INTERNATIONAL STANDARD

ISO 21600

> First edition 2019-02

Technical product documentation (TPD) — General requirements of mechanical product digital manuals

umen.
Ar manu. Documentation technique de produits (TPD) — Exigences générales



Reference number ISO 21600:2019(E)



© ISO 2019

Nementation, no partamical, includir requested fr All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Contents				
Fore	word		v	
1	Scop	e	1	
2	Norn	native references	1	
3	50	is and definitions		
_				
4		eviations		
5	_	position of digital manuals		
6	Basic	c principles	3	
7	Preparation process			
	7.1	Relationship of data		
	7.2 7.3	Information preparation Preparation Preparation of digital manuals		
		7.3.1 Preparation of SBOM		
		7.3.2 Preparation of DE		
		7.3.3 Preparation of DM		
		7.3.4 Preparation of templates		
	7.4	Release of digital manuals	5	
8	General requirements			
	8.1	Compiling requirements		
	8.2	Data requirements		
	8.3	Content and presentation requirements		
9		iled requirements		
	9.1	SBOM requirements		
		9.1.1 Preparation principles		
		9.1.3 Preparation requirements		
	9.2	DE requirements		
		9.2.1 Model requirements	8	
		9.2.2 Text requirements		
		9.2.3 Picture requirements	9	
		9.2.4 Audio requirements		
	9.3	9.2.5 Video requirements		
	9.4	Template requirements		
		9.4.1 Basic requirements	10	
		9.4.2 Requirements of the online template	10	
		9.4.3 Requirements of the printed template		
10	Relea	asing and application requirements	11	
	10.1	Releasing requirements		
	10.2	Application requirements	11	
		10.2.1 Advertisement requirements 10.2.2 Sales requirements	11 12	
		10.2.3 Training requirements	12	
		10.2.4 Service requirements		
		10.2.5 Browsing requirements		
11	Management requirements			
	11.1			
	11.2	Life cycle management requirements		
		11.2.1 General requirements		
		11.2.2 Preparation stage management requirements		
		11.2.3 Releasing stage management requirements	13	

iii

ISO 21600:2019(E)

11.2.4 Maintenance stage management requirements	13
Annex A (informative) Relationship of data at each preparation stage of a digital manual	
Annex B (informative) Preparation process of SBOM	
Annex C (informative) Preparation process of a model	
Annex D (informative) Preparation process of DE	
Annex E (informative) Preparation process of DM	
Annex F (informative) Preparation process of a template	
Annex G (informative) Transformation rules from EBOM to PT-SBOM	
Bibliography	
Annex H (informative) Example of an online template Bibliography	
iv © ISO 2019 – All rights i	eserved

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*, Subcommittee SC 6, *Mechanical engineering documentation*.

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.

This document is a previous general ded by tills

Technical product documentation (TPD) — General requirements of mechanical product digital manuals

1 Scope

This document specifies the composition, basic principles, preparation process, general requirements, detailed requirements, publication and application requirements, and management requirements of mechanical product digital manuals.

This document is intended to be used for guidance in the preparation of digital manuals, which provide guidance in the use, repair and maintenance of products. It is also intended to be used for reference in production and manufacturing.

This document does not specify function or data structure of any specific software.

This document applies to the preparation of mechanical product digital manuals based on service bills of material and modularized technical information.

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 16792:2015, Technical product documentation — Digital product definition data practices

ISO 17599:2015, Technical product documentation (TPD) — General requirements of digital mock-up for mechanical products

IEC 82079-1:2012, Preparation of instructions for use — Structuring, content and presentation — Part 1: General principles and detailed requirements

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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/

3.1

digital manual

document that describes product information, whose contents are organized in a structured way, mainly expressed by three-dimensional models, published in either electronic or paper form and used to guide the use, repair and maintenance of products

3.2

engineering bill of materials

list of part numbers and assemblies that make up the design engineering configuration that contains the raw stock size and the material specification

[SOURCE: ISO 10303-240:2005, 3.4.3, modified — the article "the" is deleted.]