

Enterprise-control system integration - Part 4: Object model attributes for manufacturing operations management integration

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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**Enterprise-control system integration - Part 4: Object model
attributes for manufacturing operations management integration
(IEC 62264-4:2015)**

Intégration des systèmes entreprise-contrôle - Partie 4:
Attributs des modèles d'objets pour l'intégration de la
gestion des opérations de fabrication
(IEC 62264-4:2015)

Integration von Unternehmensführungs- und Leitsystemen -
Teil 4: Attribute des Objektmodells für die Integration des
operativen Produktionsmanagements
(IEC 62264-4:2015)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 65E/479/FDIS, future edition 1 of IEC 62264-4, prepared by SC 65E "Devices and integration in enterprise systems", of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62264-4:2016.

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- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-10-20
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-01-20

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The text of the International Standard IEC 62264-4:2015 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 (series)	NOTE	Harmonized as EN 61512 (series).
IEC 62541 (series)	NOTE	Harmonized as EN 62541 (series).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61511-1	-	Functional safety - Safety instrumented-systems for the process industry sector - Normative (uon) -- Part 1: Framework, definitions, system, hardware and software requirements		-
IEC 61512-4	2009	Batch control -- Part 4: Batch production records	EN 61512-4	2010
IEC 62264-1	2013	Enterprise-control system integration -- Part 1: Models and terminology	EN 62264-1	2013
IEC 62264-2	2013	Enterprise-control system integration -- Part 2: Object and attributes for enterprise-control system integration	EN 62264-2	2013
IEC 62264-3	-	Enterprise-control system integration -- Part 3 Activity models of manufacturing operations management	EN 62264-3	-
IEC 62682	-	Management of Alarm Systems for the Process Industries	EN 62682	-
ISO 8601	-	Data elements and interchange formats -- Information interchange - Representation of dates and times		-
ISO/IEC 19501	-	Information technology - Open Distributed-Processing - Unified Modeling Language (UML) Version 1.4.2		-
ISO/IEC 19505-1	-	Information technology - Object-Management Group Unified Modeling Language (OMG UML) - Part 1: Infrastructure		-
ISO/IEC 19505-2	-	Information technology - Object-Management Group Unified Modeling Language (OMG UML) - Part 2: Superstructure		-

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INTRODUCTION

This part of IEC 62264 defines the interfaces between enterprise activities and control activities and is to be used in conjunction with IEC 62264-3.

The scope of this part of IEC 62264 is limited to defining the details of the information content of interfaces within manufacturing operations management. The scope is limited to the definition of object models and attributes for the information defined in IEC 62264-3. The goal is to reduce the effort, cost, and errors associated with implementing these interfaces.

The standard may be used to reduce the effort associated with implementing new product offerings. The goal is to have enterprise systems and control systems that interoperate and easily integrate.

This part of IEC 62264 further defines the object models and attributes involved in data exchange between activities of manufacturing operations management defined in 62264-3. The models and terminology defined in IEC 62264-3 and this part of IEC 6226

- a) emphasize good manufacturing operations management integration practices during the entire life cycle of the systems;
- b) can be used to improve existing integration capability of manufacturing operations management systems; and
- c) can be applied regardless of the degree of automation.

Specifically, IEC 62264-3 and this part of IEC 62264 provide a standard terminology and a consistent set of concepts and models for integrating manufacturing operations management systems that will improve communications between all parties involved. Benefits produced will

- d) reduce the user's time to reach full production levels for new products;
- e) enable vendors to supply appropriate tools for implementing integration of manufacturing operations management systems;
- f) enable users to better identify their needs;
- g) reduce the cost of automating manufacturing processes;
- h) optimize supply chains; and
- i) reduce life-cycle engineering efforts.

IEC 62264-3 and this part of IEC 62264 may be used to reduce the effort associated with implementing new product offerings. The goal is to have manufacturing operations management systems that interoperate and easily integrate.

It is not the intent of the standards to

- 1) suggest that there is only one way of implementing integration of manufacturing operations management systems;
- 2) force users to abandon their current way of handling integration; or
- 3) restrict development in the area of integration of manufacturing operations management systems.