

MINING AND MINERALS SECTION
DRAFT TANZANIA STANDARDS FOR PUBLIC COMMENTS, OCTOBER 2016.

1. **TBS/MMDC 3 (4762) P3/ISO 5069-1:1983** Brown coals and lignites - Principles of sampling - Part 1: Sampling for determination of moisture content and for general analysis

Scope: This part of ISO 5069 establishes the principles of the methods to be used for the sampling of brown coals and lignites (hereinafter called "coals") from streams, wagons, barges and stockpiles when the sample is to be used for the determination of moisture content and general analysis. These methods differ from those specified in ISO 1988.

2. **TBS/MMDC 3 (4754) P3/ISO 13909-1:2001** Hard coal and coke - Mechanical sampling - Part 1: General introduction

Scope: This part of ISO 13909 defines the basic terms used in the sampling of solid mineral fuels, describes the general principles of sampling and details the information to be provided in the documentation and the sampling report. It also lists the other parts and gives guidance on the selection of the appropriate part.

ISO 13909 does not include sampling of brown coals and lignites which is described in ISO 5069-1 and ISO 5069-2, nor sampling from coal seams, for which guidance is given in ISO 14180. Manual sampling of coal and coke is covered in ISO 1988 and ISO 2309.

3. **TBS/MMDC 3 (4755) P3/ISO 13909-2:2001** Hard coal and coke - Mechanical sampling - Part 2: Coal - Sampling from moving streams

Scope: This part of ISO 13909 specifies procedures and requirements for the design and establishment of mechanical samplers for the sampling of coal from moving streams and describes the methods of sampling used.

It does not cover mechanical sampling from stationary lots which is dealt with in ISO 13909-3.

Examples of calculations of the number of sub-lots and number of increments per sub-lot are given in annex A. Requirements for the evaluation of sampling equipment are given in annex B and information on the operation of mechanical samplers is given in annex C.

4. **TBS/MMDC 3 (4756) P3/ISO 13909-3:2001** Hard coal and coke - Mechanical sampling - Part 3: Coal - Sampling from stationary lots

Scope: This part of ISO 13909 specifies procedures for the mechanical sampling of coal from stationary lots, for example from wagons, barges, ships and stockpiles. Procedures for sample preparation are given in ISO 13909-4.

This part is applicable to mechanical sampling from stationary coal lots, to obtain samples from which test samples for the determination of moisture, for general analysis including physical and chemical tests, and for size analysis can be prepared in accordance with the requirements and recommendations set out in ISO 13909-4.

In this part, the principles and procedures for designing a sampling scheme are given, together with typical examples of applications; in addition, practices for the execution of sampling in different sampling situations are described. The methods described are limited to those on which it is possible to conduct a test for bias.

5. **TBS/MMDC 3 (4757) P3/ISO 13909-4:2001** Hard coal and coke - Mechanical sampling - Part 4: Coal - Preparation of test samples

Scope: This part of ISO 13909 describes the preparation of samples of coal from the combination of primary increments to the preparation of samples for specific tests.

6. TBS/MMDC 3 (4758) P3/ISO 13909-5:2001 Hard coal and coke - Mechanical sampling - Part 5: Coke - Sampling from moving streams

Scope: This part of ISO 13909 specifies procedures and requirements for the design and establishment of sampling schemes for the mechanical sampling of coke from moving streams and the methods of sampling used.

The diversity of types of equipment for sampling and the conditions under which mechanical sampling is performed make it inappropriate to specify standard designs for samplers which will be applicable to all situations.

7. TBS/MMDC 3 (4759) P3/ISO 13909-6:2001 Hard coal and coke - Mechanical sampling - Part 6: Coke - Preparation of test samples

Scope: This part of ISO 13909 describes the preparation of samples of coke from the combination of primary increments to the preparation of samples for specific tests.

8. TBS/MMDC 3 (4760) P3/ISO 13909-7:2001 Hard coal and coke - Mechanical sampling - Part 7: Methods for determining the precision of sampling, sample preparation and testing

Scope: In this part of ISO 13909, equations are developed which link the variables which contribute to overall sampling precision. Methods are described for estimating overall precision and for deriving values for primary increment variance which can be used to modify the sampling scheme to change the precision. Methods for checking the variance of sample preparation and testing are also described.

9. TBS/MMDC 3 (4761) P3/ISO 13909-8:2001 Hard coal and coke - Mechanical sampling - Part 8: Methods of testing for bias

Scope: This part of ISO 13909 sets out principles and procedures for testing the bias of test samples of hard coals or cokes, taken in accordance with other parts of ISO 13909. The use of univariate statistical methods only is addressed.

The user is cautioned that the chance of falsely concluding that there is a bias, when no bias exists in any one of several variables measured on the same set of samples, is substantially greater than for a single variable. While several variables may be measured, the single variable on which the outcome of the test will be governed shall be designated in advance.

NOTE In the text the term 'fuel' is used where both coal and coke would be applicable in the context and either 'coal' or 'coke' where only one is applicable.