



Designation: D6883/D6883M – 24a

Standard Practice for Manual Sampling of Stationary Coal from Railroad Cars, Barges, Trucks, or Stockpiles¹

This standard is issued under the fixed designation D6883/D6883M; 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.

1. Scope

1.1 This practice covers procedures for obtaining a manual gross sample from beneath the surface of coal in railroad cars, barges, trucks, or stockpiles. These procedures are to be used to provide gross samples for estimating the quality of the coal. The gross samples are to be crushed, divided, and further prepared for analysis in accordance with Practice [D2013/D2013M](#).

1.2 This practice provides instruction for sampling beneath the exposed surface coal to a depth of approximately 61 cm [24 in.]. Collect samples at this depth to get below the surface of the material, since drying and oxidation may have occurred at, or near the surface. Changes in moisture, in particle size, and in other properties may continue to occur deeper in the coal, although not as drastic as near the surface. The user should review the conditions of the coal (weather conditions, prior transport, settling time, and so forth, see [8.1](#)) so that the interested parties can agree on the magnitude of the potential variation introduced by external conditions and coal handling. Sample increments collected from the surface layer(s) of coal in railroad cars, barges, or stockpiles are classified condition D (see Practice [D2234/D2234M](#), Increment Collection Classification). Details of sampling procedure shall be agreed upon in advance by all parties concerned whenever collection of sample increments falls under condition D. This practice offers a sampling procedure that parties may use to meet requirements of Practice [D2234/D2234M](#) for condition D but does not produce samples that satisfy precision requirements of either General-Purpose Sampling or Special-Purpose Sampling as described in Practice [D2234/D2234M](#).

1.3 The user is cautioned that samples of this type do not satisfy the minimum requirements for probability sampling and as such cannot be used to draw statistical inferences such as precision, standard error, or bias.

¹ This practice is under the jurisdiction of ASTM Committee [D05](#) on Coal and Coke and is the direct responsibility of Subcommittee [D05.23](#) on Sampling.

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1.4 This sampling method is intended for use only when sampling by more reliable methods that provide a probability sample is not possible.

1.5 The values stated in either SI units or non-SI 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.

1.6 *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.*

1.7 *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

D121 [Terminology of Coal and Coke](#)

[D2013/D2013M Practice for Preparing Coal Samples for Analysis](#)

[D2234/D2234M Practice for Collection of a Gross Sample of Coal](#)

[D7430/D7430M Practice for Mechanical Sampling of Coal](#)

[E105 Guide for Probability Sampling of Materials](#)

3. Terminology

3.1 *Definitions:*

3.1.1 *consignment, n*—a discrete amount of coal, such as a shipment, a carload, a unit train, or a day's production. A consignment may include more than one lot of coal and may correspond to a specific period of time such as sampling period or billing period.

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