

# 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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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) 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 IEC 62264-1:2003 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.

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

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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.

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## 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.