SLOVENSKI STANDARD
SIST EN ISO 90-1:2000

01-april-2000

Nadomeġļ a:
SIST EN 20090-1:1997

Ploļ evinke - Definicije in ugotavljanje mer in prostornin - 1. del: Odprte ploļ evinke (ISO 90-1:1997)

Light gauge metal containers - Definitions and determination of dimensions and capacities - Part 1: Open-top cans (ISO 90-1:1997)

Verpackungen aus Feinstblech - Begriffe und Verfahren zur Bestimmung von Abmessungen und Volumen - Teil 1: Falzdeckeldosen (ISO 90-1:1997)

Récipients métalliques légers - Définitions et détermination des dimensions et des capacités - Partie 1: Boîtes serties (ISO 90-1:1997)

Ta slovenski standard je istoveten z: **EN ISO 90-1:1999**

ICS:

55.120 Ploļ evinke. Tube Cans. Tins. Tubes

SIST EN ISO 90-1:2000 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 90-1

June 1999

ICS 55.120

Supersedes EN 20090-1:1992

English version

Light gauge metal containers - Definitions and determination of dimensions and capacities - Part 1: Open-top cans (ISO 90-1:1997)

Récipients métalliques légers - Définitions et détermination des dimensions et des capacités - Partie 1: Boîtes serties (ISO 90-1:1997)

Verpackungen aus Feinstblech - Begriffe und Verfahren zur Bestimmung von Abmessungen und Volumen - Teil 1: Falzdeckeldosen (ISO 90-1:1997)

This European Standard was approved by CEN on 5 May 1999.

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.

This European Standard exists 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.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

Ref. No. EN ISO 90-1:1999 E

Foreword

The text of the International Standard from Technical Committee ISO/TC 52 "Light gauge metal containers" of the International Organization for Standardization (ISO) has been taken over as an European Standard by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR.

This European Standard replaces EN 20090-1:1992.

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 December 1999, and conflicting national standards shall be withdrawn at the latest by December 1999.

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

Endorsement notice

The text of the International Standard ISO 90-1:1997 as been approved by CEN as a European Standard without any modification.

INTERNATIONAL STANDARD

ISO 90-1

Second edition
1997-07-01

Light gauge metal containers — Definitions and determination of dimensions and capacities —

Part 1: Open-top cans

Récipients métalliques légers — Définitions et détermination des dimensions et des capacités —

Partie 1: Boîtes serties

Reference number
ISO 90-1:1997(E)

Contents

Page

Annexes

International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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.

International Standard ISO 90-1 was prepared by Technical Committee ISO/TC 52, *Light gauge metal containers*, Subcommittee SC 4, *Open-top containers*.

This second edition cancels and replaces the first edition (ISO 90-1:1986), which has been technically revised.

ISO 90 consists of the following parts, under the general title *Light gauge metal containers — Definitions and determination of dimensions and capacities:*

— *Part 1: Open-top cans*

— *Part 2: General use containers*

— *Part 3: Aerosol cans*

Annexes A, B and C of this part of ISO 90 are for information only.

Introduction

ISO 90 consists of three parts which group definitions, methods for determination of dimensions and capacities, as well as tolerances and designations of rigid containers made of metal with a maximum nominal material thickness of 0,49 mm.

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

Diameters for round open-top cans (beverage cans excluded) are specified in ISO 1361.

Light gauge metal containers — Definitions and determination of dimensions and capacities —

Part 1:
Open-top cans

1 Scope

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

2 Definitions

For the purposes of this part of ISO 90, the following definitions apply.

2.1 Open-top cans

2.1.1 open-top can: Rigid container made of light gauge metal with a maximum nominal material thickness of 0,49 mm, one end of which is double-seamed after filling [see figure 6 a)].

2.1.2 open-top can for processed food products: Open-top can, tight to liquids and gases, preventing contamination of the contents by microorganisms after processing.

2.1.3 open-top can for beverages: Open-top can for liquid products to which gas is added during filling.

2.1.4 diaphragmed can: Can having a double-seamed diaphragm ring at the top end and a plug which fits into the ring [see figure 6 b)].

2.1.5 can with easy-open end for food and beverages: Can having one end comprised of a sheet metal wall with a line of scoring forming a tear strip or area and having a tab attached to the tear strip or area for easy manual severance thereof.

2.2 Cross-sections

2.2.1 round can: Can with a circular cross-section (see figure 1).

2.2.2 non-round cans

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

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

2.2.2.3 oval can: Can with an oval cross-section (see figure 4).

