



# SLOVENSKI STANDARD SIST EN ISO 20705:2020

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**Tekstilije - Kvantitativna mikroskopska analiza - Splošna načela preskušanja (ISO 20705:2019)**

Textiles - Quantitative microscopical analysis - General principles of testing (ISO 20705:2019)

Textilien - Quantitative mikroskopische Analyse - Allgemeine Prüfungsgrundsätze (ISO 20705:2019)

Textiles - Analyse quantitative par microscopie - Principes généraux des essais (ISO 20705:2019)

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EUROPEAN STANDARD  
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EUROPÄISCHE NORM

**EN ISO 20705**

January 2020

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English Version

## Textiles - Quantitative microscopical analysis - General principles of testing (ISO 20705:2019)

Textiles - Analyse quantitative par microscopie -  
Principes généraux des essais (ISO 20705:2019)

Textilien - Quantitative mikroskopische Analyse -  
Allgemeine Prüfungsgrundsätze (ISO 20705:2019)

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Contents	Page
European foreword.....	3

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## European foreword

This document (EN ISO 20705:2020) has been prepared by Technical Committee ISO/TC 38 "Textiles" in collaboration with Technical Committee CEN/TC 248 "Textiles and textile products" the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by July 2020, and conflicting national standards shall be withdrawn at the latest by July 2020.

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**Textiles — Quantitative microscopical  
analysis — General principles of testing**

*Textiles — Analyse quantitative par microscopie — Principes  
généraux des essais*

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# Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>1</b>
<b>5 Apparatus</b> .....	<b>2</b>
<b>6 Reagents</b> .....	<b>2</b>
<b>7 Preparation of the test specimens</b> .....	<b>2</b>
7.1 Selection of the test specimens.....	2
7.1.1 General.....	2
7.1.2 Loose fibres.....	3
7.1.3 Slivers.....	3
7.1.4 Yarns.....	3
7.1.5 Fabrics.....	3
7.2 Preparation of a test specimen slide (LM) or stub (SEM).....	4
7.2.1 Preparation for longitudinal view for LM.....	4
7.2.2 Preparation for longitudinal view for SEM.....	4
7.2.3 Preparation for cross view for LM or SEM.....	4
<b>8 Procedures</b> .....	<b>5</b>
8.1 General.....	5
8.2 LM procedure.....	5
8.2.1 Longitudinal view.....	5
8.2.2 Cross view.....	5
8.3 SEM procedure.....	5
8.3.1 Longitudinal view.....	5
8.3.2 Cross view.....	6
<b>9 Calculation and expression of the results</b> .....	<b>6</b>
9.1 Calculation based on fibre diameter measurements (Longitudinal view).....	6
9.2 Calculation based on fibre area measurements (Cross view).....	7
9.3 Calculating the percentage by mass of fibre component in woven fabric sample.....	7
<b>10 Test report</b> .....	<b>7</b>
<b>Annex A (normative) Fibre density (Conventional)</b> .....	<b>9</b>
<b>Annex B (informative) Statistical data</b> .....	<b>10</b>
<b>Bibliography</b> .....	<b>17</b>

## ISO 20705:2019(E)

## 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 non-governmental, 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/TC 38, *Textiles*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

This document is used for the quantitative analysis of textiles containing mixtures of fibres which cannot be separated readily by mechanical methods or by chemical methods, as described in the different parts of ISO 1833.

The quantitative microscopical analysis rely on the ability of a fibre analyst to identify and count, by means of a microscope [light microscope (LM) or scanning electron microscope (SEM)], the relative number of fibres of each type in a prepared test specimen (based on fibre apparent diameter of a longitudinal view or fibre section area of a cross view, depending on the fibre types).

Fibre counts lead to the calculation of the percentage in the mixture of the test specimen by number of fibres (based on fibre apparent diameter or fibre section area) and by their respective density. And then, the calculation of the fibre percentage by mass of the laboratory sample is carried out in relation to its structure (loose fibres, yarns, woven fabrics, knitted fabric, etc.).

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