | CSI-D | 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 | Mouse | | 1PCS | |
| 7 | Packing List | | 1PCS | |

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|----|---------------------------|--|------|--|
| 8 | Product Manual | | 1PCS | |
| 9 | Certificate of Conformity | | 1PCS | |
| 10 | Product Warranty Card | | 1PCS | |