SLOVENSKI STANDARD
SIST EN 20090-1:1997

01-maj-1997

Pločevinke - Definicije in metode ugotavljanja mer in prostornin - 1. del: Odprte pločevinke (ISO 90-1:1986)

Light gauge metal containers - Definitions and determination methods for dimensions and capacities - Part 1: Open-top cans (ISO 90-1:1986)

Verpackungen aus Feinstblech - Begriffe und Verfahren zur Bestimmung von Abmessungen und Volumen - Teil 1: Falzdeckeldosen (ISO 90-1:1986)

Récipients métalliques légers - Définitions et méthodes de détermination des dimensions et des capacités - Partie 1: Boîtes serties (ISO 90-1:1986)

Ta slovenski standard je istoveten z: **EN 20090-1:1992**

ICS:

55.120	Pločevinke. Tube	Cans. Tins. Tubes

SIST EN 20090-1:1997 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 20090-1:1992

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UDC 621.789.144:672.46

Descriptors: Containers, metal packaging, cans, definitions, capacity, dimensions, volume measurement, specifications

English version

Light gauge metal containers - Definitions and determination methods for dimensions and capacities - Part 1: Open-top cans (ISO 90-1:1986)

Récipients métalliques légers - Définitions et méthodes de détermination des dimensions et des capacités - Partie 1: Boîtes serties (ISO 90-1:1986)

Verpackungen aus Feinstblech - Begriffe und Verfahren zur Bestimmung von Abmessungen und Volumen - Teil 1: Falzdeckeldosen (ISO 90-1:1986)

This European Standard was approved by CEN on 1992-10-30. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart,36 B-1050 Brussels

Foreword

In 1991, ISO 90-1:1986 "Light gauge metal containers - Definitions and determination methods for dimensions and capacities - Part 1: Open-top cans" was submitted to the CEN Primary Questionnaire procedure.

Following the positive result of the CEN/CS Proposal ISO 90-1:1986 was submitted to the Formal Vote.

The result of the Formal Vote was positive.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 1993, and conflicting national standards shall be withdrawn at the latest by May 1993.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

Endorsement notice

The text of the International Standard ISO 90-1:1986 was approved by CEN as a European Standard without any modification.

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International Standard ISO 90/1

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

Light gauge metal containers — Definitions and determination methods for dimensions and capacities — Part 1: Open-top cans

Récipients métalliques légers — Définitions et méthodes de détermination des dimensions et des capacités — Partie 1: Boîtes serties

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Descriptors : containers, metal packaging, cans, definitions, tests, dimensional measurements, determination, dimensions, cross sections, capacity, designation.

Price based on 14 pages

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.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 90/1 was prepared by Technical Committee ISO/TC 52, *Light gauge metal containers.*

This first edition together with the first editions of ISO 90/2 and ISO 90/3 cancel and replace ISO 90-1977, of which they constitute a technical revision.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Printed in Switzerland

Light gauge metal containers — Definitions and determination methods for dimensions and capacities — Part 1: Open-top cans

0 Introduction

ISO 90 is a series of three parts which groups definitions, determination methods for dimensions and capacities, and tolerances and designations of light gauge metal containers.

This part of ISO 90 covers open-top cans as defined in 2.1 and is applicable to both round and non-round cans.

NOTE — Capacities, diameters and cross-sections are specified in ISO 1361, *Light gauge metal containers — Open-top cans — Round cans — Internal diameters*, and ISO 3004 (Parts 1 to 6), *Light gauge metal containers — Capacities and related cross-sections.*

The two other parts are

Part 2: General use containers.

Part 3: Aerosol cans.

NOTE — A "general use container" is a container which is sealed after filling with a closure that need not be double-seamed. An "aerosol can" is a non-refillable can intended to contain a product which is dispensed by pre-stored pressure in a controlled manner through a valve.

1 Scope and field of application

This part of ISO 90 defines open-top cans and can types, cross-sections, constructions, shapes, special features and capacities. It specifies methods for determining cross-sections and gross lidded capacities. It also gives tolerances on capacity and recommends an international designation.

