

 **BRETBY
GAMMATECH**

 **BRETBY
GAMMATECH
LIMITED**



The LabAsh

BRETBY GAMMATECH

The **LabAsh** is a laboratory instrument providing a quick measurement of the ash content of a crushed sample of coal. It is easy to use and provides accurate results within a few minutes.

General Description

The **LabAsh** comprises two main parts: a Sample Measuring Chamber and a Display Unit. There is also a joggle table which is used to ensure a consistent compaction of the sample while filling the beaker.

The Sample Chamber is a substantial lead walled cylinder containing a scintillation crystal and associated electronics. The crystal is positioned vertically in the centre of the chamber so that when a special beaker containing the coal sample is lowered into position the crystal is evenly surrounded by the sample.

The mains powered Display Unit provides the user interface and is housed in a case suitable for desk or bench top operation.



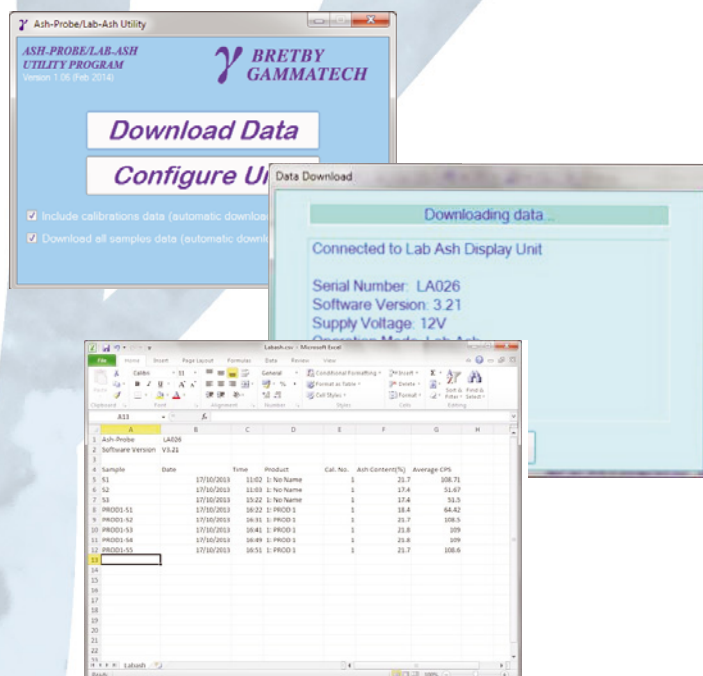
LabAsh Measuring Chamber, Joggle Table and Display Unit

Main Features

- Simple to use
- Accurate results within a few minutes (<3 minutes)
- Stores up to 300 sample measurements
- Facility to include: date, batch and sample name into each record
- Easy to calibrate on site using normal production samples
- Can store up to 9 different calibrations for multi-source applications
- Easy to download data to a spreadsheet using a new and included utility



Sample Beaker



There are no radioactive sources. The LabAsh uses Natural Gamma Technology

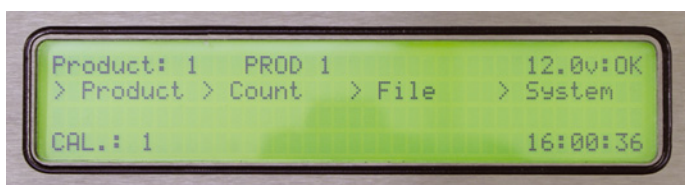
BRETBY GAMMATECH

Precision & Accuracy

Applications at many sites have shown that unbiased results with a precision of 0.65% ash can be achieved in less than 3 minutes.

Typical accuracies of around 1% (1 σ) ash or less have been achieved with coals < 15% ash. For coals > 15% ash typical accuracies of 1-2% (1 σ) ash have been achieved.

Demonstrated accuracy will depend upon the accuracy of the reference samples.



LabAsh Display Screen

Applications

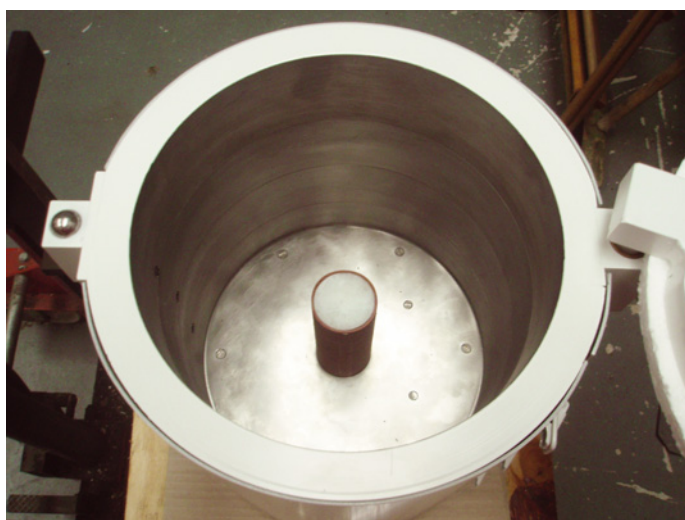
Any coal where a crushed sample is available, e.g. final product, psf, washed fines, imported coal etc.



LabAsh Display Unit

Benefits

- Quick ash results from the hourly samples (less than 3 minutes compared with at least 2 hours to obtain the in-house lab analysis or several days for an off-site laboratory)
- Faster and therefore more accurate control of quality
- Reduce in-house sample analysis from hourly to split shift leading to less effort by laboratory staff thereby achieving lower costs
- Provides an independent check on both in-house and commercial sample analyses – enabling precision of all measurement methods to be assessed under ISO15239



Inside LabAsh Chamber



Joggle Table

For further information contact:

Bretby Gammatech Limited, Units 4 & 5 Station Yard, Station Road
Melbourne, Derbyshire, DE73 8HJ. UK

Tel: +44 (0) 1332 694594 **Fax:** +44 (0) 1332 865860

Email: sales@bretbygammatech.com

Website: www.bretbygammatech.com

Physical Specifications**Sample Measurement Chamber**

Height: 430mm

Diameter: 300mm

Weight: 140Kg

Sample Measurement Beaker

Height: 238mm

Diameter: 247mm

Weight: 0.65kg

Sample weight: ~10kg (crushed coal)

Display Unit

Width: 305mm

Depth: 260mm

Height: 105mm (max)

Weight: 5.1kg

Mains powered: 240VAC (110VAC optional)

Specifications are subject to change without notice



LabAsh in use in Indonesia



LabAsh in use in the UK



LabAsh in use in India