

INTERNATIONAL STANDARD

**ISO
90-2**

Second edition
1997-07-01

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

Part 2: General use containers

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*Réipients métalliques légers — Définitions et détermination des dimensions et
des capacités —
Partie 2: Réipients à usage général*



Reference number
ISO 90-2:1997(E)

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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 90-2 was prepared by Technical Committee ISO/TC 52, *Light gauge metal containers*, Subcommittee SC 5, *General use containers*.

ISO 90-2:1997

This second edition cancels and replaces the first edition (ISO 90-2:1986), 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 and B 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 general use containers as defined in 2.1 and is applicable to both round and non-round containers.

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

Part 1: General use containers

1 Scope

This part of ISO 90 defines general use containers, types of container, cross-sections, constructions, shapes, special features and capacities. It specifies methods for determining cross-sections, and gross-lidded and brimful capacities. It also recommends an international designation.

2 Definitions

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

2.1 General use containers

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2.1.1 general use container: Rigid container made of metal with a maximum nominal material thickness of 0,49 mm, which is sealed after filling with a closure that need not be seamed and which may be made of a different material. In general the container can be reclosed after initial opening.

NOTE — Figures 1 to 8 apply to both round and non-round cross-sections. In addition to those shown in figure 2 a) and 2 b), general use containers may be fitted with one or two handles.

2.1.2 full-friction can: Can with a removable plug which fits into the open end of the can body (see figure 1).

2.1.2.1 pail: Full-friction can fitted with one or more handles (see figure 2).

2.1.2.2 full-friction can with clamping ring: Full-friction can whose lid is held in position by a closing band.

2.1.3 lever-lid can with ring: Can, with a seamed ring on top and a lid that fits into the ring, which is filled through the closure aperture and is not equipped with a diaphragm (see figure 4).

2.1.4 slip-lid can: Can with a removable lid which fits over and around the open end of the can body (see figure 5).

2.1.4.1 crimped-cover can [pail]: Can [pail] with a removable cover which is crimped over an external curl around the open end of the can body (see figure 6).

2.1.5 flat-top can: Can with a seamed flat top with an aperture which can be provided with a variety of closures (see figure 7).

2.1.6 cone-top can: Can with a seamed cone-shaped top with an aperture which can be provided with a variety of closures (see figure 8).

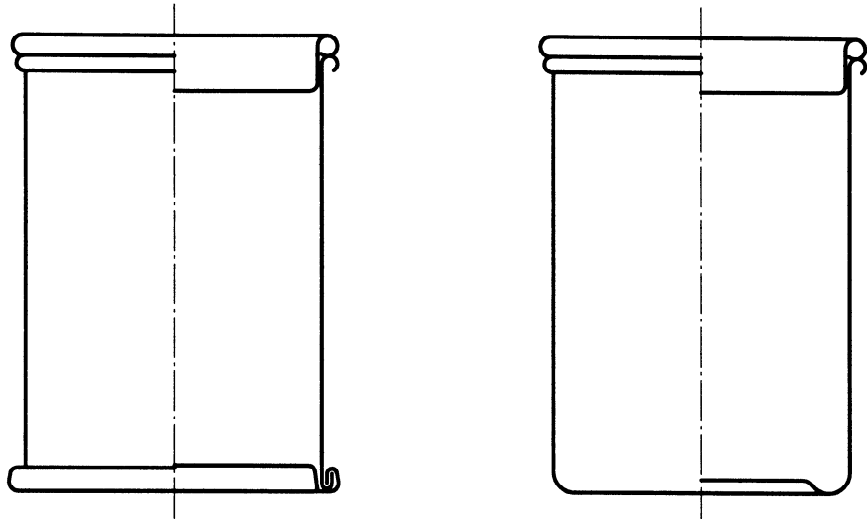
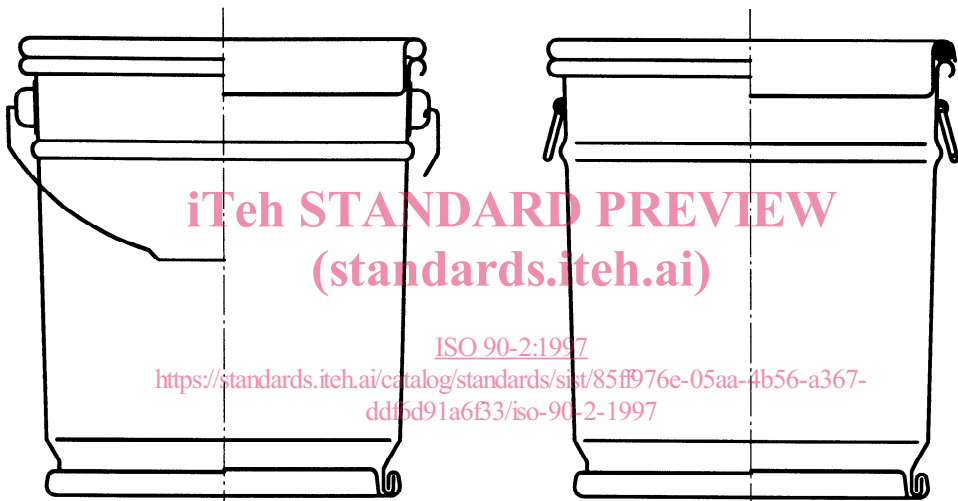


