

**Tehniline tselluloos. Võõrkehade ja
pindude hindamine. Osa 1:
Laboratoorsel teel valmistatud kangaste
kontrollimine**

Pulps - Estimation of dirt and shives - Part 1:
Inspection of laboratory sheets by transmitted light

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 5350-1:2006 sisaldab Euroopa standardi EN ISO 5350-1:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 20.09.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 5350-1:2006 consists of the English text of the European standard EN ISO 5350-1:2006.</p> <p>This document is endorsed on 20.09.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>Standardi käesolev osa määrab kindlaks meetodi, millega saab läbiva valguse abil hinnata nähtavaid võõrkehi ja pinde tehnilisest tselluloosist laboratoorsel teel valmistatud kangastes. See meetod on rakendatav mis tahes liiki tehnilistele tselluloosidele, kuigi ta on põhiliselt mõeldud tehnilisele tselluloosile, mida ei toodeta kangana. Käesoleva standardi 2. osa käsitleb võõrkehade ja pindude hindamist kangaks valtsitud tehnilises tselluloosis. Seda osa võib samuti rakendada kangaks pressitud tehnilisele tselluloosile, kui kangastel on suur ruutmeetrimass või nad on muudel põhjustel väga läbipaistmatud, misjuhul ei saa rakendada käesoleva standardi 2. osa. Käesolev standard ei ole mõeldud taastöödeldud tehnilisele tselluloosile.</p>	<p>Scope:</p> <p>This part of ISO 5350 specifies a method for the estimation by transmitted light of the visible dirt and shives in laboratory sheets prepared from pulp. It is, in principle, applicable to all kinds of pulp, although it is mainly intended for pulp that is not manufactured in sheet form. This part of ISO 5350 can also be applied to mill sheeted pulp, if the sheets have high grammage or are very opaque for other reasons, in which case ISO 5350-2 is not applicable. This part of ISO 5350 is not intended for recycled pulp.</p>
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ICS 85.040

Võtmesõnad: hinnang, kangad, paberimassid, teimimine, võrdlusanalüüs, võõrlisandid

English Version

**Pulps - Estimation of dirt and shives - Part 1: Inspection of
laboratory sheets by transmitted light (ISO 5350-1:2006)**

Pâtes - Estimation des impuretés et bûchettes - Partie 1:
Examen des feuilles de laboratoire par lumière transmise
(ISO 5350-1:2006)

Faserstoff - Bewertung von Schmutz und Splittern - Teil 1:
Prüfung von Laborblättern mit dem Durchlicht-Verfahren
(ISO 5350-1:2006)

This European Standard was approved by CEN on 14 August 2006.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN ISO 5350-1:2006) has been prepared by Technical Committee ISO/TC 6 "Paper, board and pulps" in collaboration with Technical Committee CEN/TC 172 "Pulp, paper and board", the secretariat of which is held by DIN.

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 February 2007, and conflicting national standards shall be withdrawn at the latest by February 2007.

This document supersedes EN ISO 5350-1:1998.

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

Endorsement notice

The text of ISO 5350-1:2006 has been approved by CEN as EN ISO 5350-1:2006 without any modifications.

Pulps — Estimation of dirt and shives —

**Part 1:
Inspection of laboratory sheets by
transmitted light**

Pâtes — Estimation des impuretés et bûchettes —

Partie 1: Examen des feuilles de laboratoire par lumière transmise



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 5350-1 was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps*, Subcommittee SC 5, *Test methods and quality specifications for pulps*.

This third edition cancels and replaces the second edition (ISO 5350-1:1998, ISO 5350-1:1998/Cor.1:1999), which has been technically revised.

With regard to ISO 5350-1:1998 and Technical Corrigendum 1:1999, the following changes have been made:

- a) the normative references have been updated;
- b) a more precise description of the sampling and preparation of test pieces was given;
- c) precision data have been moved from informative Annex B to 8.3;
- d) the status of the annex for the instrumental procedure has been changed from normative to informative and a more precise description of the instrumental procedure was given;
- e) editorial updating.

ISO 5350 consists of the following parts, under the general title *Pulps — Estimation of dirt and shives*:

- *Part 1: Inspection of laboratory sheets by transmitted light*
- *Part 2: Inspection of mill sheeted pulp by transmitted light*
- *Part 3: Visual inspection by reflected light using Equivalent Black Area (EBA) method*
- *Part 4: Instrumental inspection by reflected light using Equivalent Black Area (EBA) method*

Introduction

This part of ISO 5350 is based upon visual inspection. Informative Annex B is used when the inspection is performed by instrumental devices. For the time being, though, visual inspection provides the basis for this part of ISO 5350. This will eventually be changed when more experience with instrumental devices is gained, and it has been shown that such equipment can estimate dirt and shives to an acceptable level of precision at least equal to visual inspection.

This part of ISO 5350 is complementary to ISO 5350-2, which concerns visual inspection of mill sheeted pulp by transmitted light, and ISO 5350-3, which concerns visual inspection by reflected light.

ISO 5350-4 is based on automatic inspection by reflected light.

Pulps — Estimation of dirt and shives —

Part 1: Inspection of laboratory sheets by transmitted light

1 Scope

This part of ISO 5350 specifies a method for the estimation by transmitted light of the visible dirt and shives in laboratory sheets prepared from pulp. It is, in principle, applicable to all kinds of pulp, although it is mainly intended for pulp that is not manufactured in sheet form.

This part of ISO 5350 can also be applied to mill sheeted pulp, if the sheets have high grammage or are very opaque for other reasons, in which case ISO 5350-2 is not applicable.

This part of ISO 5350 is not intended for recycled pulp.

NOTE Shives in mechanical pulp are usually determined by means based on screening or optical analyses. Some grades of mechanical pulps can cause problems in sheet-making or inspection, which makes this part of ISO 5350 impractical.

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.

ISO 638, *Pulps — Determination of dry matter content*

ISO 5263-1, *Pulps — Laboratory wet disintegration — Part 1: Disintegration of chemical pulps*

ISO 5263-2, *Pulps — Laboratory wet disintegration — Part 2: Disintegration of mechanical pulps at 20 °C*

ISO 5263-3, *Pulps — Laboratory wet disintegration — Part 3: Disintegration of mechanical pulps at ≥ 85 °C*

ISO 5269-1, *Pulps — Preparation of laboratory sheets for physical testing — Part 1: Conventional sheet-former method*

ISO 5269-2, *Pulps — Preparation of laboratory sheets for physical testing — Part 2: Rapid-Köthen method*

ISO 7213, *Pulps — Sampling for testing*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.