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## **Industrial automation systems and integration — Industrial manufacturing management data —**

### **Part 31: Resource information model**

*Systèmes d'automatisation industrielle et intégration — Données de  
gestion de fabrication industrielle —*

*Partie 31: Modèle d'information des ressources*



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## Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 15531-31 was prepared by Technical Committee ISO/TC 184, *Industrial automation systems and integration*, Subcommittee SC 4, *Industrial data*.

— A complete list of parts of ISO 15531 is available from the Internet at:

[http://www.tc184-sc4.org/titles/MANDATE\\_titles.rtf](http://www.tc184-sc4.org/titles/MANDATE_titles.rtf)

## Introduction

Resources form the basis and technological foundation of any manufacturing system. The efficient use of resources is the main goal of cost management which, in turn, directly contributes to market success.

Different aspects of the resources depend on the viewpoint being considered. The choice of a specific aspect is a way of reducing complexity.

Therefore, future concepts for business process development and resource management require:

- an integrated view of the complete set of business processes and the relevant resource management activities;
- an integrated resource management including interfaces to external manufacturing unit.

NOTE external-manufacturing unit may be for example suppliers or subsidiaries.

Resource attributes and the required capabilities and capacities for manufacturing processes have to be described by data modelling, so that they can be communicated and used more efficiently for resource usage management. The means of information representation should therefore be standardized.

EXAMPLE resources attributes may be capability, capacity, and status.

In this International Standard the only aspect under consideration is the management of resources usage. The objective is to describe the resource management information to enable an unhindered flow of information between all systems and humans involved.