Figure 1 — Full-friction can



a) Single-handle

b) Double-handle

Figure 2 — Pail

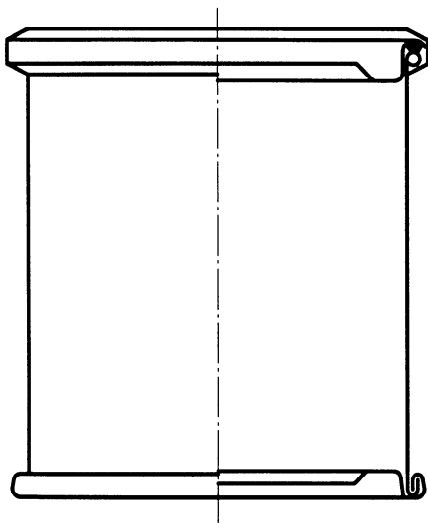


Figure 3 — Full-friction can with clamping ring

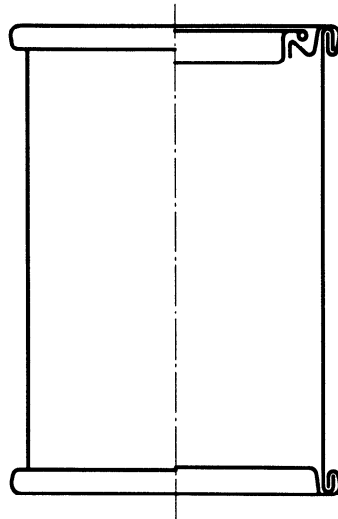


Figure 4 — Lever-lid can with ring

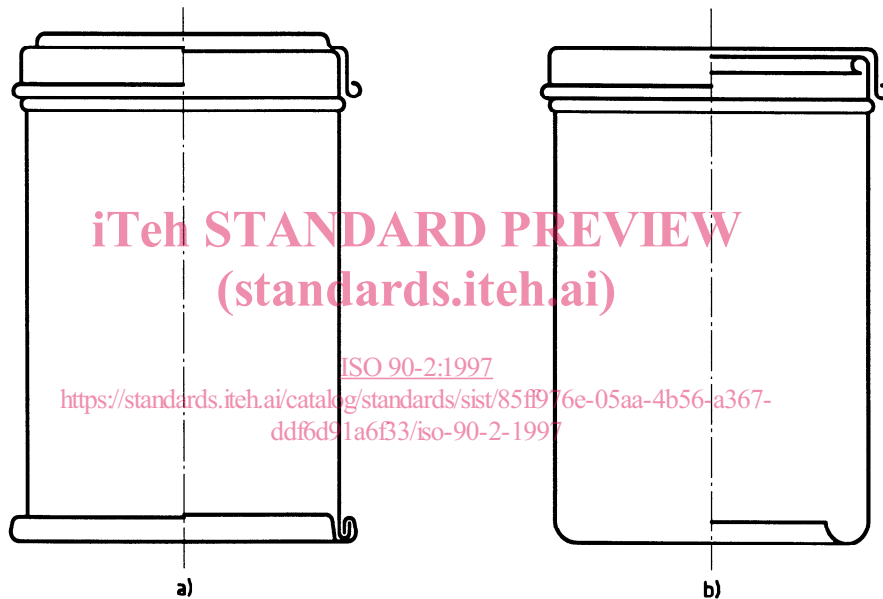


Figure 5 — Slip-lid can

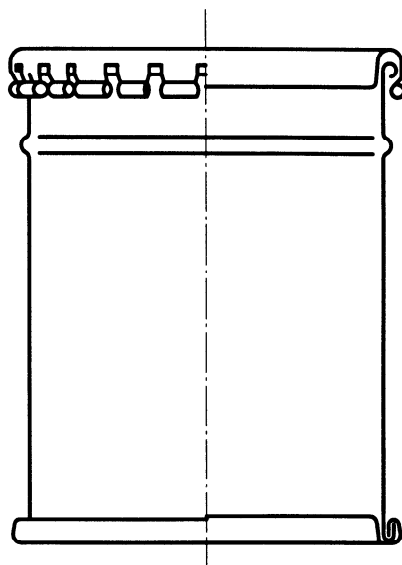


Figure 6 — Crimped-cover can [pail]

