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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 19902.4-2010

**Industrial automation systems and integration -- Manufacturing
software capability profiling for interoperability -- Part 4:
Conformance test methods, criteria and reports**

工业自动化系统与集成 制造软件互操作性能力建规 第4部分：一致性测试方法、
判则及报告

(English Translation)

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Foreword

GB/T 19902 "Industrial automation systems and integration - Manufacturing software capability profiling for interoperability" is divided into the following sections.

- Part 1. Framework;
- Part 2. Profiling methodology;
- Part 3. Interface services, protocols and capability templates;

--- Part 4. Conformance testing methodology, the judge and reports;

--- Part 5. Regulations were designed to match the ability to multi-class structure based methodology.

GB/T 19902 of This is Part 4 GB/T 19902 of.

This part identical with ISO 16100-4:2006 "Industrial automation systems and integration - Manufacturing software capability profiling for interoperability Article 4 . Conformance test methods, and then sentenced to Report "(in English).

Technical content and composition and structure of this part of ISO 16100-4:2006 is consistent, in the preparation of the format in line with our national standard GB/T 1.1-2000 "Standardization Guide Part 1. Standard structure and drafting the rules." According to China's only national standards Requirements and for ease of use, made the following editorial changes.

a) capital retention abbreviation English name, remove the ISO foreword.

b) to the "international standards" and ISO 16100 to "GB/T 19902". The "ISO 16100-4" to "GB/T 19902 of the present Part 4 "or" GB/T 19902.4 ".

c) the normative references have been translated into national standards with international standards Renumber national standard number, and the corresponding national International standards adopted standard version number placed in parentheses after the number of national standards, ease of use and access. International unconverted Standard reserves.

d) by deleting the original text does not meet the standard of written words.

This part of the Annex A, Annex B is informative appendix.

This part is proposed by China Machinery Industry Federation.

This part of the automation systems and integration by the National Standardization Technical Committee (SAC/TC159) centralized.

This section is responsible for drafting unit. Beijing Machinery Industry Automation, Southeast University.

Introduction

GB/T 19902 (ISO 16100) derived from the Strategic Plan for ISO/TC184/SC5 in the industrial and economic environment described special Notably.

a) growing vendor-specific solutions;

b) the difficulties encountered by users of the application criteria;

c) the need to migrate to a set of system integration tool module;

d) Recognizing the application software and the expertise to use the software but the company's assets.

GB/T 19902 is the national standard for software professionals the ability to standardize regulations, this description may be the expression of a computer, people can read of. It aims to provide a description of the method for manufacturing software capabilities, these capabilities throughout its life cycle in the manufacturing sector Task-related, not dependent on a particular system architecture or implementation platform.

GB/T 19902 in some charts in this section is based on the UML convention structure. Because not all of the concepts in the chart the article has explained, it is assumed that the reader of this part of the UML should have a certain understanding.

Industrial automation systems and integration Manufacturing software capability profiling for interoperability Part 4. Conformance testing methodology, the judge and reports

1 Scope

GB/T 19902 in this part of the test methods described in detail, and then sentenced to a relevant test for the evaluation and show consistency Level declaration forms, for example, a portion of the UUT with other specific requirements 19902 GB/T of the degree of consistency.

This section includes a number used to help the manufacturer or supplier (first group), a user or purchaser (second group) or an independent organization (Third group) detailed definition of conformity assessment.

This section GB/T 19902 should include the following.

List --- consistency elements can be used to determine whether an implementation of GB/T 19902 is consistent;

--- Define conformance testing and declarations to indicate an implementation which meets the consistency element;

--- Description of the elements contained in the Declaration of Conformity;

--- A set of rules used to determine the legitimacy of a plurality of consistency combination of elements.

This section GB/T 19902 does not include the following.

--- Relates to the consistency of content label or tag, authorization, and a manufacturer or supplier of the relevant declaration of conformity;

--- Between the date or the use of different standards bodies to achieve the allocation of responsibilities;

--- Production, and delivery process requirements, can not fully explain the consistency of

the product unless Without these requirements, the process or services;

--- On the production, operation, and delivery of products, processes and services quality control requirements.

2 Normative references

The following documents contain provisions which, through reference GB/T 19902 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 19902.1-2005 Industrial automation systems and integration - Manufacturing software capability profiling for interoperability - Part 1. Framework (ISO 16100-1:2002, IDT) GB/T 19902.2-2005 Industrial automation systems and integration - Manufacturing software capability profiling for interoperability - Part 2. Profiling Party Act On (ISO 16100-2:2003, IDT) GB/T 19902.3-2006 Industrial automation systems and integration - Manufacturing software capability profiling for interoperability - Part 3. Interface service Services, protocols and capability templates (ISO 16100-3:2005, IDT) REC-xml-20000814 Extensible Markup Language (XML) 1.0W3C Recommended REC-xmlschema-1-20010502XMLSchema Part 1. Framework REC-xmlschema-2-20010502XMLSchema Part 2. Data Types

3 Terms and Definitions

In order to better describe the present section, use the following terms and definitions. Some of these terms and definitions are fully referenced from other standards