International Standard ISO 90/2

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 2: General use containers

Récipients métalliques légers — Définitions et méthodes de détermination des dimensions et des capacités — Partie 2: Récipients à usage général

First edition — 1986-12-01

UDC 621.798.1 : 672.46 **Ref. No. ISO 90/2-1986 (E)**

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

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 90/2 was prepared by Technical Committee ISO/TC 52, *Light gauge metal containers.*

This first edition together with the first editions of ISO 90/1 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 2: General use containers

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 general use cans and containers as defined in 2.1 and is applicable to both round and non-round cans.

The two other parts are

Part 1: Open-top cans.

Part 3: Aerosol cans.

NOTE — An "open-top can" is a can one end of which is double-seamed after filling. 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 general use containers, types, 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

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

2.1 Cans and containers

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

2.1.2 general use container: Container which is sealed after filling with a closure that need not be double-seamed. In general, the container can be closed again.

NOTE — Figures 1 to 8 apply to both round and non-round cross-sections.

2.1.3 full-friction can: Can with a removable plug which fits into the open end of the can body.

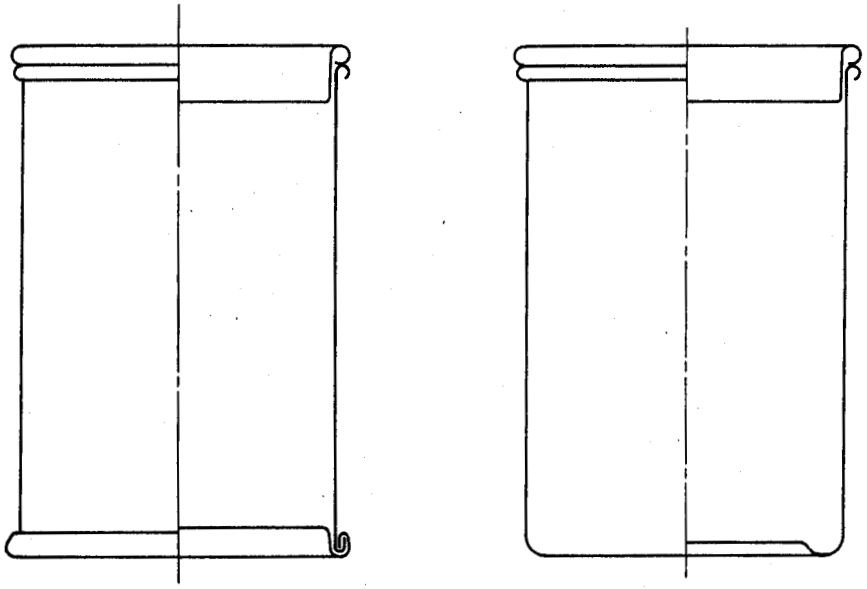
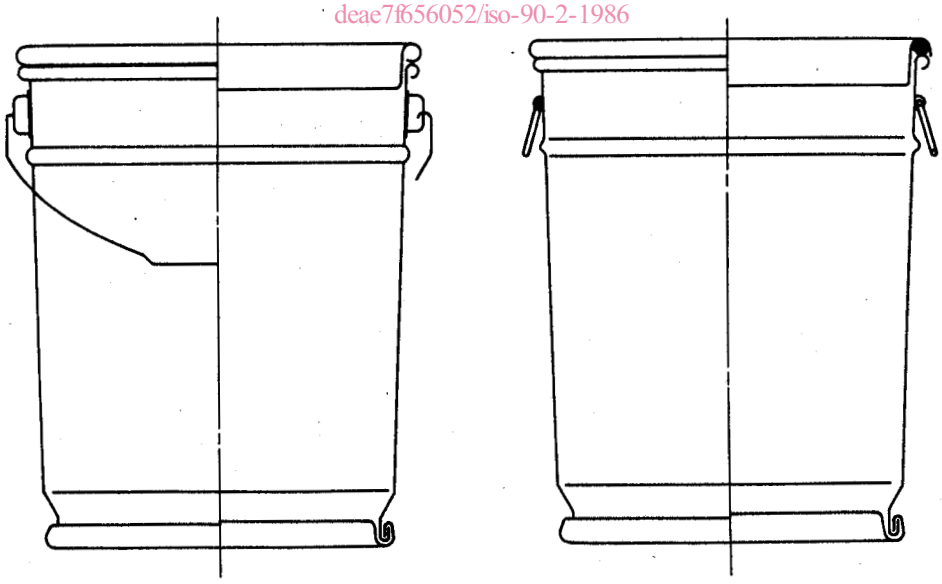


