SLOVENSKI STANDARD
SIST EN IEC 62309:2025

01-marec-2025

Zagotovljivost novih izdelkov, ki vsebujejo rabljene dele, in izdelkov s podaljšano življenjsko dobo (IEC 62309:2024)

Dependability of new products containing reused parts and life-extended products (IEC 62309:2024)

Zuverlässigkeit von Produkten mit wieder verwendeten Teilen - Anforderungen an Funktionalität und Prüfungen (IEC 62309:2024)

Sûreté de fonctionnement des produits contenant des composants réutilisés - Exigences pour la fonctionnalité et les essais (IEC 62309:2024)

Ta slovenski standard je istoveten z: **EN IEC 62309:2025**

ICS:

03.120.01	Kakovost na splošno	Quality in general
21.020	Značilnosti in načrtovanje strojev, aparatov, opreme	Characteristics and design of machines, apparatus, equipment

SIST EN IEC 62309:2025 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

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Dependability of new products containing reused parts and life-extended products (IEC 62309:2024)

Sûreté de fonctionnement des produits neufs contenant des composants réutilisés et des produits à durée de vie prolongée (IEC 62309:2024)

Zuverlässigkeit von Produkten mit wieder verwendeten Teilen und Produkten mit verlängerter Gebrauchsdauer (IEC 62309:2024)

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

European foreword

The text of document 56/2057/FDIS, future edition 2 of IEC 62309, prepared by TC 56 "Dependability" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62309:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2026-01-31
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2028-01-31

This document supersedes EN 62309:2004 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 62309:2024 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 62402:2019	NOTE	Approved as EN IEC 62402:2019 (not modified)
ISO 9000:2015	NOTE	Approved as EN ISO 9000:2015 (not modified)
IEC 60300-1	NOTE	Approved as EN IEC 60300-1
IEC 60300-3-1:2003	NOTE	Approved as EN 60300-3-1:2004 (not modified)
ISO 9001:2015	NOTE	Approved as EN ISO 9001:2015 (not modified)
IEC 60300-3-14:2004	NOTE	Approved as EN 60300-3-14:2004 (not modified)
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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Dependability of new products containing reused parts and life-extended products

Sûreté de fonctionnement des produits neufs contenant des composants réutilisés et des produits à durée de vie prolongée

INTERNATIONAL
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CONTENTS

FOREWORD 4
INTRODUCTION 6
1 Scope 8
2 Normative references 8
3 Terms, definitions and abbreviated terms 8
3.1 Terms and definitions 9
3.2 Abbreviated terms 12
4 Requirements for products containing reused parts 12
4.1 Process and decision flows 12
4.2 Functional properties and quality 13
4.3 Environmental issues 14
4.4 Safety 14
4.5 Remaining working life 14
4.6 Traceability 14
5 Reconditioning 15
5.1 Reconditioning of parts 15
5.2 Dismantling and restoration 15
6 Qualification testing for products containing reused parts 15
6.1 Evaluation of current status 15
6.2 Reliability assessment 15
6.3 Final inspection and testing 16
7 Warranty and documentation 16
7.1 Useful life, failure rate, warranty period 16
7.2 Documentation 16
7.2.1 Customer documentation 16
7.2.2 Internal documentation 16
7.3 Product compliance and control 17
Annex A (normative) Additional declarations for life extension 18
A.1 Assurance, system of assurance, and testing 18
A.2 Final product declared as "new product containing reused parts" 19
A.3 Final product declared as "refurbished" 20
A.4 Products declared as "life extended" 20
A.5 Final product declared as "updated" 21
A.6 Final product declared as "upgraded" 22
A.7 Final product declared as "second-hand" 22
Annex B (informative) Dependability aspects 24
B.1 Maintenance and repair of products 24
B.2 Reliability of reused parts 25
B.2.1 General 25
B.2.2 Design stage considerations 25
B.3 Design documentation 26
B.4 Design for reuse 27
B.4.1 General 27
B.4.2 Manufacturing stage decisions 28
B.4.3 Use stage decisions 28
B.4.4 Recycling and disposal decisions (end-of-life, EOL) 28

