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

GB/T 20719.43-2010

**Industrial automation systems and integration -- Process
specification language -- Part 43: Definitional extension:
Activity ordering and duration extensions**

工业自动化系统与集成 过程规范语言 第43部分：定义性扩展：活动次序和持续
时间扩展

(English Translation)

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Foreword

GB/T 20719 "Industrial automation systems and integration - Process specification language" currently intends divided into the following sections.

--- Part 1. Overview and fundamental principles;

Part --- Article 11. PSL core;

--- Part 12. outer core;

- Part 13. Timing Theory;
- Part 14. Resource theories;
- Part 15. Performance activity theory;
- Part --- Article 21. EXPRESS;
- Part 22. XML;
- Part --- Article 23. UML;
- Part 41. Definition of expansion. of activities;
- Part 42. Time and status;
- Part 43. Definition of expansion. of activities and duration of the order;
- Part 44. Definition of expansion. of resources;
- Part 45. Category sets of resources;
- Part 46. processing activities;
- Part 47. Procedures purposes.

This is Part 43 GB/T 20719 of.

This part identical with ISO 18629-43:2006 "Industrial automation systems and integration - Process specification language - Part 43. Definition of Expansion. activity sequence and duration extensions "(in English).

Technical content and composition and structure of this part of ISO 18629-43:2006 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." Our system is based on national standards Statutory 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 18629 to "GB/T 20719". The ISO 18629-43 to GB/T 20719 first Part 43 or GB/T 20719.43.
- c) The ISO 18629-43:2006 Chapter 2, "Normative references" in the introductory phrase to GB/T 1.1-2000 6.2.3 Introductory phrase specified.
- d) will appear in this section has been transformed into an international standard as the national standard renumbered national standard number, easy to use and access.

International standards unconverted retained.

- e) In order to facilitate the reader an understanding of the meaning of the word in bold part, the new increase in Appendix NA.

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

Appendix A to this part of the normative appendix, Appendix B and Appendix NA informative appendices.

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 drafted. Beijing Machinery Industry Automation Research Institute of Tsinghua University.

Main drafters. High Xueqin, Huang Shuangxi.

Introduction

GB/T 20719 in order to carry out the national standard manufacturing process of the exchange of information and computer-related interpretable used.

All parts of GB/T 20719 contains combine to describe the manufacturing process throughout the entire production process provides a class of language (the student the production process may be located in an industrial company, may span several industrial sectors or companies), the language is independent of any particular representation model.

The nature of the language makes it suitable for sharing and related manufacturing process specifications and properties in various stages of the production process.

This section GB/T 20719 provides definitions of the extension and expansion of activities described in GB/T 20719 related to the definition of the language.

Independent of any representation model GB/T 20719 in all parts of the application specified in the particular process. They together to change Good synergy of these applications provides a structured framework.

Industrial automation systems and integration Process Specification Language Part 43. Definition of expansion.

Order activity and duration extensions

1 Scope

This section GB/T 20719 by using GB/T 20719 written in the language of a set of definitions provided non-basic overview of the language Read the specification. These definitions of GB/T 20719 terms used in this section provides a semantic axiomatic.

The following is included in the GB/T 20719 scope of this section.

--- Define the concept, in which GB/T 20719.13 specified term use.

The following are not GB/T 20719 within the scope of this section.

--- Define the status and definition of time-related concepts, which use only GB/T 20719.11 and GB/T 20719.12 middle finger Given term.

2 Normative references

The following documents contain provisions which, through reference GB/T 20719 in this section constitute provisions of this section. For dated references, all subsequent amendments (excluding corrections) or revisions do not apply to this section, however, encourage an agreement under this section Parties to study the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 16262.1 Information technology - Abstract Syntax Notation One (ASN.1) - Part 1. Specification of basic notation (GB/T 16262.1-2006, ISO/IEC 8824-1:2002, IDT) GB/T 19114.1 Industrial automation systems and integration - Industrial manufacturing management data - Part 1. Review (GB/T 19114.1-2003, ISO 15531-1:2002, IDT) GB/T 19114.42 Industrial automation systems and integration - Industrial manufacturing management data - Part 42. Time Model (GB/T 19114.42-2008, ISO 15531-42:2005, IDT) GB/T 20719.1-2006 Industrial automation systems and integration - Process specification language - Part 1. Overview and fundamental principles (ISO 18629-1:2004, IDT) GB/T 20719.11-2010 Industrial automation systems and integration - Process specification language - Part 11. PSL core (ISO 18629-11:2005, IDT) GB/T 20719.12 Industrial automation systems and integration - Process specification language - Part 12. outer core (GB/T 20719.12-2010, ISO 18629-12:2005, IDT) GB/T 20719.13 Industrial automation systems and integration - Process specification language - Part 13. Duration and order theory (GB/T 20719.13-2010, ISO 18629-13:2006, IDT)

3.1 Terms and Definitions

The following terms and definitions apply to this part of the GB/T 20719 of.

3.1.1

Automorphism it retains the set of elements in a model of relations and functions on one mapping.