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Carbonaceous materials used in the production of aluminium — Calcined coke — Determination of particle size distribution

Produits carbonés utilisés pour la production de l'aluminium — Coke calciné — Détermination de la granulométrie

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Foreword

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This document was prepared by Technical Committee ISO/TC 226, *Materials for the production of primary aluminium*.

This second edition cancels and replaces the first edition, ISO 12984:2000, of which it constitutes a minor revision.

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Carbonaceous materials used in the production of aluminium — Calcined coke — Determination of particle size distribution

1 Scope

This document specifies a method for the determination of the particle size distribution of a sample of coke having a typical size distribution as normally produced by calcination of delayed petroleum coke. The same procedure is applicable to consignments of calcined anthracite. This document does not apply to fractions of carbon material prepared by sieving and crushing or to filter fines.

This method is applicable to the determination of particle sizes ranging from 0,25 mm to 16 mm, as the sum of the percentages of the size distribution above and below this range is typically less than 10 %. This document does not apply to determining particle sizes below 0,25 mm where a specific test for dust is 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 565, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings*

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

ISO 6375, *Carbonaceous materials for the production of aluminium — Coke for electrodes — Sampling*

3 Terms and definitions

No terms and definitions are listed in this document.

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

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

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

4 Principle

A sample of coke is subjected to a process of particle size analysis by dry sieve testing. The results are expressed in terms of the measured percentage by mass of the coke remaining on sieves of different sized openings between 16 mm and 0,25 mm, or alternatively in terms of calculated cumulative percentages for the different sized openings.

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