

Translated English of Chinese Standard: GB/T39117-2020

www.ChineseStandard.net → Buy True-PDF → Auto-delivery.

Sales@ChineseStandard.net

GB

NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA

ICS 35.240.50

L 70

GB/T 39117-2020

**Maturity assessment method of intelligent manufacturing
capability**

智能制造能力成熟度评估方法

Issued on: October 11, 2020

Implemented on: May 1, 2021

**Issued by: State Administration for Market Regulation;
Standardization Administration of PRC.**

Table of Contents

Foreword	3
1 Scope	4
2 Normative references	4
3 Terms and Definitions	4
4 Assessment content	5
5 Assessment process	7
6 Maturity level determination	10
References	16

Maturity assessment method of intelligent manufacturing capability

1 Scope

This standard specifies the maturity assessment content, assessment process, and maturity level determination method of intelligent manufacturing capability.

This standard applies to manufacturing enterprises, intelligent manufacturing system solution suppliers and third parties to carry out assessment activities of the maturity of intelligent manufacturing capability.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) is applicable to this standard.

GB/T 39116-2020 Maturity model of intelligent manufacturing capability

3 Terms and Definitions

The terms and definitions defined in GB/T 39116-2020 and the followings apply to this document.

3.1 assessment domain

A collection of core terms for conducting maturity assessments of intelligent manufacturing capability.

3.2 assessment criteria

A set of policies, procedures, or requirements for comparison with assessment evidence.

Note: Rewrite “3.2 Terms and Definitions” of GB/T 19011-2013.

3.3 assessment findings

The result of evaluating the collected assessment evidence against the assessment criteria.

- a) They shall comply with the corresponding assessment requirements;
- b) They shall master the application of assessment principles, assessment procedures and methods;
- c) The assessment shall be carried out at the planned time;
- d) Priority shall be given to important issues;
- e) Evidence of assessment shall be obtained through effective interviews, observations, reviews of documents and records, data collection, etc.;
- f) The adequacy and appropriateness of the assessment evidence shall be confirmed to support the assessment findings and assessment conclusions;
- g) Assessment findings shall be documented and appropriate assessment reports shall be prepared;
- h) The confidentiality and security of information, data, documents, and records shall be maintained;
- i) The various risks associated with the assessment shall be identified.

While performing the duties of the assessment team members, the assessment team leader shall also perform the following responsibilities:

- a) Take the responsibility for the preparation of the assessment plan;
- b) Take the responsibility for the implementation of the entire assessment activity;
- c) Train the assessment team members on assessment methods before the implementation of the formal assessment;
- d) Evaluate the assessment team members objectively;
- e) Make a final decision on the assessment results;
- f) Report assessment findings to the assessee, including strengths, weaknesses, and items that need improvement;
- g) Release on-site assessment conclusions at the end of the assessment activities.

5.2.3 Prepare an assessment plan

The maturity assessment of intelligent manufacturing capability is divided into two stages: on-site pre-assessment and formal assessment. Before the assessment, a pre-assessment plan and a formal assessment plan shall be prepared and confirmed with the assessee. The assessment plan shall at least include assessment purpose, assessment

scope, assessment tasks, assessment time, assessors, assessment schedule, etc.

5.2.4 On-site pre-assessment

The assessment team shall focus on the needs of the assessee:

- a) Understand the basic situation of the assessed party's intelligent manufacturing;
- b) Understand the direct or indirect evidence available from the assessed party;
- c) Determine the assessed party's assessment domains and weights of each domain;
- d) Determine the feasibility of formal assessment implementation.

5.3 Formal assessment

5.3.1 Opening meeting

Purpose of the opening meeting:

- a) Confirm that the relevant parties have agreed on the arrangements for the assessment plan;
- b) Introduce the assessors;
- c) Ensure that planned assessment activities can be implemented.

The content of the meeting shall at least include an explanation of the purpose of the assessment, an introduction of the assessment method, confirmation of the assessment schedule, and clarification of other matters that need to be communicated in advance.

5.3.2 Collect assessment evidence

In the implementation process of the assessment, evidence related to the assessment objectives, assessment scope, and assessment criteria shall be collected and verified through appropriate methods, including information on functions, activities, and processes related to intelligent manufacturing. The evidence collected shall be recorded, and the collection methods may include interviews, observations, on-site inspections, reviews of documents and records, demonstration of information systems, and data collection.

5.3.3 Form assessment findings

The evidence collected shall be compared with the degree of satisfaction specified in the assessment criteria to form the assessment findings. Specific assessment findings shall include evidence-supported compliance and good practices, directions for improvement, and weaknesses. The assessment team shall reach a consensus on the

assessment findings, and conduct intra-group reviews if necessary.

5.3.4 Determine the maturity level

According to the scoring result of each item, calculate the score of the enterprise by combining them with the weight of each capability domain, and determine the maturity level finally.

Note: See Chapter 6 for the principle of maturity level determination.

5.3.5 Form an assessment report

The assessment team shall form an assessment report, and the assessment report shall at least include a summary of the assessment activities, assessment conclusions, assessed strengths, assessed weaknesses, and improvement directions.

5.4 Release on-site assessment results

5.4.1 Communicate assessment results

After completing the on-site assessment activities, the assessment team shall notify the assessment results to the representative of the assessed party and give the assessed party the opportunity to demonstrate again; the final result is determined by the assessment team.

5.4.2 Closing meeting

Purpose of the closing meeting:

- a) Summarize the assessment process;
- b) Release assessment findings and assessment conclusions.

The content of the closing meeting shall at least include an assessment summary, assessment results, assessed strengths, assessed weaknesses, improvement directions, and introduction of follow-up related activities.

5.5 Improve and promote

On basis of on-site assessment results, the assessed party shall propose the improvement direction of intelligent manufacturing, formulate corresponding measures, and carry out the improvement activities for intelligent manufacturing capacity.

6 Maturity level determination

6.1 Scoring method

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 -----