
Pulps — Estimation of dirt and shives —
Part 2:
Inspection of mill sheeted pulp by
transmitted light

Pâtes — Estimation des impuretés et bûchettes —

Partie 2: Examen des pâtes en feuilles 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 5350-2 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 5350-2:1998, ISO 5350-2:1998/Cor.1:1999), which has been technically revised.

With regard to ISO 5350-2:1998 and Technical Corrigendum 1:1999, the following changes have been made:

- a) a note for problems concerning thick sheets has been added to the scope;
- b) a more precise description of the instrumental procedure in informative Annex B was given;
- c) 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.

Estimation of dirt and shives by a visual technique is a well-established method in the pulp and paper industry, and the estimation of these contraries is important for trade purposes.

This part of ISO 5350 is complementary to ISO 5350-1, which concerns visual inspection of laboratory sheets 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.

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Pulps — Estimation of dirt and shives —

Part 2: Inspection of mill sheeted pulp 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 pulp manufactured in sheets.

It does not apply to unbleached kraft pulps or to any other sheeted pulps that are too opaque to allow for the estimation of the minimum size or for minimum contrast specks to be counted, in accordance with this part of ISO 5350. The maximum grammage for most pulp sheets is in the range 800 g/m² to 1 000 g/m².

If the sheets of the mill sheeted pulp have high grammage or are very opaque for other reasons, ISO 5350-1 should be applied.

NOTE For thick sheets, with highly textured surfaces and/or with density variations, wetting the sheet will cause optical variations, called lens distortions, that will distort the perceived size of a dirt speck, thus reducing the precision of the size estimation. Alternatively, use ISO 5350-1 to disintegrate the sheet and to prepare laboratory sheets for the size estimation.

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

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 7213, *Pulps — Sampling for testing*

3 Terms and definitions

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

3.1

sheet

a sheet of pulp taken from a bale, or a part of a roll of pulp

3.2

test piece

an area taken for inspection