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

GB/T 13773.2-2008

**Textiles -- Seam tensile properties of fabrics and made-up
textile articles -- Part 2: Determination of maximum force to
seam rupture using the grab method**

(English Translation)

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Foreword

GB/T 13773 Textiles - Seam tensile properties of fabrics and made-up textile articles is divided into 2 parts.

- Part 1. Determination of maximum force to seam rupture using the strip method
- Part 2. Determination of maximum force to seam rupture using the grab method

This part is Part 2 of GB/T 13773.

This part uses translation method to equivalently adopt ISO 13935-2:1999 Textiles - Seam tensile properties of fabrics and made-up textile articles - Part 1. Determination of maximum force to seam rupture using the grab method.

Compared with ISO 13935-2:1999, the main technical differences of this part are as follows.

- Chinese standards corresponding to the referenced international standards are referenced in the normative reference document;
- Foreword, introduction, informative annex B, "bibliography" and annotation in

Chapter 7 of the international standards have been deleted.

This part replaces GB/T 13773-1992 Method A. Compared with GB/T 13773-1992, the main technical differences are as follows.

1 The above standards are characterized into that - one original independent standard

is adjusted into a series of standards, including two parts. The Part 1 is regarded as the method B of the original standard and the Part 2 is regarded as the method A of the original standard; the standard name is also amended correspondingly;

3 Relative standards of a stretching tester are added in the normative reference

document; and reference of partial standards is deleted;

4 CRE stretching tester, grab test and gauge length have been added in terms of

Chapter 3; and seaming stitch density, seam and seaming efficiency have been deleted;

5 CRT strength tester has been deleted; and concrete requirements have been

proposed for the CRE stretching tester;

6 Relative clauses of stitching parameters shall be deleted and determined according

to an agreement;

11 Relative clauses for measuring and calculating seaming efficiency have been

deleted;

This part was proposed by China National Textile And Apparel Council.

This part shall be under the jurisdiction of National Textile Standardization Technology

Committee Basic Standards Branch (SAC/TC209 / SC1).

Drafting organizations of this part. China National textile supervision testing center and China Textile Academy Shenzhen Testing Centre.

1 Scope

This part of GB/T 13773 specifies a procedure to determine the seam maximum force of sewn seams when the force is applied perpendicularly to the seam, and specifies the method known as the grab test.

This part is mainly applicable to woven textile fabrics. It can be applicable to fabrics produced by other techniques. It is not normally applicable to woven elastic fabrics, geotextiles, nonwovens, coated fabrics, textile-glass woven fabrics and fabrics made from carbon fibres or polyolefin tape yarns.

The sewn fabrics may be obtained from previously sewn articles or may be prepared from fabric samples, as agreed by the parties interested in the results.

This method is applicable to straight seams only and not to curved seams.

The method is restricted to the use of constant rate of extension (CRE) testing machines.

2 Normative references

The articles contained in the following documents have become this part of GB/T 13773 when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this part.

For the undated documents so quoted, the latest editions shall be applicable to this part.

GB/T 6529 Textiles - Standard atmospheres for conditioning and testing (GB/T 6529-2008, ISO 139.2005, MOD)

GB/T 16825.1 Verification of static uniaxial testing machines - Part 1.

Tension/compression testing machines - Verification and calibration of the force-measuring system (GB/T 16825.1-2008, ISO 7500-1.2004, IDT)

GB/T 19022 Measurement management systems - Requirements for measurement processes and measuring equipment (GB/T 19022-2003, ISO 10012.2003, IDT)

3 Terms and definitions

For the purpose of this part of GB/T 13773, the following terms and definitions shall apply.

3.1

Constant-rate-of-extension (CRE) testing machine

Tensile-testing machine provided with one clamp which is stationary and another clamp which moves with a constant speed throughout the test, the entire testing system being virtually free from deflection.

3.2

Grab test

Tensile test in which only the centre part of the test specimen is gripped in the jaws of the testing machine.

3.3

Maximum force to seam rupture

Maximum force recorded when a test specimen with a seam perpendicular to the direction of extension is taken to seam rupture during a tensile test under the specified conditions.

3.4

Gauge length

Distance between the two effective clamping points of a testing device.

Note : The effective clamping points (or lines) of jaws can be checked by clamping a test specimen under

defined pretension with carbon copy paper to produce a gripping pattern on the test specimen and/or the

jaw faces.

4 Principle

A fabric test specimen having a seam in the middle is gripped in its centre part by jaws of specified dimensions and is extended perpendicularly to the seam at a constant rate until the seam ruptures. The maximum force to seam rupture is recorded.