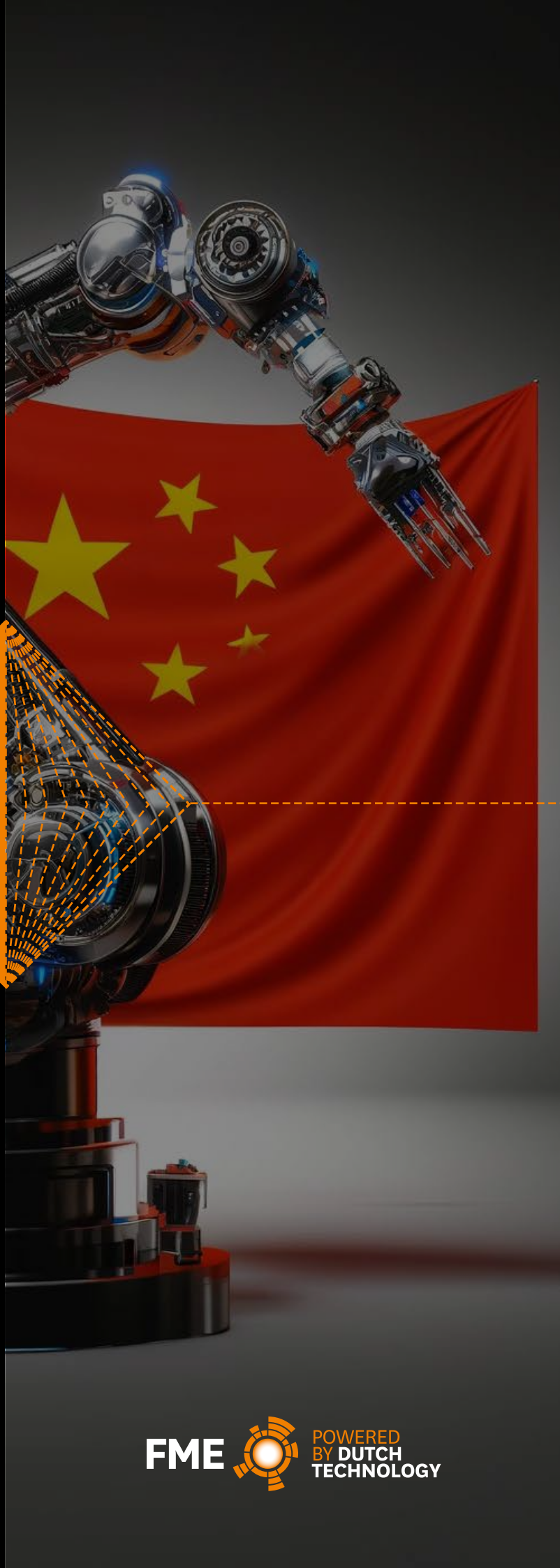
GUIDLINE FOR MANUFACTURERS AND END USERS

# Machinery export to China



FME POWERED BY DUTCH TECHNOLOGY

# Introduction

This guide is intended for NL manufacturers of machinery that are subject to product regulatory requirements and want to market machinery in China.

This document from the core group of machine manufacturers and members of FME aims to provide a guide for the aspects of product regulation, standardization and certification and is based on the state of affairs as of 2023. This document is informative and aims not to be complete but has the objective to increase knowledge about exports to China. No rights can be derived from the document.
FME Zoetermeer

***FME*** *is the business association for the technology sector and represents the interests of its members in the technology sector both nationally and internationally. With 220,000 employees, the 2200 member companies are active in production, trade, automation and maintenance in the metal, electronics, mechanical and electrical engineering and plastics sectors. The combined turnover of the FME members amounts to 91 Billion Euros, their added value is more than 21 Billion Euros and they export for 49 Billion Euros. FME members realize a sixth of what the Netherlands earns in total from exports. FME has 30 trade associations. More information: fme.nl*

***FME-RNCM*** *is the member group of machine manufacturers of FME and represents the interests of the mechanical engineering sector in the field of regulations, standardization and certification.*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# 1. Introduction and scope

Increasingly, products are not only finding their way from China to Europe, but due to the growth of the Chinese economy, exporting machinery and other goods to China is an increasing activity. The Netherlands currently exports approximately 5.5 billion Euros of machinery and transport equipment to China.

High-quality Dutch machine builders also do business with China. Not only manufacturers of high-quality chip machines but also the Dutch food industry supplies machines and products to China, as well as logistics service providers.

After 7 years of negotiations, China and the EU reached an investment agreement at the end of 2020. With this 'Comprehensive Agreement on Investment' (CAI), the EU wants to restore the balance in the investment relationship with China. Creating a level playing field is one of the topics that both parties want to agree on.

Everyone does business with China in their own way, with or without the help of the national governments and contacts with third parties. Now that there are also opportunities for exporting machines to China for both large and smaller companies, FME wants to make a further inventory of the knowledge in the field of regulations and the standards to be used for exporting machines to China and summarize it in a short guideline for those who export to China and to contribute as an entrepreneur's organization to increase the knowledge and insights for exporting machines to China.

The scope of this document does not cover customs and logistics formalities, but is limited to product regulations and specialized for machinery. This documentation covers in brief the following topics.

- **What is the machinery regulation in China?**
  *What is the legal framework for machines, which regulations must be complied with for machines.*

- **Technical approval documents and product marking requirements?**
  *What technical documentation is required for machines and n what technical documentation needs to be attached, what product marking is needed, labelling. What are the packaging requirements.*

- **What Standards to use?**
  *What are the standards that should be used. The use of European standards and the comparison with European standards and Chinese standards. What overview is there of standards? How is the use of international standards (ISO/IEC of American standards and comply with European standards?*
  *Which European standards can be applied for specific machines and applications?*

- **Which certification is required for which machinery?**
  *For example, what about machines in an explosive atmosphere?*

- **Admission of machines to the Chinese market ?**
  *How is the structure and market surveillance regulated and how is market supervision in China work?*
  *For the manufacturer who seeks information about exports to various different countries and also to China, the central Netherlands government and the European government portals may be helpful:*

## (EUROPEAN) COOPERATION/EXCHANGE OF KNOWLEDGE, MACHINE EXPORT TO CHINA

- RvO website:
- https://www.rvo.nl/onderwerpen/internationaal-ondernemen/landenoverzicht/china/producteisen
- European Commission website; https://madb.europa.eu/madb/viewPageIFPubli.htm?doc=overview&hscode=&countryid=RU

# 2. What is the Machinery Regulation in China?

## CHINA AND MACHINERY PRODUCT REGULATIONS

China has regulations for machinery and specific regulations when it comes to food processing machinery and machinery for the animal feed industry. Mandatory certification is in force for a number of machines (China Compulsory Certification). For an overview of products for which mandatory certification is required, see Annex I. In order to meet the requirements,

The applicable general and specific product-oriented standards must be met. China has a number of its own standards and a large number of standards that are identical to international standards.

An overview of the most important standards and the corresponding standards for machinery can be found in Annex II..

# 3. The standardization system

GB standards are the basis for the product testing that products must undergo during China Compulsory Certificate (CCC) certification. If there is no corresponding GB standard, CCC is not required.

## WHAT ARE GB STANDARDS (GUOBIAO STANDARDS)?

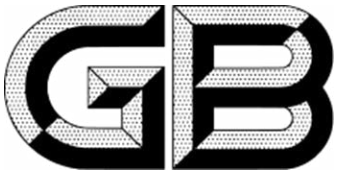
Guobiao standards or GB standards are the Chinese national standards issued by the Standardization Administration of China (SAC), the Chinese National Committee of the ISO , and IEC. GB stands for Guobiao (*simplified Chinese*: 国标; *traditional Chinese*: 國標; *pinyin*: Guóbiāo), and is Chinese for national standard.

GB standards are the basis for the product testing that products must undergo during China Compulsory Certificate (CCC) certification. China GB standards are classified as mandatory or recommended.

Mandatory standards have the force of law, just like other technical regulations in China. They are enforced by laws and administrative regulations and relate to the protection of human health, personal property, and safety. Any standards that fall outside of these characteristics are considered recommended standards.

GB recommended standards are seen as the equivalent of harmonized standards for the European Machinery Directive regulation; if the product meets the standard, this is seen as proof that the product complies with the relevant regulations in China.

**Mandatory standards have the prefix "GB". Recommended standards have the prefix** "GB/T" (**T from** the *Chinese language* 推荐; *tuījiàn*; 'recommended'). A default number follows "GB" or "GB/T".




## CHINA STANDARDS CLASSIFICATION SYSTEM

In addition, in addition to the GB national standards, the Chinese system has three other classes of standards and a total of 4 classes of standards:

These classes are hierarchically ordered, lower class standards must comply with the upper class standards, GB standards are the highest class standards, so all other class standards must meet GB standards.

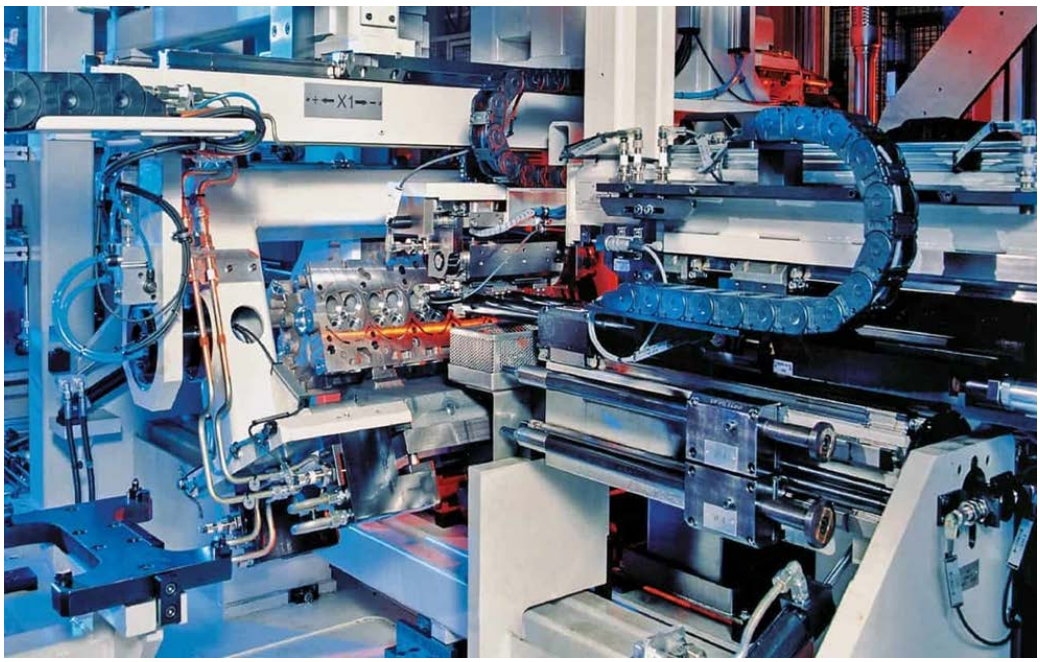
## WHY DO I NEED TO COMPLY WITH GB STANDARDS?

In China, all products or services must be met with GB standards, regardless of domestic or imported products, All products sold in China must be tested to ensure that they meet GB standards; If you want to export products or services to the Chinese market, you need to understand the complexity and necessary requirements, and be aware of the complexity and necessary requirements among the wide range of GB standards, The result of not meeting the GB standards may include the rejection of products during importation, as well as products being seized in stores, resulting in a significant impact on retailers and manufacturers in terms of reputation and cost.

## GB STANDARDS SYSTEM -KEY ORGANIZATIONS.

The GB standards system in China is managed at the top by the General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) and is mainly led by the Standardization Administration of the People's Republic of China (SAC). Other government and private organizations provide a significant amount of additional input and participate in the standards process, the main organizations include:

- General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ)
- Standardisation Administration of the People's Republic of China (SAC)
- China Association of Standardization (CAS)
- China National Institute for Standardization (CNIS)
- Standards Press of China (SPC)



# 4. Certification system in China

## INTRODUCTION

China has both compulsory and voluntary certification The mandatory certification is explained below, followed by the system of voluntary certification.

**China Compulsory Certification (CCC)** is similar to other certifications for product quality standardization, such as the European CE system, but there are important differences. The CCC certificate was introduced in 2002 and applies to both imported goods and products manufactured in China. Products that require certification may only be imported, sold, and/or used in business operations in China, after obtaining a China Compulsory Certification (CCC).

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The certification process includes the GB Guobiao-normen. In addition to the GB standard, the implementation rules are the second important component that forms the basis of CCC certification. The implementation rules govern the process of CCC certification and list the mandatory products for the certification. Due to many regulatory changes, it is important to consult the most recent version of the process rules before starting the certification process.[3]

## CCC LOGO

The CCC mark is administered by the CNCA (Certification and Accreditation Administration of the People's Republic of China).[5] The CQC (China Quality Certification Center) has been designated by CNCA to process CCC trademark applications and defines the products that require CCC. The products are summarized in general product categories. In addition, the following specialized certification authorities are responsible for specific product groups:

**CCAP** (China Certification Centre for Automotive Products) Automotive Products[6]

**CSP** (China Certification Center for Security and Protection) certifies security products, forensic technology, and road safety products

**CSCG** (China Safety Global Certification Centre) for Safety Glass

**CEMC** (China Certification Centre for Electromagnetic Compatibility) alle elektronische producten[7]

Although the sole purpose of the CCC certification is to ensure that products comply with Chinese standards, many companies are concerned that their trademarks or patents will be infringed during the CCC certification. Especially with regard to the following steps, companies see as problematic:

- Comprehensive product information for the application is required
- Type test of the products in an accredited testing laboratory in China
- Factory audit by Chinese inspectors examines the factory

## LACK OF CCC CERTIFICATE

Failure to comply with CCC regulations will result in imported goods being detained at the border or returned to the sender. Similarly, improper use of CCC licenses or printing a CCC mark on products without certification will also result in fines and penalties. Even if a product does not require China Compulsory Certification, problems can still arise if a customs officer demands a CCC certificate. For this reason, customs clearance certificates are recommended to significantly reduce the risk of import-related problems.

