International Standard

ISO 20537

Footwear — Identification of defects during visual inspection — Vocabulary

First edition
2025-01

Reference number
ISO 20537:2025(en)

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Foreword

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This document was prepared by Technical Committee ISO/TC 216, *Footwear*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 309, *Footwear*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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Introduction

Visual inspection is important for manufacturers, suppliers, inspection organizations and costumers as one of the quality indicators of footwear products. This document is not only intended as a basis for assessing footwear appearance defects but also as a reference material and training material for the footwear industry.

The presence of one of these defects in footwear does not automatically imply that the footwear is substandard. Suppliers and purchasers can still reach an agreement on the scope and level of acceptance for defects in the goods, based on the intended use of the footwear.

Due to the development of material and technology in the footwear industry, as well as insufficient photographic resources, it is impossible to define all terms for identification of defects during visual inspection of footwear. The list of terms given in this document is not exhaustive.

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Footwear — Identification of defects during visual inspection — Vocabulary

1 Scope

This document defines the most common terms related to defects that occur in the manufacture, storage and usage of footwear and that can be determined during visual inspection of the end product.

NOTE The photos are given as examples and do not represent all possible instances.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1 General defects

Term and definition	Examples
3.1.1 **colour variation** obvious difference in colour that can be seen in the same area within a pair, or in one component part or in the adjacent areas of one item of footwear Note 1 to entry: Intentional designs are not included.	
3.1.2 **damaged shoe** footwear that has changed in appearance due to careless operation that adversely affects its performance	

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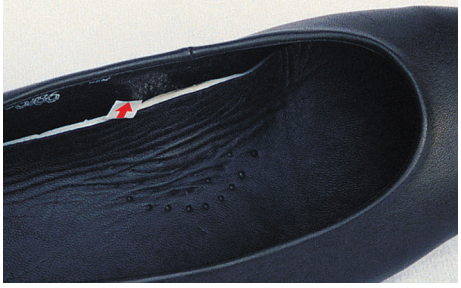
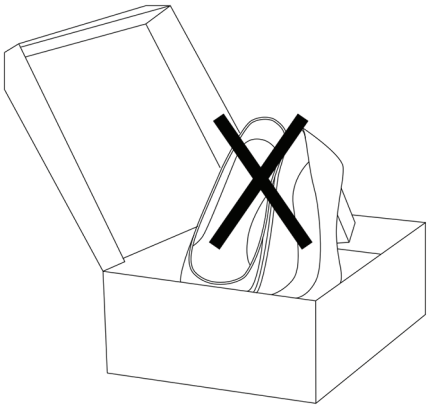
Term and definition	Examples
3.1.3 **inconformity with the design** situation when a product does not conform to the reference sample or drawing which both parties have agreed upon	 drawing product
3.1.4 **mildewing** infecting process by microorganisms on material at any part of the footwear	
3.1.5 **non-compliant box** shoe box that does not conform with the footwear inside	

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Term and definition	Examples
3.1.6 **poor printing** printing on footwear that is incomplete or unclear	
3.1.7 **soiled shoe** shoe with dirt or adhesive mark on the upper, lining or sides of the sole due to careless handling or cleaning	
3.1.8 **spue** white frost-like layer that appears on the surface of footwear	
3.1.9 **weave fault** defect that reduces the expected performance of the fabric Note 1 to entry: Related defects are described in ISO 8498 and ISO 8499.	

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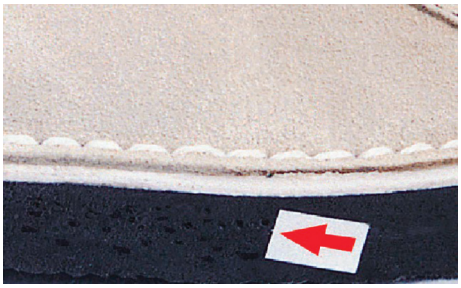
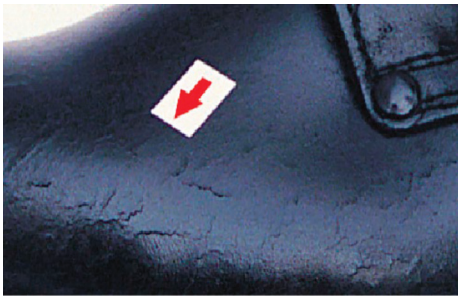
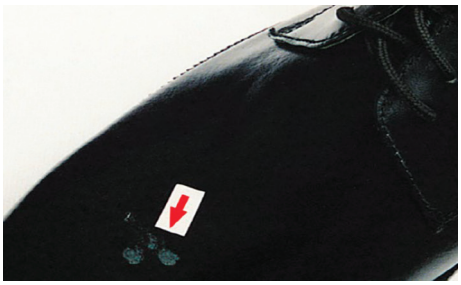
3.2 Defects in materials aspects

Term and definition	Examples
3.2.1 **air hole** small hole which develops in the colloid structure of materials	
3.2.2 **colour migration** discolouration caused by movement of colour from one material to another	
3.2.3 **crazing** cracks in the coating of upper materials	
3.2.4 **discolouration** staining or fading of the original material colour, either in discrete areas or across the whole product	
3.2.5 **impurity** small particles that do not belong to the original formulation and show on the material	

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Term and definition	Examples
3.2.6 **pit** small hole in the surface of footwear	
3.2.7 **shade variation** differences within materials that cause a difference in the shade of the finished footwear	
3.2.8 **sulfur blooming** yellow or white layer that appears on the surface of rubber materials	

3.3 Defects in components

3.3.1 Defects in upper

Term and definition	Examples
3.3.1.1 **broken folding** folding of upper over the edge that has broken during the making or wearing process	

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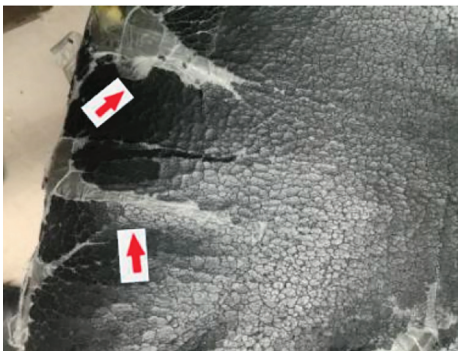
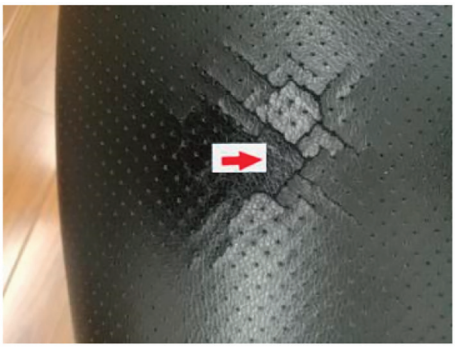
Term and definition	Examples
3.3.1.2 **crease on the upper** wrinkles on the upper area of footwear due to poor sewing process	
3.3.1.3 **delamination of upper** separation of upper into its constituent layers, either in whole or in part	 

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