International Standard

ISO 17225-5

Solid biofuels — Fuel specifications and classes —

Part 5: Graded firewood

Biocombustibles solides — Classes et spécifications des combustibles —

Partie 5: Classes de bois de chauffage

Third edition
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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 document 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).

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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 238, *Solid biofuels and Pyrogenic Biocarbon*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 335, *Solid Biofuels and Pyrogenic Biocarbon,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 17225-5:2021), which has been technically revised.

The main changes are as follows:

— moisture in Table 1 has been changed.

A list of all parts in the ISO 17225 series can be found on the ISO website.

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.

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Introduction

The objective of the ISO 17225 series is to provide unambiguous and clear classification principles for solid biofuels, to serve as a tool to enable efficient trading of biofuels, to enable good understanding between seller and buyer and as a tool for communication with equipment manufacturers. It also facilitates authority permission, procedures and reporting.

This document supports the use of graded firewood for residential, small commercial and public building applications which require classified firewood quality.

Residential, small commercial and public building appliances require higher quality fuel for the following reasons:

— small-scale equipment does not usually have advanced controls and flue gas cleaning;

— appliances are not generally managed by professional heating engineers;

— appliances are often located in residential and populated districts.

NOTE 1 Firewood produced according to this document can be used in stoves, fireplaces, cookers, room heaters and multifired sauna stoves, which are tested according to European standards EN 13229,[1]EN 12815,[2]EN 12809,[3] EN 13240,[4]EN 15250,[5]EN 15821,[6]EN 16510–2–1,[7]EN 16510–2–2,[8]EN 16510–2–3,[9]EN 16510–2–5,[10]EN 16510–2–7,[11]EN 16510–2–10,[12] and boilers systems tested according to EN 303–5,[13]EN 16510–2–4.[14]

NOTE 2 For individual contracts, ISO 17225-1 can be used.

Although this document can be used separately, it requires a general understanding of the standards based on and supporting ISO 17225-1. It is recommended to obtain and use ISO 17225-1 in conjunction with this document.

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Solid biofuels — Fuel specifications and classes —

Part 5:
Graded firewood

1 Scope

This document specifies the fuel quality classes and specifications of graded firewood. This document applies only to firewood produced from the following raw materials (see ISO 17225-1:2021, Table 1):

— 1.1.1 Whole trees without roots;

— 1.1.3 Stemwood;

— 1.1.4 Logging residues (thick branches, tops, etc.);

— 1.2.1 Chemically untreated by-products and residues from wood processing industry.

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 14780, *Solid biofuels — Sample preparation*

ISO 16559, *Solid biofuels — Vocabulary*

ISO 17225-1:2021, *Solid biofuels — Fuel specifications and classes — Part 1: General requirements*

ISO 18134-1, *Solid biofuels — Determination of moisture content — Part 1: Reference method*

ISO 18134-2, *Solid biofuels — Determination of moisture content — Part 2: Simplified method*

ISO 21945, *Solid biofuels — Simplified sampling method for small scale applications*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 16559 and the following apply.

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

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

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

3.1
firewood
cut and split oven-ready fuelwood used in household wood burning appliances like stoves, fireplaces and central heating systems

Note 1 to entry: Firewood usually has a uniform length, typically in the range of 15 cm to 100 cm.

Note 2 to entry: Cut-offs from virgin wood can also be used as a firewood.

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