

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

Pulps - Preparation of laboratory sheets for physical  
testing - Part 2: Rapid-Köthen method

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 5269-2:2005 sisaldab Euroopa standardi EN ISO 5269-2:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.01.2005 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 5269-2:2005 consists of the English text of the European standard EN ISO 5269-2:2004.</p> <p>This document is endorsed on 25.01.2005 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><b>Käsitlusala:</b> This part of ISO 5269 specifies a method, using a Rapid-Köthen sheet former, for the preparation of laboratory sheets of pulp for the purpose of carrying out subsequent physical tests on these sheets in order to assess the relevant properties of the pulp itself.</p>	<p><b>Scope:</b> This part of ISO 5269 specifies a method, using a Rapid-Köthen sheet former, for the preparation of laboratory sheets of pulp for the purpose of carrying out subsequent physical tests on these sheets in order to assess the relevant properties of the pulp itself.</p>
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**ICS** 85.040

**Võtmesõnad:**

**English version**

**Pulps – Preparation of laboratory sheets for physical  
testing**

**Part 2: Rapid-Köthen method  
(ISO 5269-2 : 2004)**

Pâtes – Préparation des feuilles de  
laboratoire pour essais physiques –  
Partie 2: Méthode Rapid-Köthen  
(ISO 5269-2 : 2004)

Faserstoffe – Laborblattbildung für  
physikalische Prüfungen – Teil 2:  
Rapid-Köthen-Verfahren  
(ISO 5269-2 : 2004)

This European Standard was approved by CEN on 2004-12-06.

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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.

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**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 5269-2 : 2004 Pulps – Preparation of laboratory sheets for physical testing – Part 2: Rapid-Köthen 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 ‘Pulp, paper and board’, 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 June 2005 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, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 5269-2 : 2004 was approved by CEN as a European Standard without any modification.

## Contents

Page

<b>Foreword</b>	<b>2</b>
<b>Introduction</b>	<b>2</b>
<b>1 Scope</b>	<b>3</b>
<b>2 Normative references</b>	<b>3</b>
<b>3 Principle</b>	<b>3</b>
<b>4 Equipment</b>	<b>4</b>
<b>5 Pretreatment and preparation of sample</b>	<b>7</b>
5.1 Pretreatment	7
5.2 Preparation of sample	8
<b>6 Procedure</b>	<b>8</b>
6.1 Sheet forming	8
6.2 Transfer of the sheet	8
6.3 Drying and conditioning	9
<b>7 Test report</b>	<b>9</b>
<b>Bibliography</b>	<b>9</b>

## Introduction

It has been agreed that the ultimate aim of standardization of the preparation of laboratory sheets should be to develop one method which is internationally acceptable and which, if possible, permits the use of different types of sheet-making apparatus.

For practical reasons, it has not proved possible to achieve this at present. Therefore, as an interim measure, in view of the widespread use of equipment described in this part of ISO 5269, it has been decided to provide agreed guidance on the use of different types of equipment in order to achieve consistency of results with each method.

To avoid creating too many levels of results, the method specified in this part of ISO 5269 should preferably be used with the PFI mill method of laboratory beating according to ISO 5264-2. The method specified in ISO 5269-1 (Conventional sheet-former method) should preferably be used with the Valley beater or PFI mill methods of laboratory beating according to ISO 5264-1<sup>[2]</sup> and 5264-2, respectively.

## 1 Scope

This part of ISO 5269 specifies a method, using a Rapid-Köthen sheet former, for the preparation of laboratory sheets of pulp for the purpose of carrying out subsequent physical tests on these sheets in order to assess the relevant properties of the pulp itself.

This part of ISO 5269 is applicable to most kinds of pulp. It is not suitable for some pulps with very long fibres, such as those made from unshortened cotton, flax and similar materials.

This method is not suitable for the preparation of laboratory sheets for the determination of diffuse blue reflectance factor (ISO brightness) in accordance with ISO 3688<sup>[1]</sup>.

**WARNING** — When long-fibred pulp is used in the unshortened form, the sheet formation may not always be satisfactory.

## 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 187, *Paper, board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples*

ISO 4119, *Pulps — Determination of stock concentration*

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  $\geq 85$  °C*

ISO 5264-2, *Pulps — Laboratory beating — Part 2: PFI mill method*

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

## 3 Principle

A circular sheet is formed from a pulp suspension on a wire screen under suction. The sheet is subjected to pressure and dried in a dryer, with almost complete prevention of shrinkage, in a specified way with respect to the pressure applied, the suction and the temperature.