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(JAPAN TAPPI/JSA)

Pulps — Determination of drainability — Part 1: Schopper-Riegler method

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In the event of any doubts arising as to the contents, the original JIS is to be the final authority.

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by Japan Technical Association of the Pulp and Paper Industry (JAPAN TAPPI)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

Consequently **JIS P 8121**:1995 has been withdrawn and partially replaced with this Standard.

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JIS P 8121 series consists of the following 2 parts under the general title "Pulps—Determination of drainability":

Part 1: Schopper-Riegler method

Part 2: "Canadian Standard" freeness method

Pulps — Determination of drainability — Part 1: Schopper-Riegler method

JIS P 8121-1: 2012

Introduction

This Japanese Industrial Standard has been prepared based on the second edition of **ISO 5267-1** published in 1999 with some modifications of the technical contents.

The portions with continuous sidelines or dotted underlines are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with explanations is given in Annex JC.

1 Scope

This Standard specifies a method for the determination of the drainability of a pulp suspension in water in terms of the Schopper-Riegler (SR) number.

The Schopper-Riegler test is designed to provide a measure of the rate at which a dilute suspension of pulp may be dewatered. It has been shown that the drainability is related to the surface conditions and swelling of the fibres, and constitutes a useful index of the amount of mechanical treatment to which the pulp has been subjected.

In principle, this method is applicable to all kinds of pulp in aqueous suspension. However, in practice, the Schopper-Riegler test provides acceptable results only if a sufficiently dense mat of fibres is formed on the wire screen. For this reason, the test is not recommended for some extremely short-fibred pulps, such as those from well-beaten hardwoods, as most of the fibres will pass through the wire screen, resulting in anomalous reduction of the SR number. The most reliable results are obtained within the range of 10° SR to 90° SR number.

The results of this test do not necessarily correlate with the drainage behaviour of a pulp material on a commercial paper machine.

NOTE: The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows:

ISO 5267-1: 1999 Pulps — Determination of drainability — Part 1: Schopper-Riegler method (MOD)

The symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.