AS ISO 13584.1—2004
ISO 13584-1:2001

Australian Standard™

Industrial automation systems and integration—Parts library

Part 1: Overview and fundamental principles

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Part 1: Overview and fundamental principles

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PREFACE

This Standard was prepared by the Standards Australia Committee IT-006, Information Technology for Industrial Automation and Integration.

This Standard is identical with, and has been reproduced from, ISO 13584-1:2001, *Industrial automation systems and integration—Parts library,* Part 1*: Overview and fundamental principles*.

The objective of this Standard is to provide a representation of parts library information together with the necessary mechanisms and definitions to enable parts library data to be exchanged, used and updated. The exchange may be between different computer systems and environments associated with the complete lifecycle of the products where the library parts may be used, including product design, manufacture, use, maintenance, and disposal.

This Standard is Part 1 of AS ISO 13584, *Industrial automation systems and integration—Parts Library*, which is published in parts as follows:

Part 1: Overview and fundamental principles (this Standard)
Part 101: Geometrical view exchange protocol by parametric program
Part 20: Logical resource: Logical model of expressions
Part 24: Logical resource: Logical model of supplier library
Part 26: Logical resource: Information supplier identification
Part 31: Implementation resources: Geometric programming interface
Part 42: Description methodology: Methodology for structuring part families

The terms 'normative' and 'informative' are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

As this Standard is reproduced from an international standard, the following applies:

(a) Its number appears on the cover and title page while the international standard number appears only on the cover

(b) In the source text 'this International Standard' should read 'this Australian Standard'.

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References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian Standard*	
ISO		AS	
10303-1	Industrial automation systems and integration—Product data representation and exchange—Part 1: Overview and fundamental principles	10303.1	Industrial automation systems and integration—Product data representation and exchange, Part 1: Overview and fundamental principles

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INTRODUCTION

ISO 13584 is an International Standard for the computer-interpretable representation and exchange of parts library data. The objective is to provide a neutral mechanism capable of transferring parts library data, independent of any application that is using a parts library data system. The nature of this description makes it suitable not only for the exchange of files containing parts, but also as a basis for implementing and sharing databases of parts library data.

ISO 13584 is organized as a series of parts, each published separately. The parts of ISO 13584 fall into one of the following series: conceptual descriptions, logical resources, implementation resources, description methodology, and view exchange protocol. The series are described in this part of ISO 13584, which also provides an overview of ISO 13584 and its structure.

AUSTRALIAN STANDARD

Industrial automation systems and integration – Parts library – Part 1: Overview and fundamental principles

1 Scope

ISO 13584 provides a representation of parts library information together with the necessary mechanisms and definitions to enable parts library data to be exchanged, used and updated. The exchange may be between different computer systems and environments associated with the complete life cycle of the products where the library parts may be used, including product design, manufacture, use, maintenance, and disposal. The standard provides a generalized structure for a parts library system and does not define a fully detailed implementable parts library system.

This part of ISO 13584 provides an overview of the ISO 13584 standard and its structure.

The following are within the scope of this part of ISO 13584:

— a summary of the content of the other parts of the ISO 13584 standard series;

— fundamental principles upon which the ISO 13584 standard is based.

The following are outside the scope of this part of ISO 13584:

— the information models defined for capturing parts library data;

— the definition of the implementation resources needed to process parts library data.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of ISO 13584. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 13584 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references the latest edition of the publication referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 10303-1:1994*, Industrial automation systems and integration — Product data representation and exchange — Part 1: Overview and fundamental principles.*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purpose of this part of ISO 13584, the following terms and definitions apply. Some of these terms and definitions are repeated for convenience from ISO 10303-1:1994.

3.1.1

abstract part
a part that is only defined by a partial specification and that cannot be materially provided by the organization that defines the specification