



Designation: D346/D346M – 11 (Reapproved 2019)^{ε1}

Standard Practice for Collection and Preparation of Coke Samples for Laboratory Analysis¹

This standard is issued under the fixed designation D346/D346M; 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.

^{ε1} NOTE—Editorial changes were made throughout in October 2019.

INTRODUCTION

Coke, especially run of oven coke or foundry coke, or both, is a difficult material to sample. It is imperative that every sample be collected and handled carefully and conscientiously and in strict accordance with the standard procedure described herein.

Gross samples of not less than the quantities designated in this practice must be taken, whether the coke to be sampled consists of a few tons or several hundred tons.

1. Scope

1.1 This practice covers procedures for the collection and reduction of samples of coke to be used for physical tests, chemical analyses, and the determination of total moisture.

1.2 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.

1.2.1 Values in SI units [or inch-pound units] shall be obtained by measurement in SI units [or inch-pound units] or by appropriate conversion, using the Rules for Conversion and Rounding given in [IEEE/ASTM SI 10](#), of measurements made in SI units [or other units]. Values are stated in SI units when inch-pound units are not used in practice.

1.3 *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.*

1.4 *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

[D167 Test Method for Apparent and True Specific Gravity and Porosity of Lump Coke](#)

[D293/D293M Test Method for the Sieve Analysis of Coke](#)
[D2013/D2013M Practice for Preparing Coal Samples for Analysis](#)

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

[D3038 Test Method for Drop Shatter Test for Coke](#)

[D3302/D3302M Test Method for Total Moisture in Coal](#)

[D3402/D3402M Test Method for Tumbler Test for Coke](#)

[IEEE/ASTM SI 10 American National Standard for Metric Practice](#)

3. Significance and Use

3.1 This practice may be used to provide a representative sample of the coke from which it is collected. Due to the variability of coke and the wide variety of sampling equipment, caution must be exercised in all stages of sampling, from system specifications and equipment procurement to equipment acceptance testing and actually taking the final sample.

3.2 This practice also provides an analysis sample of coke from the gross or divided sample. The analysis samples can be used to determine the value of the coke represented, its ability to meet specifications, as well as for other purposes.

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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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.