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Packaging — Complete, filled transport packages and unit loads — Horizontal impact tests

*Emballages — Emballages d'expédition complets et pleins et charges
unitaires — Essais de choc horizontal*



Reference number
ISO 2244:2000(E)

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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 2244 was prepared by Technical Committee ISO/TC 122, *Packaging*, Subcommittee SC 3, *Performance requirements and tests for means of packaging, packages and unit loads (as required by ISO/TC 122)*.

This third edition cancels and replaces the second edition (ISO 2244:1985) which has been technically revised.

Introduction

It is the responsibility of the user of this International Standard to establish appropriate health and safety practice in accordance with relevant legislation.

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Packaging — Complete, filled transport packages and unit loads — Horizontal impact tests

1 Scope

This International Standard specifies methods of horizontal impact testing (horizontal or inclined plane test and pendulum test) on a complete, filled transport package or a unit load. The test may be performed either as a single test to investigate the effects of horizontal impact or as part of a sequence of tests designed to measure the ability of a package or a unit load to withstand a distribution system that includes a horizontal impact hazard.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 2206, *Packaging — Complete, filled transport packages — Identification of parts when testing.*

ISO 2233, *Packaging — Complete, filled transport packages and unit loads — Conditioning for testing.*

3 Term and definition

For the purposes of this International Standard, the following term and definition applies.

3.1

test specimen

a complete, filled transport package or unit load

4 Principle

Applying a horizontal velocity to the test specimen and bringing it to a halt by impact with a vertical impact surface. The atmospheric conditions, the impact velocity and the attitude of the test specimen are predetermined. Particular conditions of impact may be simulated by placing appropriately profiled inserts between the impact surface and the impacting face or edge of the test specimen.

5 Apparatus

5.1 **Impact surface**, which should be either:

- a) a plane inclined to the vertical at $10^\circ \pm 1^\circ$ (for the inclined plane test), or
- b) a plane vertical to within 1° (for the horizontal or pendulum test).