The CCC replaced the certifications of the China Import and Export Commodity Inspection Bureau (CCIB) and the China Commission for Conformity Certification of Electrical Equipment (CCEE), greatly simplifying foreign trade with China and creating a “level playing field” for all economic operators. However, special certificates for Medical Products (SFDA) and Telecommunications Equipment remain required.

## ELEMENTS OF THE PROCEDURE

The two main elements of China Compulsory Certification (CCC) certification are **product testing** (products that need to be certified and sent to testing laboratories in China) and **factory audits** (inspection of the product manufacturers by Chinese auditors). Once a certification is granted, it is valid for several years but must be maintained through annual follow-up audits.

The CCC certification, the China CCC self-declaration, and a voluntary certification process also include comprehensive application documents, factory preparation, and various payments and fees. With the help of an expert company, the whole process can be completed within 4-5 months; Without support, the process usually takes 6-18 months.

With the introduction of the CCC in 2002, the certification bodies AQSIQ and CNCA published the **“first catalogue of CCC-required products”.** This catalogue is constantly changing and has been further developed since the first edition. Thus, a CCC certification must be carried out for the product groups listed and according to announcements from the AQSIQ and CNCA.

Manufacturers of products with a CCC obligation are required to apply for the CCC certification from the responsible certification body.


The certification process and the steps are shown above.

It includes the following steps:

1. **Application** – Preparation and submission of an application and supporting documents.
2. **Factory Code** - The factory code is issued and the required product tests are requested.
3. **Testing** – A CNAS-accredited testing laboratory in China will test your product samples.
4. **Factory Audit** – The certification body inspects the production site. The audits usually last two days.
5. **Preparation of the CCC marking** - After the factory audit, the marking can already be prepared according to Chinese regulations.
6. **Issuance of the CCC Certificate** - The results of the product testing and audit are verified. If the results of the tests and factory inspection are positive, the certificate will be issued. If there are deviations (non-conformities) in the tests or in the audit, the CCC certificate will not be issued. Detailed justification will be provided and corrective action may be taken. are usually initiated. Recertification is usually possible, as well as further testing and Inspections.
7. **CCC Marking** – After obtaining the CCC certificate, the products can be marked with the CCC logo.
8. **Annual Follow-up Certification** - Follow-up certifications are performed at 12-month intervals after the original CCC certificate is issued. The procedures are very similar to the initial certification, but the follow-up audit usually takes only one day. The results of the follow-up audits will be evaluated. If all requirements are met, the CCC certificate is reconfirmed.

## LEAD TIME OF THE CCC CERTIFICATION

The initial CCC certification time depends on several factors, such as:

- Does the manufacturer have knowledge of the Chinese certification system and already experience?
- Is there support from an experienced service provider who has long-term, good relations with Chinese authorities and testing laboratories?
- Has the production site already been inspected by the Chinese authorities for a previous certification?

## THE PRODUCT TESTS

The required product tests are carried out in an accredited testing laboratory in China and Usually takes about 2-8 weeks, depending on the product and cue. When certifying a product, tests must be carried out for each certification unit. The tests are carried out according to the relevant Chinese GB (GB is an abbreviation for Guobiao, which translates it into English according to the standards of the “National Standard”).

Chinese standards are usually in line with internationally accepted standards.

The testing laboratory in China is assigned to the applicant by the certification authority, but it is also often possible to designate a preferred laboratory in China.

**All tests, reports are issued in Chinese language only.**

## THE FACTORY INSPECTION

The duration of the factory audit is usually 2-5 days, with one or two inspectors. Usually he first audit lasts two days and is carried out by two inspectors.The purpose of the audit is to verify that the factory complies with China's wquality management standards, and if all relevant CCC regulations are known and Fulfilled. The audit is carried out according to a checklist. The requirements are similar to other international quality management guidelines (such as ISO). The installation must meet the following requirements for the audit:

- The manufacturer's quality management system must meet the requirements of the certification authority and are regularly updated.
- The products that must be CCC certified must be identical to the test products.
- The application of the CCC marking should be documented and the documentation must ensure that the CCC mark is not affixed to products that have not undergone CCC certification or have been modified after certification.
- Corresponding procedural instructions should be available.
- The site where the products are produced must be equipped with the necessary testing facilities or otherwise ensure that the products are regularly tested
- Compliance with standards.
- The manufacturer's employees must have the appropriate qualifications to ensure that ongoing quality standards are maintained.
- The requirements of the respective current GB standard must be known to the responsible persons in the company and must be consistently adhered to.

The main tasks of the Chinese authorities are to verify the following four points:

- **Does the manufacturer's QM system meet Chinese requirements?**
- **Do the products tested in China match the real products?**
- **How does the manufacturer ensure the CoP (Conformity of Production) of the products?**
- **How are the results of tests and quality checks documented?**

The manufacturer is obliged to provide the inspectors with access to the production areas and quality management with regard to the parts to be certified. Access to areas that have nothing to do with the aforementioned parts that need to be certified can be avoided.

## COST OF CERTIFICATION

The manufacturer shall bear all costs, including, but not limited to:

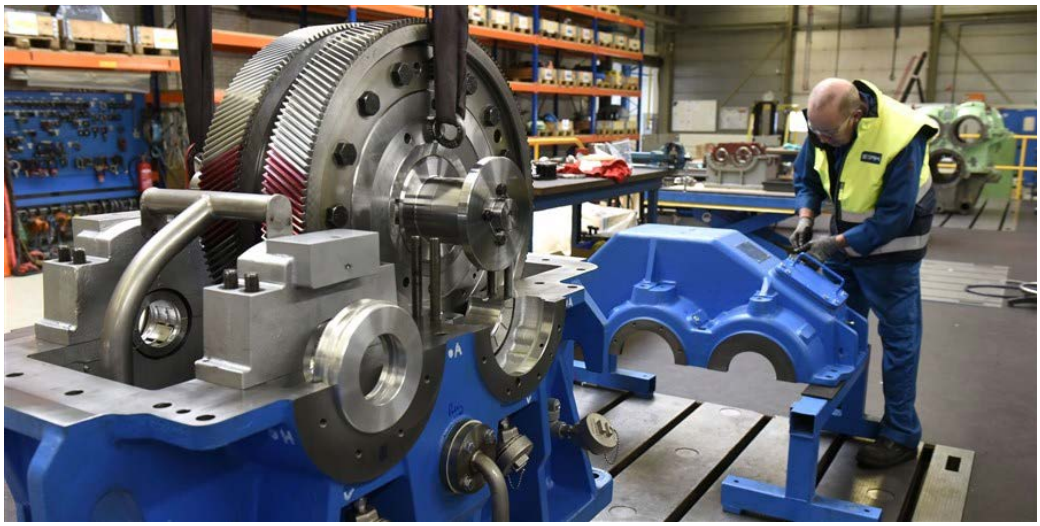
- Application fee
- Cost of test samples, sending test samples to China, customs clearance fees
- Travel expenses for inspectors, as well as subsistence and other expenses
- Fees for carrying out the inspection
- Expenses, travel expenses and accommodation of an interpreter (if necessary)
- Internal costs for preparation, implementation and follow-up.

Since inspections are required for all factories where the final manufacturing step takes place, the Inspection of multiple installations in one “inspection trip”, if applicable.

This can reduce travel costs and shorten the overall process. The trip must be carefully planned so that the application for the travel visas of the inspectors with the certification body.

Since the introduction of the CCC in 2002, companies have gained a lot of experience and the quality of the certification process is comparable to other international certifications. Internal quality assurance is examined for weaknesses during the audit.

Proper preparation for the audit, including updating audit-relevant documents, is recommended. In particular, the inspectors expect the CCC standards to be explicitly recognized and mentioned in internal quality management manuals, for example by mentioning the Chinese standards in the internal description of the CCC.



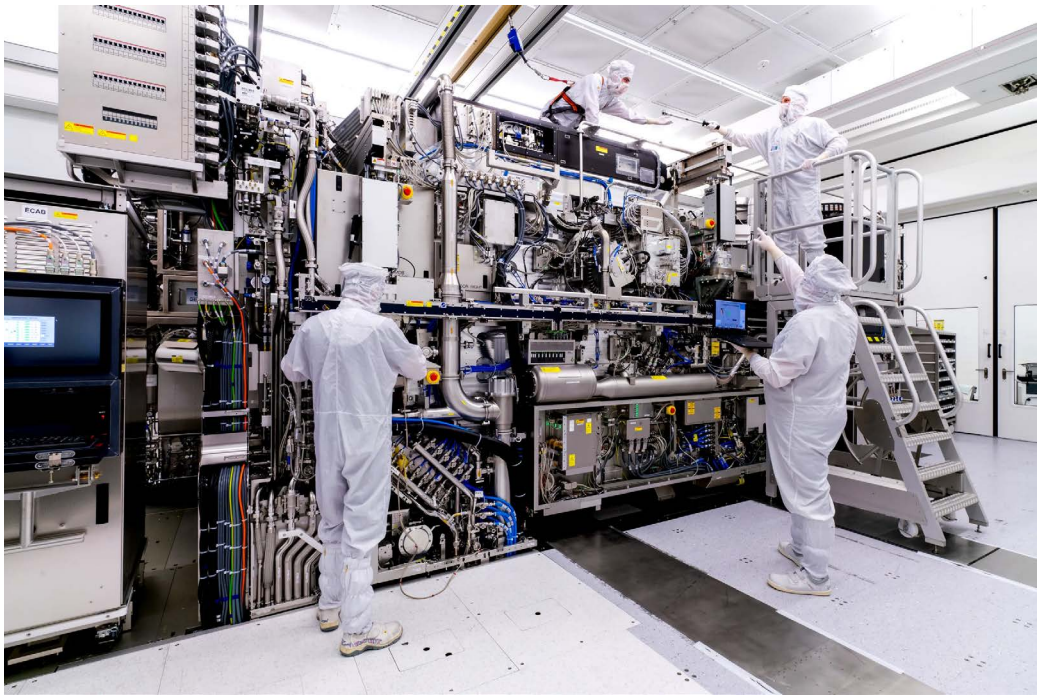
Descriptions of the main production and testing processes as well as existing permits and official certificates must be prepared in advance. For companies with ISO (or IATF) certification, the factory audit will be easier because the process will be similar.The preparation of the audit should be carried out in accordance with the relevant “Certification Implementation Rules” (implementation rules, see earlier).

The audit is the most expensive part of the entire certification process. Not only should the consultants’ fee be paid, but also their travel and subsistence expenses during the entire audit period. The same applies to the interpreter who may be needed.

## VOLUNTARY CERTIFICERING CCC SELF DECLARATION AND CQC

For many products that are not covered by the mandatory CCC certification requirement, it is possible to voluntarily certify them at the authorities CCC self declaration or through the CQC (China Quality Certification Centre). The latter is also often required by the OEM, Through a voluntary CCC Self declaration or CQC certification, manufacturers can ensure the conformity of their products with the relevant Chinese standards and regulations regarding quality, safety, environment, so that manufacturers have a safe way to provide proof that the product complies with the voluntary Chinese GB standard, even for products for which there is no mandatory CCC certification requirement or for which the CCC self-declaration applies.

The CQC provides voluntary certification for more than 500 products from different industries, The voluntary certification process is identical to the CCC certification with product testing in China and factory inspection. The main difference with CCC certification lies in the marking requirements.



**The CCC China Self-Declaration process is largely the same as the regular** CCC certification process. Instead of application being submitted to the China Certification Authorities (China Quality Certification Centre as with CQC), the application for self declaration CCC must be made in the CCC Self Declaration system of the CNCA authority. The main difference in the process is that there is no need for factory inspection. Instead, the manufacturer must autonomously enter all the necessary information into an online system and continuously check the information and compliance himself. In addition, the CNCA does not carry out checks on the accuracy of the application documents.

The CQC certificate offers the following possibilities:

- You have the third party proof that your products comply with Chinese standards and requirements for
- safety.
- Certified products can be easily imported without customs issues and sold openly on the Chinese market.
- Lower costs and time required for new projects because once certification has been achieved, new additional products can be certified quickly and cost-effectively.

Annual follow-up audits will be necessary to maintain voluntary certification.
It's important to keep in mind that many manufacturers require voluntary certification from their suppliers. The CQC marking certification improves the "perceived" product quality in the Chinese market, which can create a competitive advantage over products that are not CQC certified, facilitating access to foreign products. National quality certifications such as the CQC certification get a better reputation in China compared to the UL, or CE marks. For many product groups, the CQC Mark Certification has also set the standard by which product selections are made by the Chinese consumer. Another advantage is that products marked with the voluntary CQC marking certification have a greatly reduced risk of being detained by Chinese customs.

Products with the voluntary CQC marking certification can be more easily converted to a CCC certificate if required. The abbreviated certification process gives the manufacturer an advantage over its competitors, who may struggle with the new CCC certification process for their products.

## CCC SELFDECLARATION DOCUMENT

For some product groups, the Certification and Accreditation Administration of China (CNCA) is the only designated body and has defined the CCC Self-Declaration (SD for short) as a mandatory procedure to prove the Conformity of the product For these product groups, the CCC Self-Declaration is the only way to officially prove that they comply with Chinese standards. The Self-Declaration is also known in Europe as Declaration of Conformity (DoC) or Supplier's Declaration of Conformity (SDoC).

For product groups that fall under the Self declaration SD category in the regulations, manufacturers must officially declare by self-declaration that their products comply with GB standards and that the conformity of the product is given in accordance with Chinese regulations.