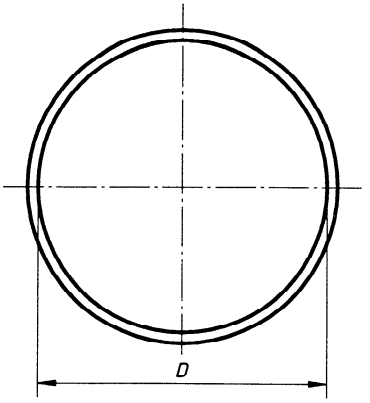
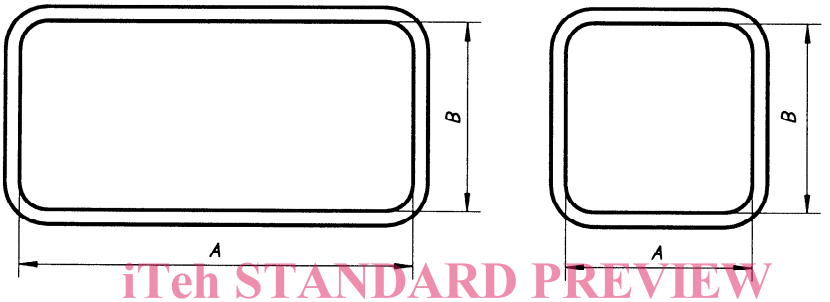
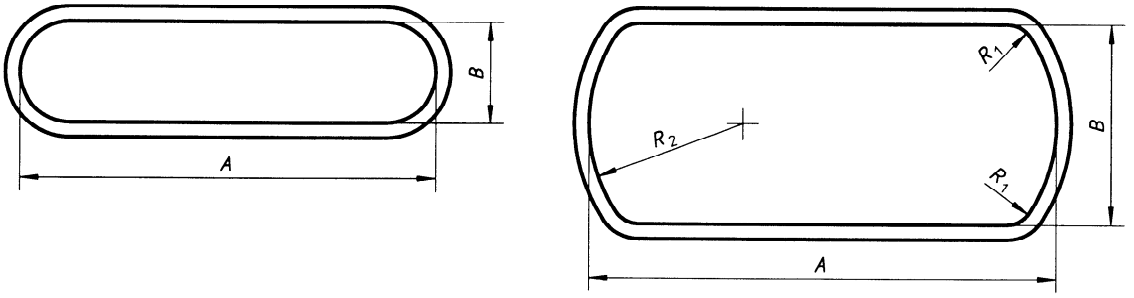


Figure 1 — Round can



a) Rectangular cross-section b) Square cross-section

Figure 2 — Rectangular cans



a) Semicircular ends b) Ends of different radii

Figure 3 — Obround cans

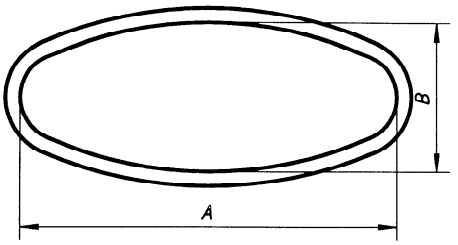


Figure 4 — Oval can

2.2.2.4 trapezoidal can: Can with an approximately trapezoidal cross-section with rounded corners (see figure 5).

NOTE — The shorter of the parallel sides [see figure 5 b)] may be curved.

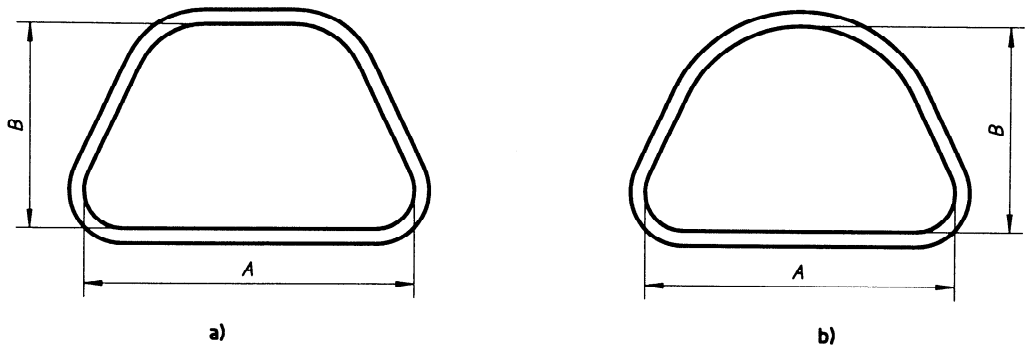


Figure 5 — Trapezoidal cans

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

2.3 Constructions

NOTE — Figures 6 and 7 apply to both round and non-round cross-sections.

2.3.1 three-piece can: Can made from three main components: body, top end and bottom end (see figure 6).

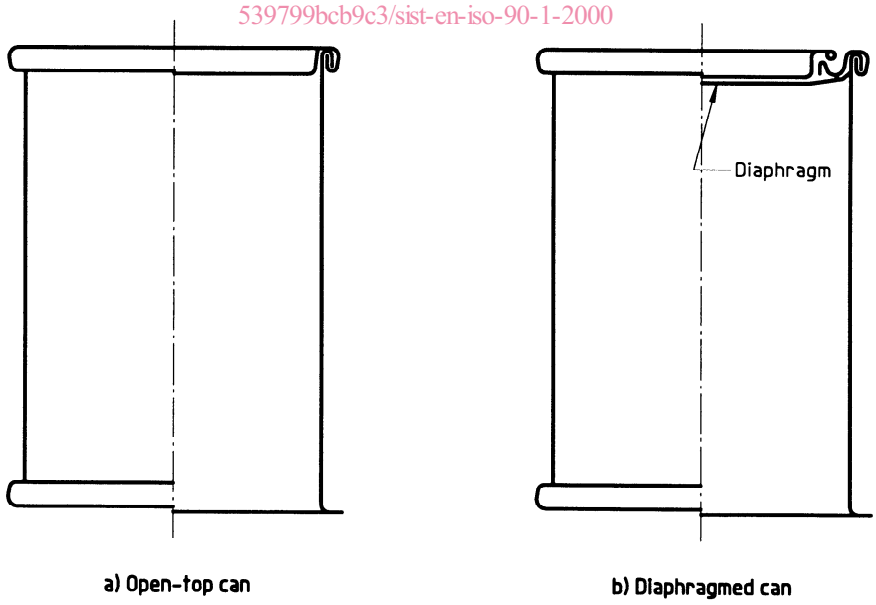


Figure 6 — Three-piece cans