Figure 1

2.1.3.1 pail: Can with a removable plug which fits into the open end of the can body; the can is fitted with a bail [see figure 2a)] or one or more handles [see figure 2b)].



a) b)

Figure 2

2.1.3.2 banded-cover can: Can with a removable cover which is held in position by a closing band.

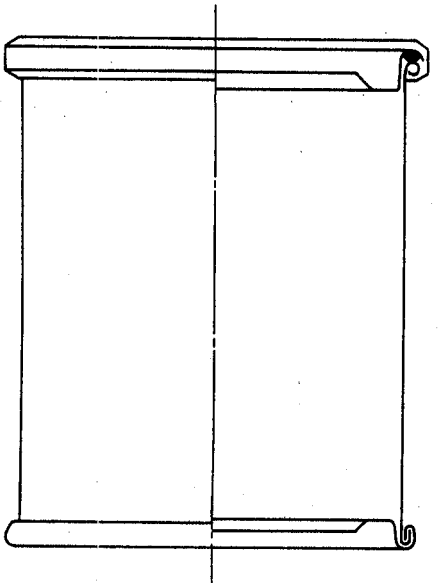


Figure 3

2.1.4 friction-closure can: Can with a double-seamed ring on top and a plug which fits into a ring. The can is filled through the closure aperture and is not equipped with a diaphragm.

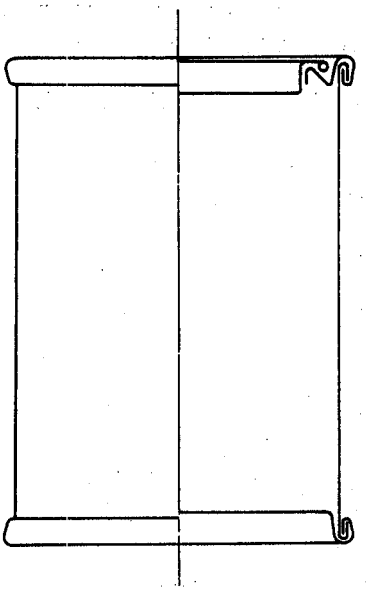


Figure 4

2.1.5 slip-cover can: Can with a removable cover which fits over and around the open end of the can body.

