Translated English of Chinese Standard: GB/T38670-2020

<u>www.ChineseStandard.net</u> → Buy True-PDF → Auto-delivery.

<u>Sales@ChineseStandard.net</u>

GB

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

ICS 35.240.50

L 64

GB/T 38670-2020

Intelligent Manufacturing - Radio Frequency Identification System - Tag Data Format

智能制造 射频识别系统 标签数据格式

Issued on: April 28, 2020 Implemented on: November 1, 2020

Issued by: State Administration for Market Regulation;

Standardization Administration of the People's Republic of

China.

GB/T 38670-2020

Table of Contents

Foreword	3
1 Scope	4
2 Normative References	4
3 Terms and Definitions	4
4 Abbreviations	4
5 Tag Data Format	5
Bibliography	14

Intelligent Manufacturing - Radio Frequency Identification System - Tag Data Format

1 Scope

This Standard specifies the tag data format of radio frequency identification system used for intelligent manufacturing.

This Standard is applicable to the tag design, manufacturing and application of the intelligent manufacturing-oriented radio frequency identification system.

2 Normative References

The following documents are indispensable to the application of this document. In terms of references with a specified date, only versions with a specified date are applicable to this document. In terms of references without a specified date, the latest version (including all the modifications) is applicable to this document.

GB/T 29261.3-2012 Information Technology - Automatic Identification and Data Capture (AIDC) Techniques - Vocabulary - Part 3: Radio-frequency Identification

GB/T 38668-2020 Intelligent Manufacturing - Radio Frequency Identification System - General Technical Requirements

ISO/IEC 15963 Information Technology - Radio Frequency Identification for Item Management - Unique Identification for RF Tags

3 Terms and Definitions

The terms and definitions defined in GB/T 29261.3-2012 and GB/T 38668-2020 are applicable to this document.

4 Abbreviations

The following abbreviations are applicable to this document.

CRC: cyclic redundancy check

HF: high frequency

UHF: ultra high frequency

No.	Chinese Name	English Name	Description	Length Digit	Optional / Required	Range
1	在制品唯一 标识符	IN-PROCESS PRODUCTS UNIQUE IDENTIFIER	Unique identification of in-process products	40	Required	Comply with relevant standards. If there is no standard, it shall be customized by enterprise
2	所属产品种 类	IN-PROCESS PRODUCTS TYPE	Type of in- process products	10	Optional	Comply with relevant standards. If there is no standard, it shall be customized by enterprise
3	所属订单号	ORDER NUMBER	Corresponding production order number	48	Optional	Relevant production order number
4	生产日期	DATE OF MANUFACTURE	Current date of manufacture	21	Optional	Date
5	加工状态	PROCESSING STATE	Whether processing is completed	3	Optional	000: to be processed; 001: being processed; 010: re-processed; 011: processing completed; 100: scrapped
6	加工人员	PROCESSING EMPLOYEE	Information of personnel completing the processing	128	Optional	Unique identifier of personnel
7	合格信息	QUALIFIED INFORMATION	Whether it is qualified	1	Optional	0: qualified; 1: disqualified

5.4 Information of Raw Materials

Raw materials include raw materials or accessories that are needed in production.

The sub-index of raw materials shall be 5 digits. In accordance with Table 7, write in the identification information. If the information contains corresponding data items, then, the identification is set to 1, otherwise, it is set to 0.

Table 7 -- Raw Materials Sub-index Format

Ident	ification of Type	Identification of Raw Material Vendor	Identification of In Date	Identification of Batch Number	Identification of Inspection Status
1	1 digit	1 digit	1 digit	1 digit	1 digit

GB/T 38670-2020

Products	Number		Date	Number	Information
1 digit	1 digit	1 digit	1 digit	1 digit	1 digit

Information of finished products may include: product unique identifier, type of products, order number, vendor, production date, batch number and qualified information. See the data format in Table 10.

