

**Technical drawings - Projection methods - Part  
3: Axonometric representations**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 5456-3:2000 sisaldab Euroopa standardi EN ISO 5456-3:1999 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 11.01.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 5456-3:2000 consists of the English text of the European standard EN ISO 5456-3:1999.

This standard is ratified with the order of Estonian Centre for Standardisation dated 11.01.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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English version

Technical drawings - Projection methods - Part 3: Axonometric  
representations (ISO 5456-3:1996)

Dessins techniques - Méthodes de projection - Partie 3:  
Représentations axonométriques (ISO 5456-3:1996)

Technische Zeichnungen - Projektionsmethoden - Teil 3:  
Axonometrische Darstellungen (ISO 5456-3:1996)

This European Standard was approved by CEN on 27 May 1999.

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Central Secretariat: rue de Stassart, 36 B-1050 Brussels

## Foreword

The text of the International Standard from Technical Committee ISO/TC 10 "Technical drawings, product definition and related documentation" of the International Organization for Standardization (ISO) has been taken over as an European Standard by CEN/CS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2000, and conflicting national standards shall be withdrawn at the latest by January 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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The text of the International Standard ISO 5456-3:1996 has been approved by CEN as a European Standard without any modification.

NOTE: Normative references to International Standards are listed in annex ZA (normative).

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**Annex ZA (normative)**  
**Normative references to international publications**  
**with their relevant European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

| <u>Publication</u> | <u>Year</u> | <u>Title</u>                                                                                      | <u>EN</u>      | <u>Year</u> |
|--------------------|-------------|---------------------------------------------------------------------------------------------------|----------------|-------------|
| ISO 10209-2        | 1993        | Technical product documentation -<br>Vocabulary - Part 2: Terms relating<br>to projection methods | EN ISO 10209-2 | 1996        |

INTERNATIONAL  
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**Technical drawings — Projection methods —**

**Part 3:**

**Axonometric representations**

*Dessins techniques — Méthodes de projection —*

*Partie 3: Représentations axonométriques*



Reference number  
ISO 5456-3:1996(E)

## 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 5456-3 was prepared by Technical Committee ISO/TC 10, *Technical drawings, product definition and related documentation*, Subcommittee SC 1, *Basic conventions*.

ISO 5456 consists of the following parts, under the general title *Technical drawings — Projection methods*:

- *Part 1: Synopsis*
- *Part 2: Orthographic representations*
- *Part 3: Axonometric representations*
- *Part 4: Central projection*

Annex A of this part of ISO 5456 is for information only.

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## Introduction

Axonometric representations are simple pictorial representations obtained by projecting the object to be represented from an infinitely distant point (projection centre) on a single projection plane (normally the drawing surface). This kind of parallel projection gives an adequate approximation for distant views.

The resulting representation depends on the shape of the object and on the relative positions of the projection centre, the projection plane and the object itself.

Among the infinite possibilities of axonometric representation, only a few types are recommended for technical drawings in all fields of technical activities (mechanical, electrical, construction, etc.).

Axonometric representations are not as commonly used in technical drawings as are orthographic representations.

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# Technical drawings — Projection methods —

## Part 3:

## Axonometric representations

### 1 Scope

This part of ISO 5456 specifies basic rules for the application of the recommended axonometric representations for all types of technical drawings.

### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 5456. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 5456 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 128:1982, *Technical drawings — General principles of presentation*.

ISO 129:1985, *Technical drawings — Dimensioning — General principles, definitions, methods of execution and special indications*.

ISO 3098-1:1974, *Technical drawings — Lettering — Part 1: Currently used characters*.

ISO 5456-1:1996, *Technical drawings — Projection methods — Part 1: Synopsis*.

ISO 10209-1:1992, *Technical product documentation — Vocabulary — Part 1: Terms relating to technical drawings: general and types of drawings*.

ISO 10209-2:1993, *Technical product documentation — Vocabulary — Part 2: Terms relating to projection methods*.

### 3 Definitions

For the purposes of this part of ISO 5456, the definitions given in ISO 5456-1, ISO 10209-1 and ISO 10209-2 apply.

### 4 General

The general principles of presentation given in ISO 128 shall be followed.

#### 4.1 Position of the coordinate system

The position of the coordinate axes shall be chosen, by convention, so that one of the coordinate axes (the Z-axis) is vertical.

#### 4.2 Position of the object

The object to be represented is located with its principal faces, axes and edges parallel to the coordinate planes. The object shall be orientated to show the principal view and the other views that would preferably be chosen when representing the same object in orthogonal projections.