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Methods of test for knitted fabrics

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 September 1988. It was prepared by Technical Committee TCI/24, *Physical testing of textiles*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

BS 5441:1988+A1:2019 supersedes BS 5441:1988, which is withdrawn.

Information about this document

This British Standard provides a companion standard to BS 2861 to BS 2866, although this standard goes somewhat further than simple analysis. In particular, the test for assessment of barriness is included and this may also be of considerable use in the evaluation of woven fabrics.

Methods already published as British Standards have not been reproduced, but a list is given in [Clause 6](#) of other test methods that may be of use in the assessment of knitted fabrics.

The order in which the tests should be carried out is not covered by this standard since this will depend, to a large extent, on the sample size available.

It is recognized that the methods given for the analysis of knitted fabrics require great skill on the part of the analyst in view of the complex nature of many such fabrics, but it is believed that the standardization of notation will go some way towards easing the difficulties.

At the time of publication of this British Standard no corresponding international standard exists.

Text introduced by or altered by Amendment No. 1 is indicated in the text by tags A1 and A1. Minor editorial corrections are not tagged.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its methods are expressed as a set of instructions, a description, or in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Requirements in this standard are drafted in accordance with *Rules for the structure and drafting of UK standards*, subclause **G.1.1**, which states, “Requirements should be expressed using wording such as: ‘When tested as described in Annex A, the product shall ...’”. This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Section 1: General



1 Scope

This British Standard describes methods of test for knitted fabrics. Section one gives general information relevant to both warp and weft knitted fabrics; section two specifies methods appropriate for weft knitted fabrics and section three specifies methods appropriate for warp knitted fabrics.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions 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.

 BS EN 14970, *Textiles — Knitted fabrics — Determination of stitch length and yarn linear density in weft knitted fabrics* 

 BS EN 14971, *Textiles — Knitted fabrics — Determination of number of stitches per unit length and unit area* 

 BS EN ISO 139, *Textiles — Standard atmospheres for conditioning and testing* 

3 Terms and definitions

For the purposes of this British Standard the following definitions apply.

3.1 barriness or barré

regularly repeating stripiness in textiles

3.2 barry

exhibiting barriness

3.3 grade

one of five members of the scale, each exhibiting a different degree of bar/background contrast

3.4 half-grade

an imaginary contrast midway between those exhibited by two adjacent grades

3.5 rating or barriness rating

the number of the grade or half-grade assessed visually as exhibiting a degree of contrast between bars and background similar to that on the fabric being compared with the scale

4 Apparatus

4.1 *Counting glass*, the aperture width of which shall be (2 ± 0.005) cm at all places. The thickness of the base plate at the edges of the aperture shall not exceed 0.1 cm. Other suitable apparatus may be used.

4.2 *Ruler*, capable of measuring to an accuracy of 0.5 mm.

4.3 *Dissecting needles, scissors and razor blades*.