Table 10 -- Finished Products Information Data Format

Table 10 Fillisileu Flouucis illioilliation Data Folliat						
Chinese Name	English Name	Description	Length	Optional /	Range	
Name			Digit	rtequired	Comply with relevant	
	PRODUCT	Unique identifier			standards. If there is	
成品唯一		•	40	Required	no standard, it shall	
标识符			40	rtoquirou	be customized by	
	IDENTII IEIX	producto			enterprise	
					Comply with relevant	
					standards. If there is	
所属产品	TYPE OF	Classification of	10	Ontional	no standard, it shall	
种类	PRODUCTS	finished products	10	Ориона	be customized by	
					enterprise	
所属订单	ORDER	Order number of			Corresponding order	
			48	Optional	number	
•		опридава			Comply with relevant	
生产厂家		Vendor of finished products	21	Optional	standards. If there is	
	生产厂家 VENDOR				no standard, it shall	
					be customized by	
					enterprise	
小 →口#⊓	PRODUCTION	Production date of	0.4	Out:	Datat	
生产日期	DATE	finished products	21	Optional	Date type	
	DATOU	Production batch			Duaduction bot-l-	
批次号	批次号	of finished	32	Optional	Production batch	
	NUMBEK	products			number	
合格信息	OLIALIEIED	Whether finished			0: qualified; 1:	
	合格信息 INFORMATION	products are	1	Optional	disqualified	
		INFORMATION	qualified			uisquaiiileu
	Chinese NameChinese Name成标所上生上上<	Chinese NameEnglish Name成品唯一 标识符PRODUCT UNIQUE IDENTIFIER所属产品 种类TYPE OF PRODUCTS所属订单 号ORDER NUMBER生产厂家VENDOR生产日期 力ATEPRODUCTION DATE批次号BATCH NUMBER会格信息QUALIFIED	Chinese NameEnglish NameDescription成品唯一标识符PRODUCT UNIQUE IDENTIFIERUnique identifier of finished products所属产品种类TYPE OF PRODUCTSClassification of finished products所属订单号ORDER Order number of finished products生产厂家VENDORVendor of finished products生产日期DATEPRODUCTION Production date of finished products批次号BATCH NUMBERProduction batch of finished products合格信息QUALIFIED INFORMATIONWhether finished products are	Chinese NameEnglish NameDescriptionLength Digit成品唯一标识符PRODUCT UNIQUE IDENTIFIERUnique identifier of finished products40所属产品种类TYPE OF PRODUCTSClassification of finished products10所属订单号ORDER NUMBEROrder number of finished products48生产厂家VENDORVendor of finished products21生产日期日本产品PRODUCTION DATEProduction date of finished products21批次号日本BATCH NUMBERProduction batch of finished products32合格信息日本QUALIFIED INFORMATIONWhether finished products are1	Chinese NameEnglish NameDescriptionLength DigitOptional / Required成品唯一标识符PRODUCT UNIQUE IDENTIFIERUnique identifier of finished products40Required所属产品 种类TYPE OF PRODUCTSClassification of finished products10Optional所属订单 号ORDER NUMBEROrder number of finished products48Optional生产厂家VENDORVendor of finished products21Optional生产日期PRODUCTION DATEProduction date of finished products21Optional批次号BATCH NUMBERProduction batch of finished products32Optional合格信息QUALIFIED INFORMATIONWhether finished products are1Optional	

5.6 Information of Storage Equipment

Storage equipment includes containers for holding and transferring production factors (such as: materials and in-process products), such as: hanging baskets, turnover boxes, trays and pallets, etc.

The sub-index of storage equipment shall be 4 digits. In accordance with Table 11, write in the identification information. If the information contains corresponding data items, then, the identification is set to 1, otherwise, it is set to 0.

Table 13 -- Tools Sub-index Format

Identification of Type Identification of		Identification of	Identification of Usage
of Tools	Manufacturer	Expiration Date	State
1 digit	1 digit	1 digit	1 digit

Information of tools may include: tool unique identifier, type of tools, manufacturer, expiration date and usage state. See the data format in Table 14.

Table 14 -- Storage Equipment Information Data Format

No.	Chinese	English Name	Description	Length	Optional /	Range	
140.	Name	Lingiion radino	Besonption	Digit	Required	runge	
1	工具唯一 标识符	TOOL UNIQUE IDENTIFIER	Unique identifier of tools	20	Required	Internally defined by each factory	
						Comply with relevant	
			Category of			standards. If there is no	
2	工具种类	TYPE OF TOOLS	tools	10	Optional	standard, it shall be	
						customized by	
						enterprise	
			Information of			Identifier of tool	
3	生产厂家	MANUFACTURER	tool	21	Optional	manufacturer	
				manufacturer			manaratarer
4	过期日期	EXPIRATION	Expiration	21	Optional	Expiration date	
	行列口列	DATE	date of tools		Optional	Expiration date	
						00: being used; 01: to	
5	使用状态	使用状态 USAGE STATE	Current state	2	Optional	be maintained;	
			of tools			10: already maintained;	

5.8 Information of Equipment

Equipment includes machines and devices directly involved in the production process, such as: processing equipment and inspection equipment, etc.

The sub-index of equipment shall be 6 digits. In accordance with Table 15, write in the identification information. If the information contains corresponding data items, then, the identification is set to 1, otherwise, it is set to 0.

Table 15 -- Equipment Sub-index Format

Identification of Equipment Number	Identification of Type	Identification of Manufacturer	Identification of Date of Annual Inspection	Identification of Expiration Date	Identification of Usage State
1 digit	1 digit	1 digit	1 digit	1 digit	1 digit

This is an excerpt of the PDF (Some pages are marked off intentionally)

Full-copy PDF can be purchased from 1 of 2 websites:

1. https://www.ChineseStandard.us

- SEARCH the standard ID, such as GB 4943.1-2022.
- Select your country (currency), for example: USA (USD); Germany (Euro).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Tax invoice can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with download links).

2. https://www.ChineseStandard.net

- SEARCH the standard ID, such as GB 4943.1-2022.
- Add to cart. Only accept USD (other currencies https://www.ChineseStandard.us).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with PDFs attached, invoice and download links).

Translated by: Field Test Asia Pte. Ltd. (Incorporated & taxed in Singapore. Tax ID: 201302277C)

About Us (Goodwill, Policies, Fair Trading...): https://www.chinesestandard.net/AboutUs.aspx

Contact: Wayne Zheng, Sales@ChineseStandard.net

Linkin: https://www.linkedin.com/in/waynezhengwenrui/

---- The End -----