

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 128

ENGINEERING DRAWING
PRINCIPLES OF PRESENTATION

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BRIEF HISTORY

The ISO Recommendation R 128, *Engineering Drawing - Principles of Presentation*, was drawn up by Technical Committee ISO/TC 10, *Drawings (General Principles)*, the Secretariat of which is held by the Association Suisse de Normalisation (SNV).

During its first meeting, held in Zurich, in September 1951, the Technical Committee decided to use as the basis for its work the ISA Bulletin No. 32, drawn up by the former International Federation of the National Standardizing Associations (ISA). The development of the various drafts was entrusted to Sub-Committee SC 1, *Preliminary work*, comprising Austria, Belgium, France, Italy, Netherlands, Sweden, Switzerland, United Kingdom and, since 1952, Germany.

After six meetings spaced over the years 1952, 1953 and 1954, the Sub-Committee submitted to the Technical Committee a proposal dealing with the principles of presentation. At its second meeting held in Stockholm, in June 1955, the Technical Committee adopted this proposal as a Draft ISO Recommendation.

On 31 December 1956, the Draft ISO Recommendation was distributed to all the ISO Member Bodies and was approved, subject to a certain number of modifications, by the following 19 (out of a total of 38) Member Bodies:

Australia	*Greece	Norway
*Brazil	Israel	Pakistan
Canada	Italy	Spain
Denmark	Japan	Switzerland
Finland	Mexico	Turkey
France	Netherlands	U.S.S.R.
Germany		

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted, by correspondence, to the Council, which decided, in September 1959, to accept it as an ISO RECOMMENDATION.

The simplest possible figures have been chosen to illustrate the text. Some figures are so clear that they need no comment. The explanatory texts allow these principles to be adopted to those more complicated situations which arise in practice.

* These Member Bodies stated that they had no objection to the Draft being approved.

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ENGINEERING DRAWING

PRINCIPLES OF PRESENTATION

INTRODUCTORY NOTE

For uniformity, all the dimensions in this ISO Recommendation are given in metric units only and the figures are in European (First angle) projection. It should be understood that inch units and/or American (Third angle) projection could equally well have been used without prejudice to the principles established.

1. VIEWS

1.1 Designation of the views

View in direction *A* = View from the front

View in direction *B* = View from above

View in direction *C* = View from the left

View in direction *D* = View from the right

View in direction *E* = View from below

View in direction *F* = View from the rear

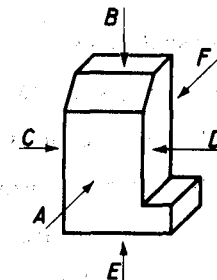


Fig. 1

The front view (principal view) having been chosen, the other usual views make with it and between themselves angles of 90° or multiples of 90° .

1.2 Relative position of views

Two methods exist :

Method E known as the European or First angle method (Fig. 2)

With reference to the front view the other views are arranged as follows:

The view from above is placed underneath

The view from below is placed above

The view from the left is placed on the right

The view from the right is placed on the left

The view from the rear may normally be placed on the left or on the right, as may be found convenient.

The distinctive symbol of this method is shown in Figure 3.

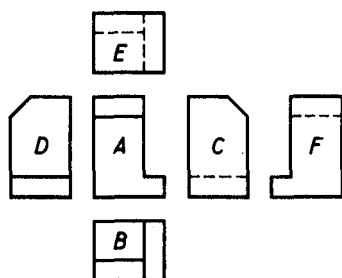


Fig. 2



Fig. 3

Method A known as the American or Third angle method (Fig. 4)

With reference to the front view the other views are arranged as follows:

The view from above is placed above

The view from below is placed underneath

The view from the left is placed on the left

The view from the right is placed on the right

The view from the rear may normally be placed on the left or on the right, as may be found convenient.

The distinctive symbol of this method is shown in Figure 5.

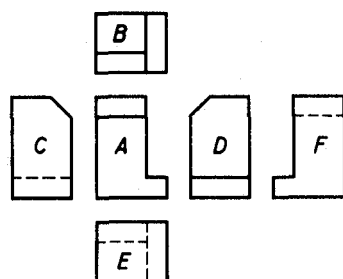


Fig. 4



Fig. 5

The method used is indicated on the drawing by means of its distinctive symbol (Fig. 3 and 5).

This is placed clearly in a space provided for the purpose in the title block of the drawing near the indication of the scale.