DRAFT AMENDMENT ISO 7768:2006/DAmd 1

ISO/TC **38**/SC **2** Secretariat: **ANSI**

Voting begins on: **2008-04-02** Voting terminates on: **2008-09-02**

Textiles — Test method for assessing the smoothness appearance of fabrics after cleansing

AMENDMENT 1

Textiles — Méthode d'essai pour l'évaluation de la régularité d'aspect des étoffes après nettoyage

AMENDEMENT 1

ICS 59.080.30

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

Amendment 1 to ISO 7768:2006 was prepared by Technical Committee ISO/TC 38, *Textiles*, Subcommittee SC 2, *Cleansing, finishing and water resistance tests*.

Textiles — Test method for assessing the smoothness appearance of fabrics after cleansing — Amendment 1

Pg. 7, Annex B (informative)

New annex added

ANNEX B
(informative)

Digital Description of the ISO Smoothness Replicas

B.1 This informative annex provides the digital description of 3D replicas. The data are not intended to be used to assess specimens. When assessing specimens, the 3D replicas are to be used.

B.2 Processes of Measurement and Analysis

B.2.1 A 3-dimensional scanning system was used to measure digital images of ISO smoothness replicas as shown in Figure B.1. Specifications for the scanning system are shown in Table B.1.

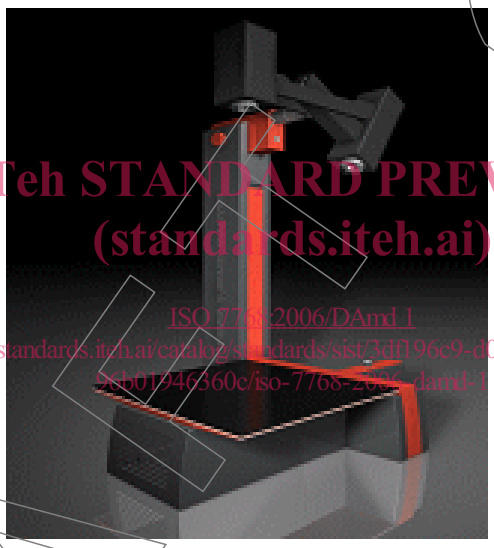


Figure B.1 — 3-Dimensional scanning system

Table B.1 — Specification of the 3-dimensional scanning system

Camera	1024×768pixel, B/W
Special Pattern	Structural beam by halogen lamp
Adjustment of focus	Using the laser point light source
Measurement time	70 ~ 80 sec
Resolution	± 0,05 mm

B.2.2 Measuring area is shown in Figure B.2

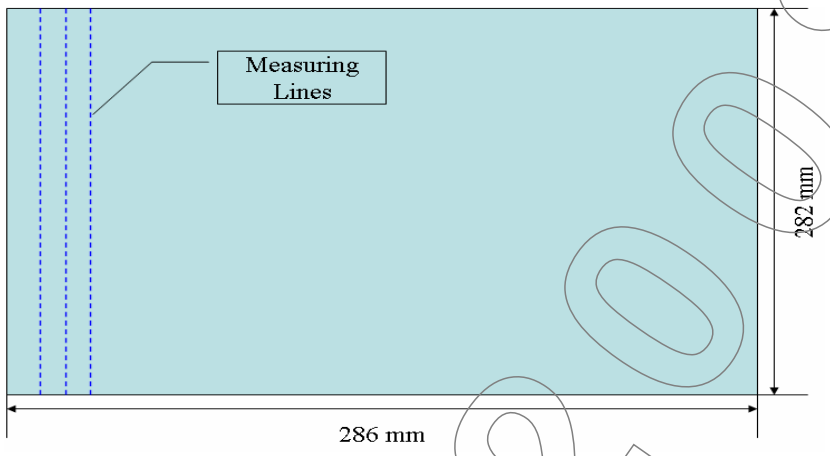


Figure B.2 — Measuring area of smoothness replica

B.2.3 The 3-dimensional measured images are separately stored as six regions to be divided intentionally for analysis. See Figure B.3.

