# **EESTI STANDARD**

Anis oocun

Solid biofuels - Fuel specifications and classes - Part 3: Graded wood briquettes (ISO 17225-3:2014)



# EESTI STANDARDI EESSÕNA

# NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 17225-3:2014 sisaldab Euroopa standardi EN ISO 17225-3:2014 inglisekeelset teksti.	This Estonian standard EVS-EN ISO 17225-3:2014 consists of the English text of the European standard EN ISO 17225-3:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
	Date of Availability of the European standard is 07.05.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.
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ICS 27.190, 75.160.10

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# EUROPEAN STANDARD

# EN ISO 17225-3

# NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

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ICS 27.190; 75.160.10

Supersedes EN 14961-3:2011

**English Version** 

# Solid biofuels - Fuel specifications and classes - Part 3: Graded wood briguettes (ISO 17225-3:2014)

Biocombustibles solides - Classes et spécifications des combustibles - Partie 3: Classes de briguettes de bois (ISO 17225-3:2014)

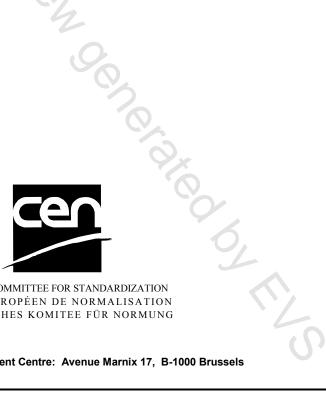
Feste Biobrennstoffe - Brennstoffspezifikationen und klassen - Teil 3: Einteilung von Holzbriketts (ISO 17225-3:2014)

This European Standard was approved by CEN on 3 April 2014.

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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

# Foreword

This document (EN ISO 17225-3:2014) has been prepared by Technical Committee ISO/TC 238 "Solid biofuels" in collaboration with Technical Committee CEN/TC 335 "Solid biofuels" the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2014, and conflicting national standards shall be withdrawn at the latest by November 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14961-3:2011.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

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### **Endorsement notice**

The text of ISO 17225-3:2014 has been approved by CEN as EN ISO 17225-3:2014 without any modification.

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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 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 wood briquettes 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 districts

NOTE 1 Wood briquettes 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 3: Graded wood briquettes

#### 1 Scope

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

- 1.1 Forest, plantation and other virgin wood
- 1.2 By-products and residues from wood processing industry
- 1.3.1 Chemically untreated used wood

Thermally treated biomass briquettes (e.g. torrefied briquettes) are not included in the scope of this NOTE part of ISO 17225. Torrefaction is a mild pre-treatment of biomass at a temperature between 200 °C to 300 °C.

#### Normative references 2

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 standards describing methods for analysis of fuel properties listed in the Bibliography, will become NOTE normative references when they are published.

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

ISO 16948, Solid biofuels — Determination of total content of carbon, hydrogen and nitrogen<sup>2</sup>)

ISO 16968, Solid biofuels — Determination of minor elements<sup>3</sup>

ISO 16994, Solid biofuels — Determination of total content of sulfur and chlorine<sup>4</sup>)

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

ISO 18122, Solid biofuels — Determination of ash content<sup>5</sup>)

ISO 18134-1, Solid biofuels — Determination of moisture content — Oven dry method — Part 1: Total  $moisture - Reference method^{6}$ 1

- 3) To be published.
- 4) To be published.

6) To be published.

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

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

<sup>5)</sup> To be published.

ISO 18134-2, Solid biofuels — Determination of moisture content — Oven dry method — Part 2: Total moisture — Simplified method<sup>7</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

### wood briquette

densified biofuel made with or without additives in form of cubiform, prismatic or cylindrical unit with diameter of more than 25 mm produced by compressing milled biomass

Note 1 to entry: The raw material for wood briquettes is woody biomass in accordance with Table 1 of ISO 17225-1.

Note 2 to entry: Biofuel briquettes are usually manufactured in a piston press, with the total moisture content usually being less than 15 % of the mass.

## 3.2

## additive

material which has been intentionally introduced into the fuel feed stock to improve quality of fuel (e.g. combustion properties), to reduce emissions or to make production more efficient

Note 1 to entry: Trace amounts of e.g. grease or other lubricants that are introduced into the fuel processing stream as part of normal mill operations are not considered as additives.

# 3.3

## chemical treatment

any treatment with chemicals other than air, water or heat

EXAMPLE Glue and paint.

Note 1 to entry: Examples of chemical treatment are listed in ISO 17225-1.

### 3.4

### commercial application

facility that utilize solid biofuel burning appliances or equipment that have similar fuel requirements as residential appliances

Note 1 to entry: Commercial applications should not be confused with industrial applications, which can utilize a much wider array of materials and may have somewhat different fuel requirements.

<sup>7)</sup> To be published.