The manufacturer must independently develop and establish a quality assurance process for production activities and product testing that comply with Chinese regulations. Unlike the "classic" CCC certification guided by the Chinese authorities, there is no factory audit requirement by the certification body. Instead, the manufacturer is required to set up its own control and inspection mechanisms to ensure regulatory compliance. The manufacturer can build on its already established quality management processes.

The self-declaration may seem less expensive, but it does make the manufacturer more accountable to the Chinese authority. Manufacturers who go through a self-declaration are often left with uncertainty about whether all measures and actions taken in good faith meet the requirements of the regulations.

Many companies therefore decide to ensure the conformity of their products and production processes through voluntary certification with the CQC. In this way, manufacturers have more certainty that the conformity of the product will be recognized by the authorities and their risks will be mitigated.

For this reason, many OEMs also require their suppliers to be voluntarily certified by the CQC in addition to the CCC self-declaration.

The applicant for the CCC self-declaration must be a company registered in China (subsidiary, importer, or distributor). In the absence of a Chinese company such as the applicant, the CCC cannot be self-declaration. Annual GB-standard product testing and internal audits are required to maintain the validity of the CCC self-declaration. The whole process is handled by an online system of CNCA depending on the product category.

The tests can be carried out in a self-selected laboratory or in a test laboratory accredited by the Chinese authority CNAS. For products covered by the CCC self-declaration, the appropriate application for SD-CCC must be made through the Chinese online system with relevant documents and tests uploaded online to be valid.

## CCC SELF-DECLARATION PROCESS (SD) PROCEDURE

The steps of a CCC self-declaration at a glance:

- **Application** - Preparation of application documents and implementation of an internal
- audit
- **Test samples** - Preparation of product tests, including contacting the testing laboratory to
- determine the required test samples and test requirements.
- **Test** - Performing the product tests.
- **Upload the test reports into the online system** and provide other documents online
- system.
- **Draft copy of the self-declaration** – After the documents have been reviewed by CNCA, the draft CCC Self-Declaration is issued and must be checked for accuracy.
- **Upload Signed and Stamped SD Certificate** – The CCC self-declaration must be signed and stamped by the applicant and uploaded to the online system for it to become valid.
- **Marking** - The products must be marked with the CCC logo.

## CCC APPLICANT SERVICE

The applicant for the CCC self-declaration must be a company registered in China, as mentioned.

Many manufacturers use a subsidiary in China or the importer for this purpose. This the company must submit its extract from the Commercial Registry with reference to the social credit system when applying for the CCC self-declaration. The Chinese applicant is therefore at risk with his social credit score if there are discrepancies in the products. Violations of compliance with the prescribed certification process can lead to serious consequences,up to and including the revocation of the applicant's business license. Many consulting firms that act in the field of certification offer addresses to fulfill this role.

## TYPE A AND B PRODUCT TESTS

Product testing is still mandatory, just like regular CCC certification; however, a distinction has been made between **types A and B** based on the product type.

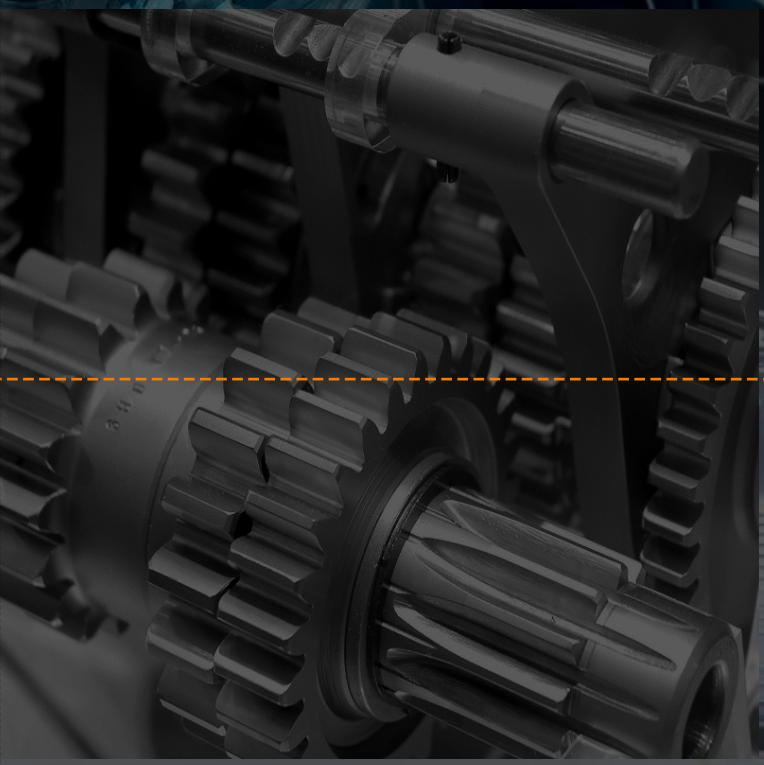
- For **Type A products**, product testing can take place in self-selected laboratories, such as an in-house or external laboratory with ISO 17025 certification.
- For **Type B products**, product testing must take place in a specified laboratory with CNAS accreditation.

Even after successful CCC Self-Declaration, annual product tests must be carried out according to China's GB standard to ensure the conformity of the product.

## ISSUANCE OF THE CCC SELF-DECLARATION CERTIFICATE

Upon successful completion of the tests, the test reports will be uploaded to the online system along with the other application documents. The application is then processed by CNCA.

If all application documents are formally in order and the test report has been checked against the documents, CNCA will issue the CCC self-declaration in the online system for further processing. Once the design has been signed and stamped by the manufacturer and the Chinese applicant, the CCC self-declaration can be re-uploaded to the online system. Only then is the CCC Self-Declaration valid. Then, the manufacturer can put the CCC logo on the certified products.



# 5. Comparison between Chinese regulations and standards and the European Machinery Directive*

For a number of common topics, the specific standards are discussed below.

## 5.1 Functional safety

The standards for functional safety are made by adoption of the of the harmonised standards of the EU machinery directive. The Chinese standards are based on the same standard or the previous version of the EU standards. The newer version of the standards have more stringent requirements; meaning complying to the EU standards will also be compliant to the Chinese standards.

| Standard code | Standard title | Adopted standard | EU current version of standard |
|---|---|---|---|
| GB/T 16754-2021 | Safety of machinery—Emergency stop function—Principles for design | ISO 13850-2015 | 2015 |
| GB/T 16855.1-2018 | Safety of machinery—Safety-related parts of control systems—Part 1: General principles for design | ISO 13849-1-2015 | 2023 |
| GB/T 16855.2-2015 | Safety of machinery—Safety-related parts of control systems—Part 2: Validation | ISO 13849-2-2003 | 2012 |
| GB/T 19670 | Safety of machinery-Prevention of unexpected start-up | ISO 14118-2000 | 2017 |
| GB/T 19761-2022 | Safety of machinery - Two-hand control devices - Principles for design and selection | ISO 13851-2019 | 2019 |
| GB/T 19876-2012 | Safety of machinery -- Positioning of safeguards with respect to the approach speeds of parts of the human body | ISO 13855-2010 | 2010 |
| GB 28526-2012 | Electrical safety of machinery -- Functional safety of safety-related electrical, electronic and programmable electronic control systems | IEC 62061-2005 | 2021 |

## 5.2 Fixed and movable guards on machinery

The standards for guards on machinery are made by adoption of the harmonised standards related to the EU Machinery directive. The China standards are fully compatible with the EU standards.

| Standard code | Standard title | Adopted standard | EU current version of standard |
|---|---|---|---|
| GB/T 8196-2018 | Safety of machinery - Guards - General requirements for the design and construction of fixed and movable guards | ISO 14120-2015 | 2015 |
| GB/T 12265-2021 | Safety of machinery—Minimum gaps to avoid crushing of parts of the human body | ISO 13854-2017 | 2017 |
| GB/T 18831-2017 | Safety of machinery -- Interlocking devices associated with guards -- Principles for design and selection | ISO 14119-2013 | 2013 |
| GB/T 23821-2022 | Safety of machinery—Safety distances to prevent hazard zones being reached by upper and lower limbs | ISO 13857-2019 | 2019 |

Note: *In the coming years up to and including 2026, the European Machinery Directive 2006/42 will still be used .

## 5.3 Platforms

The standards for platforms at machinery are made by adoption of the harmonised standards related to the EU Machinery directive. The China standards are fully compatible with the EU standards.

| Standard code | Standard title | Adopted standard | EU current version of standard |
|---|---|---|---|
| GB/T 17888.1-2020 | Safety of machinery. Permanent means of access to machinery -- Part 1: Choice of fixed means and general requirements of access | ISO 14122.1-2016 | 2016 |
| GB/T 17888.2-2020 | Safety of machinery. Permanent means of access to mach | ISO 14122.2-2016 | 2016 |
| GB/T 17888.3-2020 | Safety of machinery - Permanent means of access to machinery - Part 3: Stairs, stepladders and guard-rails | ISO 14122.3-2016 | 2016 |
| GB/T 17888.4-2020 | Safety of machinery - Permanent means of access to machinery - Part4: Part 4: Fixed ladders | ISO 14122.4-2016 | 2016 |

## 5.4 Electrical

The standards for Electrical safety are made by adoption of the of the harmonised standards of the EU machinery directive. The Chinese standards are based on the same standard or the previous version of the EU standards. The newer version of the standards have more stringent requirements; meaning complying to the EU standards will also be compliant to the Chinese standards.

| Standard code | Standard title | Adopted standard | EU current version of standard |
|---|---|---|---|
| GB/T 5226.1-2019 | Safety of machinery - Electrical equipment of machines - Part 1: General requirements | IEC 60204-1-2016 | 2016 |
| GB/T 4208-2017 | Degrees of protection provided by enclosure(IP code) | IEC 60259-2013 | 2013 |
| GB/T 18209.1-2010 | Electrical safety of machinery. Indication, marking and actuation. Part 1: Requirements for visual, acoustic and tactile signals | IEC 61310.1-2007 | 2007 |
| GB/T 18209.2-2010 | Electrical safety of machinery. Indication, marking and actuation. Part 2: Requirements for marking | IEC 61310.2-2007 | 2007 |
| GB/T 18209.3-2010 | Electrical safety of machinery. Indication, marking and actuation. Part 3: Requirements for the location and operation of actuators | IEC 61310.3-2007 | 2007 |
| GB/T 19436.1-2013 | Electrical safety of machinery - Electro-sensitive protective equipment - Part 1: General requirements and tests | IEC 61496-1-2008 | 2020 |
| GB/T 19436.2-2013 | Electrical safety of machinery - Electro-sensitive protective equipment - Part 2: Particular requirements for equipment using active opto-electronic protective devices | IEC 61496-2-2006 | 2020 |
| GB/T 19436.3-2008 | Electrical safety of machinery - Electro-sensitive protective equipment - Part 3: Particular requirements for active opto-electronic protective devices responsive to diffuse Reflection | IEC 61496-3-2001 | 2019 |

| Standard code | Standard title | Adopted standard | EU current version of standard |
|---|---|---|---|
| GB/T 3836.1-2021 | Explosive atmospheres - Part 1: Equipment -- General requirements | IEC 60079-0:2017 | C1:2020 |
| GB/T 3836.14-2014 | Electrical apparatus for explosive gas atmospheres.Part 14. Classification of hazardous areas | IEC 60079-10-1 2008 | 2020 |
| GB/T 3836.15 2017 | Explosive atmospheres-Part 15. Electrical installations design, selection and erection | IEC 60079-14 2007 | 2013 |
| GB/T 3836.28-2021 | Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements | ISO 80079-36-2016 | 2016 |
| GB/T 3836.29-2021 | Explosive atmospheres – Part 29: Non-electrical equipment for explosive atmospheres – Constructional safety “c”, control of ignition source “b”, liquid immersion “k” | ISO 80079-37-2016 | 2016 |
| GB/T 25285.1-2020 | Explosive atmospheres -- Explosion prevention and protection -- Part 1: Basic concepts and methodology | EN 1127-1 2007 MOD | 2017 |
| GB/T 25285.2-2021 | Explosive atmospheres -- Explosion prevention and protection -- Part 2: Basic concepts and methodology for mining | EN 1127-2-2002 MOD | 2019 |

## 5.5 Equipment for explosive atmosphere

Chinese standards regarding explosive atmospheres; comparison with the EU harmonised standards related to the ATEX regulation:

- **1992/92/EC**: ATEX 153 Minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres
- **2014/29/EU**: ATEX 114 Equipment and protective systems intended for use in potentially explosive atmospheres.

## 5.6 Pressure equipment

Chinese regulation regarding Pressure Equipment; comparison with the EU regulation and design codes. For pressure equipment the comparison needs to be done on the total procedure. The procedure for pressure equipment can be divided in 2 sections

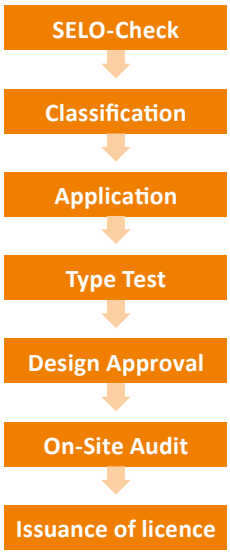
1. Certification process by an authorised organisation
2. Standards for defining the design, materials, fabrication and inspection method

Note 5: Refer to EN-2022-010 Regulation of pressure equipment for detailed information

### CHINA: SELO-CHINA MANUFACTURING LICENCE (CML)

The **SELO license** is also known as the China Manufacture License (CML), China Stamp or the Pressure Vessel License. It is an approval procedure from the Chinese authority SELO ( China Special Equipment Licensing Office ). This authority is overseen by the State Administration for Market Regulations (SAMR).

**SELO registration** is required for products such as: boilers, pressure vessels, safety components, gas cylinders, tanks and hot water systems.




