AS 10303.202—1999
ISO 10303-202:1996

Australian Standard™

Industrial automation systems and integration—Product data representation and exchange

Part 202: Application protocol: Associative draughting

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 February 1999 and published on 5 May 1999.

The following interests are represented on Committee IT/6:

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Part 202: Application protocol: Associative draughting

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PREFACE

This Standard was prepared by the Standards Australia Committee IT/6, Information Technology for Industrial Automation and Integration. It is identical with, and has been reproduced from, ISO 10303-202:1996, *Industrial automation systems and integration—Product data representation and exchange,* Part 202: *Application protocol: Associative draughting.*

The objective of this Standard is to provide, for designers of computer-interpretable representation and exchange of product data, a specification for an application protocol for the exchange of drawings which consist of two-dimensional presentations of two-dimensional or three-dimensional geometry and planar annotation, defined in a two-dimensional or three-dimensional coordinate space.

This Standard is Part 202 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 l2: Description methods: The EXPRESS-I 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
Part 42: Integrated generic resources: Geometric and topological representation
Part 43: Integrated generic resources: Representation structures
Part 44: Integrated generic resources: Product structure configuration
Part 46: Integrated generic resources: Visual presentation
Part 47: Integrated generic resource: Shape variation tolerances
Part 101: Integrated application resources: Draughting
Part 105: Integrated application resource: Kinematics
Part 201: Application protocol: Explicit draughting
Part 202: Application protocol: Associative draughting (this Standard)
Part 203: Application protocol: Configuration controlled design
Part 207: Application protocol: Sheet metal die planning and design

The term 'normative' has been used in this Standard to define the application of the annex to which it applies. A 'normative' annex is an integral part of a Standard.

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

Its number does not appear on each page of text and its identity is shown only on the cover and title page.

In the source text 'this part of ISO 10303' should read 'this Australian Standard'.

A full point should be substituted for a comma when referring to a decimal marker.

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

Reference to International Standard or other Publication		*Australian or Australian/New Zealand Standard*	
ISO		AS	
3098	Technical drawings—Lettering	1100	Technical drawings
3098-1	Part 1: Currently used characters	1100.101	Part 101: General principles
5459	Technical drawings—Geometric tolerancing—Datums and datum-systems for geometrical tolerances	1100 1100.101	Technical drawings Part 101: General principles

ISO		AS	
10209	Technical product documentation—Vocabulary	—	
10209-1	Part 1: Terms relating to technical drawings: general and types of drawings	—	
10303	Industrial automation systems and integration—Product data representation and exchange	10303	Industrial automation systems and integration—Product data representation and exchange
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10303-11	Part 11: Description methods: The EXPRESS language reference manual	10303.11	Part 11: Description methods: The EXPRESS language reference manual
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AUSTRALIAN STANDARD

Industrial automation systems and integration — Product data representation and exchange — Part 202: Application protocol: Associative draughting

1 Scope

This part of ISO 10303 specifies the use of the integrated resources necessary for the scope and information requirements for associative draughting.

This part of ISO 10303 provides for the inter-organization exchange of computer-interpretable drawing information and associated product definition data.

NOTE 1 - The application activity model in annex G provides a graphical representation of the processes and information flows which are the basis for the definition of the scope of this part of ISO 10303.

The following are within the scope of this part of ISO 10303:

— the structures for representing drawings for the purpose of exchange, suitable for mechanical engineering and AEC applications;

— the structures for representing a drawing that depicts any phase of the life cycle of a product;

— the structures for representing individual drawing revisions;

— the structures for representing the two-dimensional or three-dimensional product shape;

— the structures for representing the transformations of the shape model used for the generation of the drawing views;

— the hierarchical structure of drawings, drawing sheets, and views of the draughting shape model;

— the presentation of non-shape product definition data depicted in a drawing by two-dimensional annotation or planar annotation defined in a three-dimensional coordinate space;

— mechanisms for the grouping of the elements depicted on a drawing;