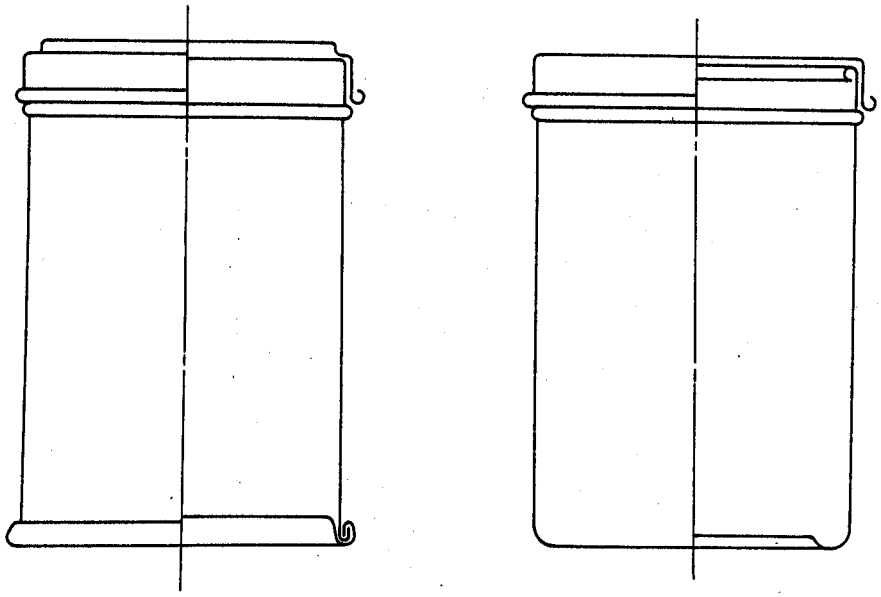


Figure 5

2.1.5.1 crimped-cover can: Can with a removable cover which is crimped over an external curl around the open end of the can body.

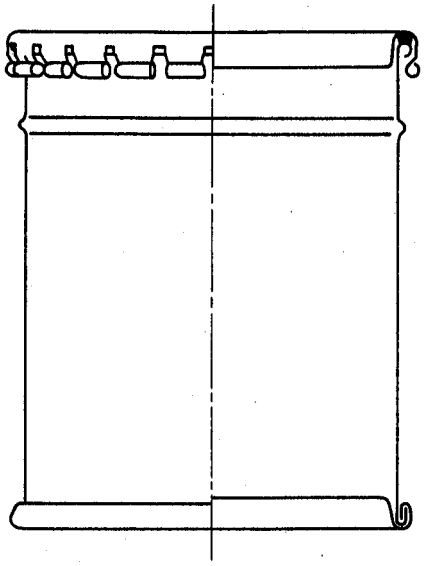


Figure 6

2.1.6 flat-top can: Can with a double-seamed flat top which can be provided with a variety of closures.

