STANDARD 1213-1

Second edition
1993-12-01

Solid mineral fuels – Vocabulary –

Part 1:
Terms relating to coal preparation

Combustibles minéraux solides – Vocabulaire –

Partie 1: Termes relatifs à la préparation du charbon

Reference number
ISO 1213-1:1993 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 1213-1 was prepared by Technical Committee ISO/TC 27, *Solid mineral fuels,* Sub-Committee SC 1, *Coal preparation, terminology and performance.*

This second edition cancels and replaces the first edition (ISO 1213-1:1982), of which it constitutes a technical revision.

ISO 1213 consists of the following parts, under the general title *Solid mineral fuels – Vocabulary*

– *Part 1: Terms relating to coal preparation*

– *Part 2: Terms relating to sampling testing and analysis.*

Annex A of this part of ISO 1213 is for information only.

International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Introduction

This part of ISO 1213 is a glossary consisting of a systematic list of terms commonly employed in coal preparation.

For terms relating to petrographic analysis, see ISO 7404-1:1984, *Methods for the petrographic analysis of bituminous coal and anthracite – Part 1: Glossary of terms.*

This part of ISO 1213 takes into account the distinction between processes or operations and the methods or machines for carrying them out.

Clause 3 is devoted primarily to coal properties and the principal operations involved in coal preparation, and also includes general terms such as those relating to capacities and flowsheets.

Clauses 4 to 7 cover the detailed terminology relating to sizing, cleaning, separation of solids from water or air, and size reduction.

Clause 8 deals with the terms involved in interpreting or expressing the results of coal preparation operations.

Clause 9 includes some miscellaneous terms.

Clause 10 covers terms related to blending and homogenization.

Clause 11 covers terms related to automatic control. Of necessity, it covers only a limited selection of terms. A list of other International Standards, which together provide a more comprehensive set of terms, is given in annex A.

Most of the clauses are subdivided, and in each case the first subclause includes general terms and the remaining subclauses cover groups of related terms. As far as possible, this logical principle has been carried through into the arrangement of the terms themselves, which are also numbered for ease of reference. An alphabetical index is also provided, with a numerical cross-reference.

Solid mineral fuels – Vocabulary –

Part 1:
Terms relating to coal preparation

1 Scope

This part of ISO 1213 defines terms commonly employed in coal preparation

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 1213. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 1213 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 10753:–[1], *Coal preparation plant – Assessment of the liability to breakdown in water of materials associated with coal seams.*

3 General

3.1 General coal preparation terms

3.1.01 coal preparation: Collectively, physical and mechanical processes applied to coal to make it suitable for a particular use.

3.1.02 run of mine; r.o.m. coal: Coal produced by mining operations, before screening, crushing or preparation.

3.1.03 raw coal: Coal that has received no preparation other than possibly screening or crushing.

3.1.04 raw coal feed: Raw coal supplied to a plant or machine, in which it undergoes some form of preparation.

3.1.05 coal cleaning: The treatment of raw coal to lower the quantity of undesirable constituents, through the difference in either density or surface properties

3.1.06 cleaned coal; clean coal: Coal produced by a cleaning process (wet or dry).

3.1.07 middlings: A product of coal preparation that, because of its ash percentage, is intermediate between coal and discard.

NOTE 1 It follows therefore that the relative density of middlings is intermediate between those of coal and discard. Middlings may be reprocessed.

3.1.08 true middlings; bone: Middlings so nearly homogeneous that their quality cannot readily be improved by crushing and recleaning.

3.1.09 false middlings; interbanded middlings: Middlings in which the particles consist of bands of coal and shale, and from which the coal may be liberated by crushing.

3.1.10 reject; refuse: The material extracted from the feed during cleaning, for retreatment or discard.

3.1.11 discard; dirt; stone: The material extracted from the raw coal and finally discarded.

3.1.12 recirculation: The operation in which the whole or part of a product from a process is returned to the feed to a process, e.g. the return of the crushed overflow from a screen to the screen feed for rescreening.

3.1.13 "foreign coal": Coal received at a preparation plant from a source other than that to which the plant is attached.

3.1.14 imported coal: Coal coming from a foreign country, or other state within the country.

3.1.15 low-grade coal: Combustible material that has only limited uses owing to undesirable characteristics (e.g. ash percentage or size).

3.1.16 segregation: Partial separation of a material into its constituents, occurring as a result of differences in particle characteristics such as particle size or relative density.

1) To be published.