

<b>STN</b>	<b>Tuhé biopalivá</b> <b>Stanovenie rozdelenia veľkosti častíc</b> <b>nezlisovaných palív</b> <b>Časť 2: Metóda s vibračným sitom s veľkosťou</b> <b>otvorov 3,15 mm a menej (ISO 17827-2: 2024)</b>	<b>STN</b> <b>EN ISO 17827-2</b>  65 7412
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Solid biofuels - Determination of particle size distribution for uncompressed fuels - Part 2: Vibrating screen method using sieves with aperture of 3,15 mm and below (ISO 17827-2:2024)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/24

Obsahuje: EN ISO 17827-2:2024, ISO 17827-2:2024

Oznámením tejto normy sa ruší  
STN EN ISO 17827-2 (65 7412) z novembra 2016

**138981**

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Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2024  
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

EUROPEAN STANDARD

EN ISO 17827-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2024

ICS 27.190; 75.160.40

Supersedes EN ISO 17827-2:2016

English Version

**Solid biofuels - Determination of particle size distribution  
for uncompressed fuels - Part 2: Vibrating screen method  
using sieves with aperture of 3,15 mm and below (ISO  
17827-2:2024)**

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  
(ISO 17827-2:2024)

Biogene Festbrennstoffe - Bestimmung der  
Partikelgrößenverteilung für unkomprimierte  
Brennstoffe - Teil 2: Vertikales Rüttelsiebverfahren mit  
Sieben mit einer Lochgröße von 3,15 mm und darunter  
(ISO 17827-2:2024)

This European Standard was approved by CEN on 12 May 2024.

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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**EN ISO 17827-2:2024 (E)**

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## **European foreword**

This document (EN ISO 17827-2:2024) 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 December 2024, and conflicting national standards shall be withdrawn at the latest by December 2024.

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

This document supersedes EN ISO 17827-2:2016.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

## **Endorsement notice**

The text of ISO 17827-2:2024 has been approved by CEN as EN ISO 17827-2:2024 without any modification.



# International Standard

**ISO 17827-2**

## **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*

**Second edition  
2024-05**

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Published in Switzerland

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## ISO 17827-2:2024(en)

### 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](http://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](http://www.iso.org/patents). ISO shall not be held responsible for identifying any or all such patent rights.

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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](http://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](http://www.iso.org/members.html).

**ISO 17827-2:2024(en)****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

# 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

## 1 Scope

This document specifies a method for the determination of the size distribution of particulate biofuels by the vibrating screen method. The method described is meant for particulate biofuels only, namely, materials that either have been reduced in size, such as most wood fuels, or are physically in a particulate form. This document applies to particulate uncompressed fuels with a nominal top size of 3,15 mm and below (e.g. sawdust).

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

ISO 3310-2, *Test sieves — Technical requirements and testing — Part 2: Test sieves of perforated metal plate*

ISO 14780, *Solid biofuels — Sample preparation*

ISO 16559, *Solid biofuels — Vocabulary*

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

ISO 18134-1, *Solid biofuels — Determination of moisture content — Part 1: Reference method*

ISO 18134-2, *Solid biofuels — Determination of moisture content — Part 2: Simplified method*

ISO 18135, *Solid Biofuels — Sampling*

ISO 21945, *Solid biofuels — Simplified sampling method for small scale applications*

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