

ICS 25.040.01

CCS N 10



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

GB/T 44275.13-2024

**Industrial automation systems and integration - Open technical
dictionaries and their application to master data - Part 13:
Identification of concepts and terminology**

工业自动化系统与集成 开放技术字典及其在主数据中的应用 第 13 部分：概念和
术语的标识

(English Translation)

Issued on: August 23, 2024

Implemented on: August 23, 2024

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Preface
Introduction
1 Scope
2 Normative references
3 Terms and Definitions
4 Abbreviations
5 Metadata object types requiring identifiers
6 Identifier
7 Compliance requirements
Appendix A (Normative) Document Identification
Appendix B (Normative) Computer-interpretable lists
References

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is part 13 of GB/T 44275 "Industrial Automation Systems and Integration Open Technology Dictionary and Its Application in Master Data" GB/T 44275 has published the following parts.

- Part 1: Overview and basic principles;
- Part 2: Terminology;
- Part 11: Guidelines for the development of terminology;
- Part 13: Identification of concepts and terms;
- Part 20: Maintenance procedures for the open technical dictionary.

This document is modified to adopt ISO 22745-13:2010 "Industrial Automation Systems and Integration Open Technology Dictionary and its Application in Master Data" Part 13: Identification of concepts and terms.

This document deletes Annex C of ISO 22745-13:2010.

Introduction

The descriptive technical system specified in GB/T 44275 includes.

- Open Technical Dictionary (OTD);
- Identification Guide (IG);
- Master data;
- Identification mode;
- Procedures for maintaining OTD;
- Interface for querying information from OTD, including terms related to a given concept.

GB/T 44275 "Industrial Automation Systems and Integration Open Technology Dictionary and Its Application in Master Data" is intended to consist of the following parts.

- Part 1: Overview and basic principles. The purpose is to explain the overall architecture, basic principles and Principles and basic concepts.
- Part 2: Terminology. The purpose is to provide the terms and vocabulary used in the GB/T 44275 series of standards.
- Part 10: Dictionary representation. The purpose is to provide a conceptual model of OTD for computer-to-computer exchange of OTD XML schema for the XML physical file.
- Part 11: Guidelines for the development of terminology. The purpose is to provide guidelines for the development of terminology and the definition of concepts in open technical dictionaries.
- Part 13: Identification of concepts and terms. The purpose is to identify concepts, terms, Definitions and image recognition rules, as well as the syntax of identifiers.
- Part 14: Dictionary query interface. The purpose is to provide query interface definitions and web service bindings supported by OTD.
- Part 20: Maintenance procedures for open technical dictionaries. The purpose is to standardize the maintenance procedures, publication rules, changes and Change programs, add programs, and maintain organizational structures.
- Part 30: Identification Guide Representation. The purpose is to provide the conceptual model and exchange format of IG.
- Part 35: Querying feature data. The purpose is to provide a conceptual model and exchange format for querying feature data.
- Part 40: Master data representation. The purpose is to provide a conceptual model and exchange format for master data.

--- Part 50: Registration of Open Technical Dictionaries. The purpose is to provide the structure and operate.

--- Part.200.Implementation guidance for incorporating master data into ISO 10303 product data. The purpose is to provide guidance on incorporating master data into ISO 10303 product data.

The general requirements for directory data are represented in the data set of the Application Protocol (AP).

--- Part 300: Master Data Guide. The purpose is to provide a common template for commonly used master data types.

OTD is a terminology defined and derived from a consensus body such as ISO, IEC, or other organizations that have a consensus process for developing terminology.

OTD contains terms, definitions and images used to describe concepts of individuals, organizations, locations, goods and services.

In, items are described by membership in a class and a set of attribute-value pairs.

For OTD, usually.

--- Allows attributes to be explicitly defined in ISO 10303;

--- Allows information to be clearly defined and exchanged between multinational partners without loss of meaning;

---Supports database synchronization with minimal data mapping requirements;

---Provide transparent information flow between multiple information formats, especially between government systems and commercial systems;

---Provide timely and accurate data to support financial and accounting processes;

---Support cost-effective procurement;

---Support inventory management and rationalization;

---Provide commercial and intergovernmental transactions;

---Support multiple units of measurement and international currencies;

---Support multiple categories and multiple languages.

Any consensus organization can submit terms for inclusion in the OTD. GB/T 44275 does not establish a new process for terminology standardization.

Each GB/T 44275 will provide a global unambiguous identifier for each concept and provide a reference to the original terminology (terms, definitions and images).

GB/T 44275 aims to link terms and definitions with the same semantic content and to cite

the original source of each term and definition.

Therefore, OTD aims not to duplicate existing standards but to provide a comprehensive set of terms for describing people, organizations, locations, goods and services.

Although the process of harmonizing terminology is beyond the scope of GB/T 44275, the OTD can be used as a useful research tool to assist in the coordination of Coordination process, such as the coordination process between ISO, IEC and other standards.

Identification guidelines specify which concepts can be used and constrain which concepts can be linked to each other. An example of the latter is that identification guidelines specify that in addition, where there are multiple terms, definitions, and images for a concept, the identification guidelines can specify which terms, definitions, and images are used.

Meaning and imagery are applicable.

Master data is data held by an organization that describes entities that are both independent and fundamental to the organization and that need to be referenced in order to Execute its business.

A directory represents master data in the form of attribute-value pairs.

For a more detailed overview of GB/T 44275, please refer to GB/T 44275.1.

Industrial Automation Systems and Integration Open Technical Dictionary and Its Application in Master Data Part 13: Identification of concepts and terms

1 Scope

This document specifies the format of Open Technical Dictionary (OTD) element identifiers.

This document is a specialization of ISO/T S29002-5.

Note 1: ISO/T S29002-5 specifies the identifier format of concept dictionary elements common to GB/T 44275 and ISO 13584.

Note 2 to entry. The Open Technology Dictionary is a concept dictionary.

The following contents fall within the scope of this document.

--- Data elements used to identify elements of the open technical dictionary, including concepts and their related concept information elements;

--- Syntax for Open Technology Dictionary element identifiers.

The following are outside the scope of this document.

---Automated methods for retrieving concepts, terms, definitions and images based on identifiers.

Note 3: These are specified in ISO/T S29002-20, and ISO/T S22745-14 adds restrictions.