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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 23319.2-2009

**Textiles -- Determination of spirality after laundering -- Part 2:
Woven and knitted fabrics
(English Translation)**

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1 Scope

This Part of GB/T 23319 specifies three methods for measuring the spirality of woven and knitted fabrics after laundering (diagonal marking method, inverted T-marking method, and mock garment marking method).

Test results obtained using different methods may not be comparable.

This Part is applicable to measuring the spirality of fabrics after laundering, not to measuring the spirality formed during fabric manufacturing.

NOTE: Some fabric structures, such as coarse twill cotton, are intentionally skewed during production. Fabrics produced by circular knitting machines may have an inherent non-perpendicular stripe arrangement.

2 Normative References

The clauses in the following documents become clauses of this Part by reference to this Part of

GB/T 23319. In terms of references with a specified date, the subsequent amendments (excluding corrections) or revisions do not apply to this Part. However, parties to agreements based on this Part are encouraged to investigate the possibility of using the most recent versions of these documents. In terms of references without a specified date, the latest versions apply to this Part.

GB/T 6529 Textiles - Standard atmospheres for conditioning and testing (GB/T 6529-2008, ISO

139.2005, MOD)

GB/T 8629 Textiles - Domestic washing and drying procedures for textile testing (GB/T 8629-

2001, eqv ISO 6300.2000)

3 Terms and Definitions

The following terms and definitions are applicable to this Part of GB/T 23319.

3.1 Spirality

A skew condition in textiles where the weft yarns or knitted rows deviate angularly from the perpendicular lines of the fabric selvage or garment side.

4 Principle

The specimen is cut, prepared, marked, and washed according to a prescribed procedure. The spirality value is measured in millimeters, and the result is taken as a percentage of the marked length or skew angle.

5 Instruments

5.1

Automatic washing machine, as specified in GB/T 8629, the type of washing machine shall be determined through negotiation.

5.2

Automatic dryer, as specified in GB/T 8629, shall be determined through negotiation.

5.3

Steel ruler, at least 500 mm in length, with a graduation of 1 mm.

5.4

Conditioning rack.

5.5

Sewing machine.

5.6

T-square, at least 500 mm in length.

5.7

Marking template, with dimensions of (380 x 380) mm, (580 x 510) mm, and (650 x 380) mm.

6 Conditioning

Before cutting, sewing, and measuring fabric specimens, condition the fabric or garment samples in standard atmospheric conditions for at least 4 h, as specified in GB/T 6529.

7.1.1 Specimen preparation

Prepare three specimens in suitable locations within the fabric sample area. Cut three 380 mm

x 380 mm single-layer fabric specimens, excluding the same warp and weft (longitudinal and transverse) yarns, along the fabric selvage or fold lines of tubular fabric.

7.1.2 Diagonal marking

Mark two 250 mm long reference lines parallel to the length direction and two 250 mm long reference lines parallel to the width direction at 65 mm from each side of the specimen, forming a square.

Starting from the bottom left corner, mark the four apex angles A, B, C, and D clockwise (see

Figure 1).

7.2.1 Specimen preparation

This marking method is particularly suitable for narrow fabrics.

Cut three 650 mm x 380 mm specimens, with the length of the specimen parallel to the selvage of the sample. If the sample is a tubular knitted fabric, the length direction of the specimen shall be parallel to the folded edge of the sample.

7.2.2 Inverted T-marking

Draw a straight line YZ parallel to the width direction, 75 mm from the bottom edge of the specimen.

Mark reference point A at the midpoint of YZ.

Mark point B using a T-square, perpendicular to YZ above point A and 500 mm away from point A (see Figure 4).

7.3.1 Specimen preparation

Fold the fabric in half so that the selvages overlap.

Place a 580 mm x 510 mm template on the folded fabric, with its length parallel to the selvage.

Cut three double-layer fabric specimens, each 580 mm x 510 mm in dimensions.

NOTE: The length direction of the specimen may not align with the warp or weft direction of the fabric, and the width direction of the specimen does not necessarily have to align with the weft or row direction of the fabric. However, the length direction of the specimen is generally aligned with the selvage direction of the fabric.

7.3.2 Mock garment marking

Arrange the specimen so that its right sides are aligned, and all edges are aligned.

Sew a stitch along each long side and any one of the short sides, 12 mm from the adjacent selvage. Turn the stitches inside out to form a specimen shaped like an open bag or pillowcase, simulating a garment pattern.

Sew the open edges together.

Measure and record the lengths of AB and CD on each specimen along the sewn edge (see

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