#### Regulation for the SELO certification

Licensing takes place according to current TSG regulations and GB standards. These include.

- TSG Z0004-2007 – Basic Requirements for Special Equipment Quality Assurance System on Manufacture, Installation, Alteration and Repair
- TSG 07-2019: Regulation for Production and Filling Licensing of Special Equipment

| Standard code | Standard title | Adopted standard |
|---|---|---|
| TSG 21-2016 | Supervision Regulation on Safety Technology for Stationary Pressure Vessel | N/A |
| GB 150.1-2011 | Pressure Vessels-Part 1: General Requirements | N/A |
| GB 150.2 2011 | Pressure vessels-Part 2: Materials | N/A |
| GB 150.3-2011 | Pressure vessels-Part 3:Design | N/A |
| GB 150.4-2011 | Pressure vessels-Part 4: Fabrication, Inspection and Testing, and Acceptance | N/A |
| GB/T 151 -2014 | Heat Exchangers | N/A |
| GB 12337-2014 | Steel Spherical tanks | N/A |
| NB/T 47041-2014 | vertical Vessels supported by skirt | N/A |
| NB/T 47042-2014 | Horizontal Vessels on saddle support | N/A |
| JB 4732-2005 | Steel pressure vessel - Stress analysis design standard [re-approved in year 2005. Quasi-official version - Translated by Chinese Standard Committee / Institute] | N/A |

*Table: shows the mandatory GB standards and the recommended GB/T and NB/T standards*

### EUROPE: PED 2014/68/EU

The Pressure Equipment Directive (PED) applies to the design, manufacture and conformity assessment of pressure equipment and assemblies with a maximum allowable pressure greater than 0.5 bar gauge including vessels, piping, safety accessories and pressure accessories.

This Directive is relevant to manufacturers (and may include importers, suppliers, or authorized representatives) of pressure equipment selling in most European countries. The definition of pressure equipment includes vessels, piping, safety accessories or pressure accessories. Once you meet the requirements of the Directive you will be able to apply the CE marking to the products.

### DESIGN CODE

The EU PED has several Design Codes; the design code defines the calculation method and design rules to build and design a pressure vessel. The chosen design has impact on the robustness of the pressure vessel the cost price of the product.

| Certification Method | Region | Design Code |
|---|---|---|
| PED | Germany/Austria/Turkey | AD-2000 Merkblatter |
| PED | Great Britain | BS5000/ PD550 |
| PED | Finland/France | EN 13445 |
| PED | Netherlands/Belgium/Spain/Poland | RToD |
| PED | Europe | ASME VIII Div 1. |

### COMPARISON SELO/PED

For the design, calculation and fabrication pressure equipment build according EU design code ASME VIII Div 1 are also compliant with the Chinese regulation. For the certification process; for China the SELO/CML process has to be followed; this is the only process allowed for pressure equipment in China.

Note 6: Due to the comparable rules for design, calculation and fabrication a pressure equipment with SELO certification can be re-certificated to PED. Due difference between SELO and PED; a PED certified pressure equipment can not be re-certified toe SELO.

## 5.7 AC Motors

### AC MOTORS

AC Motors have to comply with the Chinese standard **GB12350** and **GB14711**; Ac motors must be provided with CEL label (China Energy Label ) and; when required with the CCC label. AC motors without CEL labels will be refused at the China Customs

| Regional Characteristics | |
|---|---|
| **Voltage** | 1 ~ 220V±10%<br>3 ~ 380V±10% |
| **Frequency** | 50Hz |
| **National Regulations** | China Compulsory certification |

| | |
|---|---|
| **Standard** | GB12350<br>GB14711<br>CNCA-C04-01:2014 |
| **Scope** | Rated voltage from 36 V up to 1000 V<br>All kinds of AC asynchronous motors and AC synchronous motors with maximum continuous rating not exceeding 1.1 kW @1500 rpm<br>Not applicable for Ex-motors, servomotors and multi-speed motors with a rating exceeding the above applicable range |
| **Marking** |  <br>36V-1000V P<1,1 kW @1500 rpm CEL label |
| **Energy Efficiency** | China Energy Label |
| **Regional standard** | GB18613-2020 |
| **Regulation** | CEL 007-2021 |
| **Mandatory Efficiency Class** | Three-phase: Grade 3=IE3 0,12kW-1000kW<br>Single phase: IE1/1,5 |
| **Scope** | Single-speed AC motors, three-phase, 50 Hz 2-, 4-, 6- and 8-pole motors<br>Nominal rated output power between 0,12 kW and 1000 kW<br>Nominal rated voltage UN up to 1000 V<br>Continuous operation S1 and S3> 80 %<br>Self-ventilated motors (IC411)<br>Single-speed AC motors, single-phase, 50 Hz Nominal rated voltage UN up to 690 V<br>Continuous operation S1 and S3 > 80 %<br>Self-ventilated motors (IC411)<br>2-, 4- and 6-pole motors With starting capacitor: 0,12 kW up to 3,7 kW<br>With operating capacitor: 0,12 kW up to 2,2 kW<br>2- and 4-pole motors with start and operating capacitor: 0,25 kW up to 3,7 kW. |

## 5.8 Risk assessment and hygienic design for food processing equipment

These standards are the basic standards for Food Processing equipment. The Chinese standards are adopted from the harmonized EU Machinery directive standards.

| Standard code | Standard title | Adopted standard | EU current version of standard |
|---|---|---|---|
| GB/T 15706-2012 | Safety of machinery- General principles for design-Risk assessment and risk reduction | ISO 12100-2010 | 2010 |
| GB/T 16856.2-2015 | Safety of machinery-Risk assessment-Practical guidance and examples of methods | ISO/TR 14121-2-2012 | 2012 |
| GB/T 19891-2005 | Safety of machinery. Hygiene requirements for the design of machinery | ISO 14159-2002 | 2008 |
| GB/T 22747-2022 | Food processing equipment—Basic requirements | EN 1672-2 2005 | 2020 |

Note: The EU has adopted newer versions of ISO 14159 and EN 1672; the newer versions have more stringent requirements; meaning complying to the EU standards will also be compliant to the Chinese standards.

## 5.9 Food Contact Materials (FCM)

Under the Chinese Food Safety law issued in 2009 products are subject to comply with several standards, varying from general safety standards to specific material standards and general hygiene standards. For testing according China has several testing methods standards.


*Figure: Standards according to Chinese food law*

In 2017 two important Standards entered into force: the revised **Additives Standard (GB 9685 Standard on the Uses of Additives in Food-Contact** Materials and Articles) and the **General Safety Standard (GB 4806.1 Standard on General Safety Requirements for Food-Contact Materials and Articles)**.

GB 9685 is well known to the food packaging industry, as it has a wide impact on all additives used in food-contact materials and articles sold in China. The General Safety Standard has even broader significance, as it requires all food packaging materials to be safe and suitable for their intended use.

The main requirements of GB 4806.1-2016 that apply to all types of food contact materials are listed as follows:

- FCMs shall not release their constituents into food at levels harmful to human health or change food composition, taste and odour;
- The production of food contact materials and their products shall meet the requirements of **GB 31603-2015** National Food Safety Standard General Hygienic Practice for Production of Food Contact Materials and Its Products;
- Food contact materials and food contact additives must comply with relevant restriction conditions in relevant food safety standards.
- Producers must establish a **traceability** system for FCMs from production to distribution;
- **Product information**: Food contact materials must be accompanied with sufficient product information when they are sold. This includes product name, material, declaration of conformity to relevant laws, regulations and standards; name, address and contact information of the producer and (or) dealer, production date, warranty period (if applicable), instruction for use, and qualification certificate.
- **Labelling**: Food contact materials and their final products shall be labelled with "**food contact use**", "**used as food packaging**", or be printed or pasted with the sign of **spoon or chopsticks** (see picture below). Obvious food contact articles such do not require such labelling.

## TESTING STANDARDS

The NHFPC regulation also contains final testing method Standards that pertain to the determination of residual impurities and/or their migration from food-contact materials. Such Standards generally track international testing methods (e.g., those established by ISO, OECD, ASTM, etc.) and will ultimately be relied upon by testing laboratories and industry to confirm the residual content and/or migration of these impurities in packaging materials. Testing standards:

- **GB 5009.156-2016** National food safety standards - general principles of pretreatment methods for migration test of food contact materials and articles
- **GB31604.1-2015** National food safety standards - general principles for migration test of food contact materials and articles.
- **GB 31604.49-2016** Determination of arsenic, cadmium, chromium, lead and determination of arsenic, cadmium, chromium, nickel, lead, antimony and zinc in foodcontact materials and articles; and
- **Other testing methods** for the testing of the migration of specific hazardous substances formaldehyde, Pb, etc.

EU and China have as a consequence for food production machinery and food packaging different FCM certificates compared to the EU. The EU has the EU 1935/2004; China has the GB4806.

Officially the GB 4806 certificate is required to export parts to China. When exporting e.g. a complete machine the EU 10/2011 certificate is mostly tolerated, but sending afterwards spare parts without the GB4806 certificate can cause rejection from Chinese Customs.

## REGULATION OF FOOD CONTACT MATERIALS

Below you will find an overview of the applicable regulation and most important standards for food contact materials in Europe and China.

## EUROPEAN UNION

EU regulation for food contact materials in general is defined in EU 1935/2004 and EU 2023/2006; for specific materials there are more detailed regulations; e.g. the EU 10/2011 for plastics. Non-plastics materials are regulated on national level in Europe. Plastic suppliers in Europe mostly can deliver relevant FDA compliance statement and specifically for Europe, a EU 10/2011 compliance statement for plastics applications. Most EU suppliers are not yet able to deliver a GB4806 certificate.

### 3.1 Europe

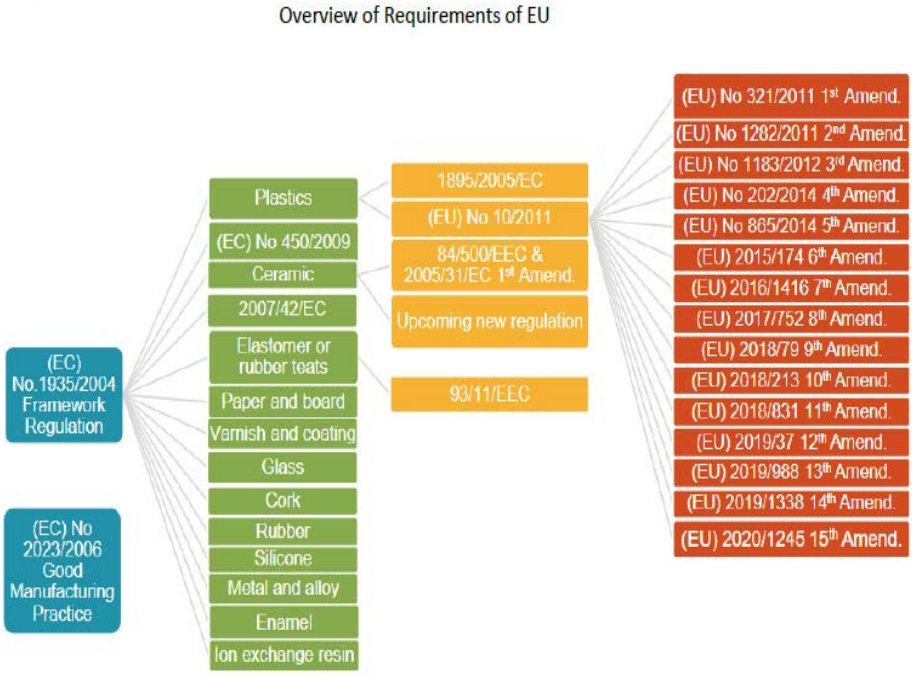



*Figure: overview of requirements in the EU*

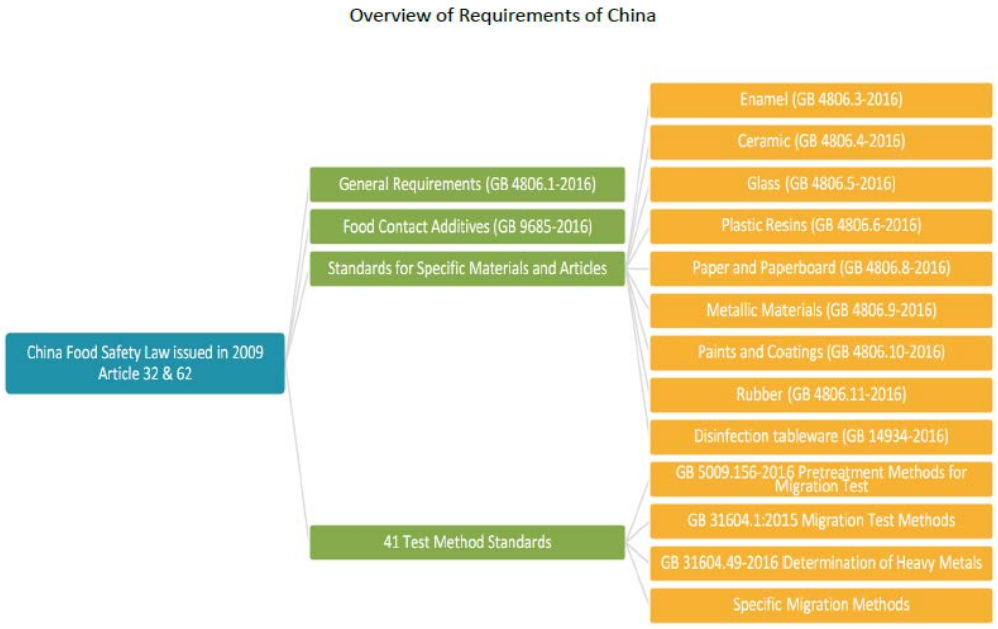



*Figure: overview of requirements in China*

In 2016 According to China's National Health and Family Planning Commission (NHFPC) the following Standards became applicable to food-contact materials marketed in China in its announcement No. 15/2016:[*]:

