



NSAI
Standards

Irish Standard
I.S. EN ISO 128-3:2020

Technical product documentation - General principles of representation - Part 3: Views, sections and cuts (ISO 128- 3:2020)

I.S. EN ISO 128-3:2020

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN ISO 128-3:2020 is the adopted Irish version of the European Document EN ISO 128-3:2020, Technical product documentation - General principles of representation - Part 3: Views, sections and cuts (ISO 128-3:2020)

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EUROPEAN STANDARD

EN ISO 128-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2020

ICS 01.100.01

English Version

**Technical product documentation - General principles of
representation - Part 3: Views, sections and cuts (ISO 128-
3:2020)**

Documentation technique de produits (TPD) -
Principes généraux de représentation - Partie 3: Vues,
sections et coupes (ISO 128-3:2020)

Technische Produktdokumentation (TPD) - Allgemeine
Grundlagen der Darstellung - Teil 3: Ansichten,
Schnitte und Schnittansichten (ISO 128-3:2020)

This European Standard was approved by CEN on 12 June 2020.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

Page

European foreword.....	3
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European foreword

This document (EN ISO 128-3:2020) has been prepared by Technical Committee ISO/TC 10 "Technical product documentation" in collaboration with Technical Committee CEN/SS F01 "Technical drawings" the secretariat of which is held by CCMC.

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of an identical text or by endorsement, at the latest by January 2021, and conflicting national standards shall be withdrawn at the latest by January 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 128-3:2020 has been approved by CEN as EN ISO 128-3:2020 without any modification.

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INTERNATIONAL STANDARD

**ISO
128-3**

First edition
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Technical product documentation (TPD) — General principles of representation —

Part 3: Views, sections and cuts

*Documentation technique de produits (TPD) — Principes généraux de
représentation —*

Partie 3: Vues, sections et coupes



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Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Basic conventions for views	2
4.1 General information on views.....	2
4.2 Choice of views.....	3
4.3 Partial views.....	3
4.4 Simplified view of symmetrical parts.....	4
4.5 First angle projection method.....	4
4.6 First angle projection method views.....	4
4.7 First angle projection graphical symbol.....	5
4.8 Third angle projection method.....	5
4.9 Third angle projection method views.....	5
4.10 Third angle projection graphical symbol.....	6
4.11 Other projection methods.....	6
4.12 Enlarged features.....	6
5 Reference indication for views and enlarged features	7
5.1 General.....	7
5.2 Details of the reference indication.....	7
5.3 Examples of indication.....	8
6 General information on cuts and sections	9
6.1 General.....	9
6.2 Indication of cuts and sections.....	9
6.2.1 Cutting plane.....	9
6.2.2 Identification of the cutting plane.....	9
6.2.3 Identification of the cuts and sections.....	9
6.2.4 Reference indication for cuts and sections.....	10
6.3 Sections revolved in the relevant view.....	11
6.4 Cuts/sections of symmetrical parts.....	12
6.5 Local cuts/sections.....	12
7 Basic conventions for representing areas on cuts and sections	13
7.1 General information on cuts and sections.....	13
7.2 Hatching.....	13
7.3 Shading or toning.....	14
7.4 Extra-wide continuous outlines.....	15
7.5 Thin sections.....	15
7.6 Thin adjacent sections.....	15
7.7 Specific materials.....	16
Annex A (normative) Graphical symbols	17
Annex B (informative) Former practices	20
Annex C (normative) Views on mechanical engineering technical drawings	22
Annex D (normative) Sections on mechanical engineering technical drawings	34
Annex E (normative) Projection methods in building technical drawings	39
Annex F (normative) Representation of views, sections and cuts on construction drawings	41
Bibliography	48

ISO 128-3:2020(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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 10, *Technical product documentation*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/SS F01, *Technical drawings*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition cancels and replaces the following documents:

- ISO 128-30:2001
- ISO 128-33:2018
- ISO 128-34:2001
- ISO 128-40:2001
- ISO 128-44:2001
- ISO 128-50:2001

The main changes to these documents are as follows:

- harmonization of the former parts listed above;
- introduction of reference indication for views and enlarged features;
- use of arc arrow in special position of views moved to a former practice annex.

A list of all parts in the ISO 128 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document contains generally applicable rules for the presentation of views, sections and cuts in all kinds of technical product documentation. The first angle projection method (formerly referred to as method E) and the third angle projection method (formerly referred to as method A) are described in more detail in ISO 5456-2.

All figures in this document, excluding [Figure 1](#), [Figure 6](#) and [Figure 7](#), have been drawn in first-angle projection method unless other methods are stated. It should be understood that third-angle projection or other methods could have been used equally well without prejudice to the principles established.

The application of views, sections and cuts within drawings of special technical fields varies considerably. Therefore, rules of application specific to technical fields are given in [Annex A](#), [B](#) and [C](#).

Technical product documentation (TPD) — General principles of representation —

Part 3: Views, sections and cuts

1 Scope

This document specifies the general principles for presenting views, sections and cuts applicable to various kinds of technical drawings (e.g. mechanical, electrical, architectural, civil engineering), following the orthographic projection methods specified in ISO 5456-2. Views and sections for shipbuilding technical drawings are discussed in ISO 128-15. Views and sections for 3D models are discussed in ISO 16792.

Attention has also been given in this document to the requirements of reproduction, including microcopying in accordance with ISO 6428.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 128-2:—¹⁾, *Technical drawings — General principles of presentation — Part 2: Basic conventions for lines*

ISO 129-1, *Technical product documentation (TPD) — Presentation of dimensions and tolerances — Part 1: General principles*

ISO 3098-1, *Technical product documentation — Lettering — Part 1: General requirements*

ISO 5456-2, *Technical drawings — Projection methods — Part 2: Orthographic representations*

ISO 6428, *Technical drawings — Requirements for microcopying*

ISO 10209:2012, *Technical product documentation — Vocabulary — Terms relating to technical drawings, product definition and related documentation*

ISO 15519-1, *Specification for diagrams for process industry — Part 1: General rules*

ISO 81714-1, *Design of graphical symbols for use in the technical documentation of products — Part 1: Basic rules*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10209 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

1) Under preparation. Stage at the time of publication: ISO/FDIS 128-2:2020.

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