# INTERNATIONAL STANDARD

ISO 17225-5

First edition 2014-05-01

# Solid biofuels — Fuel specifications and classes —

Part 5: Graded firewood

Biocombustibles solides — Classes et spécifications des combustibles —

Partie 5: Classes de bois de chauffage





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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 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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 238, *Solid biofuels*.

1 title ISO 17225 consists of the following parts, under the general title Solid biofuels — Fuel specifications and classes:

- Part 1: General requirements
- Part 2: Graded wood pellets
- Part 3: Graded wood briquettes
- Part 4: Graded wood chips
- Part 5: Graded firewood
- Part 6: Graded non-woody pellets
- Part 7: Graded non-woody briquettes

# 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 as well as a tool for communication with equipment manufacturers. It will also facilitate authority permission procedures and reporting.

This part of ISO 17225 supports the use of graded firewood for residential, small commercial and public building applications.

The residential, small commercial and public building applications 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 part of ISO 17225 may be used in stoves, fireplaces, cookers, roomheaters 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] and EN 15821[6], and boilers systems tested according to EN 303–5[7].

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

Although these product standards may be obtained separately, they require 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 these standards.

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# Solid biofuels — Fuel specifications and classes —

# Part 5:

# Graded firewood

# 1 Scope

This part of ISO 17225 determines the fuel quality classes and specifications of graded firewood. This part of ISO 17225 covers only firewood produced from the following raw materials (see ISO 17225-1, Table 1):

- 1.1.1 Whole trees without roots
- 1.1.3 Stem wood
- 1.1.4 Logging residues (thick branches, tops etc.)
- 1.2.1 Chemically untreated wood residues

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 16559, Solid biofuels — Terminology, definitions and descriptions<sup>1)</sup>

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

ISO 18134-1, Solid biofuels — Determination of moisture content — Oven dry method — Part 1: Total moisture — Reference method $^{2}$ 

ISO 18134-2, Solid biofuels — Determination of moisture content — Oven dry method — Part 2: Total moisture - Simplified method<sup>3)</sup>

## 3 Terms and definitions

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

#### 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.

<sup>1)</sup> To be published.

<sup>2)</sup> To be published.

<sup>3)</sup> To be published.