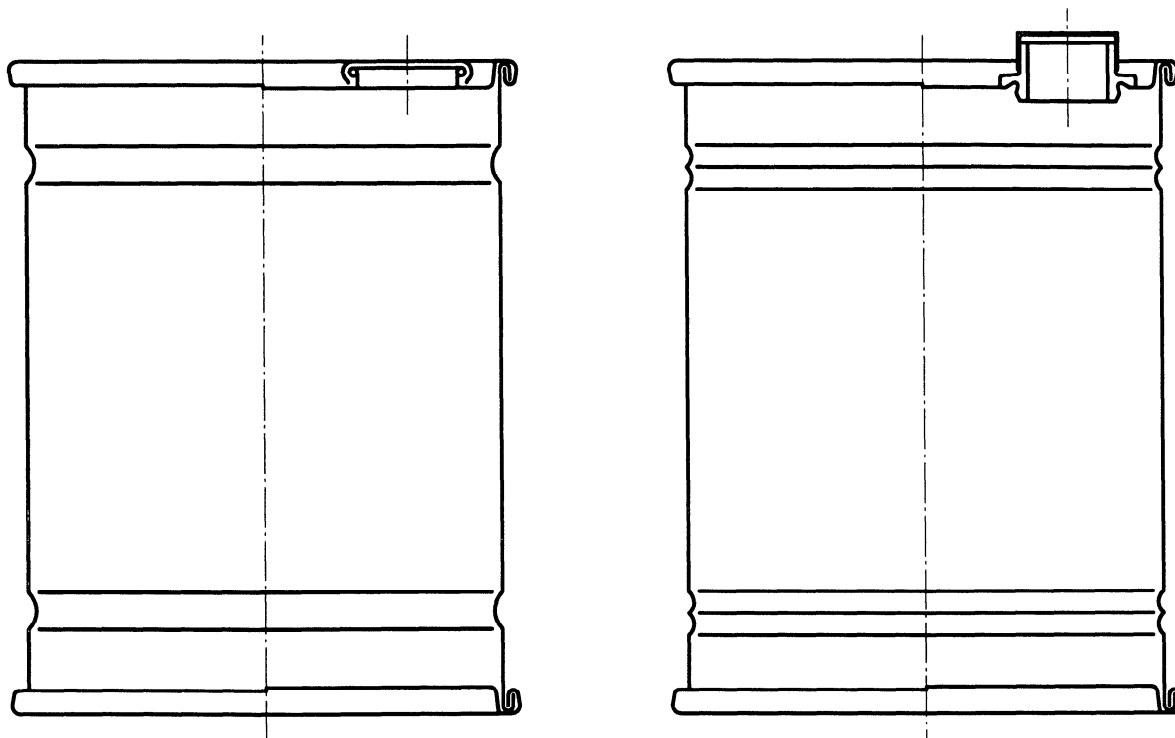


Figure 7 — Flat-top can

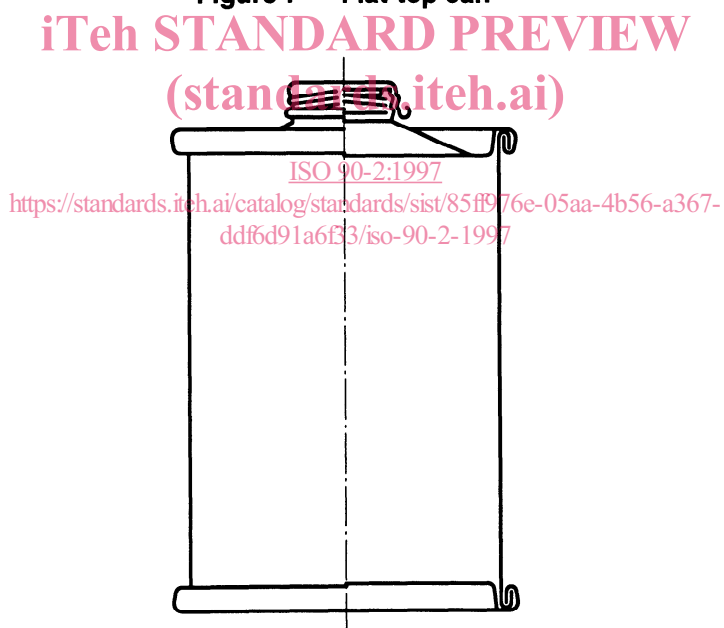


Figure 8 — Cone-top can

2.2 Cross-sections

2.2.1 round can: Can with a circular cross-section (see figure 9).

