

**Tehnilised tselluloosid. Laboratoorne jahvatamine.
Osa 2: PFI-veski meetod (ISO 5264- 2:2011)**

Pulps - Laboratory beating - Part 2: PFI mill method (ISO 5264- 2:2011)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 5264-2:2011 sisaldab Euroopa standardi EN ISO 5264-2:2011 ingliskeelset teksti.

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grinding machines (tools), I, laboratory testing, materials testing, measurement, milling equipment (agriculture), mills, paper, paper mills, paper pulp, pulp, refineries, rice milling equipment, semi-finished products, size reduction, specimen preparation, testing

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English Version

Pulp - Laboratory beating - Part 2: PFI mill method (ISO 5264-2:2011)

Pâtes - Raffinage de laboratoire - Partie 2: Méthode au moulin PFI (ISO 5264-2:2011)

Faserstoff - Labormahlung - Teil 2: PFI-Mühle-Verfahren (ISO 5264-2:2011)

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

This document (EN ISO 5264-2:2011) 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of an identical text or by endorsement, at the latest by August 2011, and conflicting national standards shall be withdrawn at the latest by August 2011.

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Endorsement notice

The text of ISO 5264-2:2011 has been approved by CEN as a EN ISO 5264-2:2011 without any modification.

Contents

Page

Foreword	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Principle	1
4 Apparatus and auxiliary materials.....	1
5 Sampling	2
6 Preparation of sample.....	2
7 Procedure.....	2
8 Test report.....	4
Annex A (normative) PFI mill.....	5
Annex B (normative) Control and maintenance of the PFI mill.....	8
Annex C (informative) Checking the stability of the PFI mill.....	10
Bibliography.....	11

Introduction

In view of the widespread use of the following beaters:

- Valley beater,
- PFI mill,

it has been decided to provide guidance on the use of these beaters in order to achieve consistency of results with each instrument. Although both beaters show similar trends in the effect on pulp properties, there is no correlation between the actual results obtained with the different types of beaters.

ISO 5264-1 specifies a method of laboratory beating using a Valley beater.

Beating is a preliminary step in the preparation of laboratory sheets for testing the physical properties of pulps. In the PFI mill, each beating is performed separately, i.e. a new test portion of unbeaten pulp is taken for each beating.

NOTE A complete test of physical properties normally comprises unbeaten pulp and several beatings of the same pulp, where the beating is carried out for different numbers of roll revolutions. The number of roll revolutions depends on the type of pulp and the beating load. After beating, the drainability is measured according to ISO 5267-1 or ISO 5267-2, and laboratory sheets are prepared according to ISO 5269-1^[1], ISO 5269-2^[2] or ISO 5269-3^[3]. Physical testing of the laboratory sheets is performed according to ISO 5270^[4].

Pulps — Laboratory beating —

Part 2: PFI mill method

1 Scope

This part of ISO 5264 specifies a method for the laboratory beating of pulp using a PFI mill. The description is limited to the sampling, preparation and beating of the pulp and the beating equipment.

NOTE Beating is a preliminary step in testing the physical properties of pulp.

In principle, this method is applicable to all kinds of chemical and semi-chemical pulps. In practice, the method might not give satisfactory results with certain pulps having extremely long fibres.

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, *Paper, board and pulps — Determination of dry matter content — Oven-drying method*

ISO 4119, *Pulps — Determination of stock concentration*

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

ISO 5267-1, *Pulps — Determination of drainability — Part 1: Schopper-Riegler method*

ISO 5267-2, *Pulps — Determination of drainability — Part 2: "Canadian Standard" freeness method*

ISO 7213, *Pulps — Sampling for testing*

ISO 14487, *Pulps — Standard water for physical testing*

3 Principle

A measured amount of pulp at a specified stock concentration is beaten between a roll with bars and a smooth beater housing, both rotating in the same direction, but at different peripheral speeds.

4 Apparatus and auxiliary materials

Use ordinary laboratory equipment and the following.

4.1 PFI mill, as specified in Annex A.

See Annexes B and C.