

Australian Standard™

**Industrial automation systems
and integration—Product data
representation and exchange**

**Part 41: Integrated generic
resources—Fundamentals of
product description and support**

This Australian Standard was prepared by Committee IT/6, Information Technology for Industrial Automation and Integration. It was approved on behalf of the Council of Standards Australia on 16 June 1998 and published on 5 September 1998.

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Australian Standard™

**Industrial automation systems
and integration—Product data
representation and exchange**

**Part 41: Integrated generic
resources. Fundamentals of
product description and support**

First published as AS 10303.41—1998.

PREFACE

This Standard was prepared by Standards Australia Committee IT/6, Information Technology for Industrial Automation and Integration. The Standard is the result of a consensus among the representatives on the Committee that it be produced as an Australian Standard. It is identical with and has been reproduced from ISO 10303-41:1994, *Industrial automation systems and integration—Product data representation and exchange, Part 41: Integrated generic resources: Fundamentals of product description and support*.

The objective of this Standard is to provide users of integrated automation systems with a specification of the general product description, generic management and support resources.

This Standard is Part 41 of AS 10303, *Industrial automation systems and integration—Product data representation and exchange*, which is published in Parts as follows:

- Part 1: Overview and fundamental principles
- Part 11: Description methods: The EXPRESS language reference manual
- Part 21: Implementation methods: Clear text encoding of the exchange structure
- Part 31: Conformance testing methodology and framework: General concepts
- Part 41: Integrated generic resources: Fundamentals of product description and support (this Standard)
- Part 42: Integrated generic resources: Geometric and topological representation
- Part 43: Integrated generic resources: Representation structure
- Part 44: Integrated generic resources: Product structure configuration
- Part 46: Integrated generic resources: Visual representation
- Part 101: Integrated application resources: Draughting
- Part 201: Application protocol: Explicit draughting
- Part 203: Application protocol: Configuration controlled design

The terms 'normative' and 'informative' have been used in this Standard 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.

Annex C, which is in the form of computer-interpretable listings, and Annex A are supplied on a diskette, which is part of this Standard.

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<i>Reference to International Standard or other publication</i>	<i>Australian or Joint Australian/New Zealand Standard</i>
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	2900.0 Part 0: General principles concerning quantities, units and symbols
1000	1000
SI units and recommendations for the use of their multiples and of certain other units	The International System of Units (SI) and its application

ISO		AS	
8601	Date elements and interchange formats—Information interchange—Representations of dates and times	3801	Data elements and interchange formats—Information interchange—Representation of dates and times
8824	Information Technology—Open Systems Interconnection—Abstract Syntax notation One (ASN.1)		
8824-1	Part 1: Specification of Basic Notation	—	
10303	Industrial automation systems and integration—Product data representation and exchange	10303	Industrial automation systems and integration—Product data representation and exchange
10303-1	Part 1: Overview and fundamental principles	10303.1	Part 1: Overview and fundamental principles
10303-11	Part 11: Description methods: EXPRESS language reference manual	10303.11	Part 11: Description methods: The EXPRESS language reference manual
10303-43	Part 43: Integrated resources: Representation structures	10303.43	Part 43: Integrated resources: Representation structures
10303-44	Part 44: Integrated resources: Product structure configuration	10303.44	Part 44: Integrated resources: Product structure configuration

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AUSTRALIAN STANDARD

**Industrial automation systems and integration —
Product data representation and exchange —
Part 41 :
Integrated generic resources:
Fundamentals of product description and support**

Section 1 : General

1.1 Scope

This part of ISO 10303 specifies the following:

- generic product description resources (section 2);
- generic management resources (section 3);
- support resources (section 4).

The schemas which are specified in this part of ISO 10303 are organized according to these sections.

1.1.1 Generic product description resources

This section of ISO 10303-41 specifies the resource constructs for the high level structure for the representation of products and their properties. It also specifies ISO 10303 integrated resources for the description of generic aspects of product usage, categorization of products and associations between products.

The following are within scope in this section:

- the identification of a product;
- the categorization of products;
- the specification of definitions of, relationships among, and allowable substitutions for a product;
- the specification of the representation of the shape of a product;
- the specification of the representation of the properties of a product;
- the description of the application context for which product data is defined.