- GB 9685-2016 Standard on the Uses of **Additives** in Food Containers and Packaging Materials
- GB 4806.1-2016 Standard on **General Safety Requirements for Food-contact Materials** and Articles
- GB 4806.3-2016 Food-Contact Use **Enameled** Articles
- GB 4806.4-2016 National food safety standard for **ceramic** products
- GB 4806.5-2016 National food safety standard for **glass** products
- GB 4806.6-2016 Standard on Food-contact Use **Plastic Resins**
- GB 4806.7-2016 Standard on Food-contact Use **Plastic Materials** and Articles
- GB 4806.8-2016 Standard on Food-Contact Use **Paper, Paperboard** and Paper Articles
- GB 4806.9-2016 Standard on Food-contact Use **Metal Materials** and Articles
- GB 4806.10-2016 Standard on Food-contact Use **Coatings and Coating** Layers
- GB 4806.11-2016 Standard on Food-contact Use **Rubber Materials** and Articles
- GB 5009.156-2016 Standard on Pre-treatment **Methods for Migration Test** of Food-Contact Materials and Articles
- GB 14934-2016 National food safety standards - **Disinfection tableware**

The table below shows the most important ones for manufacturers of machinery for the food industry

| Standard code | Standard title | Status | Approximately equivalent to |
|---|---|---|---|
| GB4806.1-2016 | General Safety Requirements for Food-Contact Materials and Articles | Valid | EU 1935/2004 |
| GB 31603-2015 | General Hygenic norms for manufacture of FCM&A | Valid | EU 2023/2006 |
| GB 4806.6-2016 | National Food Safety Standard-Plastic Resins for food contact use | Valid | EU 10/2011 |
| GB 4806.7-2016 | National Food Safety Standard-Plastic materials and articles for food contact use | Valid | EU 10/2011 |
| GB 9685-2016 | National Food Safety Standard -Standard for Uses of Additives in Food Contact Materials and Products | Valid | EU 10/2011 |
| GB/T 31604.8-2021 | National Food Safety Standard - Food Contact Materials and Articles - Determination of Overall Migration | Valid | - |

The regulation on FCM in China is approximately the same as in EU; there are a few differences:

- For Plastic migrations of materials these are according the older versions of the EU10/2011
- For metals there is in China detailed regulation; in EU metals have no EU detailed regulation; but some countries have detailed regulation on metals.

* Note dec 2023: New version of the GB4806 is expected(draft version in Chinese is already available) The new version can contain more stringent migration rules compared to the EU regulation; this needs follow up.

# 6. ANNEX I

## OVERVIEW LIST OF PRODUCTS WITH MANDATORY CERTIFICATION

The following list gives an indicative overview of the products for which certification is mandatory.

### 1. Electrical wires and cables

- Cord sets
- Flexible rubber sheathed cables for mining purposes
- Insulated cables (wires) for rail vehicles of rated voltage up to and including 3000V
- Rubber insulated cables (wires) of rated voltage up to and including 450/750V
- PVC insulated cables (wires) of rated voltage up to 450/750V.

### 2. Circuit switches, electrical devices for protection or connection

- Appliance sockets for domestic, industrial and similar purposes
- Plugs and sockets for domestic, industrial and similar purposes
- Thermal couplings
- Cartridge fuse switches of miniature fuses
- Switches of fixed electrical appliances for domestic and similar purposes
- Accessory housings of fixed electrical appliances for domestic and similar purposes

### 3. Low-voltage installations

- Electrical Leakage Protectors
- Circuit breakers (RCD, RCBO, MCB) fuses
- Low-voltage switches (insulators, disconnector switches and fuse-combination units)
- Other chain protection devices (current limiters, circuit protectors, over protection, thermal protectors, overload relays, low-voltage electromechanical switches, and motor starters)
- Relais (36V
- Other switches (switches for devices, vacuum, pressure switches, proximity switches, foot switches, thermo switches, level switches liquids, push button switches, limit switches, micro switches, toggle switches, temperature switches, travel switches, transfer switches, automatic transfer switches, knife switches)
- Other devices (switches, motor starters, specifying lighting, auxiliary contact assemblies, master controllers, AC semiconductor motor controllers and starters)
- Low-voltage switchgear assemblies.

### 4.Low power consumption motors

- Miniwatt motors

### 5. Power tools

- Electric drills, including impact drills
- Electric screwdrivers and impact drivers
- Electric grinders
- Sanders
- Circular saws
- Electric hammers, including electric pickaxes
- Electric spray guns with a non-flammable liquid
- Electric scissors, including electric scissors with double edged blades, electric effect scissors
- Electric tapping machine
- Reciprocating saws, including jigsaws and saber saws
- Concrete vibrating machines
- Electric chainsaws
- Electric planer
- Electric hedge trimmer and electric grass trimmers
- Electric routers and edge trimmers
- Electric stonemasons, including marble cutters

### 6. Welding machines

- Portable A.C. booglasmachines
- A.C. arc welding machines
- DC booglasmachines
- TIG-lasmachines, TIG lasers
- MIG/MAG lockmachines, ME/MAG lasers
- Submerged arc welding machines
- Plasma snijmachines
- Plasma booglasmachines
- Electrical shock protection devices
- Coupling devices for welding cables
- Resistance welding machines
- Wire feeder for the welder
- TIG welding lamp
- MIG / MAG lastorks
- Electrode holders

### 7. Household and similar electrical appliances

- Household refrigerators and freezers: with an effective volume of less than 500 liters, for household and similar use with/without freezer part, storage cabinet frozen food, freezer and its combination
- Electric fans: electric fans with single-phase alternating current and direct current for domestic and similar use
- Air conditioners: cooling should not exceed 21,000 kcal/h for household and similar use
- Motor-compressors (input power must be below 5000W): sealed motor-compressors (hermetic and semi-hermetic type) for air conditioners and freezers for household and similar use
- Household washing machines: washing machines with/without water heaters, spin dryers and drying
- Electric boilers: including fixed boilers and instantaneous water heaters, which heat water to a temperature below the boiling point
- Space heaters: radiant heaters, panel heaters, liquid-filled radiators, fan heaters, convectors, tubular heating elements for household and similar purposes
- Vacuum cleaners: vacuum cleaners that suck up the functions of dust and/or liquid, driven by a series collector motor or DC motors
- Skin and hair care appliances: appliances with electric heating components for skin and hair care of both humans and animals
- Electric irons: electric dry irons and steam irons for household and similar use
- Elektromagnetische fornuizen: elektromagnetische verwarming keuken apparaten die elektromagnetische verwarmingsonderdelen met enkele kookplaat of kookplaten voor huishoudelijke of soortgelijke doeleinden kunnen bevatten
- Roasters: with a volume not exceeding 10L of roasters, toasters, waffle irons and similar appliances for domestic or similar purposes
- Electric food processors: household food preparation machines and the like with multiple functions to prepare food
- Microwave ovens: household appliances for heating food and beverages using electromagnetic energy in one or more of the ISM frequency bands exceeding 300 MHz. These appliances may also include functions such as browning or steaming
- Electric cookers, hobs, ovens and similar appliances: including household cookers, stationary electric ovens, hobs, stationary cookers, hob elements, grills and griddles, induction ovens and grills
- Image with light, art Auto-generated description

**8. Audio and video equipment (except broadcasting and motor vehicle audio equipment)**

- Active speaker systems with single or multiple speakers with max. output power below 500W (R.M.S.)
- Audio power amplifier
- Tuners
- Radios
- Audio or video recorders on all types of media
- Players or equipment from the disc, tape or other media
- Combination of the above mentioned audio / video equipment
- Power adapters for audio/video equipment
- Color TV receivers and displays of all types of dispays (excluding television receivers for cars)
- B/W television receivers and other monochrome television receivers
- Image/display tubes
- Video recorders
- Satellite TV/broadcasting
- Electronic organs, keyboards
- Antenna amplifiers
- Equipment and components for cable distribution, sound and television signal systems

**9. Information technology equipment**

- Personal computers (PC)
- Portable computers
- Displays to connect to the computer
- Printers to connect to the computer
- Printer and copiers (multiplication purposes)
- Scanners
- Switches, power supplies, adapters and chargers for the computer
- Computer game spelers
- Learning machines
- Duplicators, copiers
- Servers
- Equipment for financial activities and trade
- Wireless LAN products

**10. Lighting equipment (excluding lighting devices with a voltage lower than 36V)**

- Lighting, lamps
- Switching devices

**11. Telecommunications terminal equipment**

- Single Telephone Terminals
- Common telephones
- Caller ID telephones
- Card Management telephones
- Answering machine telephones
- Pay devices
- Intelligent card telephone devices
- Public IC card telephones
- Hands-free phone sets
- Digital telephones
- Additional devices of telephones
- Cordless phone terminals
- Analog cordless telephones
- Digital cordless telephones
- Group telephone systems
- Conference call exchanges
- Fax machines/cards
- Modem terminals/cards
- Mobile terminals
- Analog mobile phones

- GSM digital mobile mobile stations, including mobile phones and other terminals
- CDMA digital cell mobile stations, including mobile phones and other terminals
- ISDN devices
- Network terminals, including NT1, NT1+
- Terminal adapters/cards, TA
- Data terminals
- Saving/sending Fax/Voice cards
- Payment terminals
- Interface transformers
- Network hubs
- Other data terminals
- Multimedia-terminals
- Video phones
- Video conference terminals
- VOD-terminals
- Other multimedia terminals

**12. Motor vehicles**
- Auto: Motorvoertuigen van subcategorieën M, N, O
- Motoren: Motorfietsen

**13. Motorvoertuig Banden**
- Passenger car tyres: radial tyres, diagonal band
- Truck tires: Ultra-light truck tires, Light truck tires, Medium/heavy truck tires
- Motorcycle tyres

**14. Safety glass**
- Safety glasses for motor vehicles:
- Laminated glass A
- Laminated glass B
- Zone-tempered glass
- Tempered glass
- Safety glasses for buildings:
- Laminated glass
- Laminated glass
- Safety Glasses for Railway Vehicles:
- Laminated glass
- Laminated glass
- Insulated Safety Glass

**15. Agricultural machinery**
- Equipment for Crop Protection
- Motorized or manual liquid back sprinklers
- Motorized or Manual Powder Backpack Sprayers
- Motorized Liquid and Powder Back Sprinklers

**16. Latex products**
- Rubber Condooms

**17. Medical equipment**
- Medische X-Ray Diagnostic Equipment
- Hemodialyse Equipment
- Hollow fiber dialyzers
- Blood Circuit Conduits in Vitro for Blood Purification Equipment
- ECG
- Implantable Cardiac Pacemakers
- Heart-Long Machines

### 18. Fire Fighting Products

- Brand alarmmelders
- Type of smoke and fire alarm detectors
- Type Heat and Fire Alarm detectors
- Fire alarm control units
- Corridor control equipment for fire protection
- Manual Fire Alarm button
- Fire hoses
- Sprinklers
- Wet System Alarm Valves
- Water Flow Indicators
- Fire pressure switches

### 19. Safety Protection Products

- Intrusion detectors
- Internal Magnetron Doppler detector
- Proactive infrared intrusion detectors
- Internal passive infrared detectors
- Internal Microwave and Passive Infrared Combined Intrusion Detectors
- Magnetic Intrusion Detectors
- Vibratile Intrusion Detectors
- Internal Passive Breaking Glass Detectors
- Inbraakalarm Controllers
- Burglar Alarm Systems for Vehicles
- Theft-proof Coffers

### 20. Home Decor & Remodeling Products

- Paints for wood products
- Porcelain products / ceramic tiles

### 21. Safety Parts and accessories of vehicles and engines

- Antifreezes
- Safety belts
- Motorcycle engines
- Horns
- Retro reflectoren
- Retro-reflective vehicle markings
- Image with light, art Auto-generated description
- Rear-view mirrors
- Interior parts
- Door lock and door fasteners
- Fuel tanks
- Seat and headrests
- Rear-view mirrors
- Odometers
- External lighting for Vehicle / Motorcycle and signalling products (headlight, turn signal, front position light, traffic light, fog light, reversing light, parking light, turn signals, lighting equipment for license plate etc.)