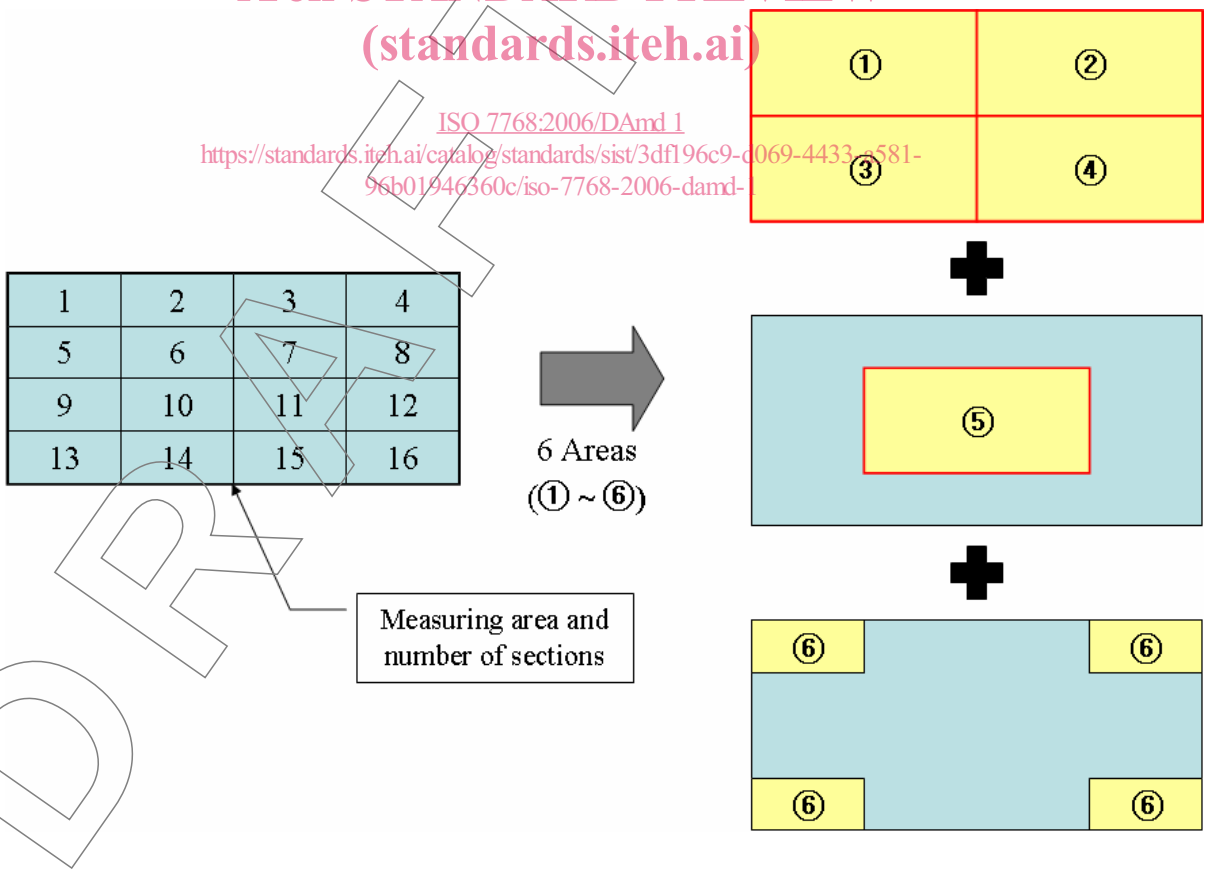


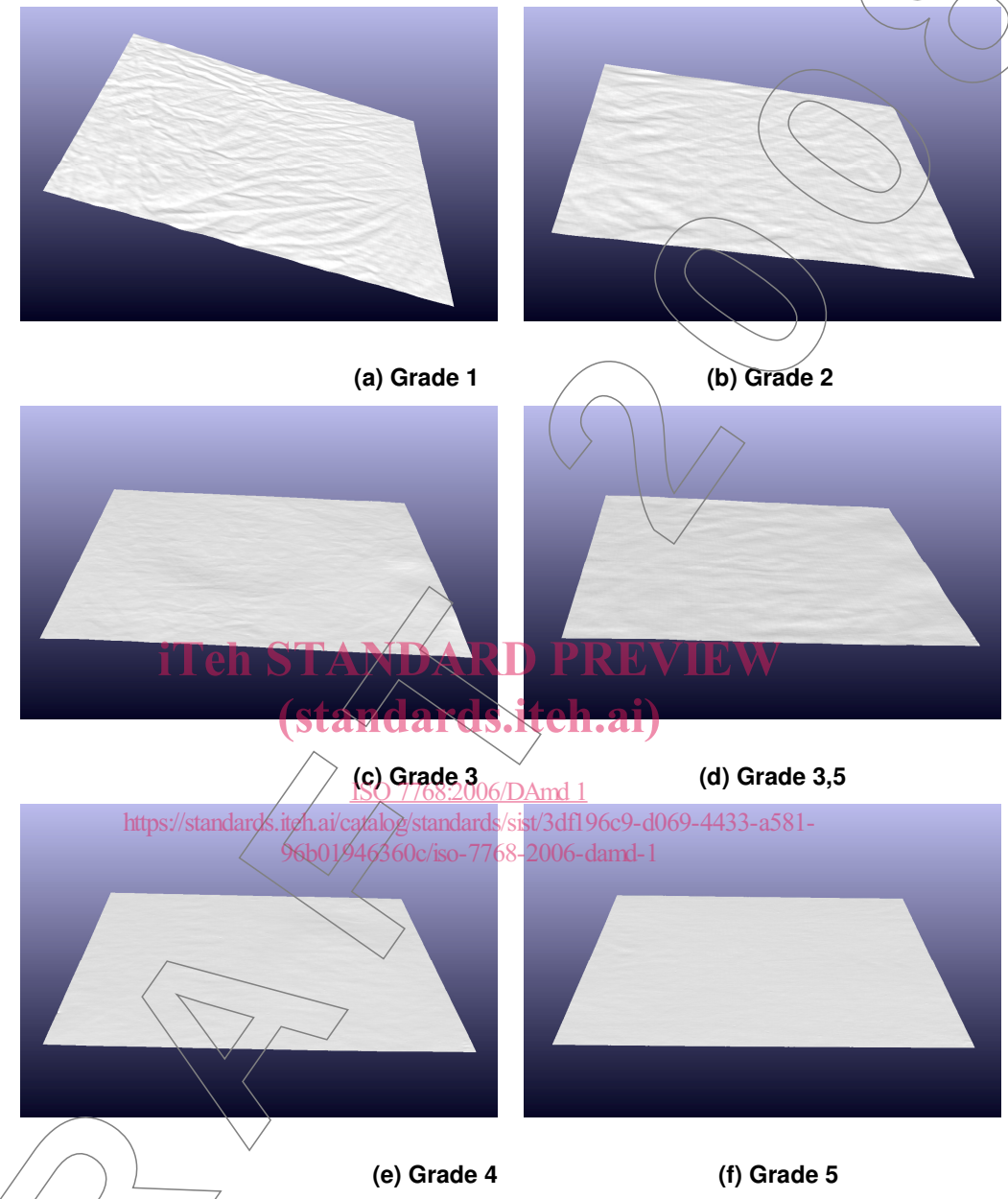
Figure B.3 — Six regions for smoothness replica analysis

B.2.4 A geometric shape of each standard replica is measured using a 3-dimensional laser scanning system at an interval with 0,375 mm. The number of measuring points along each line is determined by the intervals.

To analyze the replicas, define six shape parameters that have an influence on grade of replica. They are mean of heights, maximum of heights, variation of heights, mean of height frequency, maximum of height frequency, variation of height frequency. For each region, one can get 6 parameters.

B.3 Analysis of Smoothness with 0,375 mm Measurements

B.3.1 Measured Images of Smoothness Replicas



(a) Grade 1 (b) Grade 2

(c) Grade 3 (d) Grade 3,5

(e) Grade 4 (f) Grade 5

Figure B.4 — Measured images of smoothness replica

B.3.2 Analysis of Parameters

B.3.2.1 Mean of Height (H_mean)

Figure B.5 shows the relationship between grade of smoothness replica and mean of height. The ANOVA test and Tukey's method were performed to confirm differences in this parameter among grades. From the results of the ANOVA test, the difference in grades was confirmed at the 95 % confidence level. The results of the Tukey's method indicated no significant differences between grade 1 and 3, between grade 2 and 3, between grade 2 and 3,5; between grade 2 and 4; between grade 3 and 3,5; between grade 3,5 and 4; and between grade 4 and 5.