Methods for determination of

Bow, skew and lengthway distortion in knitted fabrics



Committees responsible for this British Standard

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Association of Consulting Scientists

British Nonwovens Manufacturers' Association

British Polyolefin Textiles Association

British Textile Employers' Association

British Textile Machinery Association

British Textile Technology Group

Confederation of British Wool Textiles Limited

International Wool Secretariat

Man-made Fibres Producers Committee

Ministry of Defence

SATRA Footwear Technology Centre

Soap and Detergent Industry Association

Society of Dyers and Colourists

Textile Institute

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	16629	29 September 2006	Figure 4 amended to show dimension
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Foreword

Publishing Information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution. It has been prepared under the direction of the Textiles and Clothing Standards Policy Committee.

A2 Supersession

BS 2819:1990+A2:2016 supersedes BS 2819:1990 (incorporating Amendment No 1:2006), which is withdrawn.

Information about this document

Attention is drawn to the existence of BS EN ISO 13015 for the determination of these properties in woven fabrics.

Widthway or weft bow and skew can be present in fabrics as defects causing making up difficulties, being visually displeasing and resulting in made-up articles which may function improperly. In such cases the distortion is likely to occur sporadically in certain pieces or parts of pieces and the normal provisions for random sampling may well be inappropriate.

When widthway bow and skew are present as defects, it has been customary in the past for British Standard test methods to measure both defects separately. These are, however, idealized defects and the property of interest, particularly the garment maker, is the total lengthway distortion which is generally a combination of both width-way bow and skew, and a method of measuring this included in this edition.

Lengthway distortion is generally best ascertained on the fabric rolls or bundles at the time of inspection as it is the maximum amount of distortion which is of interest in most cases and the worst areas can be most readily observed at this time. Tests are, therefore, not always carried out in the standard temperate atmosphere for testing textiles. In many instances tests made in this manner are quite acceptable.

It is, however, sometimes convenient to make measurements on samples removed from the bulk as in the case of fabrics where the exact position of the threads is not obvious on the face of the fabric. In such an event, in cases of dispute and when results of high accuracy are required tests are made in the standard temperate atmosphere for testing textiles on samples removed from the bulk.

Skew can also be present in some fabrics as a desirable and essential part of their construction. A specified amount of skew is needed in some fabrics if, for example, the twisting of trouser legs is to be prevented in subsequent laundering. In such cases the average percentage skew is the property of interest and tests are made in the standard temperate atmosphere for testing textiles.

Text introduced or altered by Amendment No. 2 is indicated in the text by tags A_2 (A2). Minor editorial changes are not tagged.

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.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 4, an inside back cover and a back cover.

1 Scope

This British Standard describes methods for measuring bow, skew and lengthway distortion in \triangle text deleted \triangle knitted fabrics.

NOTE The titles of the publications referred to in this British Standard are given on the inside back cover in the Bibliography.

2 Definitions

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

2.1

bow

(A) text deleted (A) the curvature of the wales and courses in knitted fabrics

 NOTE Bow may assume many different forms and some are shown in Figure 1.

2.2

skew

△ a fabric condition where the courses, although straight, are not at right angles to the wales 🏖

NOTE For example of a skew condition see Figure 2.

2.3

lengthway distortion

a combination of weft bow and skew which may assume many different forms

NOTE Examples of the forms assumed as a result of lengthway distortion are shown in Figure 3.