2 Definitions

For the purposes of ISO 90 and related International Standards, the following definitions apply.

2.1 Cans

2.1.1 can: Rigid container made of metal with a maximum nominal material thickness of 0,49 mm.

2.1.2 open-top can: Can one end of which is double-seamed after filling.

2.1.2.1 open-top can for food products: Open-top can, tight to liquids and gases, preventing recontamination of the contents by micro-organisms.

2.1.2.2 diaphragmed can: Friction-closure can which is fitted with a diaphragm.

A friction-closure can is a can with a double-seamed ring on top and a plug which fits into the ring.

2.2 Cross-sections

2.2.1 round can: Can with a circular cross-section.

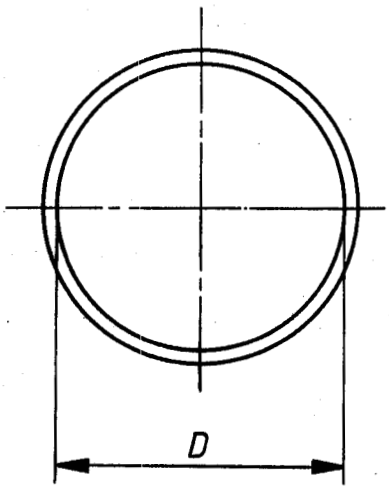
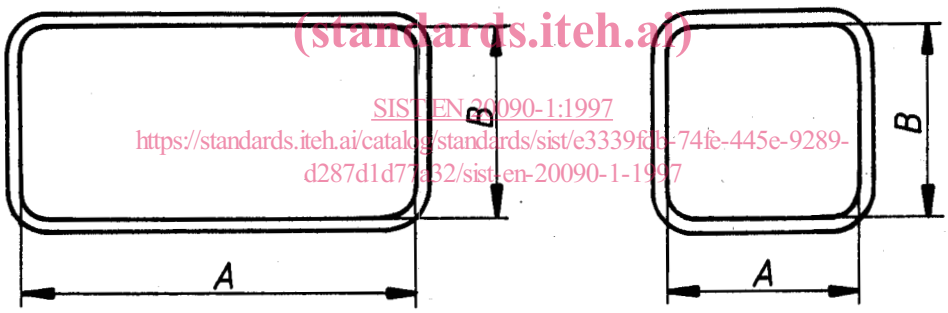


Figure 1

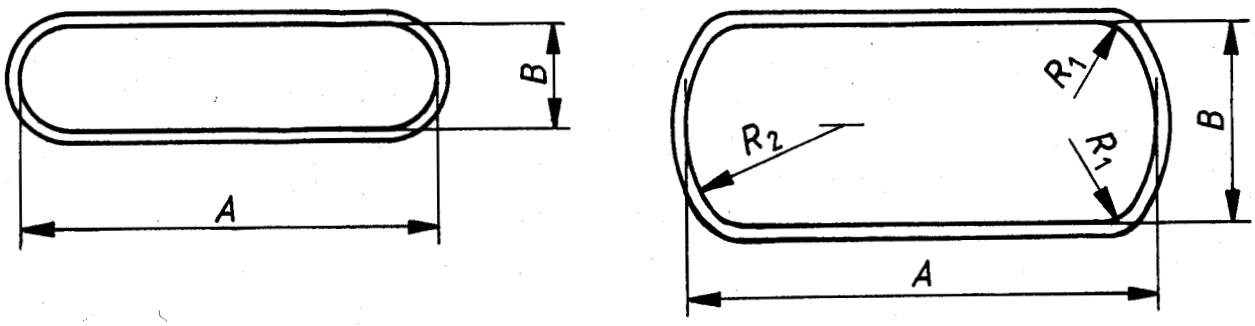
2.2.2 rectangular can: Can with a rectangular [see figure 2a)] or square [see figure 2b)] cross-section.



a) b)

Figure 2

2.2.3 obround can: Can with a cross-section of parallel sides of equal length joined by two curved ends; these may be semicircular [see figure 3a)] or include different radii [see figure 3b)].



a) b)

Figure 3

2.2.4 oval can: Can with an oval cross-section.

