International

ISO 13909-7

Coal and coke — Mechanical sampling —

Part 7: Methods for determining the precision of sampling, sample preparation and testing

Charbon et coke — Échantillonnage mécanique —

Partie 7: Méthodes pour la détermination de la fidélité de l'échantillonnage, de la préparation de l'échantillon et de l'essai

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This document was prepared by Technical Committee ISO/TC 27, *Coal and coke*, Subcommittee SC 4, *Sampling*.

This third edition cancels and replaces the second edition (ISO 13909-7:2016), which has been technically revised.

The main changes are as follows:

— references have been updated;

— the results discussed in Clause B.4 have been clarified.

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Two different situations are considered when a measure of precision is required. In the first, an estimate is made of the precision that can be expected from an existing sampling scheme and, if this is different from that desired, adjustments are made to correct it. In the second, the precision that is achieved on a particular lot is estimated from the experimental results actually obtained using a specifically designed sampling scheme.

The formulae developed in this document are based on the assumption that the quality of the fuel varies in a random manner throughout the mass being sampled and that the observations will follow a normal distribution. Neither of these assumptions are strictly correct. Although the assumption that observations will follow a normal distribution is not strictly correct for some fuel parameters, this deviation from assumed conditions will not materially affect the validity of the formulae developed for precision checking since the statistics used are not very sensitive to non-normality. Strictly speaking, however, confidence limits will not always be symmetrically distributed about the mean. For most practical uses of precision, however, the errors are not significant.

In this document, the term “fuel” is used where the method is applicable to both coal and coke and either “coal” or “coke” where the method is exclusively applicable to that commodity.