

Product Details	
Product Number	PRO6387



Technical Specification:

Overview — CAL200 Oxygen Bomb Calorimeter

CAL200 is a fully automated bomb calorimeter for rapid, repeatable determination of calorific value in coal, coke, oil, paraffin and other combustibles. A high-precision temperature sensor and a high-performance A/D converter are paired with a single-chip microprocessor to deliver stable measurements and intelligent data handling. A color LCD provides clear guidance through the run; once the sample is prepared and parameters are entered, CAL200 executes the test automatically and compiles the results. Data can be printed directly on an A4 printer (when configured) or exported for LIMS/reporting. Built for demanding labs in *power generation, metallurgy, cement, chemicals*, research institutes and universities.

- Consistent results, minimal handling.
- Automated test sequence with microprocessor control
 - 0.001 K temperature resolution for confident endpoints
 - Self-sealing stainless-steel oxygen bomb (20 MPa)

Key features

- Intelligent control: single-chip controller with color LCD UI; automatic data collection and processing.
- Automation: after loading the sample and entering parameters, the instrument completes the full test workflow automatically.
- Self-sealing O₂ bomb: all-stainless construction; pressure-tested to 20 MPa at room temperature.
- Stable bath design: inner stainless-steel bucket holds ~3000 g water; electric mixer ensures uniform bath

- temperature.
- Constant-temperature jacket: double-wall external water jacket with circulation/mixing for a stable test environment.
- Printing & export: results can be output to an A4 printer (when configured) and exported digitally.
- Recommended accessory: briquetting (press-cake) machine for pulverized coal to improve repeatability.

Technical specifications — CAL200

Heat capacity (instrument)	14,000 – 15,000 J/K
Temperature resolution	0.001 K
Thermal error	≤ 60 J/g
Temperature measurement range	10 – 35 °C
Repeatability	≤ 0.2% (Grade C)
Oxygen bomb pressure rating	20 MPa (room temperature)
Ambient conditions	15 – 28 °C; RH < 85%; ΔT during a test ≤ 1 °C
Inner bucket / bath	Stainless-steel inner tube; ~3000 g water; electric mixer
Jacket	Double-container external water jacket with mixer
Power supply	AC (220 ± 5%) V, 50 Hz
Power consumption	< 150 W
Dimensions (L × W × H)	600 × 460 × 430 mm (PC not included)

Note: For pulverized coal, use a press-cake (briquetting) machine to improve consistency.

Included

- CAL200 bomb calorimeter with self-sealing oxygen bomb
- Stainless-steel inner bucket with mixer
- User manual

Optional accessories

- Press-cake (briquetting) machine for pulverized coal
- A4 desktop printer (for direct printout)

Accessories: