
International Standard



7211/1

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

**Textiles — Woven fabrics — Construction — Methods of analysis —
Part 1: Methods for the presentation of a weave diagram and plans for drafting, denting and lifting**

Textiles — Tissus — Construction — Méthodes d'analyse — Partie 1: Représentation du dessin d'armure, du rentrage, du piquage au peigne et du levage

First edition — 1984-03-15

ISO 7211/1-1984 (E)

UDC 677.064 : 677.017.35 : 003.63

Ref. No. ISO 7211/1-1984 (E)

Descriptors : textiles, woven fabrics, weave diagrams, recording.

Price based on 5 pages

Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 7211/1 was developed by Technical Committee ISO/TC 38, *Textiles*, and was circulated to the member bodies in November 1982.

It has been approved by the member bodies of the following countries:

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Printed in Switzerland

Textiles — Woven fabrics — Construction — Methods of analysis —

Part 1: Methods for the presentation of a weave diagram and plans for drafting, denting and lifting

0 Introduction

Although drafting, denting and lifting plans are not strictly within the province of fabric analysis, it has been thought convenient to include methods for their presentation in this part of this International Standard. Nothing within this document precludes the use of shortened methods of designing used extensively on Jacquard structures where the design is coloured in solid shades and supplied with a written series of card-cutting instructions to apply throughout with only bare details of weave starting points.

The attention of users of this part of ISO 7211 is drawn to ISO 2959 and ISO 3572. The terms used in this document are defined in ISO 3572.

1 Scope and field of application

This part of ISO 7211 deals with recording of fabric weaves and makes provision for showing in relation to the weave repeat the sequence in which yarns of different character are used. A method is also provided for the presentation of the warp and weft yarn arrangement.

This part of ISO 7211 applies to all woven fabrics, including compound fabrics in which interlacing of the warp and weft threads is accompanied by crossing of warp threads.

NOTE — If only a small sample, e.g. 4 cm × 4 cm, is available and it is desired to carry out further tests as described in other parts of this International Standard, the following order should be observed:

- a) Measure the area of the sample and determine the mass per unit area.
- b) Analyse for weave, keeping the removed threads.
- c) Use the removed threads to determine the masses of warp and weft per unit area and/or linear density.

2 References

ISO 2959, *Textiles — Woven fabric descriptions*.

ISO 3572, *Textiles — Weaves — Definitions of general terms and basic weaves*.

3 Principle

The weave repeat shown on design paper is adopted as the means for showing the weave of the fabric, and provision is made in the repeat for showing the disposition of different yarns in relation to the weave when there is more than one yarn in the warp or weft. A tabular method is used for indicating the sequence of colours in a colour pattern. The drafting, denting and lifting plans are shown on the same design paper as the weave repeat and are related to it by conventional methods.

4 Apparatus

- 4.1 Design paper (see ISO 3572).
- 4.2 Low-power magnifier, such as a counting glass.
- 4.3 Forceps.
- 4.4 Scissors.
- 4.5 Dissecting needle.

5 Test specimen

Select a specimen from the fabric containing several complete repeats of the weave.

6 Procedure

6.1 Analysis

Identify the face, warp and weft. Decide whether to remove the weft from the warp or vice versa.

Form a fringe of threads on two perpendicular sides of the specimen by fraying threads until a fringe of about 1 cm length is obtained. With the aid of the dissecting needle (4.5), slide threads parallel to one fringed side in order to facilitate recording of interlacing as in 6.2. Continue removing threads progressively from the fabric, examining and recording the inter-