### 22. Toy products

- Children's cars, including children's bicycles, tricycles, strollers, baby walkers, etc.
- Electrically powered toys
- Plastic toys
- Metal toys
- Catapulting toys
- Baby toys

### 23. IT Products

** Deze lijst is een moment opname, een indicatie en niet volledig*

# 7. ANNEX II - Machinery related Chinese vs. International Standards

## SELECTIE VAN MEEST GEBRUIKTE NATIONALE STANDAARDEN IN RELATIE TOT INTERNATIONALE STANDAARDEN

| No | Standard | standard name | Corresponding international standard number | Corresponding to foreign standards |
|---|---|---|---|---|
| **01 Basic Machinery Safety** | | | | |
| 1 | GB 5083-1999 | General Principles for Safety and Health Design of Production Equipment | | Neq DIN 3100 / VDE1000:1993 |
| 2 | GB 5226.1-200 8 | Mechanical Electrical Safety machinery Electrical apparatus 1 Part General specification | Idt IEC 60204-1:200 5 | EN 60204-1:1998 |
| 3 | GB 5226.2-2002 | Mechanical and electrical equipment of mechanical safety 32 portion crane technical conditions | Idt IEC 60204 -32:1998 | |
| 4 | GB 5226. 3 -200 5 | Safety of machinery. Electrical equipment of machinery. Part 11 Technical conditions for high voltage equipment with voltage higher than 1000a.cV or higher than 1500d.cV but not exceeding 36kV | Idt IEC 60204- 11 : 2000 | |
| 5 | GB 5226.4-2005 | Safety of machinery. Electrical equipment of machinery. Part 31. Special safety and EMC requirements for sewing machines, sewing units and sewing systems | Idt IEC 60204-31:2001 | |
| 6 | GB 19891 -2005 | Hygienic requirements in machinery design | Mod ISO 14159:2002 | |
| 7 | GB 23819-2009 | Machinery safety fire prevention | Idt ISO 19353:2005 | |
| 8 | GB 23820-2009 | Hygienic requirements for lubricants in accidental contact with products | Idt ISO 21469:2006 | |
| 9 | GB / T 12801-2008 | General Principles of Safety and Health Requirements for Production Process | | |
| 10 | GB/T 15706.1- 2007 | Safety of machinery basic concepts general principles for design 1 Part basic terminology, methodology | Idt ISO/TR 12100-1:2003 | 292 EN - 1 : 1991 |
| 11 | GB/T 15706.2- 2007 | The basic concept of security machinery and general principles for design 2 Part Technical principles and specifications | Idt ISO/TR 12100-2:2003 | EN 292-2:1991 |
| 12 | GB / T 16 856 .1 - 2008 | Machinery Safety Risk Assessment Part 1 Principles | Idt ISO 14121: 2007 | E qv prEN1050-12:1994 |
| 13 | GB / T 16856.2-2008 | Examples of Implementation Guidelines and Methods of Machinery Safety Risk Assessment Part 2 | Idt ISO/TR 14121-2:2007 | |
| 14 | GB / T 22696.1-2008 | Safety Risk Assessment and Risk Reduction of Electrical Equipment Part 1 General Principles | | |
| 15 | GB / T 22696.2-2008 | Safety risk assessment and risk reduction of electrical equipment. Part 2: Risk analysis and risk assessment | | |
| 16 | GB / T 22696.3-2008 | Safety risk assessment and risk reduction of electrical equipment Part 3 Examples of hazards, hazardous situations and hazardous events | | |
| 1 7 | GB / Z 1-2010 | Design hygiene standards for industrial enterprises | | |
| 1 8 | JB / T 7536-1994 | General terms for machinery safety | | |
| **02 Standard preparation and understanding** | | | | |
| 1 | GB 6441-1986 | Classification of employee casualties | | |
| 2 | GB / T 13861-1992 | Classification and codes of hazardous and harmful factors in the production process | | |
| 3 | GB / T 16499-1996 | Guidelines for the preparation of electrical safety standards | Eqv IEC GUIDE 104:1984 | |
| 4 | GB/T 16755-1997 | Drafting and expression rules of machinery safety standards | Mod IEC GUIDE 78:2008 | E qv EN414:1992 |
| 5 | GB/T 20850-2007 | Guide to understanding and using machinery safety standards | Idt ISO/TR 18569:2004 | |
| **03 Control system** | | | | |
| 1 | GB 16655-2008 | Basic requirements for machinery safety integrated manufacturing system | Idt ISO 11161:2007 | |
| 2 | GB 16754- 2008 | Design principles for emergency stop of machinery | Idt ISO 13850: 2006 | EN 418:1992 |
| 3 | GB/T 3766-2001 | General technical conditions of hydraulic system | E qv ISO 4413:1998 | EN 982:1996 |
| 4 | GB/T 7932-2003 | General technical requirements for pneumatic systems | I dt ISO 4414:1998 | EN 983:1996 |
| 5 | GB/T 16855.1-200 8 | Safety related components of machinery safety control system Part 1 General design rules | Idt ISO 13849-1: 2006 | E qv P REN954-1:1994 |
| 6 | GB/T 16855.2-200 7 | Safety related parts of machinery safety control system Part 2 confirmation | Idt ISO 13849-2:2003 | EN ISO 13849-2:2003 |
| 7 | GB/T 16855.100-2005 | Mechanical safety-related components of the safety control system first 100 Part Application GB / T 16855.1-1997 guidance | Mod ISO/TR 13849-100: 2000 | CR 954-100:1999 |
| 8 | GB/T 19670-2005 | Mechanical safety prevents accidental start | Mod ISO 14118 :2000 | EN 1037:1995 |
| 9 | GB/T 19671-2005 | Functional status and design principles of mechanical safety two-hand control devices | Mod ISO 13851:2002 | EN 574:1996 |

| No | Standard | standard name | Corresponding international standard number | Corresponding to foreign standards |
|---|---|---|---|---|
| 10 | JB/T 10051-1991 | General technical requirements for hydraulic systems of metal cutting machine tools | | |
| **04 Ergonomics** | | | | |
| 1 | GB 1251.1-1989 | Danger signal in the workplace Danger audio signal | E qv ISO 7731:1986 | ≈ EN 457:1992 |
| 2 | GB 1251.2-1996 | Ergonomics visual signal of dangerous situation generally requires design and inspection | Eqv ISO /DIS 11428:1992 | ≈ EN 842:1996 |
| 3 | GB 1251.3-1996 | Ergonomics danger and non-dangerous sound and light signal system | Idt ISO 11429: 2006 | ≈ EN 981:1996 |
| 4 | GB 3869-1997 | Manual labor intensity classification | | |
| 5 | GB 5697-1985 | Ergonomic lighting terms | | |
| 6 | GB 7947-2006 | Basic and safety rules for human-machine interface logos. Conductor color or digital logo | Idt IEC 60446:1999 | |
| 7 | GB 50033-1991 | Lighting Design Standards for Industrial Enterprises | | |
| 8 | GB 50 034-1992 | Lighting design standards for industrial enterprises | | |
| 9 | GB/T 12454-1990 | Visual environment evaluation method | | |
| 10 | GB/T 12984-1991 | Basic terms of ergonomics visual information operations | | |
| 11 | GB/T 12985-1991 | Apply the general rule of percentile of human body size in production design | | |
| 12 | GB/T 13379-1992 | Principles of visual ergonomics indoor working system lighting | Neq ISO 8995:1989 | |
| 13 | GB/T 13547-1992 | Work space human size | | |
| 14 | GB/T 14774-1993 | General ergonomic requirements for work seats | | |
| 15 | GB / T 14775-1993 | General ergonomics requirements for manipulators | | |
| 16 | GB/T 14776-1993 | Ergonomics job size design principles and values | | Neq DIN 33406 : 1988 |
| 17 | GB/T 14777-1993 | Geometric orientation and movement direction | Neq ISO 1503:1977 | |
| 18 | GB/T 15241 -199 4 | Ergonomic associated with the heart load of the term | | |
| 19 | GB/T 15241.2-1999 | Ergonomic principles associated with the heart load of 2 Part Design Principles | Idt ISO 10075-2:1996 | EN IS O 10075-2:2000 |
| 20 | GB/T 16251-1996 | Ergonomic Principles of Work System Design | E qv ISO 6385:1981 | ENV 26385:1990 |
| 21 | GB/T 17161-1997 | Operating direction of machine tool control device | E qv ISO 447:1984 | |
| 22 | GB/T 17244-1998 | Thermal environment evaluation of the thermal load of workers based on WBGT index (wet bulb black bulb temperature) | E qv ISO 7243:1989 | EN 27243:1993 |
| 23 | GB / T 18048-2000 | Ergonomics determination of metabolic heat production | Eq v ISO 8996:1990 | |
| 24 | GB/T 18153-2000 | Ergonomics data for determining the temperature limit of hot surfaces | | E qv EN 563:1994 |
| 25 | GB/T 18717.1-2002 | Ergonomic design for machine safety. Part 1 : Principles for determining the size of openings for whole body access to machines | Neq ISO 15534-1:2000 | EN 547-1:1996 |
| 26 | GB/T 18717.2-2002 | Ergonomic design for machine safety. Part 2 Principles for determining the size of the opening of the human body into the machine | Neq ISO 15534-2:20 00 | EN 547-1:1996 |
| 27 | GB/T 18717.3-2002 | Ergonomic design for the safety of machinery 3 part anthropometric data | Neq ISO 15534-3 :200 0 | EN 547-1:1996 |
| 28 | GB / T 18977-2003 | Thermal environment ergonomics uses subjective judgment scale to evaluate the impact of thermal environment | Mod ISO 10551:1995 | |
| 29 | GB / T 18978.1-2003 | Ergonomics requirements for office using visual display terminals (VDTs) Part 1 Overview | Idt ISO 9241-1:1997 | |
| 30 | GB / T 189 78.2-2004 | Ergonomics Requirements for Offices Using Visual Display Terminals (VDTs) Part 2 Guidelines for Task Requirements | Idt ISO 9241-2:1992 | |
| 31 | GB / T 18978.10-2004 | Ergonomics requirements for office using visual display terminals (VDTs) Part 10 Principles of dialogue | Idt ISO 9241-10:1996 | |
| 32 | GB / T 18978.11-2004 | Ergonomic requirements for office using visual display terminals (VDTs) Part 11 Usability guidelines | Idt ISO 9241-11:1998 | |
| 33 | GB / T 20528.1-2006 | Using a base in flat visual display Ergonomic work Part 1 Overview | Idt ISO 13406-1:1999 | |
| 34 | GB / T 21051-2007 | Human-system interaction ergonomics supports the usability approach of human-centered design | Idt ISO/TR 16982:20002 | |
| 35 | JB/T 5062-1991 | General requirements for ergonomics of information display devices | | |
| **05 Safety protection device** | | | | |
| 1 | GB 4053.1-2009 | Safety requirements for fixed steel ladders and platforms. Part 1 Steel straight ladders | | |
| 2 | GB 4053.2-2009 | Safety requirements for fixed steel ladders and platforms. Part 2 Steel inclined ladders | | |
| 3 | G B 4053.3-2009 | Safety requirements for fixed steel ladders and platforms. Part 3: Industrial protective railings and steel platforms | | |
| 4 | GB 5725-1997 | safe net | | ANSI A10.11:1989 |

| No | Standard | standard name | Corresponding international standard number | Corresponding to foreign standards |
|---|---|---|---|---|
| 5 | GB 23821-2009 | Safety distance of machinery to prevent the upper and lower limbs from touching the danger zone | Idt ISO 13857:2008 | |
| 6 | GB 12265.1-1997 | Safety distance of machinery to prevent upper limbs from touching the danger zone | Eqv ISO/DIS 13852 | Eqv EN 294:1992 |
| 7 | GB 12265.2-2000 | Safety distance of machinery to prevent the lower limbs from touching the danger zone | Eq v ISO/DIS 13853 | Eqv PrEN 811:1994 |
| 8 | GB 12265.3-1997 | Mechanical safety The minimum distance to avoid extrusion of various parts of the human body | ISO/DIS 13854:1996 | E qv EN 349:1993 |
| 9 | GB 16909-1997 | Dense mesh safety net | | |
| 10 | GB 17888.1- 2008 | Safe entry of machinery into fixed facilities of machinery and industrial equipment Part 1 Selection of entry into fixed facilities between two levels | Idt ISO 14122.1: 2001 | EN ISO 14122-1:2001 |
| 11 | GB 17888.2- 20 08 | Mechanical safe access to machines and industrial plants - the first 2 part work platforms and channels | Idt ISO 14122.2: 2001 | EN ISO 14122-2:2001 |
| 12 | GB 17888.3- 2008 | Mechanical safe access to machines and industrial plants - the first 3 section stairs, ladder and guardrail | Idt ISO 14122.3: 2001 | EN ISO 14122-3:2001 |
| 13 | 17888.4- GB 2008 | Safety of machinery into the machines and industrial plants - of 4 portion fixed ladders | Idt ISO 14122.4: 2004 | EN ISO 14122 -4:2004 |
| 14 | GB 19436.3-2008 | Electrical safety of machinery. Electro-sensitive protective devices. Part 3 Special requirements for equipment using active photoelectric diffuse reflection protective devices (AOPDDR) | Idt IEC 61496-3:2001 | |
| 15 | GB/T 8196-2003 | General requirements for the design and manufacture of fixed and movable protective devices for mechanical safety protection devices | Mod ISO 14120 : 2002 | EN 954-1:1996 |
| 16 | GB / T 17454.1-2008 | Mechanical safety pressure-sensitive protective devices. Part 1: Design and test general rules of pressure-sensitive mats and pressure-sensitive floors | Idt ISO 13856-1:20 01 | neq prEN 1760.1:1994 |
| 17 | GB / T 17454.2-2008 | Mechanical safety pressure-sensitive protective devices. Part 2: General rules for the design and test of pressure-sensitive edges and pressure-sensitive rods | Idt ISO 13856- 2:2005 | |
| 18 | GB / T 17454.3-2008 | Mechanical safety pressure-sensitive protective devices. Part 3: General rules for the design and testing of pressure-sensitive buffers, pressure-sensitive plates, pressure-sensitive wires and similar devices | Idt ISO 13856- 3 :200 6 | |
| 19 | GB/T 17889.1-1999 | Ladder Part 1 : Terms, Types and Functional Dimensions | | E qv EN13 -1:1993 |
| 20 | GB/T 17889.2-1999 | Ladders of 2 Part requirements, testing and marking | | E qv EN131-2:1993 |
| 21 | GB/T 18831-2002 | Interlocking device design and selection principle of mechanical safety belt protection device | Mod ISO 14119 : 199 8 | EN 1088:1996 |
| 22 | GB/T 19074-2003 | Mechanical safety device guard of industrial fan fan | Idt ISO 12499 : 1999 | |
| 23 | GB / T 19436.1-2004 | Electrical safety of machinery. Electro-sensitive protective devices. Part 1: General requirements and tests | Idt IEC 61496-1:1997 | |
| 24 | GB / T 19436.2-2004 | Electrical safety of machinery. Electro-sensitive protective devices. Part 2 Special requirements for equipment using active optoelectronic protective devices (AOPDs) | Idt IEC 61496-2:1997 | |
| 25 | GB /T 19876 -2005 | Configuration and positioning of protective facilities related to machine safety and the approach speed of human body parts | Mod ISO 13855:2002 | EN 999:1998 |
| **06 Safety signs and symbols** | | | | |
| 1 | GB 2893-200 8 | Safety color | Mod ISO 3864 -1 : 2002 | |
| 2 | GB 2894- 2008 | Safety signs and guidelines for their use | Neq ISO 70 10 | |
| 3 | GB 6527.1-1986 | Safety color card | | |
| 4 | GB 7231-2003 | Basic identification colors, identification symbols and safety signs of industrial pipelines | | Refer to DIN 2403:1984 |
| 5 | GB 7947-2006 | Basic and safety rules for human-machine interface logos. Conductor color or digital logo | Idt IEC 60446:1999 | |
| 6 | GB 15052-1994 | Dangerous parts and signs of cranes | | |
| 7 | GB 18209.1-2000 | Mechanical safety instructions, and the operation of the first signs 1 Part Requirements for visual, auditory and tactile signals | I dt IEC 61310-1 : 1995 | EN 61310-1:1995 |
| 8 | GB 18209.2-2000 | Mechanical safety instructions, and the operation of the first mark 2 portion flag claim | I dt IEC 61310-2 : 1995 | EN 61310-2:1995 |
| 9 | GB 18209.3-2002 | Mechanical safety instructions, and the operation of the first mark 3 portion of claim position of the operating member and the operation | I dt IEC 61310-3 : 1999 | |
| 10 | GB /T 191-200 8 | Packaging, storage and transportation icon sign | Mod ISO 780:1997 | |