B.5 Economic aspects 28
B.6 Lifetime diagram 29
Annex C (informative) Example with QAGAN parts 30
C.1 Modules considered for reuse 30
C.2 The optical system 30
C.3 The electric motor 30
C.4 The voltage supply 31
C.4.1 General 31
C.4.2 Solder joints 31
C.4.3 Power transistors 31
C.4.4 Non-solid electrolyte capacitors 31
C.4.5 Varistors 31
C.4.6 The memory PWA 31
C.4.7 EPROMs 32
C.4.8 Connectors 32
C.5 Conclusion 32
Bibliography 33

Figure 1 – Life extension for products, parts, and material 13
Figure 2 – Principal decision flow considering parts 13
Figure B.1 – Example for determination of the remaining working life of parts 25
Figure B.2 – Lifetime diagram 29

Table A.1 – Different aspects of product life 18
Table B.1 – Assignment of "level of detail for product" to "design aspects" 27

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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DEPENDABILITY OF NEW PRODUCTS CONTAINING REUSED PARTS AND LIFE-EXTENDED PRODUCTS

FOREWORD

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IEC 62309 has been prepared by IEC technical committee 56: Dependability. It is an International Standard.

This second edition cancels and replaces the first edition published in 2004. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) the previous Annex A has been separated into Annex B (Dependability aspects) and Annex C (Example with QAGAN parts);
b) a new normative Annex A has been written with expansion of lifecycle activities, to describe extending the useful life by refurbishment, life extension, updating, upgrading and second-hand use;
c) revision of Figure 1 accordingly;

d) minor editorial alignments throughout the document;

e) the abbreviation "quagan" has been changed "QAGAN" to reflect more contemporary use.

The text of this International Standard is based on the following documents:

Draft	Report on voting
56/2057/FDIS	56/2073/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

The marketplace for products in the 21st century is a rapidly changing one, with increased speed of technological growth, and new pressures on environmental sustainability as humanity's demand for ecological resources currently far exceeds what the Earth can regenerate in the same timeframe.

Owing to the improving quality of manufacturing, most parts have been manufactured with a life expectancy far longer than the user needs.

Technological changes are also making products more reliable. However, commercial pressures and legislation changes are leading to an increased rate of technological change, resulting in a difficulty in obtaining supplies, spares and or support for the superseded parts [a discipline known as obsolescence management (see IEC 62402 [1][1])], and the need to upgrade systems before all their parts have reached their life expectancy.

The disposal of products and their component parts, which can be potentially useful, is fuelling the cycle of waste and the overuse of finite materials.

It is unlikely that the speed of technological growth can be slowed, or significant changes can be made to user needs. However, what can be done is to increase the reuse of parts that have not reached their life expectancy. This document addresses this goal to reduce waste by reusing parts, and the additional benefits that come with reusing parts.

This document provides customers with dependability assurance when manufacturers are producing new products containing previously used parts. The main concept is to qualify the reused parts to ensure that the product under consideration will fulfil the requirements for a product containing only new parts. The reused parts can then be declared QAGAN (qualified-as-good-as-new) and used interchangeably with new parts in the product.

This document firstly describes, in Clauses 4 to 7, requirements for qualification of reuse of parts in new products. A QAGAN part is qualified only for a specific application, often the same or similar to that for which it was previously used. This means that QAGAN parts are not declared as qualified for general use.

QAGAN parts are already type approved for their original application. The declaration QAGAN certifies that a reused part that has previously been qualified for use in a specific product has been checked that it has not deteriorated to a degree that it cannot be used in new products. A new product containing QAGAN parts is tested only to the same extent as if it contained only new parts.

Secondly, in Clauses A.3 to A.7, this document describes the life extension of products already in use. In most cases, life extension can be made using new components, new parts, or QAGAN parts that have been qualified for the specific application.

[1] Numbers in square brackets refer to the Bibliography.

Reuse of parts and materials is one way to save resources. Another way is to extend the useful life of products as described in Annex A, extending the useful life by refurbishment, life extension, updating, upgrading or second-hand use. These concepts are defined and the requirements for using the term QAGAN with reference to this document are stated. This document expresses guidance to support the circular economy and anticipates application by organisations to enable, permit and encourage reuse of functional parts. This document envisages that the item, the subject under consideration, which attracts the declaration or designation "QAGAN" may be an individual part, component, device, or functional unit. This document does not cover reused materials or large structures and large systems, nor does it cover software products, concepts, and ideas.