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**Sistemi ocenjevanja kakovosti - 2. del: Izbira in uporaba planov vzorčenja za pregledovanje elektronskih komponent in embalaže (IEC 61193-2:2007)**

Quality assessment systems -- Part 2: Selection and use of sampling plans for inspection of electronic components and packages

Qualitätsbewertungssysteme -- Teil 2: Auswahl und Anwendung von Stichprobenanweisungen für die Prüfung elektrischer Bauelemente und Gehäuse

Système d'assurance de la qualité -- Partie 2: Choix et utilisation des plans d'échantillonnages pour le contrôle des composants électroniques et des boîtiers

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**Ta slovenski standard je istoveten z: EN 61193-2:2007**

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**ICS:**

03.120.99	Drugi standardi v zvezi s kakovostjo	Other standards related to quality
31.190	Sestavljeni elektronski elementi	Electronic component assemblies

**SIST EN 61193-2:2008****en,de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 61193-2**

November 2007

ICS 31.190

English version

**Quality assessment systems -  
Part 2: Selection and use of sampling plans for inspection  
of electronic components and packages  
(IEC 61193-2:2007)**

Système d'assurance de la qualité -  
Partie 2: Choix et utilisation des plans  
d'échantillonnages pour le contrôle  
des composants électroniques  
et des boîtiers  
(CEI 61193-2:2007)

Qualitätsbewertungssysteme -  
Teil 2: Auswahl und Anwendung von  
Stichprobenanweisungen für die Prüfung  
elektrischer Bauelemente und Gehäuse  
(IEC 61193-2:2007)

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This European Standard was approved by CENELEC on 2007-11-01. CENELEC 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 Central Secretariat or to any CENELEC 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 CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of document 91/690/FDIS, future edition 1 of IEC 61193-2, prepared by IEC TC 91, Electronics assembly technology, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61193-2 on 2007-11-01

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2008-08-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2010-11-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61193-2:2007 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62421      NOTE      Harmonized as EN 62421:2007 (not modified).

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60194	- <sup>1)</sup>	Printed board design, manufacture and assembly - Terms and definitions	EN 60194	2006 <sup>2)</sup>
ISO 2859-1	1999	Sampling procedures for inspection by attributes - Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection	-	-
ISO 3534-2	2006	Statistics - Vocabulary and symbols - Part 2: Applied statistics	-	-

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<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

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IEC 61193-2

Edition 1.0 2007-08

# INTERNATIONAL STANDARD

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**Quality assessment systems –**  
**Part 2: Selection and use of sampling plans for inspection of electronic components and packages**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## QUALITY ASSESSMENT SYSTEMS –

**Part 2: Selection and use of sampling plans  
for inspection of electronic components and packages**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61193-2 has been prepared by IEC technical committee 91: Electronics assembly technology.

The text of this standard is based on the following documents:

FDIS	Report on voting
91/690/FDIS	91/723/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 61193 series, under the general title *Quality assessment systems*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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## INTRODUCTION

To obtain a high quality level of products, process controls like 100 % testing of significant characteristics and statistical methods are needed to stabilize, monitor, and improve processes.

Sampling inspection is one of the methods to verify

- whether the process control is effective, and
- the quality level of a supplier's product by a customer or third party.

Today the quality level of products for use in electric and electronic equipment is expected to be equal or close to zero defects. But, the assessment of a quality level close to zero defects by sampling only would lead to an unreasonable increase of cost for inspection. A combination of process control and zero acceptance number sampling plans is indispensable.

This standard provides a sampling system and plans for the inspection of electronic components, packages and modules, manufactured under suitable process control, which prevents the outflow of nonconforming products.

NOTE The sampling system provided by this standard is extracted from ISO 2859-1, and is intended to be used for the inspection of final products, either by the manufacturer, a customer, or a third party.

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