

## CAL3K-U UNIVERSITY EDITION

**NEXT GENERATION OXYGEN BOMB CALORIMETERS  
FOR TODAY'S ANALYTICAL NEEDS.**

## CAL3K-U CALORIMETER

The CAL3K-U is the third in the range of new oxygen bomb calorimeters from DDS. It is the companion to the CAL3K-AP and CAL3K-A but with EXTERNAL oxygen filling and without ATC (Automatic Temperature Control). The new range, from the engineers who designed the CAL2K oxygen bomb calorimeter range, features higher speeds and improved accuracy with a small carbon footprint (uses less resources; no water required, lower power consumption). The external filling removes the pressure component from the CAL3K-U and has resulted in a more robust combustion calorimeter. The CAL3K-U conforms to ASTM D5865-12, ASTM D4809-13, ISO 1928-2009, and DIN 51900-2 international standards. The CAL3K-U bomb calorimeter works in the DYNAMIC (Isoperibol) method. The traditional CAL2K-4 bomb vessel has been replaced with a self-locking and sealing bayonet vessel with built-in temperature sensors. The vessel is completely removable for easy sample management, cooling, cleaning and maintenance.

### CAL3K-U APPLICATIONS

**The CAL3K-U can be used in the following departments :**

Poultry Science, Dairy Science, Faculty of Agriculture, Biology Faculty, Zoology Faculty, Chemistry Faculty, Faculty of Sciences, Mechanical Engineering, Faculty of Engineering, Food Chemistry, Food Safety & Quality Control, Veterinary and Agricultural Technology, Civil Engineering, Food Nutrition and Digestion, Environmental Engineering

### COMPLETE SYSTEM FOR USE WITH THE CAL3K-U.

The CAL3K-U is best suited for universities and educational institutions.

The oxygen bomb calorimeter, filling station and air cooler are operated together for effective routine sample determination, using 2 or more bomb vessels. It is recommended to use the air cooler for optimum results and faster throughput.



**The CAL3K-U Bomb Calorimeter System includes an Air Cooler, Filling Station and Two Bayonet Vessels.**

Visit our website for more information, features and tech specs.

**[www.cal3k.com](http://www.cal3k.com)**

### FEATURES & SPECS



Working (Operating) Temperature	15-70°C
Results per hour	9 samples per hour using 3 bayonet bomb vessels
Temperature Resolution	0.000001°C
Reproducibility/Repeatability	<0.1% RSD
Resolution	0.0001 MJ/Kg



#### STEP-BY-STEP HELP

Screen prompts assist with step-by-step instructions to operate the calorimeter



#### AIR COOLER

No water required to cool the bomb vessel



#### FILTER DATA ON EVENTS

Extensive testing and detailed data viewing



#### NO WATER REQUIRED

No Water Bucket.  
No Spillage.  
No Measuring.



#### EVENT LOGGING

Built-in event logging for ~6000 events



#### HIGH SPEED DETERMINATIONS

Choose between faster or more accurate determinations