

# BCA<sup>®</sup> 500

HIGH PRESSURE BOMB CALORIMETER

UPGRADE

The BCA<sup>®</sup> 500 is the only single-instrument solution for the combustion (deflagration) calorimetry of energetic materials on the market. It offers superb resolution, electronic calibration, high pressure measurement, metrological traceability, semi-automatic operation, durable construction, easy to use concept and one-box design with an integrated water cooler.

  
design by Jan ERMIS



## APPLICATIONS

The BCA 500 is well suited for the combustion heat characterization needed for further performance calculations of high explosives or propellants in their research, development, manufacture and in-service surveillance and as well can be used for performance characterization of various fuels (coal, wood etc.).

The BCA 500's precision and performance allow it to be used in quality control systems and in research and development applications with the highest criterion. Typically, coal mines, power plants and explosive production plants find the BCA 500 indispensable. The tailored design of the BCA 500's accessories and consumables provide an excellent solution for any application especially in the industries of fuels and energetic materials; however, please note the BCA 500 is not designed for the testing of materials in a detonation regime.

## ADVANTAGES & FEATURES

- ▶ Superb resolution of temperature measurement system
- ▶ Optional electronic calibration system
- ▶ Results reproducibility as low as 0.1 %
- ▶ The BCA 500 needs no continuous water supply – all process water is stored inside inner tanks
- ▶ Two tanks allow for non-stop testing thereby reducing the operation time
- ▶ Advanced water management with integrated chillers provides precise dosing and conditioning
- ▶ Easy to operate interface with LCD touch screen
- ▶ Fully automated data acquisition, evaluation and management
- ▶ Intuitive operation with no special personnel requirements



BCA 500 EX and DC bombs for low and high pressure combustion respectively

## COMPLIANCE

- |              |                |                |
|--------------|----------------|----------------|
| ▪ AS 1038.5  | ▪ ASTM D5865   | ▪ IS 1350-2    |
| ▪ ASTM D240  | ▪ ASTM E711    | ▪ ISO 1928     |
| ▪ ASTM D4809 | ▪ CSN EN 14918 | ▪ JIS M 8814   |
| ▪ ASTM D5468 | ▪ DIN 51 900   | ▪ MIL-STD-286C |



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