
**Solid biofuels — Fuel specifications
and classes —**

**Part 4:
Graded wood chips**

*Biocombustibles solides — Classes et spécifications des
combustibles —*

Partie 4: Classes de plaquettes de bois

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Contents

Page

| | |
|---|-----------|
| Foreword | iv |
| Introduction | v |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 4 Symbols and abbreviated terms | 2 |
| 5 Specification of graded wood chips | 3 |
| Annex A (informative) General guidelines for bulk density of graded wood chips | 7 |
| Bibliography | 8 |

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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 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 TC238, *Solid biofuels*.

This second edition cancels and replaces the first edition (ISO 17225-4:2014), which has been technically revised. The main changes compared to the previous edition are as follows:

- particle size distribution classification updated;
- moisture and ash content classes updated;
- [Annex A](#) updated.

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.

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 solid biofuels; to enable good understanding between seller and buyer as well as a tool for communication with equipment manufacturers. It also facilitates authority permission procedures and reporting [2].

This document supports the use of graded wood chips for small and medium residential, commercial and public building applications.

Depending on the type of energy conversion technology used (boilers, heaters, gasifiers, etc., the tolerances for a particular quality of wood chips will be different.

Scales of applications and their typical operation range:

- below 100 kW (Residential);
- from 75 to 500 kW (Small; e.g. residential, public and commercial buildings);
- from 500 kW to 1,5 MW (Medium; public and commercial buildings);
- 1,5 MW to 5 MW (Large; small industrial facilities and district heating);
- over 5 MW (Industrial; recommended to use 'ISO 17225-1 or ISO/DIS 17225-9¹⁾)

The scale used for grouping the applications utilizing wood chips is for illustration only and in practice, some overlaps between the applications and the scales are expected.

The residential, small and medium commercial and public building applications require high quality fuel for the following reasons:

- Small-scale equipment usually does not 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 Wood chips produced according to this document can be used in boilers tested according to EN 303-5[1].

NOTE 2 For individual contracts and industrial use, ISO 17225-1 or ISO/DIS 17225-9 can be used.

Although this document can be obtained 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.

1) Under preparation. Stage at the time of publication: ISO/DIS 17225-9:2021.

