

# DCA 25

## DETONATION CALORIMETER

The DCA 25™ is a detonation isoperibolical calorimeter which is designed and made by OZM Research for the determination of detonation heat of all kinds of explosives. In addition, combustion and/or explosion heat can be analyzed as well. The DCA instruments offer superb precision, semi-automatic operation, durable construction, easy to use concept and a one-box design with an integrated water cooler and a bomb manipulator.



*design by Jan ERMIS*

## APPLICATIONS

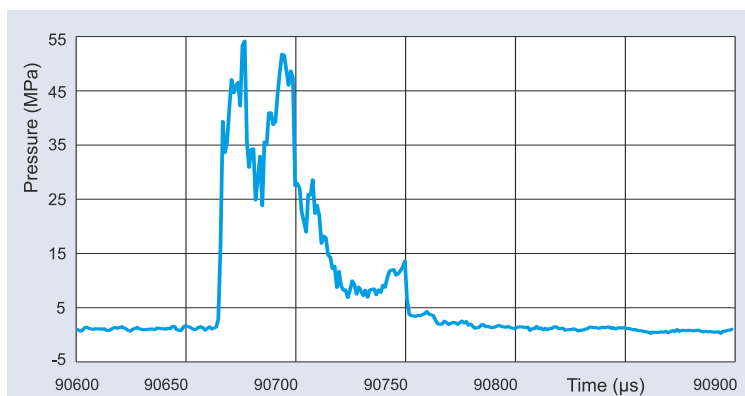
The DCA 25 (4.7 L volume, max 25 g of TNT equivalency) is well suited for the characterization of performance properties of high explosives or propellants in their research, development, manufacture and in-service surveillance.

## ADVANTAGES & FEATURES

- ▶ Superb resolution of thermometers: 0.00001 K
- ▶ Results reproducibility as low as 0.2 %
- ▶ 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, wireless keyboard and mouse
- ▶ Fully automated data acquisition, evaluation and management with remote access features
- ▶ Built-in dynamic pressure sensors upon request
- ▶ High strength stainless steel detonation chamber for testing in vacuum, air, nitrogen, argon, oxygen etc.
- ▶ Built-in bomb manipulator and detachable cart for easy positioning.

## COMPLIANCE

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



High frequency pressure record



DCA 25 bomb



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