

**Tehnilised tselluloosid. Laboratoorne
jahvatamine. Osa 2: PFI-veski meetod**

Pulps - Laboratory beating - Part 2: PFI mill method

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 5264-2:2003 sisaldab Euroopa standardi EN ISO 5264-2:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 19.03.2003 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 5264-2:2003 consists of the English text of the European standard EN ISO 5264-2:2002.</p> <p>This document is endorsed on 19.03.2003 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>
--	---

<p>Käsitlusala: This part of ISO 5264 specifies a method, using a PFI mill, for the laboratory beating of pulp. The description is limited to the sampling and beating of the pult, the withdrawal and distribution of samples, and the beating equipment</p>	<p>Scope: This part of ISO 5264 specifies a method, using a PFI mill, for the laboratory beating of pulp. The description is limited to the sampling and beating of the pult, the withdrawal and distribution of samples, and the beating equipment</p>
--	--

ICS 85.040

Võtmesõnad: 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

English version

Pulps – Laboratory beating

Part 2: PFI mill method
(ISO 5264-2 : 2002)

Pâtes – Raffinage de laboratoire –
Partie 2: Méthode au moulin PFI
(ISO 5264-2 : 2002)

Faserstoffe – Labormahlung –
Teil 2: PFI-Mühle-Verfahren
(ISO 5264-2 : 2002)

This European Standard was approved by CEN on 2002-09-30.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

The European Standards exist 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Management Centre: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 5264-2 : 2002 Pulps – Laboratory beating – Part 2: PFI mill method, which was prepared by ISO/TC 6 ‘Paper, board and pulps’ of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 172 ‘Paper, board and pulps’, the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by May 2003 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 5264-2 : 2002 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

Contents

Page

1	Scope	4
2	Normative references	4
3	Principle	4
4	Apparatus and auxiliary materials	4
5	Sampling	5
6	Preparation of sample	5
7	Procedure	5
8	Test report	7

Annexes

A	PFI mill	8
B	Control and maintenance of the PFI mill	10
C	Checking the stability of the PFI mill	12
	Bibliography	12

Introduction

In view of the widespread use of the following beaters:

- Valley beater;
- PFI mill;
- Jokro 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 all three 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 and ISO 5264-3 a method using a Jokro mill.

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 or ISO 5269-2.

1 Scope

This part of ISO 5264 specifies a method, using a PFI mill, for the laboratory beating of pulp. The description is limited to the sampling and beating of the pulp, the withdrawal and distribution of samples, 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 may not give satisfactory results with certain pulps having extremely long fibres.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 5264. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 5264 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

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

ISO 4119, *Pulps — Determination of stock concentration*

ISO 5263, *Pulps — Laboratory wet disintegration*

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

Ordinary laboratory equipment and the following.