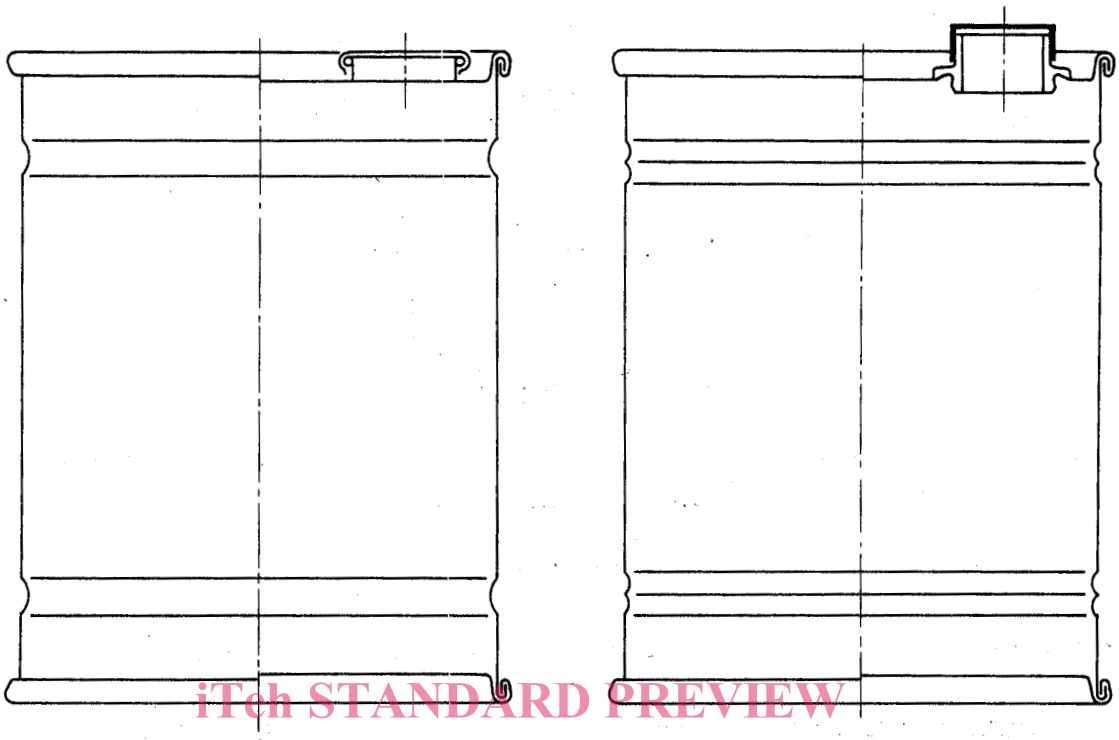


Figure 7

2.1.7 cone-top can: Can with a double-seamed cone-shaped top which can be provided with a variety of closures.

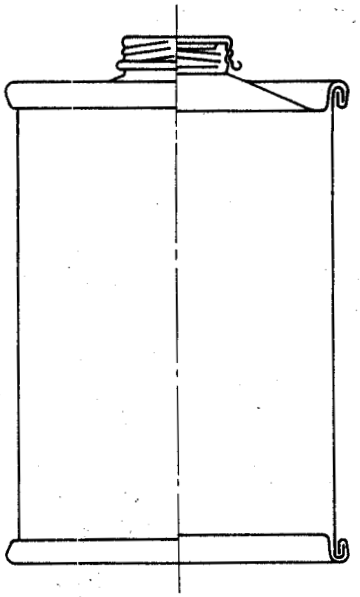


Figure 8

2.2 Cross-sections

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

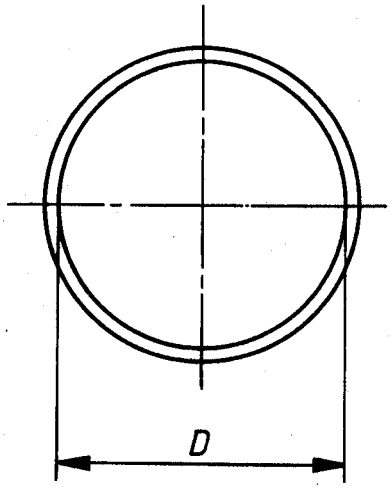
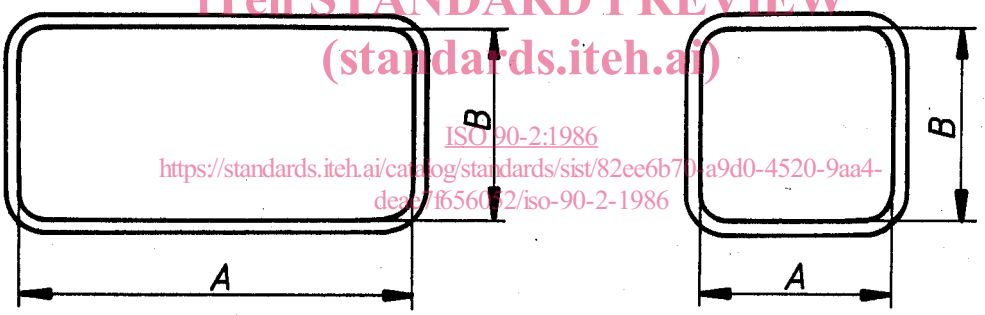


Figure 9

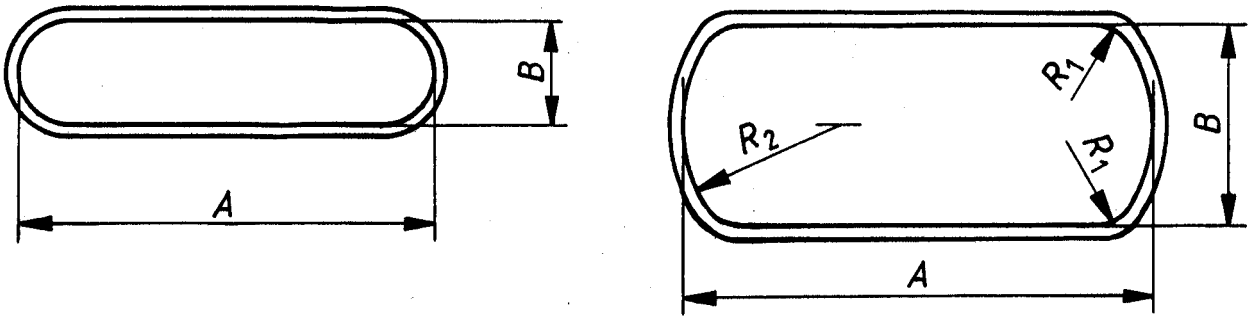
2.2.2 rectangular can: Can with a rectangular [see figure 10 a)] or square [see figure 10 b)] cross-section.



