

Technical Specification for **bomb calorimeter**

Sl. No.	Software	Details
01	Bomb Calorimeter	<p><b>1) Fully automatic micro processor controlled bomb calorimeter for rapid determination of gross calorific value of crushed/powdered samples of coal/coke and other organic matter as per Indian/international standards. The equipment should be compact, integrated, and bench-top model. The calorific value should be reportable in Kcal/Kg, properly interfaced printer with LCD display of the final results on the screen of the instrument, fast hard copy printing facility and adequate memory storage facility. The instrument should be easy to operate.</b></p> <p><b>(2)Method: - BIS/ASTM/ISO and other international standard.</b></p> <p><b>(3)Jacket type:-isoperibol, water jacket</b></p> <p><b>(4) Oxygen fill:-Automatic</b></p> <p><b>(5) Water bucket fill:-Automatic</b></p> <p><b>(6) Bomb wash:-Automatic</b></p> <p><b>(7) Resolution:-0.1 cal/g</b></p> <p><b>(8) Temperature measuring resolution:-0.0001 gm.</b></p> <p><b>(9) Gas requirements-oxygen (420-450) psi</b></p> <p><b>(10) Electrical requirements-120/240 v ac, 50/60 HZ, single phase</b></p> <p><b>(11) Test per hour:-5 to 7 tests</b></p> <p><b>(12) Operation:-operated by calorimeter system and pc also.</b></p> <p><b>(13) % RSD:-0.05 to 0.10 %</b></p> <p><b>(14) GCV range –More than 7000 kcal/kg</b></p> <p><b>(15) The warranty should be five years from the date of installation/commissioning.</b></p> <p><b>(16) Corrections:-Operator selected option for correcting for acid, nitrogen, fuse wire, sulphur, moisture, ash and hydrogen.</b></p> <p><b>(16) All the accessories required for the instrument should be supplied by company/supplier.</b></p> <p><b>(17)Operator time:-less than 5 minutes.</b></p>

**Other Terms:**

1. Deliverable include license for above equipment along with all spare parts to run the equipment for three years with operating manual hardcopy (for Bomb Calorimeter).
2. There will be two years comprehensive annual maintenance contract (for fourth & fifth year) for the above equipment. Kindly attach estimate/cost separately for CAMC.
3. The warranty of Bomb Calorimeter should be three years from the date of installation with all parts with complete warranty.
4. If the equipment is proprietary you have to provide proprietary & sole supplier certificate.