

Batch control - Part 4: Batch production records

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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 61512-4:2010 sisaldab Euroopa standardi EN 61512-4:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.10.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

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**Batch control -
Part 4: Batch production records
(IEC 61512-4:2009)**

Contrôle-commande des processus
de fabrication par lots -
Partie 4: Enregistrements de production
par lots
(CEI 61512-4:2009)

Chargenorientierte Fahrweise -
Teil 4: Aufzeichnungen
zur Chargenproduktion
(IEC 61512-4:2009)

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CENELEC

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

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Foreword

The text of document 65A/537/FDIS, future edition 1 of IEC 61512-4, prepared by SC 65A, System aspects, of IEC TC 65, Industrial-process measurement, control and automation, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61512-4 on 2010-09-01.

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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) | 2011-06-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2013-09-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61512-4:2009 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 standards indicated:

- | | | |
|------------------|------|---|
| IEC 61512-3:2008 | NOTE | Harmonized as EN 61512-3:2008 (not modified). |
| IEC 62264-1:2003 | NOTE | Harmonized as EN 62264-1:2008 (not modified). |
-

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 61512-1	1997	Batch control - Part 1: Models and terminology	EN 61512-1	1999
IEC 61512-2	2001	Batch control - Part 2: Data structures and guidelines for languages	EN 61512-2	2002
ANSI/ISA-95.00.01	2000	Enterprise-Control System Integration - Part 1: Models and Terminology	-	-
ANSI/ISA-95.00.02	2001	Enterprise-Control System Intergration - Part 2: Object Model Attributes	-	-

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INTRODUCTION

IEC 61512-1 provides models and terminology applicable to batch control. Subclause 5.5 defines product information concepts, and subclause 6.4 defines production information management activities and functions.

Clause 4 of IEC 61512-2 provides an object model of production information, and Clause 5 defines batch history exchange tables. The batch history exchange tables given in Clause 5 are one implementation for production information.

Whereas IEC 61512-1 and IEC 61512-2 provide significant information concerning batch history and production information, they are not sufficient for use as standards for implementing specific technologies and are lacking in scope and content.

This part of IEC 61512 provides a detailed definition for batch production records. It consists of a description and object model of batch production record contents.

The intended use of this batch production record standard is to provide a reference model for developing applications for the storage and/or exchange of batch production records. Implementations based upon this standard will allow retrieval, analysis, and reporting of selected batch production record data.

This batch production record standard is compliant with the batch data model in Clause 4 of IEC 61512-2, as well as with IEC 61512-1.

Although this standard is intended primarily for batch processes, it may be of considerable value for other types of processes.

BATCH CONTROL –

Part 4: Batch production records

1 Scope

This part of the IEC 61512 series defines a reference model for batch production records containing information about production of batches or elements of batch production. This standard is intended for batch processes.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated reference, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61512-1:1997, *Batch Control – Part 1: Models and terminology*

IEC 61512-2:2001, *Batch Control – Part 2: Data structures and guidelines for language*

ANSI/ISA-95.00.01:2000, *Enterprise-Control System Integration – Part 1: Models and Terminology*

ANSI/ISA-95.00.02:2001, *Enterprise-Control System Integration – Part 2: Object Model Attributes*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE Terms and definitions given in IEC 61512-1 also apply, except where differences are explicitly stated in this part.

3.1

batch history

all execution information collected pertaining to the production of a single batch, and may include common (non-batch specific) information

3.2

batch production record

subset of the execution and business information that is retained based upon business requirements identified by the batch production record specification

NOTE This information could include the recipe procedural element execution information, both specific equipment information, operator comments, batch-related alarms, elements related to the definition of a batch (such as control recipe, master recipe, site and/or general recipe, batch schedule information), and information important to the batch (such as training logs, maintenance records, and environmental conditions).

3.3

batch production record report

extraction of information from one or more batch production records that is formatted for printing, displaying, or sending to a collaborating system