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Coke —

Part 2:
Determination of true relative density

Coke —

Partie 2: Détermination de la densité relative vraie

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Foreword

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This document was prepared by Technical Committee ISO/TC 27, *Coal and coke*, Subcommittee SC 3, *Coke*.

This first edition of ISO 1014-2, together with ISO 1014-1 and ISO 1014-3, cancels and replaces ISO 1014:2021.

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Coke —

Part 2:
Determination of true relative density

1 Scope

This document specifies the method for determining the true relative density of coke, in relation to water.

NOTE "True relative density" varies according to the displacement liquid used.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 13909-6, *Coal and coke — Mechanical sampling — Part 6: Preparation of test samples of coke*

ISO 18283, *Coal and coke — Manual sampling*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Principle

The mass of water displaced by a known mass of dry coke, ground to pass through a 212 µm sieve, is determined using a pycnometer. Air is displaced by boiling during the determination. Distilled water is specified. Thermostatic control of the temperature is essential since a difference of 1 °C can cause an error of about 0,012 in the result.

5 Apparatus

5.1 Pycnometer, 50 ml capacity (see Figure 1).

5.2 Water bath, with stirrer, thermostatically controlled to maintain a desired temperature θ °C to within ±1 °C.

5.3 Two wash bottles, each containing about 50 ml of distilled water. One wash bottle is kept hot (80 °C to 90 °C) and the other is left in the water bath (5.2).

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