



BSI Standards Publication

Solid biofuels — Fuel specifications and classes

Part 8: Graded thermally treated and densified biomass fuels

National foreword

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A list of organizations represented on this committee can be obtained on request to its secretary.

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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.

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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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 238, *Solid biofuels*.

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

Introduction

The objective of this document 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 to serve as a tool for communication with equipment manufacturers. It will also facilitate authority permission procedures and reporting.

This document supports the use of thermally treated and densified biomass for household, small commercial and public building as well as industrial energy generation applications, which require classified quality.

Thermal treatment includes processes such as torrefaction, steam treatment (explosion pulping), hydrothermal carbonization and charring, all of which represent different exposure to heat, oxygen, steam or water. Thermally treated and densified biomass fuels should only be used in appliances with manufacturer approval.

The household, small commercial and public building applications require specified 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 or trained plant operators;
- appliances are often located in living and populated districts.

Pellets produced according to this document may be used in pellet stoves, which are tested according to European Standard EN 14785[6], pellet burners tested according to EN 15270[7] and pellet boilers or integrated-pellet burner systems tested according to EN 303-5[5]. It is recommended that stove manufacturers test these products prior to authorizing their use.

For individual contracts, ISO 17225-1 should be used. ISO 17225-1 can be used for specification of undensified thermally treated material and charcoal.

