

### Bulk Density of Lime

EN 459-2

The bulk density of lime is of interest for storage and packaging and for determining volume and capacity of mixing equipments necessary for processing the material.

The Apparatus is designed to determine Bulk Density by allowing a sample to fall from a known height into a volumetric container. The method is often known as Bulk Density according to Böhme.

#### Ordering Information

**EL38-7200**

**Bulk Density Apparatus** comprising a hopper, 1 litre container and spring-loaded trap. *Weight 4.5 kg*

**EL38-7200/10**

**Filling Ring** 50 mm depth. Used with volumetric container of EL38-7200 to determine compacted density of powders. *Weight 1kg*



EL38-7200 Bulk Density Apparatus

### Fly Ash (Pulverised Fuel Ash)

**Fly Ash or Pulverised Fuel Ash (PFA) is a by-product of coal-fired power stations. It is a fine material with spherical particles. Uses include as an additive in composite cements, as a cementitious component in concrete and as a filler in certain types of asphalt.**

Various test methods are specified in BS and EN standards and include the determination of moisture content, water requirement, strength, loss-on-ignition, initial setting time, and soundness. These tests are based on those described in BS EN196. A major requirement for Fly Ash is consistency of fineness.

### Loss-on-Ignition EN 450

This method is for cement specified in EN196-2 with an ignition time of 1 hour at 975°C.

**Muffle Furnace**

see Laboratory  
Equipment Section

### Activity Index

EN 450

The activity index is the ratio (in percent) of the compressive strength of standard mortar prisms 40 x 40 x 160 mm, prepared with 75% reference cement and 25% fly ash, to standard mortar prisms prepared with reference cement alone. The equipment required comprises that used to prepare specimens and determine their compressive strength in accordance with EN196-1.

### Soundness

EN450

The expansion of a cement/fly ash paste is determined using the Le Chatelier method specified in EN196-3. Refer to page 109.

### Fineness of Fly Ash

(Wet Sieving)BS 3892-1; EN 451-2:ASTM C430

#### Ordering Information

**EL38-7600**

**Spray Nozzle Apparatus** comprising a spray nozzle 17.5 mm ID with 17 holes as specified in EN 451, a vacuum pressure gauge, 160 kPa graduated at 5 kPa divisions and fittings to attach the apparatus to a standard domestic water supply. Supplied without sieve. *Weight 2.1 kg*

#### Accessory

**EL38-7600/12**

**45 µm Sieve** stainless steel mesh 50 mm internal diameter.

EL38-7600 Spray Nozzle Apparatus

