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**Rubber- or plastic-coated fabrics - Physical and mechanical
test - Determination of bending force
(English Translation)**

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Foreword

This document was drafted in accordance with the provisions of GB/T 1.1-2020

"Directives for standardization - Part 1.Rules for the structure and drafting of standardizing documents".

This document is identical to ISO 22751.2020 "Rubber- or plastic-coated fabrics - Physical and mechanical test - Determination of bending force".

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The issuing authority of this document shall not be held responsible for identifying any or all such patent rights.

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Rubber- or plastic-coated fabrics - Physical and mechanical
test - Determination of bending force

1 Scope

This document describes the test method for the determination of bending force of rubber- or plastic-coated fabrics.

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.

GB/T 24133-2009 Rubber-or plastics-coated fabrics - Standard atmospheres for conditioning and testing (ISO 2231.1989, IDT)

ISO 2286-3 Rubber- or plastics-coated fabrics - Determination of roll characteristics - Part 3.Method for determination of thickness

NOTE: HG/T 3050.3-2020 Rubber- or plastics-coated fabrics - Determination of roll characteristics - Part 3.Method for determination of thickness (ISO 2286-3.2016, IDT)

ISO 7500-1 Metallic materials - Calibration and verification of static uniaxial testing machines - Part 1.Tension/compression testing machines - Calibration and verification of the force-measuring system

NOTE: GB/T 16825.1-2022 Metallic materials - Calibration and verification of static uniaxial testing machines - Part 1.Tension/compression testing machines - Calibration and verification of the force-measuring system (ISO 7500-1.2018, IDT)

3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

3.1

bending force

Force exerted on the measuring bar by the specimen at a specified bending angle (3.2), bending length (3.3), and bending rate (3.4).

3.2

bending angle

Angle corresponding to the measured bending force.

3.3

bending length

Length of the specimen that is bent.

NOTE: Bending length is the distance between the clamping device of the specimen and the measuring bar that receives the specimen force.

3.4

bending rate

Rate at which the specimen bends.

3.5

compression-bending

Bending caused by compression of the coating layer.

3.6

extension-bending

Bending caused by extension of the coating layer.

4 Test principle

The bending force is determined using the measuring bar method (two-point bending method). In this method, the specimen is clamped in a rotatable fixture. During the rotation, the specimen exerts a force to the measuring bar. The force acting at a specified bending angle is measured.

5.1 The apparatus for determining the bending force according to the measuring bar

method (two-point bending method) consists of the following mechanisms.

5.1.1 Clamping jaws, a mechanism capable of vertically clamping a specimen. The

clamping jaws shall have a depth of (35 ± 1) mm, and a minimum width of at least 30

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