



**International
Standard**

ISO 17830

**Solid biofuels — Particle size
distribution of disintegrated pellets**

*Biocombustibles solides — Distribution granulométrique des
granulés désintégrés*

**Second edition
2024-05**

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Foreword

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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).

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This document was prepared by Technical Committee 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 17830:2016), which has been technically revised.

The main changes are as follows:

- set of suggested sieves has been modified to better reflect industry practice and to be consistent with ISO 17827-2;
- a specific table for the results of size distribution analysis for quality control of pellets for industrial use has been added. The order of sieves was reversed to align with other standards;
- a figure has been added to show the sample division;
- details have been added to clarify the procedure and to improve the accuracy;
- normative references have been updated and amended;
- editorial changes have been made.

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

In power plants with powder fuel burners for energy production, operators need information about the particle size distribution of the fuel for optimising particle burnout during combustion. Fuel preparation equipment, such as pulverisers, are used for crushing pellets into the original particle sizes before the material is pressed into pellets. The method described in this document is intended to characterize particle size distribution of the material contained within fuel pellets and also allows for a relative comparison of pellets of different manufacturing.

This method is based on experience with pellets made from sawdust, wood shavings and milled wood, as well as straw. The method may also be applicable for pellets produced from other solid biofuel materials provided that they can be disintegrated into its constituents in water.

Pellets that are engineered to resist water, e.g. pellets from materials which have undergone some thermal treatments, cannot be characterised by this method.

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