

STN	Letectvo a kozmonautika LOTAR Dlhodobá archivácia a získavanie digitálnej technickej dokumentácie výrobku ako 3D, CAD a PDM údaje Časť 100: Spoločné pojmy pre dlhodobú archiváciu a získavanie technických informácií CAD 3D	STN EN 9300-100 31 1060
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Aerospace series - LOTAR LOng-Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data - Part 100: Common concepts for long-term archiving and retrieval of 3D mechanical CAD information

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. 06/26

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EN 9300-100

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

**Aerospace series - LOTAR LOnG-Term Archiving and
Retrieval of digital technical product documentation such
as 3D, CAD and PDM data - Part 100: Common concepts for
long-term archiving and retrieval of 3D mechanical CAD
information**

Série aérospatiale - LOTAR Archivage long terme et
récupération des données techniques produits
numériques telles que CAD 3D et PDM - Partie 100 :
Concepts communs pour l'archivage long terme et la
récupération des données CAO mécaniques 3D

Luft- und Raumfahrt - LOTAR Langzeitarchivierung
und Bereitstellung digitaler technischer
Produktdokumentationen beispielsweise 3D CAD und
PDM Daten - Teil 100: Allgemeine Konzepte für die
Langzeitarchivierung und Wiederverwendung von 3D
CAD Mechanik-Informationen

This European Standard was approved by CEN on 16 February 2026.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 9300-100:2026) has been prepared by ASD-STAN.

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

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 October 2026, and conflicting national standards shall be withdrawn at the latest by October 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 9300-100:2018.

This document includes the following significant technical changes with respect to EN 9300-100:2018:

EN 9300-100 (P1), 07/2018 — Document updated for new generations of CAD methods and tools. The contents in scope of other EN 9300 parts have been removed:

- “Annex B (informative) Overview of the main types of CAD 3D mechanical information”
- “Annex C (informative) Overview of CAD mechanical assembly structure information”.

The annexes of EN 9300-100 provide an understanding of the principles of long-term archiving of CAD information. EN 9300-100 makes no claim that the listed principles are complete, and the Annexes should not be understood as a training lecture.

Annex A sums up the evolution of CAD systems.

Annex B proposes a template for the table of contents for a part of the EN 9300-1XX series.

Annex C sums up the main issues to take into consideration for long term archiving of CAD 3D information.

Annex D provides general information for the definition of a representative sample of test cases to be used in a test plan.

Annex E describes examples of performance indicators used to manage the longevity of CAD archived information.

Annex F gives an overview of maturity of the main components for long term archiving of CAD mechanical information.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of

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North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

This document was prepared jointly by AIA, ASD-STAN, PDES, Inc. and the prostep ivip Association.

The prostep ivip Association is an international non-profit association in Europe. For establishing leadership in IT-based engineering it offers a moderated platform to its nearly 200 members from leading industries, system vendors and research institutions. Its product and process data standardization activities at European and worldwide levels are well known and accepted. The prostep ivip Association sees this document and the related parts as a milestone of product data technology.

PDES Inc is an international non-profit association in USA. The mission of PDES, Inc. is to accelerate the development and implementation of ISO 10303, enabling enterprise integration and PLM interoperability for member companies. PDES, Inc. gathers members from leading manufacturers, national government agencies, PLM vendors and research organizations. PDES, Inc. supports this document as an industry resource to sustain the interoperability of digital product information, ensuring and maintaining authentic longevity throughout their product lifecycle.

Readers of this document should note that all standards undergo periodic revisions and that any reference made herein to any other standard implies its latest edition, unless otherwise stated.

The documents will be published under two different standards organizations using different prefixes. ASD-STAN will publish the document under the number EN 9300-XXX. AIA will publish the document under the number NAS 9300-xxx. The content in the EN 9300 and NAS 9300 documents will be the same. The differences will be noted in the reference documentation. For example, EN 9300 Geometric Dimensioning and Tolerancing will be referenced in ISO 1101 and ISO 16792, and for NAS 9300 the same information will be referenced in ASME Y 14.5M and ASME Y 14.41. The document formatting, etc., will follow that of the respective editorial rules of ASD-STAN and AIA.

EN 9300-100:2026 (E)**1 Scope****1.1 Introduction**

This document specifies common fundamental concepts for long term archiving and retrieval of mechanical CAD information for elementary parts and assemblies. It details the “fundamentals and concepts” of EN 9300-003:2012 in the specific context of long-term archiving of CAD mechanical models.

Mechanical CAD information is divided into assembly structure and geometrical information, both including explicit and implicit geometrical representation, geometric dimensioning and tolerancing with form features.

The EN 9300-1XX series is organized as a sequence of parts, each building on the previous ones in a consistent way, each adding a level of complexity in the CAD data model. This includes the detailing of relationships between the essential information for the different types of CAD information covered by the EN 9300-1XX series.

As technology matures, additional parts will be released in order to support new requirements within the aerospace community.

1.2 In Scope

This document specifies:

- the fundamentals and concepts for long-term archiving and retrieval of 3D mechanical CAD information;
- the document structure of the EN 9300-1XX series, and the links between all these parts;
- the qualification methods for long-term preservation of archived mechanical CAD information; more specially, principles for the CAD validation properties and for verification of the quality of the CAD archived file;
- the specifications for the preservation planning of archived CAD information;
- the specific functions for administration and monitoring of CAD archived mechanical models;
- the definition of archive information packages for CAD data.

1.3 Out of scope

The following are out of scope for this part:

- long-term archiving of CAD 2D drawings;
- other CAD specialization disciplines, such as electrical harnesses, composite.

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.

EN 9300 (all parts), *Aerospace series — LOTAR — LOng-Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data*

ISO 14721, *Space Data System Practices — Reference model for an open archival information system (OAIS)*

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