

STN	Integrácia podnikových riadiacich systémov. Časť 2: Objekty a atribúty pre integráciu podnikových riadiacich systémov.	STN EN 62264-2 18 4411
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Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Obsahuje: EN 62264-2:2013, IEC 62264-2:2013

Oznámením tejto normy sa od 1.8.2016 ruší
STN EN 62264-2 (18 4411) z júna 2008

118874

Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, odbor SÚTN, 2014
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy
rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62264-2

October 2013

ICS 25.040.40; 35.240.50

Supersedes EN 62264-2:2008

English version

**Enterprise-control system integration -
Part 2: Objects and attributes for enterprise-control system integration
(IEC 62264-2:2013)**

Intégration des systèmes entreprise-
contrôle -
Partie 2: Objets et attributs pour
l'intégration des systèmes de commande
d'entreprise
(CEI 62264-2:2013)

Integration von Unternehmensführungs-
und Leitsystemen -
Teil 2: Objekte und Attribute für die
Integration von Unternehmensführungs-
und Leitsystemen
(IEC 62264-2:2013)

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

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

Foreword

The text of document 65E/290/FDIS, future edition 2 of IEC 62264-2, prepared by SC 65E "Devices and integration in enterprise systems" of IEC/TC 65 "Industrial-process measurement, control and automation" and by ISO/TC 184/SC5 "Interoperability, integration and architectures for enterprise systems and automation applications" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62264-2:2013.

The following dates are fixed:

- latest date by which the document has to be (dop) 2014-05-01
implemented at national level by
publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2016-08-01
standards conflicting with the
document have to be withdrawn

This document supersedes EN 62264-2:2008.

EN 62264-2:2013 includes the following significant technical changes with respect to EN 62264-2:2008:

- a) update of the first edition;
- b) addition of object models for exchange information used in manufacturing operations management activities, instead of just production operations management activities. The added object models were physical asset, operations definition, operations schedule, operations performance, and operations capability;
- c) displacement of the production specific object models in Annex A;
- d) displacement of the UML object models that were in EN 62264-1:2008 into this standard so that the object models and the associated attribute tables were available in the same document;
- e) addition of the Hierarchy scope object definition to replace the Location attribute used in the previous edition;
- f) addition of a value type section to define the exchange of non-simple value types;
- g) definition of simple value types were defined using the ISO 15000-5.

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IEC 61512-1	NOTE	Harmonised as EN 61512-1.
ISO 19439	NOTE	Harmonised as EN ISO 19439.
ISO 19440	NOTE	Harmonised as EN ISO 19440.

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 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 62264-1	-	Enterprise-control system integration - Part 1: Models and terminology	EN 62264-1	-
ISO/IEC 19501	-	Information technology - Open Distributed Processing - Unified Modeling Language (UML)	-	-



IEC 62264-2

Edition 2.0 2013-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Enterprise-control system integration –
Part 2: Objects and attributes for enterprise-control system integration**

**Intégration des systèmes entreprise-contrôle –
Partie 2: Objets et attributs pour l'intégration des systèmes de commande
d'entreprise**



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IEC 62264-2

Edition 2.0 2013-06

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONALE

PRICE CODE
CODE PRIX

XH

ICS 25.040.40; 35.240.50

ISBN 978-2-83220-833-5

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ENTERPRISE-CONTROL SYSTEM INTEGRATION –**Part 2: Objects and attributes for enterprise-control system integration**

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International Standard IEC 62264-2 has been developed by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation, and by ISO technical committee 184/SC5: Interoperability, integration and architectures for enterprise systems and automation applications. It is published as a double logo standard.

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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:

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- e) addition of the Hierarchy scope object definition to replace the Location attribute used in the previous edition;
- f) addition of a value type section to define the exchange of non-simple value types;
- g) definition of simple value types were defined using the ISO 15000-5.

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

FDIS	Report on voting
65E/290/FDIS	65E/317/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. In ISO, the standard has been approved by 10 members out of 10 having cast a vote.

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

A list of all parts in the IEC 62264 series, published under the general title *Enterprise control system integration* can be found on the IEC website.

In this publication, the following print types are used:

– *attributes: in italic type.*

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

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

This part of IEC 62264 further defines formal object models for exchange information described in IEC 62264-1 using UML object models, tables of attributes, and examples. The models and terminology defined in this part of IEC 62264:

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

Specifically, this part of IEC 62264 provides a standard terminology and a consistent set of concepts and models for integrating control systems with enterprise systems that will improve communications between all parties involved. Benefits produced will:

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

This 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.

It is not the intent of the standards to:

- a) suggest that there is only one way of implementing integration of control systems to enterprise systems;
- b) force users to abandon their current way of handling integration; or
- c) restrict development in the area of integration of control systems to enterprise systems.

ENTERPRISE-CONTROL SYSTEM INTEGRATION –

Part 2: Objects and attributes for enterprise-control system integration

1 Scope

This part of IEC 62264 specifies generic interface content exchanged between manufacturing control functions and other enterprise functions. The interface considered is between Level 3 manufacturing systems and Level 4 business systems in the hierarchical model defined in IEC 62264-1. The goal is to reduce the risk, cost, and errors associated with implementing the interface.

Since this standard covers many domains, and there are many different standards in those domains, the semantics of this standard are described at a level intended to enable the other standards to be mapped to these semantics. To this end this standard defines a set of elements contained in the generic interface, together with a mechanism for extending those elements for implementations.

The scope of IEC 62264-2 is limited to the definition of object models and attributes of the exchanged information defined in IEC 62264-1.

This part of IEC 62264 standard does not define attributes to represent the object relationships.

2 Normative references

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.

IEC 62264-1, *Enterprise-control system integration – Part 1: Models and terminology*

ISO/IEC 19501, *Information technology – Open Distributed Processing – Unified Modeling Language (UML) Version 1.4.2*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN