

Quicklime, hydrated lime and natural calcium carbonate —

Part 3: Methods of test for physical properties of quicklime

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- British Aggregate Construction Materials Industries
- Building Employers Confederation
- Cement Makers' Federation
- Department of the Environment (Building Research Establishment)
- Department of the Environment (Property Services Agency)
- Dry Lining and Partition Association Limited
- Gypsum Products Development Association
- Institution of Structural Engineers
- National Federation of Plastering Contractors
- Plasterers' Craft Guild
- Royal Institute of British Architects
- Scottish Master Plasterers' Association
- Society of Chemical Industry

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- Chemical Industries Association
- Mortar Producers' Association Ltd
- Water Authorities

This British Standard, having been prepared under the direction of the Cement, Gypsum, Aggregates and Quarry Products Standards Committee, was published under the authority of the Board of BSI and comes into effect on 30 October 1987

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Foreword

This Part of BS 6463 has been prepared under the direction of the Cement, Gypsum, Aggregates and Quarry Products Standards Committee in order to bring together standard methods of test for quicklime, hydrated lime and natural calcium carbonate.

The standard incorporates and revises the test methods contained in BS 890 which is also to be revised. Although the standard deals primarily with methods of test for lime products used in the construction industry, methods used in other fields, e.g. water treatment, food, agriculture and the steel and chemical industries have been included.

BS 6463 is published in four Parts as follows:

- *Part 1: Methods of sampling;*
- *Part 2: Methods of chemical analysis;*
- *Part 3: Methods of test for physical properties of quicklime;*
- *Part 4: Methods of test for physical properties of hydrated lime and lime putty.*

This Part of BS 6463 gives methods for testing quicklime as produced and delivered to the customer. These include size grading, bulk density and reactivity and the preparation of lime putty at standard consistence. The tests to determine the properties of the lime putty produced from the quicklime after slaking are included in BS 6463-4.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This Part of BS 6463 describes methods for determining the physical properties of quicklime.

NOTE The titles of the publications referred to in this standard are listed on the inside back cover.

2 Determination of particle size

2.1 Principle

The particle size distribution is determined by sieve analysis using an air-jet sieving apparatus. The method is suitable for powdered quicklime of maximum particle size of 2 mm.

Crushed quicklime with a maximum particle size greater than 2 mm should be tested by the method described in clause 7 of BS 812-1:1975.

2.2 Apparatus

2.2.1 Air-jet sieving apparatus, of the form shown in Figure 1, capable of giving a pressure difference of 1 kPa across the sieve, with 200 mm diameter, 63 μm and 75 μm mesh sieves in accordance with BS 410.¹⁾

2.2.2 Balance, with an accuracy of 0.001 g.

2.2.3 Soft brush, (a camel hair brush is suitable).

2.2.4 Weighing bottle

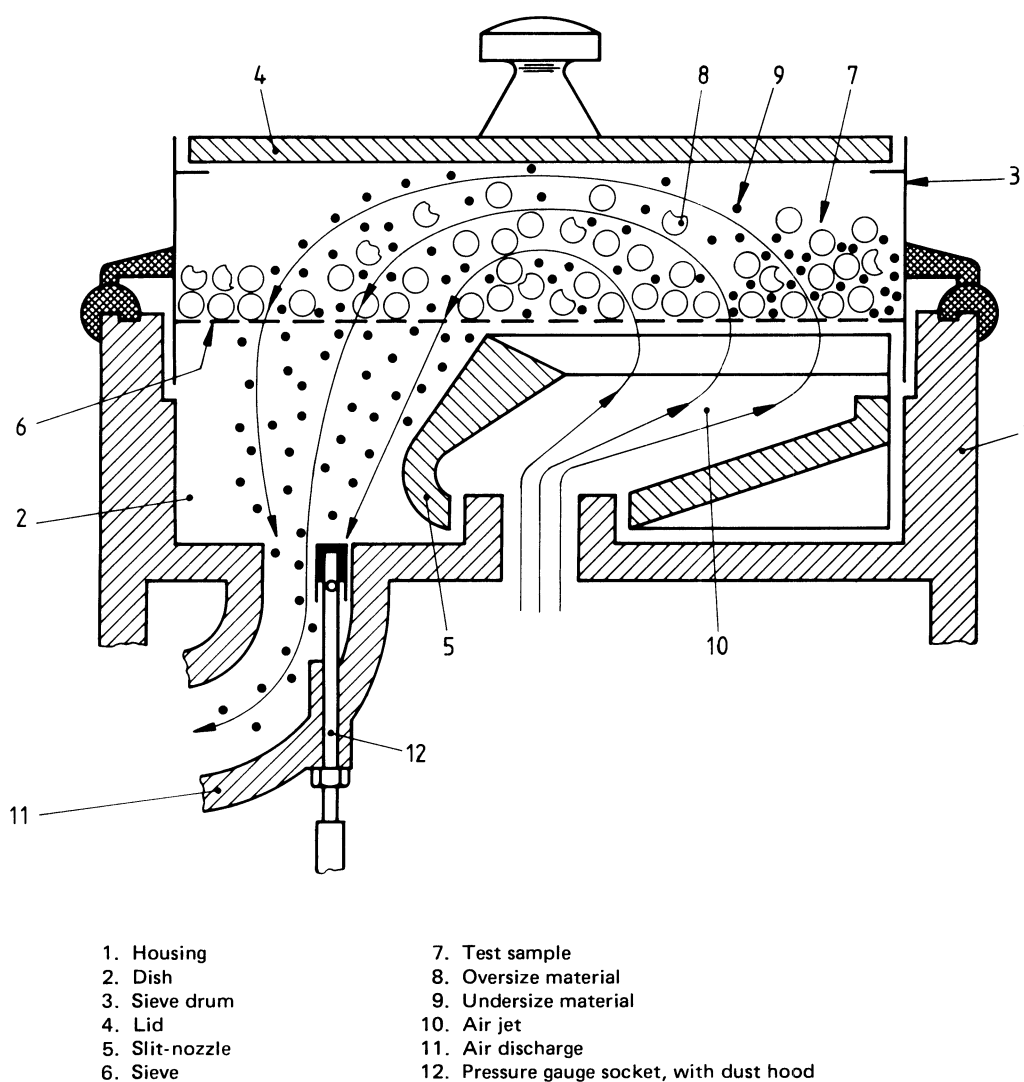


Figure 1 — Air-jet sieving apparatus

¹⁾ For information on the availability of a suitable apparatus, apply to Enquiry Section, BSI, Linford Wood, Milton Keynes MK14 6LE, enclosing a stamped addressed envelope.