



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS Z 8315-1 : 1999
(ISO 5456-1 : 1996)

**Technical drawings—
Projection methods—
Part 1 : Synopsis**

ICS 01.100.01

Descriptors : engineering drawings, projection (drawing)

Reference number : JIS Z 8315-1 : 1999 (E)

Z 8315-1 : 1999 (ISO 5456-1 : 1996)

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS Z 8315 : 1984** is withdrawn and replaced with **JIS Z 8315** group.

By this establishment, **JIS Z 8315** group becomes identical with the corresponding part of **ISO 5456**, *Technical drawings—Projection method*. **JIS Z 8315** group, inclusive of forward and title, is named *Technical drawing—Projection methods*, and consists of the following parts.

Part 1 : *Synopsis*

Part 2 : *Orthographic*

Part 3 : *Axonometric representations*

Part 4 : *Central projection*

Date of Establishment: 1999-03-20

Date of Public Notice in Official Gazette: 1999-03-23

Investigated by: Japanese Industrial Standards Committee
Divisional Council on Basic Items

JIS Z 8315-1:1999, First English edition published in 2000-03

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

In the event of any doubts arising as to the contents,
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Printed in Japan

Technical drawings—Projection methods— Part 1: Synopsis

Introduction This Japanese Industrial Standard has been prepared based on ISO 5456-1, *Technical drawings—Projection methods—Part 1: Synopsis* issued in 1996 without changing the technical contents.

In the broad field of technical activities, various projection methods are used to represent objects. All these methods have their own merits, but also their inherent disadvantages.

The normal technical drawing is often an orthogonal projection, in which related representations of more than one view are utilized (see JIS Z 8315-2) to draw and completely define any object by means of carefully chosen views, cuts and sections.

However, the execution of such two-dimensional representations requires an understanding of both the projection method and its interpretation, so that the observer will be able to synthesize the single views into a three-dimensional object.

For many technical fields and their stages of development, however, it is necessary to provide an easily understood picture to observers. Such drawings, called pictorial representation, provide a three-dimensional view of an object as it would appear to the observer. No special technical training for reading pictorial representations is necessary.

Pictorial representations may be presented on their own or may supplement orthogonal drawings.

Various methods of pictorial representations exist, but their nomenclatures differ, and may be used even contradictorily.

The steady increase in global technical intercommunication, as well as the evolution of methods of computer-aided design and draughting with their various types of three-dimensional representations, suggest the need for ISO/TC 10 to clarify this problem.

It is recommended that this Standard should be used for all types of technical drawings and in all fields of technical activities, such as:

- mechanical and construction drawings;
- manuals and instruction books;
- X-ray views;
- exploded views.

The description underlined with dots in this Standard is not included in the original International Standard.

1 Scope This Standard gives a survey of the various types of projection methods as well as their geometric relationships. Part 2 to 4 specify details for the selection and application of the various projection methods.

2 Normative references The following standards contain provisions which, through reference in this text, constitute provisions of this part of JIS Z 8315.