Second edition
2018-11

Classification of coals

Classification des charbons

Reference number
ISO 11760:2018(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 27, *Solid mineral fuels,* Subcommittee SC 5, *Methods of analysis.*

This second edition cancels and replaces the first edition (ISO 11760:2005), of which it constitutes a minor revision.

The main changes compared to the previous edition are as follows:

— replacement of AS 2434-1 with ISO 1018 in Table 1.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Coals occur worldwide and vary significantly in their physical and chemical characteristics for a variety of reasons, both with respect to the organic coal substance and to the associated mineral matter that is always present to varying extents. Coals are an important source of energy, as well as being essential for the production of metallurgical cokes, and are widely used as feedstock for other industrial processes such as in the production of gaseous fuels and synthesis gas. Hence, a wide range of procedures has been developed by the International Organization for Standardization (ISO) for the analysis and testing of coals. These ISO procedures are variously designated as being applicable to "hard coals", "brown coals" and "lignite", "bituminous coals" and "anthracite". There are, however, no ISO definitions that specify the boundaries that apply to these descriptive terms, which all relate to the geological maturity (rank) of the coals. Further, there is no simple system for the classification of coals that can provide, on a comparative basis, an indication of coal characteristics on a worldwide basis. This ISO standard provides a basis for addressing both these issues.

The classification is not intended to be used for commercial purposes because the assessment and selection of coals for a specific purpose require detailed information that enables the likely performance of a coal in a particular application to be anticipated. The wide-ranging list of ISO analyses and tests provides that information.

The development of this ISO standard has been guided by the recently published "*International Classification of in-Seam Coals*"[14]. The ISO standard, however, represents a simplified version that incorporates some significant modifications made for reasons given in the classification details that follow.