
**Technical product documentation —
Design for manufacturing, assembling,
disassembling and end-of-life
processing —**

**Part 1:
General concepts and requirements**

*Conception et documentation pour la fabrication, le montage, le
démontage et le traitement en fin de vie (MADE) —*

Partie 1: Concepts généraux, processus et exigences



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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 on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 10, *Technical product documentation*.

A list of all parts in the ISO 8887 series can be found on the ISO website.

Introduction

In recent years, policy makers throughout the world have focused their attention on ways to reduce environmental impact. In many countries, this has led to, or will soon lead to, new incentives with the result that end-of-life processes now need to be considered at the design stage. Consequently, there is an increasing focus on not only the production of a product but also what is to be done when the user has finished with it. Thus, this document includes consideration of disassembling the product and the treatment of the components through processes such as reworking, recycling, reusing or disposing.

This document aims to specify the documentation requirements for integrating these environmental aspects into the design and development of products. It relates to the following four stages:

With regard to production:

- the manufacturing of the components;
- the assembling of the components to produce a product.

With regard to end of use:

- the disassembling into component parts;
- the end-of-life processing of those components.

It addresses the design task, irrespective of whether the designer works for a manufacturer, a design company, or is freelance. It is applicable to all types of manufactured products.

This document expands the life cycle model in ISO 15226 to cover multiple life cycles.

Technical product documentation — Design for manufacturing, assembling, disassembling and end-of-life processing —

Part 1: General concepts and requirements

1 Scope

This document specifies the requirements for the preparation, content and structure of technical product documentation (TPD) of design output for the cycles of manufacturing, assembling, disassembling and end-of-life processing of products. It describes the TPD needed at the critical stages of a design process.

It identifies and describes methods and conventions appropriate to the preparation of documentation, in whatever form, necessary to realize a design including the application to multiple life cycles. It extends beyond specification for the manufacturing and assembling of products to incorporate guidance on the ultimate reusing, recovering, recycling and disposing of the components and materials used.

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

ISO 11442, *Technical product documentation — Document management*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms, definitions and abbreviated terms 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 <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1.1

assembling

bringing together of components in a functional relationship