



Designation: D4749/D4749M – 87 (Reapproved 2019)^{ε1}

Standard Test Method for Performing the Sieve Analysis of Coal and Designating Coal Size¹

This standard is issued under the fixed designation D4749/D4749M; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the U.S. Department of Defense.

^{ε1} NOTE—The designation was editorially updated to dual and other editorial changes were made throughout in December 2019.

1. Scope

1.1 This test method covers procedures for determining the sieve analysis of coal and designating the size of coal from sieve analysis data. Raw as well as prepared (crushed, cleaned or screened) coals can be tested by this test method.

1.2 This test method explains how to designate coal sizes from the results of sieve analysis data in order to represent the condition of the coal as sold. In the case of special mixtures or coals with noncontinuous ranges of sizes, a sufficiently complete sieve analysis must be made to properly describe the size distribution.

1.3 This test method is not applicable for determining the sieve analysis nor for designating the size of pulverized coal. (See **Note 1**.) Size fractions down to and including 38 μm [No. 400 U.S.A. Standard Series] can be treated by the methods discussed in this test method. Methods for handling size fractions below 38 μm [No. 400] will be developed by this committee.

NOTE 1—For powdered or pulverized coal as is fired into steam boilers, refer to Test Method **D197**.

1.4 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system are not necessarily exact equivalents; therefore, to ensure conformance with the standard, each system shall be used independently of the other, and values from the two systems shall not be combined.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

¹ This test method is under the jurisdiction of ASTM Committee **D05** on Coal and Coke and is the direct responsibility of Subcommittee **D05.07** on Physical Characteristics of Coal.

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1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

D197 Test Method for Sampling and Fineness Test of Pulverized Coal

D346 Practice for Collection and Preparation of Coke Samples for Laboratory Analysis

D388 Classification of Coals by Rank

D2013 Practice for Preparing Coal Samples for Analysis

D2234/D2234M Practice for Collection of a Gross Sample of Coal

D3302 Test Method for Total Moisture in Coal

D4371 Test Method for Determining the Washability Characteristics of Coal

E11 Specification for Woven Wire Test Sieve Cloth and Test Sieves

E323 Specification for Perforated-Plate Sieves for Testing Purposes

2.2 Other Document:³

Specification C-80 Commonwealth of Pennsylvania, Department of General Services, Bureau of Purchases, Specification for Coal:Anthracite

3. Descriptions of Terms Specific to this Standard

3.1 *as-mined coal*—same as ROM coal (**3.8**).

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from Commonwealth of Pennsylvania, Dept. of General Services, Bureau of Purchases, 414 N. Office Building, Harrisburg, PA 17125.