Australian Standard™

Technical drawings—General principles of presentation

Part 1: Introduction and index

STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee ME-072, Technical Drawings. It was approved on behalf of the Council of Standards Australia on 9 March 2005. This Standard was published on 4 May 2005.

The following are represented on Committee ME-072:

Department of Defence
Department of Education, Training and Employment (South Australia)
Design Association of New Zealand
Institute for Drafting and Design Australia
Master Builders Australia
TAFE NSW
University of Melbourne

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to the Chief Executive, Standards Australia, GPO Box 5420, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 04289.

Australian Standard™

Technical drawings—General principles of presentation

Part 1: Introduction and index

First published as AS ISO 128.1—2005.

Published by Standards Australia GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 6618 8

PREFACE

This Standard was prepared by the Standards Australia Committee ME-072, Technical Drawings.

This Standard is identical with and reproduced from ISO 128-1:2003, *Technical drawings—General principles of presentation,* Part 1: *Introduction and index.*

This Standard is Part 1 of the AS ISO 128 series, *Technical drawings—General principles of presentation*, as follows:

AS ISO	
128	Technical drawings—General principles of presentation
128.1	Part 1: Introduction and index (this Standard)
128.20	Part 20: Basic conventions for lines
128.21	Part 21: Preparation of lines by CAD systems
128.22	Part 22: Basic conventions and applications for leader lines and reference lines
128.23	Part 23: Lines on construction drawings
128.24	Part 24: Lines on mechanical engineering drawings
128.25	Part 25: Lines on shipbuilding drawings

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number appears on the cover and title page while the International Standard number appears only on the cover.

(b) In the source text, 'this International Standard' should read 'this Australian Standard'.

(c) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by equivalent Australian Standards, as follows:

Reference to International Standard		*Australian Standard*	
ISO		AS	
31-1	Quantities and units Part 1: Space and time	2900 2900.1	Quantities and units Part 1: Space and time
129	Technical drawings Indication of dimensions and tolerances (all parts)	—	
286-1	ISO system of limits and fits Part 1: Bases of tolerances, deviations and fits	—	
1000	SI units and recommendations for the use of their multiples and of certain other units	1000	The International System of units (SI) and its application
1101	Geometrical Product Specifications (GPS)—Geometrical tolerancing Tolerances of form, orientation, location and run-out	—	
1302	Geometrical Product Specifications (GPS)—Indication of surface texture in technical product documentation	1100 1100.201	Technical drawing Mechanical engineering drawing
2553	Welded, brazed and soldered joints—Symbolic representation on drawings	—	

Reference to International Standard		*Australian Standard*	
ISO		AS	
2692	Technical drawings—Geometrical tolerancing—Maximum material principle	—	
2768 2768-1	General tolerances Part 1: Tolerances for linear and angular dimensions without individual tolerance indications	—	
2768-2	Part 2: Geometrical tolerances for features without individual tolerance indications	1100.201	Technical drawing—Mechanical engineering drawing
3040	Technical drawings—Dimensioning and tolerancing—Cones	1100.101	Technical drawing—General principles
3098 3098-0	Technical product documentation—Lettering Part 0: General requirements	—	
5455	Technical drawings—Scales	1100.101	Technical drawing—General principles
5457	Technical product documentation—Sizes and layout of drawing sheets	—	
5458	Geometrical Product Specifications (GPS)—Geometrical tolerancing—Positional tolerancing	—	
5459	Technical drawings—Geometrical tolerancing—Datums and datum-systems for geometrical tolerances	1100-101	Technical drawing—General principles
6284	Construction drawings—Indication of limit deviations	—	
6428	Technical drawings—Requirements for microcopying	—	
6433	Technical drawings—Item references	—	
7083	Technical drawings—Symbols for geometrical tolerancing—Proportions and dimensions	—	
7200	Technical drawings—Title blocks	—	
7573	Technical drawings—Item lists	—	
8015	Technical drawings—Fundamental tolerancing principle	—	
8560	Technical drawings—Construction drawings—Representation of modular sizes, lines and grids	—	
8785	Geometrical Product Specification (GPS)—Surface imperfections—Terms, definitions and parameters	—	
9431	Construction drawings—Spaces for drawing and for text, and title blocks on drawing sheets	—	

Reference to International Standard		*Australian Standard*
ISO		AS
10135	Technical drawings—Simplified representation of moulded, cast and forged parts	—
10209	Technical product documentation—Vocabulary	—
10209-1	Part 1: Terms relating to technical drawings General and types of drawings	—
11091	Construction drawings—Landscape drawing practice	—
13715	Technical drawings—Edges of undefined shape—Vocabulary and indications	—
15785	Technical drawings—Symbolic presentation and indication of adhesive, fold and pressed joint	—
15787	Technical product documentation—Heat-treated ferrous parts—Presentation and indications	—
16016	Technical product documentation—Protection notices for restricting the use of documents and products	—

CONTENTS

Page

NOTES

AUSTRALIAN STANDARD

Technical drawings — General principles of presentation —

Part 1:
Introduction and index

1 Scope

This part of ISO 128 gives general rules for the execution of technical drawings, as well as presenting the structure of, and an index for, the other parts of ISO 128. In all, ISO 128 specifies the graphical representation of objects on technical drawings with the aim of facilitating the international exchange of information on drawings and ensuring their uniformity in a comprehensive system relating to several technical functions. This part of ISO 128 is applicable to all kinds of technical drawings, including, for example, those used in mechanical engineering and construction (architectural, civil engineering, shipbuilding, etc.). It is applicable to both manual and computer-based drawings. It is not applicable to three-dimensional CAD models.

2 Normative references

The following referenced documents are indispensable for the application 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 31-1, *Quantities and units — Part 1: Space and time*

ISO 129 (all parts), *Technical drawings — Indication of dimensions and tolerances*

ISO 286-1, *ISO system of limits and fits — Part 1: Bases of tolerances, deviations and fits*

ISO 1000, *SI units and recommendations for the use of their multiples and of certain other units*

ISO 1101[1)], *Geometrical Product Specifications (GPS) — Geometrical tolerancing — Tolerances of form, orientation, location and run-out*

ISO 1302, *Geometrical Product Specifications (GPS) — Indication of surface texture in technical product documentation*

ISO 2553, *Welded, brazed and soldered joints — Symbolic representation on drawings*

ISO 2692[2)], *Technical drawings — Geometrical tolerancing — Maximum material principle*

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

1) To be published. (Revision of ISO 1101:1983)

2) To be published. (Revision of ISO 2692:1988)