

ICS 03.100.40; 03.120.01
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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 9414.9-2017

Maintainability -- Part 9: Maintenance and maintenance support

Issued on: December 29, 2017

Implemented on: July 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

Table of Contents

Foreword

Introduction

1 Scope

2 Normative references

Foreword

GB/T 9414 "maintainability" is divided into the following sections.

- Part 1. Application Guide;
- Part 2. Design and development phase of maintenance requirements and research;
- Part 3. Verification and data collection, analysis and presentation;
- Part 5. Diagnostic tests;
- Part 9. Repair and maintenance support.

This section GB/T 9414 Part 9.

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

This section uses the translation method identical with IEC 60300-3-14.2004 "Credibility Management Part 3-14 Application Guidelines Maintenance and Maintenance and security. "

The documents of our country that are consistent with the corresponding international documents that are normative references in this section are as follows.

- GB/T 7829-2012 Fault Tree Analysis (FTA) procedures (IEC 61025.2006, IDT)

This section made the following editorial changes.

- Modify the standard name.

This part is proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This part of the National Electrical and Electronic Products Reliability and Maintenance of Standardization Technical Committee (SAC/TC24) centralized.

This section is drafted unit. Fifth Institute of Industry and Information Technology, Wuhu ? Bao Information Industry Technology Research Institute Co., Ltd., Shanghai

Institute of Industrial Automation Instrumentation, China Electronics Technology Group Corporation twenty-eighth Institute, China Electronics Technology Group Corporation twenty-ninth study

Institute of Electronic Engineering, China Academy of Engineering Physics, University of Electronic Science and Technology.

Introduction

Providing repair and maintenance support is a key element of the product (unit, equipment and system) life cycle to ensure its credibility. To be real

Now suitable product features, inherent ability and credibility, the need to provide the necessary maintenance and repair support, and reasonable design, qualified production

And the correct operation to use.

The amount and type of repair and maintenance support depends on the needs of the customer, the characteristics of the product, the conditions of use, the availability of the provisions and other factors

Prime As these factors change, especially in the service and maintenance phases, maintenance and repair support needs to be adjusted.

Many different functions, such as repair management and asset management, involve maintenance and repair support. This part of GB/T 9414 and these duties

The use of energy is not contradictory, and will be elaborated in the corresponding chapter.

Under-repair, over-repair and fault repair can cause product failure and can significantly reduce product availability, resulting in loss of performance and

Possible secondary damage can also greatly increase the cost. A reduction in usability often causes obstacles to use and results in reduced benefits and losses

May be far more than repair costs, or even more than the initial failure caused by the loss. Security is also affected, and in some industries this is the most

Important considerations.

This section provides a more general approach to maintenance and repair support than Integrated Support (ILS). ILS makes all safeguards

A way to develop essential content for your product. This section gives examples to illustrate the complex system during the design, use and maintenance phase of the specific

In the case of repair and maintenance support to be adjusted.

Maintainability

Part 9. Repair and maintenance support

1 Scope

GB/T 9414 This section describes the maintenance and repair support framework and a variety of minimum common items should be carried out. This section

The purpose is to provide a general overview of the management, processes and technologies associated with maintenance and service support, with sufficient credibility

Customer demand is very necessary.

In some cases, regulatory requirements and other mandatory requirements need to be considered. Therefore, the requirements and responsibilities for repairs and maintenance support are needed

Citing this part of the contract clearly stated.

This section can be used for suppliers, maintenance organizations and users, and can be applied to all products.

This section applies to products include various types of units, equipment and systems (hardware and related software). Most such products require

Determine the level of maintenance to ensure that they meet the requirements of the function, credibility, inherent ability, economy, safety and regulatory requirements.

Note 1. Maintenance and repair support is a key element of reliability as detailed in IEC 60300-1 and IEC 60300-2.

Note 2. For consistency, the term "product" as used in this section is defined in 3.1.5 unless the context otherwise requires.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

IEC 60300-1 Credibility Management Part 1. Dependability management-Part 1. Dependabilitymanagementsystems)

IEC 60300-2, Credibility management - Part 2. Dependability management - Part 2.

Guidelines fordependabilitymanagement

IEC 60300-3-2 Credibility Management Part 3. Application Guidelines Section 2.

Dependability Data Collection (Dependability

management-Part 3.Applicationguide-Section2.Colectionofdependabilitydatafromthefield)

IEC 60300-3-3 Credibility Management Part 3. Application Guidelines Section 3.

Dependabilityman-

agement-Part 3.Applicationguide-Section3.Lifecyclecosting)

IEC 60300-3-10 Maintainability Part 1. Application Guidelines

(Dependabilitymanagement-Part 3-10.Applica-

tionguide-Maintainability)

IEC 60300-3-11 Credibility Management Part 3. Application Guidelines Section 11.

Reliability-Centric Maintenance (Depend-

abilitymanagement-Part 3-11.Applicationguide-Reliabilitycentredmaintenance)

IEC 60300-3-12 Credibility Management Part 3. Application Guidelines Section 12.

Dependabilitymanage-

ment-Part 3-12.Applicationguide-Integratedlogisticsupport)

IEC 60706-3 Maintenance Part 3. Verification and data collection, analysis and presentation

(Guideonmaintainabilityofe-

quipment-Part 3.SectionsSectionsSixandSeven-Verificationandcolection,

analysisandpresen-

tationofdata)

IEC 60706-5 Maintenance Part 5. Diagnostic tests (Guideonmaintainabilityofequipment-Part

5.Di-

agnostictesting)

IEC 60812 system reliability analysis of technical failure modes and impact analysis

[Analysistechniquesforsystemreliabil-

ity-Procedureforfailuremodeandeffectsanalysis (FMEA)]