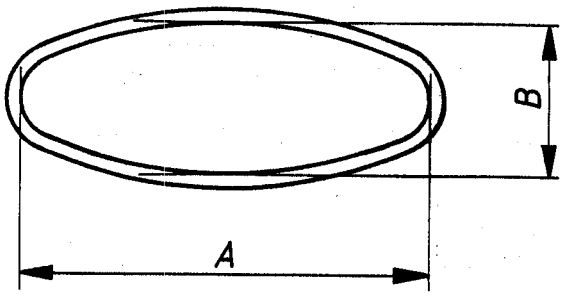
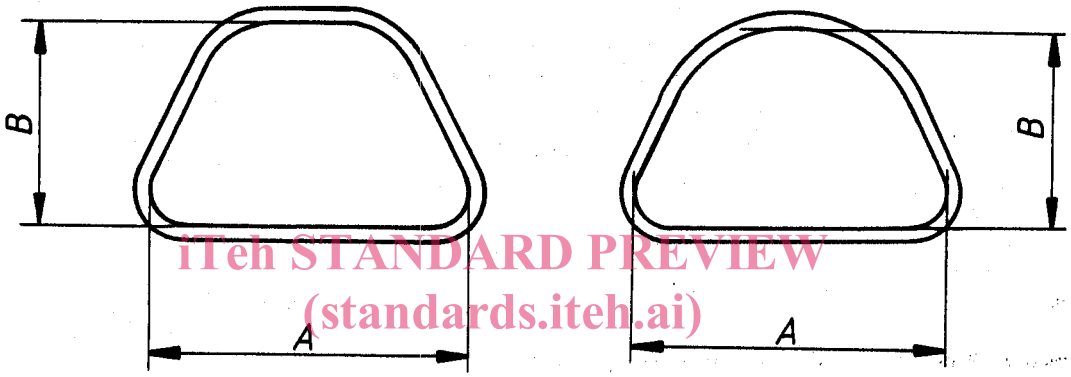


Figure 4

2.2.5 trapezoidal can: Can with an approximately trapezoidal cross-section with rounded corners. The shorter of the parallel sides [see figure 5a)] and the non-parallel sides [see figure 5 b)] may be curved.



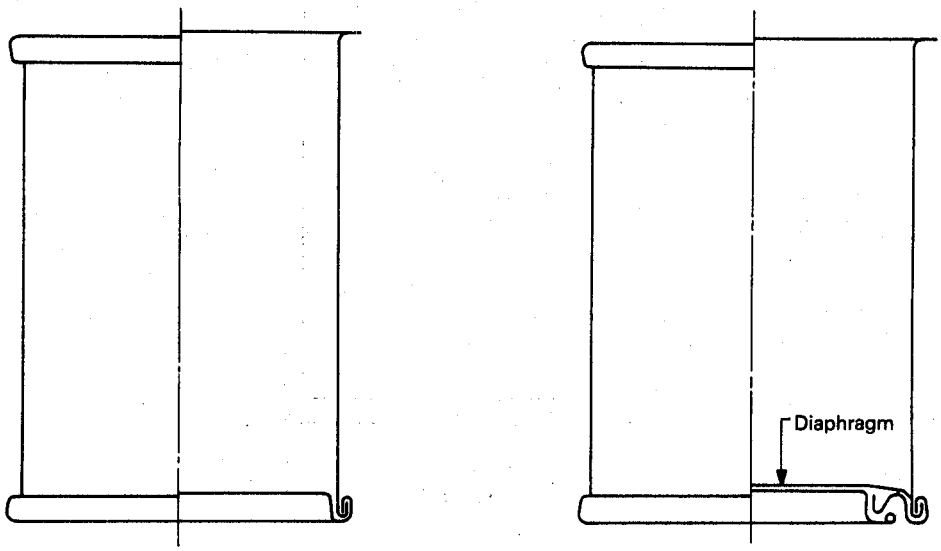
a) b)

Figure 5

NOTE — Some variations of the trapezoidal can are also known as pear-shaped cans.

