International Standard

ISO 17827-2

Second edition
2024-05

Solid biofuels — Determination of particle size distribution for uncompressed fuels —

Part 2: Vibrating screen method using sieves with apertures of 3,15 mm and below

Biocombustibles solides — Détermination de la distribution granulométrique des combustibles non comprimés — Partie 2: Méthode au tamis vibrant d'ouverture de maille inférieure ou égale à 3,15 mm

Reference number
ISO 17827-2:2024(en)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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

This second edition cancels and replaces the first edition (ISO 17827-2:2016), which has been technically revised.

The main changes are as follows:

— several sieves were removed from the set; the remaining sieves have apertures of 3,15 mm, 2,0 mm, 1,0 mm, 0,5 mm and 0,1 mm;

— table of results has been modified and adapted;

— references have been updated;

— an introduction has been added;

— Annex A and Annex B have been deleted;

— editorial changes have been made.

A list of all parts in the ISO 17827 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

Particle size and size distribution of uncompressed solid biofuels significantly influence the transport, handling and combustion properties of solid fuels. Depending on the type of fuel feeding and the type and size of a conversion plant, fuels of different particle sizes are suitable. Of particular interest are also the fines fraction and oversized particles. An increased content of fine particles can lead to clogging in feed systems and unsteady combustion. Oversized particles can block conveying systems or cause bridging problems in silos and can reduce the bulk density of the fuel. Very fine particles can have negative health effects and are relevant for explosion protection reasons (< 0,5 mm).

The ISO 17827 series, describing the determination of particle size distribution, consists of the following parts under the general title Solid biofuels - Determination of particle size distribution for uncompressed fuels:

Part 1: Oscillating screen method using sieves with apertures of 3,15 mm and above

Part 2: Vibrating screen method using sieves with apertures of 3,15 mm and below