INTERNATIONAL STANDARD

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

Part 2: Basic conventions for lines

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

Partie 2: Conventions de base pour les traits

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Contents

Page

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*.

This first edition cancels and replaces the following documents:

— ISO 128-20:1996

— ISO 128-21:1997

— ISO 128-22:1999

— ISO 128-23:1999

— ISO 128-24:2014

— ISO 128-25:1999

The main changes to these documents are as follows:

— harmonization of the former parts listed above;

— introduction of the hierarchy of overlapping lines.

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

ISO 128-2 contains generally applicable rules for the presentation of lines in all kinds of technical product documentation.

All figures in this document have been drawn in first-angle projection. 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 lines within drawings of special technical fields varies considerably. Therefore, rules of application specific to technical fields are given in Annexes B to G.

Annex A provides information for the calculation of the most important basic types of non-continuous lines according to types of lines and their line elements.

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

Part 2:
Basic conventions for lines

1 Scope

This document establishes the types of lines used in technical drawings (e.g. diagrams, plans or maps), their designations and their configurations, as well as general rules for the draughting of lines. In addition, this document specifies general rules for the representation of leader and reference lines and their components as well as for the arrangement of instructions on or at leader lines in technical documents. Annexes have been provided for specific information on mechanical, construction and shipbuilding technical drawings.

For the purposes of this document the term "technical drawing" is interpreted in the broadest possible sense encompassing the total package of documentation specifying the product (workpiece, subassembly, assembly).

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 128-3, *Technical drawings — General principles of representation — Part 3: Views, sections and cuts*

ISO 128-15, *Technical product documentation (TPD) — General principles of presentation — Part 15: Presentation of shipbuilding drawings*

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

ISO 129-5, *Technical product documentation (TPD) — Presentation of dimensions and tolerances — Part 5: Dimensioning of structural metal work*

ISO 1101, *Geometrical product specifications (GPS) — Geometrical tolerancing — Tolerances of form, orientation, location and run-out*

ISO 2203, *Technical drawings — Conventional representation of gears*

ISO 2538-2, *Geometrical product specifications (GPS) — Wedges — Part 2: Dimensioning and tolerancing*

ISO 2553, *Welding and allied processes — Symbolic representation on drawings — Welded joints*

ISO 3040, *Geometrical product specifications (GPS) — Dimensioning and tolerancing — Cones*

ISO 3766, *Construction drawings — Simplified representation of concrete reinforcement*

ISO 4463-1, *Measurement methods for building — Setting-out and measurement — Part 1: Planning and organization, measuring procedures, acceptance criteria*

ISO 4463-3, *Measurement methods for building — Setting-out and measurement — Part 3: Check-lists for the procurement of surveys and measurement services*