

ICS 75.160.10

English Version

**Solid biofuels - Methods for the determination of particle size
distribution - Part 3: Rotary screen method**

Combustibles solides - Méthode de détermination de la
granularité - Partie 3 : Méthode au tamis rotatif

Feste Biobrennstoffe - Verfahren zur Bestimmung der
Teilchengrößenverteilung - Teil 3: Verfahren mit
rotierendem Sieb

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Foreword

This Technical Specification (CEN/TS 15149-3:2006) has been prepared by Technical Committee CEN/TC 335 "Solid Biofuels", the secretariat of which is held by SIS.

CEN/TS 15149 consists of the following parts under the general title *Solid biofuels - Methods for the determination of particle size distribution*:

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

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

Part 3: Rotary screen method

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Introduction

Part 1 describes the reference method for size classification of samples with a nominal top size of 3,15 mm and over.

Part 2 describes the reference methods for all samples with a nominal top size below 3,15 mm.

Part 3 describes an innovative method, by which the degree of overestimating the fine particle fractions is reduced. As it is currently not generally available, it is here proposed, for research and development purposes or for individual quality management processes, that the quality requirements are bilaterally defined between the suppliers and consumers based on this method.

NOTE The nominal top size is defined as the aperture size of the sieve where at least 95 % by mass of the material passes (see bibliography)

1 Scope

This Technical Specification specifies a method for the determination of the size distribution of particulate biofuels by the rotary 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 e.g. olive stones, nutshells, grain etc. This document applies to particulate uncompressed fuels with a nominal top size of 3,15 mm and over, e.g. wood chips, hog fuel, olive stones etc.

2 Normative references

The following referenced documents are indispensable for the application 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.

CEN/TS 14588:2003, *Solid biofuels – Terminology, definitions and descriptions*

CEN/TS 14778-1, *Solid biofuels – Sampling – Part 1: Methods for sampling*

CEN/TS 14778-2, *Solid biofuels – Sampling – Part 2: Method for sampling particulate material transported in lorries*

CEN/TS 14779, *Solid biofuels – Sampling – Part 3: Method for preparing sampling plans and sampling certificates*

CEN/TS 14780, *Solid biofuels – Methods for sample reduction*

CEN/TS 14774-1, *Solid biofuels – Determination of moisture content – Oven dry method, Part 1: Total moisture – Reference method*

CEN/TS 14774-2, *Solid biofuels – Determination of moisture content – Oven dry method, Part 2: Total moisture – Simplified procedure*

CEN/TS 15149-2, *Solid biofuels - Methods for the determination of particle size distribution - Part 2: Vibrating screen method using sieve apertures of 3,15 mm and below*

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

3 Terms and definitions

For the purposes of this Technical Specification, the terms and definitions given in CEN/TS 14588:2003 apply.

3.1

nominal top size

aperture size of the sieve where at least 95 % by mass of the material passes