STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 2582.10—2003
Complete, filled transport packages—Methods of test
Method 10: Compression and stacking tests using a compression tester

RECONFIRMATION NOTICE

Major stakeholders of this publication have reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 11 September 2020.

NOTES

AS 2582.10—2003
ISO 12048:1994
Reconfirmed 2020

Australian Standard™

Complete, filled transport packages—Methods of test

Method 10: Compression and stacking tests using a compression tester

PREFACE

This Standard was prepared by Standards Australia Committee PK-012, Physical Testing of Packages and Containers, to supersede (in part) AS 2582.3—1983, *Complete, filled transport packages—Methods of test*, Part 3: *Stacking, compression test*. It is identical with, and has been reproduced from ISO 12048:1994, *Packaging—Complete, filled transport packages—Compression and stacking tests using a compression tester.*

As this publication has been reproduced from an International Standard, the following modifications apply:

(a) Its number does not appear on each page of text and its identity is shown on the cover and title page.

(b) In the source text 'this International Standard' should read 'this Australian Standard.

(c) Substitute a full point for a comma when referring to a decimal marker.

References to International Standards should be replaced by Australian Standards, as follows:

Reference to International Standard		*Australian Standard*	
ISO		AS	
2206	Packaging—Complete, filled transport packages—Identification of parts when testing	2582	Complete, filled transport packages—Methods of test
		2582.1	Part 1: Identification of parts when testing
2233	Packaging—Complete, filled transport packages and unit loads—Conditioning for testing	2582.2	Part 2: Conditioning for testing
2234	Packaging—Complete, filled transport packages—Stacking tests using static load	2582.3	Part 3: Stacking tests using static load

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NOTES

1 Scope

This International Standard specifies a method for testing the resistance to compression of complete, filled transport packages and a method for carrying out a stacking test on complete, filled transport packages using the same apparatus.

The test may be used to assess the performance of a package in terms of its strength or the protection it offers to its contents when it is subjected to compressive forces. A test may be performed either as a single test to investigate the effects (deformation, collapse or failure) of compression or stacking, or as part of a sequence of tests designed to measure the ability of a package to withstand a distribution system that includes a compression or stacking hazard.

This test may also be used as a stacking test to investigate performance under particular conditions of loading, as, for example, when the bottom package in a stack rests on an open-decked pallet.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2206:1987, *Packaging — Complete, filled transport packages — Identification of parts when testing.*

ISO 2233:— *Packaging — Complete, filled transport packages — Conditioning for testing.*

) To be published. (Revision of ISO 2233:1986)

3 Principle

The test package is placed between the platens of a compression tester and either:

a) in the case of a compression test, a load is applied until failure occurs or predetermined values for load or displacement are reached; or

b) in the case of a stacking test, a predetermined load is applied for a predetermined time or until failure occurs.

4 Apparatus

4.1 Compression tester, motor-driven, platen-type, capable of applying a load through uniform movement of one or both platens at a relative speed of 10 mm/min ± 3 mm/min.

NOTES

1 The comparison between results obtained from apparatus operated at other speeds (for example 12,5 mm/min ± 2,5 mm/min) and results obtained at 10 mm/min ± 3 mm/min is not recommended.

2 For certain packagings, such as metal drums or wooden crates, lower speeds may be required to prevent load peaks in excess of the predetermined value.

4.1.1 Platens

Each platen shall be

— flat:

  a) with a tolerance of 1 part in 1 000 for surface areas <1 m^2;

  b) for surface areas >1 m^2, such that when placed horizontally the difference in height between the lowest and highest points of the platen does not exceed 1mm;

— dimensioned so as to extend over the whole area of that side of the test package or interposed devices with which it is in contact;