2.2.2 Non-round can

2.2.2.1 rectangular can: Can with a rectangular [see figure 10 a)] or square [see figure 10 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 11a)] or include different radii [see figure 11 b)].

2.2.2.3 oval can: Can with an oval cross-section (see figure 12).

2.2.2.4 trapezoidal can: Can with a trapezoidal cross-section with rounded corners (see figure 13).

NOTE — The shorter of the parallel sides [see figure 13 a)] and the non-parallel sides [see figure 13 b)] may be curved.

2.3 Constructions

NOTE — Figures 14 and 15 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 14).

2.3.2 two-piece can: Can made from two main components: body and bottom, which form one piece, and a top end (see figure 15).

2.4 Shapes

NOTE — Figures 16 and 17 apply to both round and non-round cross-sections.

2.4.1 cylindrical can: Can which has a cross-section of constant dimension from top to bottom, local variations caused by special features such as beading, etc. being disregarded (see figure 16).

2.4.2 tapered can: Can whose cross-section changes linearly from top to bottom, local variations caused by special features such as beading, necking-in, etc. being disregarded (see figure 17).

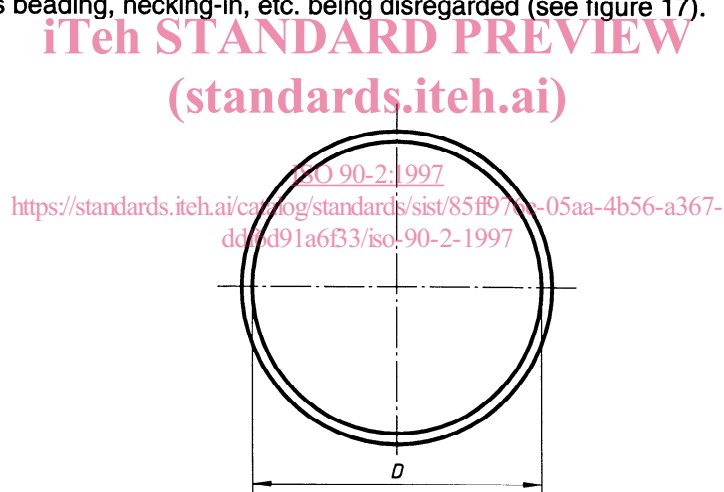


Figure 9 — Round can

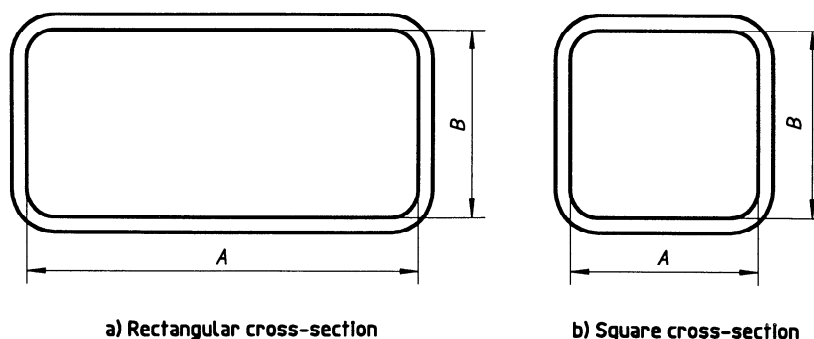


Figure 10 — Rectangular cans

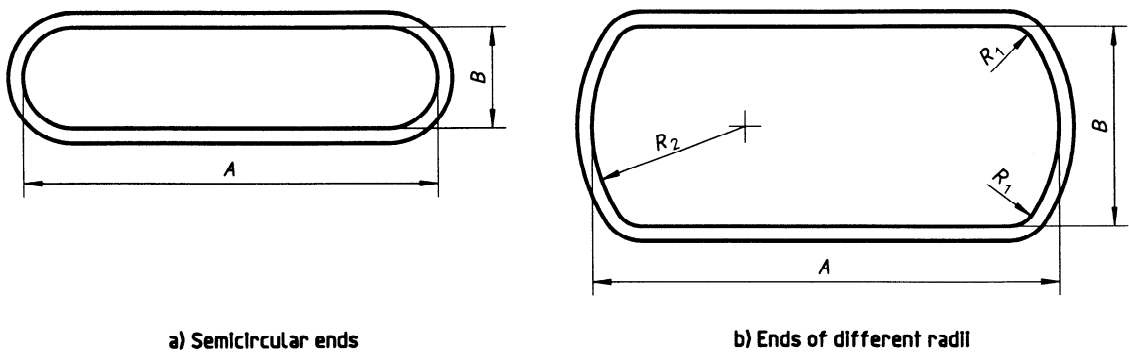


Figure 11 — Obround cans

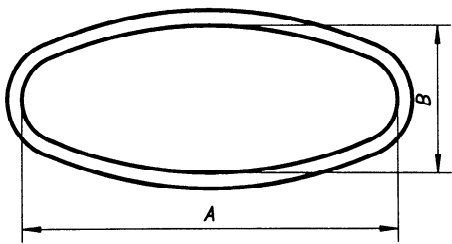


Figure 12 — Oval can

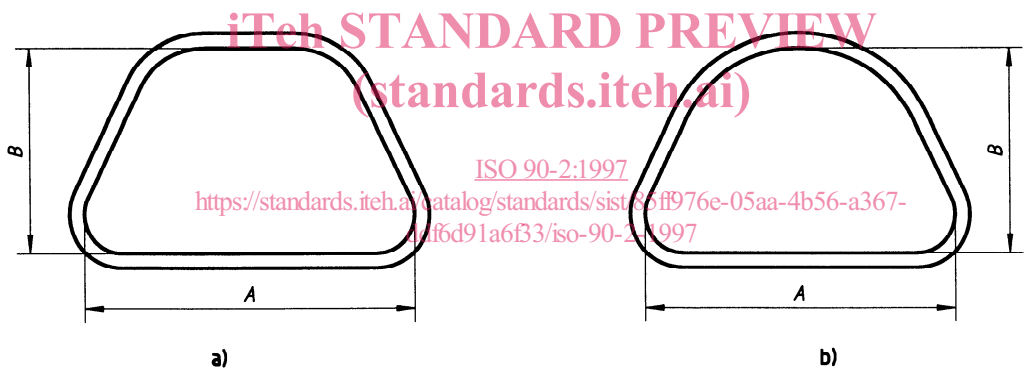


Figure 13 — Trapezoidal cans

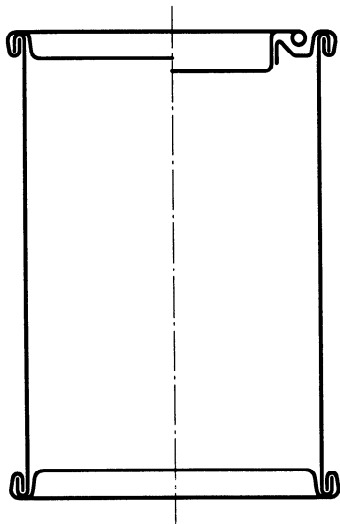


Figure 14 — Three-piece can

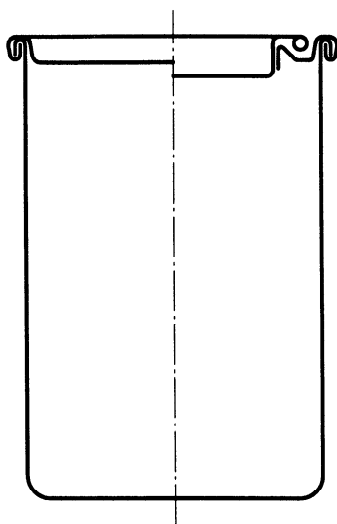


Figure 15 — Two-piece can

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Figure 16 — Cylindrical can

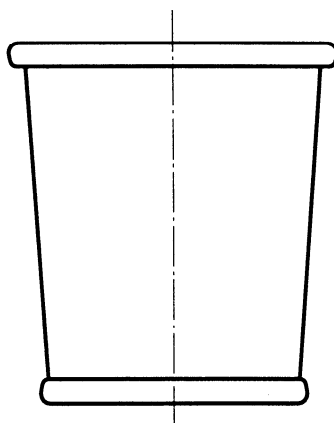


Figure 17 — Tapered can