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

GB/T 27758.2-2015

**Industrial automation systems and integration -- Diagnostics, capability
assessment and maintenance applications integration -- Part 2:
Descriptions and definitions of application domain matrix elements**

工业自动化系统与集成 诊断、能力评估以及维护应用集成 第2部分：应用领域矩阵元素描述与定义

(English Translation)

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Foreword

GB/T 27758 "Industrial automation systems and integration diagnosis, assessment, and the ability to maintain application integration" intended to be divided into the following sections.

- Part 1. Overview and general requirements;
- Part 2. Application description matrix elements and definitions;
- Part 3. application integration method is described.

This section GB/T 27758 Part 2.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method identical with ISO 18435-2:2012 "Industrial automation systems and integration diagnosis, assessment, and the ability to maintain Application integration - Part 2. Application description and definition of matrix elements. " Consistency correspondence between this part of international documents and normative references of our files are as follows.

- GB/T 27758.1-2011 Industrial automation systems and integration capability assessment and diagnosis Maintenance Part 1 Application Integration Score. Overview and general requirements (ISO 18435-1:2009, IDT)
- GB/T 19659.1-2005 Industrial automation systems and integration - Open systems application integration framework - Part 1. Generic Reference description (ISO 15745-1:2003, IDT) this part made the following editorial changes.
- With "GB/T 27758 in this part of" instead of "this part of ISO 18435";
- With "GB/T 27758.1-2011" instead of "ISO 18435-1:2009";
- With "GB/T 19659" instead of "ISO 15745".

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.

Introduction

ISO 18435 relationship between the various parts shown in Figure 1. Concerns of each part as shown in dotted lines, dashed lines delineate the UML class diagram Specific portion, and represents an integrated model between applications.

The relationship between the various parts of the FIG. 1 ISO 18435 ISO 18435-1 gives a description of automation application integration requirements of the rules and the basic

principles of the method outlined. The basic principle involves automatically Application integration with other applications of the key elements, and the relationships between these key elements. Rules include support for an application and more Information between apps interoperable exchange. The main focus is on production operations and maintenance domains, including the ability to evaluate activities.

Details This part of ISO 18435 gives application interaction matrix elements (AIME) and applications matrix elements (ADME) Structure Definitions, and the relationship between them. This section describes special steps for constructing the ADME, AIME set a specific combination of support ADME.

ISO 18435-3 defines a recommended method for describing business in one or more of the field of automation interoperability between applications and integration requirements. The main focus is on production operations and maintenance areas, including the ability to evaluate activities.

Industrial automation systems and integration Diagnostic, competency assessment and maintenance applications integration Part 2. Application description matrix elements and definitions

1 Scope

This section GB/T 27758 defines the structure and templates of the following elements.

--- Application interaction matrix element;

--- Application matrix elements.

This section also defines the relationship between these types of elements.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

ISO 18435-1 Industrial automation systems and integration capability assessment and diagnostic maintenance applications integration - Part 1. Overview and General Requirements (Industrialautomationsystemsandintegration-Diagnostics, capabilityassessmentandmainten- nanceapplicationsintegration-Part 1. Overviewandgeneralrequirements) ISO 15745-1 Industrial automation systems and integration - Open systems application integration framework - Part 1. Generic reference description (Industrialautomationsystemsandintegration-Opensystemsapplicationintegrationframework- Part 1. Genericreferencedescription)

3 Terms and definitions

As defined in ISO 18435-1 and the following terms and definitions apply to this document.

Applications Matrix applicationdomainmatrix it depicts matrix applications.

Applications matrix elements applicationdomainmatrixelement; ADME Applications matrix an entry application for the exchange of information between organizations.

Application interaction matrix; AIM Description Matrix resource information exchange.

Application interaction matrix element; AIME Application interaction matrix an entry for indicating resource capacity to support information exchange.