| No | Standard | standard name | Corresponding international standard number | Corresponding to foreign standards |
|---|---|---|---|---|
| 11 | GB/T 2893.1-2004 | Graphical symbols, safety colors and safety signs. Part 1 Design principles of safety signs in workplaces and public areas | Mod ISO 3864-1:2002 | |
| 12 | GB/T 3168-1993 | Digital control machine tool operating instructions visualized symbols | Neq ISO 2927:1979 and ISO 7000:1984 | |
| 13 | GB / T 4025-2003 | Basic and safety rules for man-machine interface signs and coding rules for indicators and operators | Idt IEC 60073:1996 | |
| 14 | GB / T 4026-2004 | The basic methods and safety rules for the identification of human-machine interface signs and general rules for the application of equipment terminals and specific conductor terminal identification and alphanumeric systems | Idt IEC 60445: 1999 | |
| 15 | GB /T 14778- 2008 | General rules for safe shades | | |
| 16 | GB/T 15566-1995 | Principles and requirements for using graphic signs | | |
| 17 | GB / T 16903.1-2008 | Rules for the Representation of Graphic Symbols for Signs Part 1 Design Principles of Graphic Symbols for Public Information | Neq ISO 22727:2007 | |
| 18 | GB / T 16903.2-2008 | Graphical Symbol Representation Rules for Signs Part 2 Test Procedure | Mod ISO 9186:2001 | |
| 19 | JB 6028-1998 | General rules for safety signs and hazard diagrams of construction machinery | Eqv ISO 9244: 1995 | |
| **07 Environmental pollution** | | | | |
| 1 | GB 8703-1988 | Electromagnetic radiation protection regulations | | |
| 2 | GB/T 13441-1992 | Measurement specification of human body whole body vibration environment | Neq ISO 2631/1:1985 | |
| 3 | GB/T 13442-1992 | The comfort reduction limit and evaluation criteria of human body whole body vibration exposure | Neq ISO 2631/1:1985 | |
| 4 | GB/T 18569.1-2001 | Safety of machinery to reduce the risk of health from hazardous substances emitted by machinery 1 part Principles and specifications for machinery manufacturers | Eqv ISO 14123-1:1998 | EN 626-1:1 994 |
| 5 | GB/T 18569.2-2001 | Safety of machinery decreased from hazardous substances emitted by machinery health risks of 2 portions method of generating verification procedures | Eqv ISO 14123-2:1998 | EN 626-2:1994 |
| 6 | JB 7740-1995 | Regulations on the discharge of oily wastewater from the machinery industry | | |
| 7 | JB 8891-1999 | Emission limits for exhaust pollutants from small and medium power diesel engines | I dt ISO 8178-4:1999 | |
| 8 | JB /T 6953-1993 | Smoke and Dust Emission Standard for Casting Cupola | | |
| 9 | JB/T 9878-1999 | Measurement of Dust Concentration of Metal Cutting Machine Tool | | |
| 10 | JB/T 9879-1999 | Method for measuring oil mist concentration of metal cutting machine tools | | |
| **08 Noise** | | | | |
| 1 | GB 12348-2008 | Environmental noise emission standards for industrial enterprises | | |
| 2 | GB 14097-1999 | Noise limits for small and medium power diesel engines | | |
| 3 | GB 22337 -2008 | Environmental noise emission standards for social life | | |
| 4 | GB/T 13325-1991 | Noise radiated by machinery and equipment Basic criteria for noise measurement at the operator's location (engineering level) | Neq ISO 6081:1986 | |
| 5 | GB/T 16769-1997 | Measurement method of noise sound pressure level of metal cutting machine tools | Neq ISO/DI S 230-5.2 : 1996 | DIN 45635T.16:1978 |
| 6 | JB 8551-1997 | Noise limits for rock drilling machinery and pneumatic tools | | |
| 7 | JB 9048-1999 | Noise measurement and limit of cold rolling tube mill | | |
| 8 | JB 9967-1999 | Hydraulic press noise limit | | |
| 9 | JB 9968-1999 | Noise limit for open press | | |
| 10 | JB 9969-1999 | Noise limits for bar shears, alligator shears, and shears | | |
| 11 | JB 9970-1999 | Noise limits for punching shears and combined punching shears | | |
| 12 | JB 9971-1999 | Bender, a three-roll coil machine noise limits | | |
| 13 | JB 9972-1999 | Noise limit of thread rolling machine, spring coiling machine and nail making machine | | |
| 14 | JB 9973-1999 | Air hammer noise limit | | |
| 15 | JB 9974-1999 | Noise limit of closed press | | |
| 16 | JB 9975-1999 | Noise limits for automatic upsetting machines, automatic trimming machines, automatic thread rolling machines, and automatic bending machines | | |
| 17 | JB 9976-1999 | Noise limit of sheet metal bending machine and folding machine | | |
| 18 | JB 9977-1999 | Noise limit of double-disc friction press | | |

| No | Standard | standard name | Corresponding international standard number | Corresponding to foreign standards |
|---|---|---|---|---|
| 19 | JB 10046-1999 | Limits and measurement methods of machine tool electrical noise | | |
| **09 machine tools** | | | | |
| 1 | GB 2494-1995 | Abrasive safety rules | | |
| 2 | GB 4674- 2009 | Safety Regulations for Grinding Machinery | | |
| 3 | GB 6067-1985 | Safety Regulations for Lifting Machinery | | |
| 4 | GB 6077-1985 | Shearing machinery safety regulations | | |
| 5 | GB 10891-1989 | Air handling unit safety requirements | | |
| 6 | GB 10892-2005 | Fixed air compressor safety rules and operating procedures | Mod ISO 5388:1981 | |
| 7 | GB 11341-2008 | Safety regulations for suspended conveyors | | |
| 8 | GB 12266-1990 | General safety requirements for machining equipment | | |
| 9 | GB 13567-1998 | Technical requirements for safety protection of EDM machine tools | | |
| 10 | GB 15760-2004 | General technical requirements for safety protection of metal cutting machine tools | | |
| 11 | GB 16454- 2008 | Technical requirements for safety protection of metal sawing machines | | |
| 12 | GB 16490-1996 | Safety Specification for Vibrating Feeder | | |
| 13 | GB 16798-1997 | Food machinery safety and hygiene | | |
| 14 | GB 17120-1997 | Safety technical conditions for forging machinery | | |
| 15 | GB 17584-1998 | Technical requirements for safety protection of bullhead planer | | |
| 16 | GB 17585-1998 | Slotting security Anti- supporting technology requirements | | |
| 17 | GB 17586-1998 | Technical requirements for broaching safety protection | | |
| 18 | GB 18452-2001 | Safety requirements for crushing equipment | | |
| 19 | GB 18568-2001 | Technical requirements for safety protection of machining centers | | |
| 20 | GB 19998-2005 | Technical requirements for safety protection of electrochemical machining machine tools | | |
| 21 | GB 20905-2007 | Safety requirements for foundry machinery | | |
| 22 | GB 20906-2007 | Safety technical requirements for die casting unit | | Mod EN 869:1998 |
| 23 | GB 21501-2008 | Safety requirements for cupola and cupola charging machine | | |
| 24 | GB 22207-2008 | Safety requirements for positive displacement air compressors | | Neq ASME B19.1-1995 |
| 25 | GB 22447-2008 | General technical conditions for safety of balancing machines | | |
| 26 | GB 22530-2008 | Safety requirements for rubber plastic injection molding machines | | Neq EN 201:1997 |
| 27 | GB 22997-2008 | Machine safety small size CNC lathes and turning centers | | Mod EN 12415:2000 |
| 28 | GB 22998-2008 | Large-scale CNC lathes and turning centers for machine tool safety | | Mod EN 12478:2000 |
| 29 | GB 23290-2 009 | Design and structural safety requirements of machine tool safety chucks | Idt ISO 16156:2004 | |
| 30 | GB 24384-2009 | Technical requirements for safety protection of cylindrical grinders | | |
| 31 | GB 24385-2009 | Technical requirements for safety protection of horizontal axis and rectangular table surface grinder | | |
| 32 | GB 24386-2009 | Technical conditions for safety protection of gear grinding machines | | |
| 33 | GB/T 6067-1985 | Safety Regulations for Lifting Machinery | | Neq NF E52-122:1975 |
| 34 | GB/T 17780-1999 | Textile machinery safety requirements | Eqv ISO 11111 : 1995 | |
| 35 | GB /T 18490-2001 | Safety requirements for laser processing machinery | Eqv ISO 11553:1996 | |
| 36 | GB/T 18514-2001 | General rules for the safety of wood-based panel machinery | | |
| 37 | JB 3350-1993 | Safety technical requirements for mechanical presses | | |
| 38 | JB 3915-1985 | Safety technical requirements for hydraulic press | | |
| 39 | JB 4029-2000 | Technical requirements for safety protection of grinder wheel guard | | |
| 40 | JB 7233-1994 | Packaging machinery safety requirements | | |
| 41 | JB 7741-1995 | Metal cutting safety requirements | | |
| 42 | JB 8686-1998 | Safety requirements for separators | | |
| 43 | JB 8780-1998 | Safety technical requirements for screw presses | | |
| 44 | JB 8799-1998 | Technical conditions for safety protection of grinder | | |
| 45 | JB 9962-1999 | Safety technical requirements for combined punching and shearing machine | | |
| 46 | JB 10139-1999 | Technical requirements for safety protection of gear hobbing machine | | |
| 47 | JB 10140-1999 | Technical requirements for safety protection of spline shaft milling machines | | |
| 48 | JB 10145-1999 | Safety requirements for die casting machines | | |
| 49 | JB 10166-2000 | Technical requirements for safety protection of spiral bevel gear milling machine | | |
| 50 | JB 10167-2000 | Technical conditions for safety protection of gear shaper | | |
| 51 | JB 10227-2001 | Technical conditions for safety protection of gear shaving machine | | |

| No | Standard | standard name | Corresponding international standard number | Corresponding to foreign standards |
|---|---|---|---|---|
| 52 | JB 10228-2001 | Technical requirements for safety protection of gear honing machine | | |
| 53 | JB 10229-2001 | Technical requirements for safety protection of thread milling machine | | |
| 54 | JB 10230-2001 | Technical requirements for safety protection of short thread milling machines | | |
| 55 | JB / T 5545-1991 | Technical requirements for safety protection of foundry machinery | | |
| **10 Woodworking machinery** | | | | |
| 1 | GB 12557-2000 | General Safety Rules for Woodworking Machine Tools | | Mod Pr EN 691:1992 |
| 2 | GB 15606- 200 8 | General rules for safety production in woodworking (timber) workshops | | |
| 3 | GB 22659-2008 | Woodworking machine safety CNC drilling machine and CNC router | | Mod EN 848-3:1999 |
| 4 | GB / T 14384-1993 | General technical requirements for woodworking machine tools | | |
| 5 | GB / T 18515-2001 | Structural safety of the rotary cutting machine | | |
| 6 | JB 3380-1999 | Woodworking Planer Safety | | Mod EN 859: 1997 |
| 7 | JB 5723-1991 | Safe structure of woodworking circular sawing machine with manual feeding of receipt pieces | | |
| 8 | JB 5727-1999 | Single-sided woodworking press planer safety | | Mod EN 860 |
| 9 | J B 6109-1992 | Structural safety of single-axis woodworking milling machine | | |
| 10 | JB 6110-1992 | Structural safety of automatic feed longitudinal section woodworking circular machine | | |
| 11 | JB 6113-1992 | Safety technical articles for woodworking tools | | |
| **11 manual, electric, pneumatic tools safe operation** | | | | |
| 1 | GB 13960.2-2008 | The safety of portable electric tools Part 2: Particular requirements for circular saws | | |
| 2 | GB 13960.4-2009 | Safety of Portable Power Tools Part 2 Particular Requirements for Planing and Thickness Planing | | |
| 3 | GB 13960.5-2008 | The safety of portable electric tools Part 2: Specific requirements for bench grinders | | |
| 4 | GB 13960.10-2009 | The safety of portable electric tools Part 2: Specific requirements for single-axis vertical wood milling | | |
| 5 | GB 14807-1993 | Safety requirements for electric profile cutting machines | | |
| 6 | GB 17668-1999 | Safety regulations for the use of electric chain saws | | |
| 7 | GB 17957-2005 | Safety requirements for rock drilling machinery and pneumatic tools | | |
| 8 | GB / T 14822-1993 | Design guidelines for safety protection structure of hand-held electric tools | | |
| **1 2 mining and other equipment** | | | | |
| 1 | GB 14161-2008 | Mine safety signs | | |
| 2 | GB 13308-199 1 | Safety requirements for lifting tackle | | |
| 3 | JB 5319.2-1991 | Safety code for stacking cranes in tracked roadways | | |
| 4 | JB 6132-1992 | Safety Code for Buried Scraper Conveyor | | |
| 5 | JB 7326-1994 | Safety Specification for Bucket Wheel Stacker and Reclaimer | | |
| 6 | JB 8515-1997 | Safety requirements for mine winches | | |
| 7 | JB 8516-1997 | Safety requirements for mine hoists and mine hoisting winches | | |
| 8 | JB 8518-1997 | Safety requirements for underground scrapers | | |
| 9 | JB 8519-1997 | Disc brake of mine hoist and mine hoist winch | | |
| 10 | JB 8912-1999 | Safety requirements for mine blasthole drills | | |
| 11 | JB 8913-1999 | Safety requirements for mining vehicles | | |
| 12 | JB 8918-1999 | Safety requirements for hydraulic explosion-proof hoists and hoisting winches | | |
| **13 other** | | | | |
| 1 | GB 2494-2003 | General abrasive safety rules | | |
| 2 | GB 6222-2005 | Gas Safety Regulations for Industrial Enterprises | | |
| 3 | GB 7144-1999 | Cylinder color logo | | |
| 4 | GB 8959-1988 | Casting dustproof technical regulations | | |
| 5 | GB 7950-1999 | General technical requirements for lifting moment limiter of jib crane | | |
| 6 | GB 9448-1999 | Welding and cutting safety | | Eqv ANSI/AWS Z4 9.1 |
| 7 | GB 10080-2001 | Safety requirements for fans for air conditioning | | Eqv BS 848 part 5: 1986 |
| 8 | GB 10827-1999 | Motor Industrial Vehicle Safety Code | Eqv ISO 3691:1980 | |
| 9 | GB 11291-1997 | Industrial robot safety regulations | Eqv ISO 10218:1992 | |
| 10 | GB 11341-1989 | Safety regulations for suspended conveyors | | |