a) b)

Figure 10

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 11 a)] or include different radii [see figure 11 b)].



a) b)

Figure 11

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

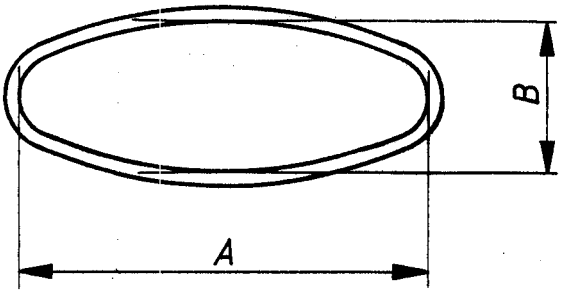


Figure 12

2.2.5 trapezoidal can: Can with an approximately trapezoidal cross-section with rounded corners. The shorter of the parallel sides [see figure 13a)] and the non-parallel sides [see figure 13b)] may be curved.

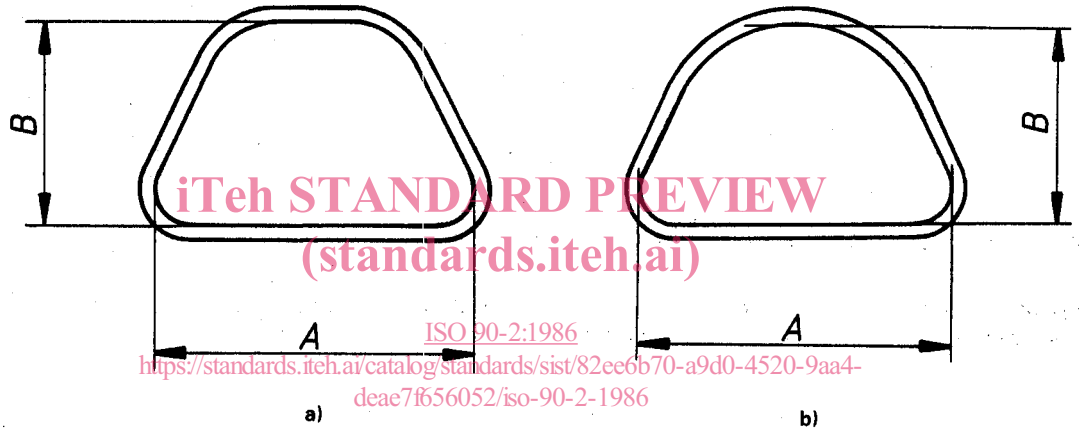


Figure 13

2.3 Constructions

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

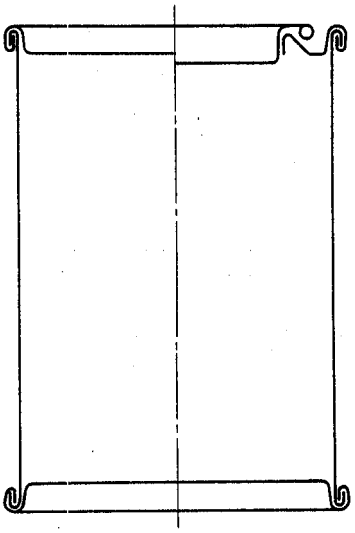


Figure 14