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

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/20

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

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EN ISO 128-3:2020 (E)

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of an identical text or by endorsement, at the latest by January 2021, and conflicting national standards shall be withdrawn at the latest by January 2021.

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Endorsement notice

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

INTERNATIONAL STANDARD

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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



Reference number
ISO 128-3:2020(E)

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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).

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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*

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