



BSI Standards Publication

**Composites made from cellulose based materials and thermoplastics (usually called wood polymer composites (WPC) or natural fibre composites (NFC)) - Determination of particle size of lignocellulosic material**

---

## National foreword

This Published Document is the UK implementation of CEN/TS 17158:2018.

The UK participation in its preparation was entrusted to Technical Committee PRI/42, Fibre reinforced thermosetting plastics and preregs.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2018  
Published by BSI Standards Limited 2018

ISBN 978 0 539 00850 0

ICS 83.140.99; 79.080; 83.080.01

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 May 2018.

### Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

---

English Version

Composites made from cellulose based materials  
and thermoplastics (usually called wood polymer  
composites (WPC) or natural fibre composites (NFC)) -  
Determination of particle size of lignocelulosic material

Composites à base de matières cellulosiques et  
de thermoplastiques (communément appelés  
composites bois-polymères (WPC) ou composites  
fibres d'origine naturelle (NFC)) - Détermination des  
dimensions de particules de matières ligocellulosiques

Verbundwerkstoffe aus cellulosehaltigen  
Materialien und Thermoplasten (üblicherweise  
Holz-Polymer-Werkstoffe (WPC) oder  
Naturfaser-Verbundwerkstoffe (NFC)) -  
genannt Bestimmung der Partikelgröße  
von lignocellulosehaltigem Material

This Technical Specification (CEN/TS) was approved by CEN on 10 December 2017 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

## Contents

Page

<b>European foreword</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>4</b>
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Principle</b> .....	<b>5</b>
<b>4 Apparatus</b> .....	<b>5</b>
4.1 Vibrating sieve analysis.....	5
4.2 Air jet sieve analysis.....	5
4.3 Static image analysis systems.....	6
4.4 Dynamic image analysis systems using automatic dispersion by jet air and image acquisition with a CMOS-camera.....	6
<b>5 Calibration</b> .....	<b>6</b>
5.1 Vibrating sieve analysis.....	6
5.2 Air jet sieve analysis.....	6
5.3 Static image analysis systems.....	6
5.4 Dynamic image analysis systems.....	6
<b>6 Procedure</b> .....	<b>7</b>
6.1 Sampling and preparation of test specimens.....	7
6.1.1 General.....	7
6.1.2 Vibrating sieve analysis.....	7
6.1.3 Air jet sieve analysis.....	7
6.1.4 Static image analysis systems.....	7
6.1.5 Dynamic image analysis systems.....	7
6.2 Observation and measurement.....	7
6.2.1 Vibrating sieve analysis.....	7
6.2.2 Air jet sieve analysis.....	7
6.2.3 Static image analysis systems.....	8
6.2.4 Dynamic image analysis systems.....	8
6.3 Expression of results.....	8
6.3.1 Vibrating sieve analysis.....	8
6.3.2 Air jet sieve analysis.....	8
6.3.3 Static image analysis systems.....	8
6.3.4 Dynamic image analysis systems.....	8
6.4 Test report.....	9
6.4.1 Vibrating sieve analysis.....	9
6.4.2 Air jet sieve analysis.....	9
6.4.3 Static image analysis systems.....	9
6.4.4 Dynamic image analysis systems.....	9
<b>Bibliography</b> .....	<b>10</b>