2.3 Constructions

2.3.1 three-piece can; built-up can: Can made from three main components: body, top end and bottom end.



a) Open-top can b) Diaphragmed can

Figure 6

2.3.2 two-piece can: Can made from two main components: body and bottom which are one piece, and a top end.

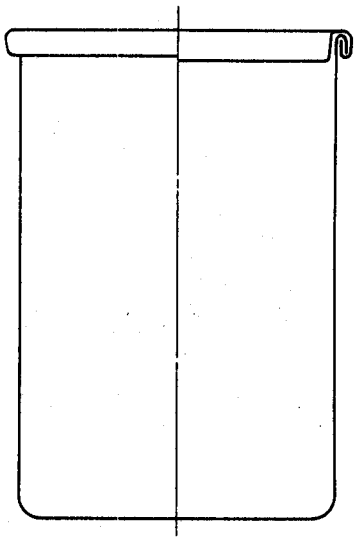


Figure 7

2.4 Shapes

NOTE — Figures 8 and 9 apply to both round and non-round cross-sections.

2.4.1 cylindrical can: Can the cross-section of which is constant in dimension from top to bottom, local variations caused by special features, such as beading, necking-in, etc., being disregarded.

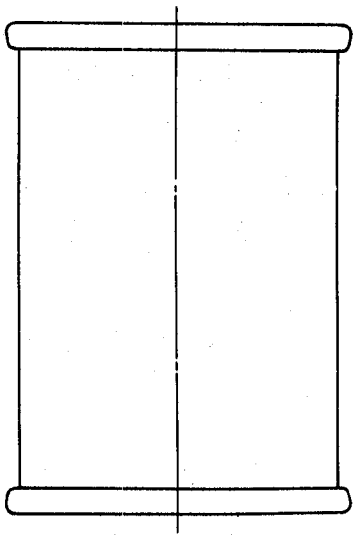


Figure 8

2.4.2 tapered can: Can the cross-section of which changes in dimension from top to bottom, local variations caused by special features, such as beading, necking-in, etc., being disregarded.

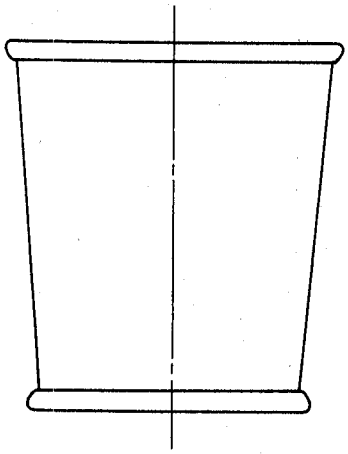


Figure 9

2.5 Special features

NOTE — Figures 10 to 12 apply to both round and non-round cross-sections.

2.5.1 necked-in can: Can the body of which has been reduced in cross-section at one or both extremities.

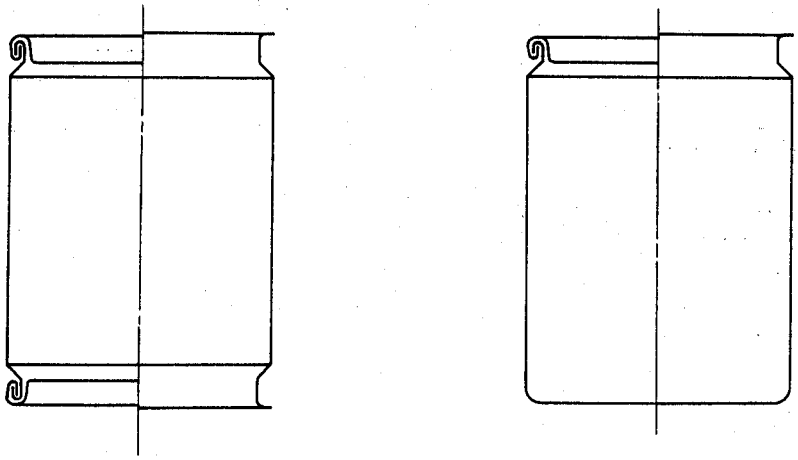


Figure 10