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ISO 1014-3

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Coke —

Part 3: Determination of porosity

Coke —

Partie 3: Détermination de la porosité

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Contents

Page

Foreword ..... **iv**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 Porosity **1**
4.1 Principle 1
4.2 Expression of results 1
5 Test report **2**

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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 1014-3, together with ISO 1014-1 and ISO 1014-2, cancels and replaces ISO 1014:2021.

A list of all parts in the ISO 1014 series can be found on the ISO website.

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Coke —

Part 3:
Determination of porosity

1 Scope

This document specifies the method for the determination the porosity of the coke.

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 1014-1, *Coke — Part 1: Determination of apparent relative density*

ISO 1014-2, *Coke — Part 2: Determination of true relative density*

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 Porosity

4.1 Principle

The porosity, P_o, shall be calculated from the true relative density in accordance with ISO 1014-2 and the apparent relative density in accordance with ISO 1014-1 of the coke.

4.2 Expression of results

The porosity of the coke, expressed as a percentage by volume fraction, is given by the following Formula (1):

$$P_o = \frac{\rho - \rho_A}{\rho} \times 100 \quad (1)$$

where

ρ is the true relative density of the coke;

ρ_A is the apparent relative density of the coke;

100 is the conversion factor from dimension one mass (voidage) fraction to % porosity volume fraction in coke.

The result shall be reported to the nearest 1 %.

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