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



### **FESTI STANDARDI FESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 5269-2:2000 sisaldab Euroopa standardi EN ISO 5269-2:2000 ingliskeelset teksti. This Estonian standard EVS-EN ISO 5269-2:2000 consists of the English text of the European standard EN ISO 5269-2:2000.

Standard on kinnitatud Eesti Standardikeskuse 18.12.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 18.12.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on .

Date of Availability of the European standard text

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

ICS 85.040

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## **EUROPEAN STANDARD**

### **EN ISO 5269-2**

# NORME EUROPÉENNE EUROPÄISCHE NORM

July 2000

ICS 85.040

### **English version**

Pulps - Preparation of laboratory sheets for physical testing - Part 2: Rapid-Köthen method (ISO 5269-2:1998)

Pâtes - Préparation des feuilles de laboratoire pour essais physiques - Partie 2: Méthode Rapid-Köthen (ISO 5269-2:1998)

Faserstoffe - Laborblattbildung für physikalische Prüfung - Teil 2: Rapid-Köthen-Verfahren (ISO 5269-2:1998)

This European Standard was approved by CEN on 12 June 2000.

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 Central Secretariat or to any CEN member.

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.

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



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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

### Foreword

The text of the International Standard from Technical Committee ISO/TC 6 "Paper, board and pulps" of the International Organization for Standardization (ISO) has been taken over as an European Standard by 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 January 2001, and conflicting national standards shall be withdrawn at the latest by January 2001.

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

### **Endorsement notice**

The text of the International Standard ISO 5269-2:1998 has been approved by CEN as a European Standard without any modification.

NOTE: Normative references to International Standards are listed in annex ZA (normative).

# INTERNATIONAL **STANDARD**

ISO 5269-2

> Second edition 1998-08-01

# Pulps — Preparation of laboratory sheets for physical testing —

Part 2:

Rapid-Köthen method

atic ode Raj. Pâtes — Préparation des feuilles de laboratoire pour essais physiques — Partie 2: Méthode Rapid-Köthen



### **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 nongovernmental, 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.

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.

International Standard ISO 5269-2 was prepared by Technical Committee ISO/TC 6, Paper, board and pulps, Subcommittee SC 5, Test methods and quality specifications for pulp.

This second edition cancels and replaces the first edition (ISO 5269-2:1980), of which it constitutes a technical revision.

ISO 5269 consists of the following parts, under the general title Pulps Preparation of laboratory sheets for physical testing.

- Part 1: Conventional sheet-former method
- Part 2: Rapid-Köthen method

Annex A of this part of ISO 5269 is for information only.

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### 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 or Jokro mill methods of laboratory beating according to ISO 5264-2 and ISO 5264-3, respectively. The method specified in ISO 5269-1 (Conventional sheetformer method) should preferably be used with the Valley beater or PFI mill ator, methods of laboratory beating according to ISO 5264-1[2] and 5264-2, respectively.

## Pulps — Preparation of laboratory sheets for physical testing —

### Part 2:

Rapid-Köthen method

### 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[1].

#### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 5269. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 5269 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 187:1990, Paper, board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples.

ISO 4119:1995, Pulps — Determination of stock concentration.

ISO 5263:1995, Pulps — Laboratory wet disintegration.

ISO 5264-2:1979, Pulps — Laboratory beating — Part 2: PFI mill method.

ISO 5264-3:1979, Pulps — Laboratory beating — Part 3: Jokro mill method.

ISO 5269-1:1998, 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.