

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 10713 (1983): Scales for use in technical drawings [PGD
24: Drawings]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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Indian Standard

SCALES FOR USE ON TECHNICAL DRAWINGS

(ISO Title : Technical Drawings — Scales)

National Foreword

This Indian Standard, which is identical with ISO 5455-1979 'Technical drawings — Scales', issued by the International Organization for Standardization (ISO), was adopted by the Indian Standards Institution on recommendation of the Drawings Sectional Committee and approved by the Engineering Division Council.

IS : 696-1972 'Code of practice for general engineering drawings (*second revision*)' was originally issued in 1955 and was revised in 1960 as a consequence of changeover to metric system of weights and measures. The second revision of IS : 696 was carried out in 1972 to bring it more in line with the recommendation published by the Technical Committee TC 10 — Technical Drawings of International Organization for Standardization.

ISO has published number of standards on various subjects covered in IS : 696-1972. This standard is an adoption of ISO 5455-1979 on the subject superseding the relevant subject matter covered in 2.2 of IS : 696-1972.

Wherever the words 'International Standard' appear, referring to this standard, they should be read as 'Indian Standard'.

Adopted 16 August 1983

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1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies recommended scales and their designation for use on all technical drawings in any field of engineering.

2 DEFINITIONS

2.1 scale : Ratio of the linear dimension of an element of an object as represented in the original drawing to the real linear dimension of the same element of the object itself.

NOTE — The scale of a print may be different from that of the original drawing.

2.2 full size : A scale with the ratio 1 : 1.

2.3 enlargement scale : A scale where the ratio is larger than 1 : 1. It is said to be larger as its ratio increases.

2.4 reduction scale : A scale where the ratio is smaller than 1 : 1. It is said to be smaller as its ratio decreases.

3 DESIGNATION

The complete designation of a scale shall consist of the word "SCALE" (or its equivalent in the language used on the drawing) followed by the indication of its ratio, as follows :

- SCALE 1 : 1 for full size;
- SCALE X : 1 for enlargement scales;
- SCALE 1 : X for reduction scales.

If there is no likelihood of misunderstanding, the word "SCALE" may be omitted.

4 INSCRIPTION

4.1 The designation of the scale used on the drawing shall be inscribed in the title block of the drawing.

4.2 Where it is necessary to use more than one scale on a drawing, the main scale only shall be inscribed in the title block, and all other scales adjacent to the item reference number of the part concerned, or adjacent to the reference letter of a detail view (or section).

5 SCALES

5.1 The recommended scales for use on technical drawings are specified in the following table.

Category	Recommended scales		
Enlargement scales	50 : 1	20 : 1	10 : 1
	5 : 1	2 : 1	
Full size	1 : 1		
Reduction scales	1 : 2	1 : 5	1 : 10
	1 : 20	1 : 50	1 : 100
	1 : 200	1 : 500	1 : 1 000
	1 : 2 000	1 : 5 000	1 : 10 000

NOTE — If, for special applications, there is need for a larger enlargement scale or a smaller reduction scale than those shown in the table, the recommended range of scales may be extended in either direction, provided that the required scale be derived from a recommended scale by multiplying by whole number powers of 10. In exceptional cases where for functional reasons the recommended scales cannot be applied, intermediate scales may be chosen.

5.2 The scale to be chosen for a drawing will depend upon the complexity of the object to be depicted and the purpose of the representation.

In all cases, the selected scale shall be large enough to permit easy and clear interpretation of the information depicted.

The scale and the size of the object, in turn, will decide the size of the drawing.

5.3 Details that are too small for complete dimensioning in the main representation shall be shown adjacent to the main representation in a separate detail view (or section) which is drawn to a larger scale.

6 LARGE SCALE DRAWINGS

It is recommended that, for information, a full size view be added to the large scale representation of a small object.

In this case the full size view may be simplified by showing the outlines of the object only.