| No | Standard | standard name | Corresponding international standard number | Corresponding to foreign standards |
|---|---|---|---|---|
| 11 | GB 12977-2008 | Balancing machine protective cover and other protective measures for measuring station | Mod ISO 7475:2002 | |
| 12 | GB 13318-2 003 | General rules for forging production safety and environmental protection | | |
| 13 | GB 13887- 2008 | Cold stamping safety regulations | ISO 7225:1994 | |
| 14 | GB 15578-1995 | Safety requirements for resistance welding machines | | |
| 15 | GB 15606-2008 | General rules for safety production in woodworking (timber) workshops | | |
| 16 | GB 15735-2004 | Safety and health requirements for metal heat treatment production process | | |
| 17 | GB 16804-1997 | Cylinder warning label | Eqv ISO 7225:1994 | |
| 18 | GB 17907-1999 | General safety requirements for mechanical parking equipment | | |
| 19 | GB 19288-2003 | Safety regulations for the production of lighters | | |
| 20 | GB 21746-2008 | General Principles of Safety Requirements for Teaching Equipment | | |
| 21 | GB 21748-2008 | Safety requirements for teaching equipment and equipment Basic requirements for equipment and parts | | |
| 22 | GB 21749-2008 | Safety requirements for teaching equipment and glass equipment and connecting parts | | |
| 23 | GB /T 8176-19 9 7 | General rules for safe production in stamping workshop | | |
| 24 | GB / T 23580-2009 | Special rules for continuous handling equipment safety regulations | Idt ISO 7149:1982 | |
| 25 | JB 3350-1993 | Safety technical requirements for mechanical presses | | |
| 26 | JB 3643-2000 | Safety requirements for small arc welding transformers | | |
| 27 | JB 5320-2000 | Safety Specification for Scissor Lift Table | | |
| 28 | JB 6028-1998 | General rules for safety signs and hazard icons of construction machinery | Eqy ISO 9244:1995 | Pr EN 5099-1 and ANSI Z 535.4 |
| 29 | JB 6030-2001 | General safety technical requirements for construction machinery | | |
| 30 | JB 6407-1992 | Safety technical specifications for commissioning, operation and maintenance of electrostatic precipitators | | |
| 31 | JB 8524-1997 | Safety requirements for positive displacement air compressors | | |
| 32 | JB 8525-19 97 | Centrifuge safety requirements | | |
| 33 | JB 8588-1997 | Safety requirements for cooling fans for electric welding machines | | I dt IEC 974/1:1989 |
| 34 | JB 8654-1997 | Safety requirements for positive displacement and centrifugal chiller (heat pump) units | | ANSI/ASHRAEI 5-1992 |
| 35 | JB 8655-1997 | Safety requirements for unitary air conditioners | Neq IEC 335-2-40:1992<br>Eqv IEC 335-1:1991 | ANSI/ASHRAEI 5-1992 |
| 36 | JB 8684-1998 | Safety requirements for rock drilling machinery and pneumatic tools | | |
| 37 | JB 8686-1998 | Safety requirements for separators | | |
| 38 | JB 8716-1998 | Safety regulations for truck cranes and tire cranes | | |
| 39 | JB 8780-1998 | Safety technical requirements for screw presses | | |
| 40 | JB 8781-1998 | Safety technical requirements for shears | | |
| 41 | JB 8836-1999 | Safety technical requirements for reciprocating lawn mowers | | |
| 42 | JB 8890-1999 | Safety requirements for reciprocating internal combustion engines | | |
| 43 | JB 8939-1999 | Safety technical specifications for water pollution prevention equipment | | |
| 44 | JB 9063-1999 | Safety requirements for room fan-coil air conditioners | | |
| 45 | JB 10143-1999 | Technical requirements of automatic fire extinguisher for electric spark forming machine | | |
| 46 | JB 10144-1999 | Safety requirements for throwing (shot) blasting equipment | | |
| 47 | JB 10146-1999 | Safety requirements for cupola and cupola charging machine | | |
| 48 | JB 10148-1999 | Safety technical requirements for sheet metal bending machine | | |
| 49 | JB /T 7018- 2008 | Safety specification for monorail trolley suspension conveyor | Mod ISO 9851:1990 | |
| **14 Electrical** | | | | |
| 1 | GB 4208- 2008 | Enclosure protection grade ( IP code) | Idt IEC 60 529: 2001 | |
| 2 | GB 1 0320-1995 | Electrical safety of laser equipment and facilities | | |
| 3 | GB 12158-1990 | General guidelines for preventing electrostatic accidents | | |
| 4 | GB 12350-2000 | Safety requirements for small power motors | IEC 335-1:1991 | EN 60335-1:1994 |
| 5 | GB/T 4942.1-2001 | Rotating motor enclosure protection classification ( IP code) | Idt IEC 60034-5:1991 | EN 60034-5:2001 |
| 6 | GB/T 4942.2-2001 | Low-voltage electrical enclosure protection class | 947 IEC - 1: 1998 and IEC 529: 1989 | EN 60947:2004 and EN 60529:1991 |
| 7 | GB/T 12501-1990 | Classification of protection against electric shock for electrical and electronic equipment | IEC 536:1976 | EN 60536 |
| 8 | GB/T 13869- 2008 | Electricity Safety Guide | | |

| No | Standard | standard name | Corresponding international standard number | Corresponding to foreign standards |
|---|---|---|---|---|
| 5 | GB 23821-2009 | Safety distance of machinery to prevent the upper and lower limbs from touching the danger zone | Idt ISO 13857:2008 | |
| 6 | GB 12265.1-1997 | Safety distance of machinery to prevent upper limbs from touching the danger zone | Eqv ISO/DIS 13852 | Eqv EN 294:1992 |
| 7 | GB 12265.2-2000 | Safety distance of machinery to prevent the lower limbs from touching the danger zone | Eq v ISO/DIS 13853 | Eqv PrEN 811:1994 |
| 8 | GB 12265.3-1997 | Mechanical safety The minimum distance to avoid extrusion of various parts of the human body | ISO/DIS 13854:1996 | E qv EN 349:1993 |
| 9 | GB 16909-1997 | Dense mesh safety net | | |
| 10 | GB 17888.1- 2008 | Safe entry of machinery into fixed facilities of machinery and industrial equipment Part 1 Selection of entry into fixed facilities between two levels | Idt ISO 14122.1: 2001 | EN ISO 14122-1:2001 |
| 11 | GB 17888.2- 20 08 | Mechanical safe access to machines and industrial plants - the first 2 part work platforms and channels | Idt ISO 14122.2: 2001 | EN ISO 14122-2:2001 |
| 12 | GB 17888.3- 2008 | Mechanical safe access to machines and industrial plants - the first 3 section stairs, ladder and guardrail | Idt ISO 14122.3: 2001 | EN ISO 14122-3:2001 |
| 13 | 17888.4- GB 2008 | Safety of machinery into the machines and industrial plants - of 4 portion fixed ladders | Idt ISO 14122.4: 2004 | EN ISO 14122 -4:2004 |
| 14 | GB 19436.3-2008 | Electrical safety of machinery. Electro-sensitive protective devices. Part 3 Special requirements for equipment using active photoelectric diffuse reflection protective devices (AOPDDR) | Idt IEC 61496-3:2001 | |
| 15 | GB/T 8196-2003 | General requirements for the design and manufacture of fixed and movable protective devices for mechanical safety protection devices | Mod ISO 14120 : 2002 | EN 954-1:1996 |
| 16 | GB / T 17454.1-2008 | Mechanical safety pressure-sensitive protective devices. Part 1: Design and test general rules of pressure-sensitive mats and pressure-sensitive floors | Idt ISO 13856-1:20 01 | neq prEN 1760.1:1994 |
| 17 | GB / T 17454.2-2008 | Mechanical safety pressure-sensitive protective devices. Part 2: General rules for the design and test of pressure-sensitive edges and pressure-sensitive rods | Idt ISO 13856- 2:2005 | |
| 18 | GB / T 17454.3-2008 | Mechanical safety pressure-sensitive protective devices. Part 3: General rules for the design and testing of pressure-sensitive buffers, pressure-sensitive plates, pressure-sensitive wires and similar devices | Idt ISO 13856- 3 :200 6 | |
| 19 | GB/T 17889.1-1999 | Ladder Part 1 : Terms, Types and Functional Dimensions | | E qv EN13 -1:1993 |
| 20 | GB/T 17889.2-1999 | Ladders of 2 Part requirements, testing and marking | | E qv EN131-2:1993 |
| 21 | GB/T 18831-2002 | Interlocking device design and selection principle of mechanical safety belt protection device | Mod ISO 14119 : 199 8 | EN 1088:1996 |
| 22 | GB/T 19074-2003 | Mechanical safety device guard of industrial fan fan | Idt ISO 12499 : 1999 | |
| 23 | GB / T 19436.1-2004 | Electrical safety of machinery. Electro-sensitive protective devices. Part 1: General requirements and tests | Idt IEC 61496-1:1997 | |
| 24 | GB / T 19436.2-2004 | Electrical safety of machinery. Electro-sensitive protective devices. Part 2 Special requirements for equipment using active optoelectronic protective devices (AOPDs) | Idt IEC 61496-2:1997 | |
| 25 | GB /T 19876 -2005 | Configuration and positioning of protective facilities related to machine safety and the approach speed of human body parts | Mod ISO 13855:2002 | EN 999:1998 |
| **06 Safety signs and symbols** | | | | |
| 1 | GB 2893-200 8 | Safety color | Mod ISO 3864 -1 : 2002 | |
| 2 | GB 2894- 2008 | Safety signs and guidelines for their use | Neq ISO 70 10 | |
| 3 | GB 6527.1-1986 | Safety color card | | |
| 4 | GB 7231-2003 | Basic identification colors, identification symbols and safety signs of industrial pipelines | | Refer to DIN 2403:1984 |
| 5 | GB 7947-2006 | Basic and safety rules for human-machine interface logos. Conductor color or digital logo | Idt IEC 60446:1999 | |
| 6 | GB 15052-1994 | Dangerous parts and signs of cranes | | |
| 7 | GB 18209.1-2000 | Mechanical safety instructions, and the operation of the first signs 1 Part Requirements for visual, auditory and tactile signals | I dt IEC 61310-1 : 1995 | EN 61310-1:1995 |
| 8 | GB 18209.2-2000 | Mechanical safety instructions, and the operation of the first mark 2 portion flag claim | I dt IEC 61310-2 : 1995 | EN 61310-2:1995 |
| 9 | GB 18209.3-2002 | Mechanical safety instructions, and the operation of the first mark 3 portion of claim position of the operating member and the operation | I dt IEC 61310-3 : 1999 | |
| 10 | GB /T 191-200 8 | Packaging, storage and transportation icon sign | Mod ISO 780:1997 | |

| No | Standard | standard name | Corresponding international standard number | Corresponding to foreign standards |
|---|---|---|---|---|
| 9 | JB 1601-1993 | Rated voltage 300/500V rubber insulated fixed laying wires | | |
| 10 | JB 8677-1997 | Factory explosion-proof circuit breaker | | |
| 11 | JB 9537-1999 | Environmental technical requirements for indoor and outdoor anti-corrosion and explosion-proof asynchronous motors (frame size 45~710 ) | | |
| 12 | JB 9650-1999 | Flameproof turn changeover switch | | |

Note:

| * | Idt | Mod | Neq | Eqv |
|---|---|---|---|---|
| Indicates that the standard has been obsoleted | Equivalent use | Modification adopted | Non-equivalent adoption | Equivalent use |

( Used before 2002 )

Standard Control

| National standard | International standard |
|---|---|
| GB17626.1-2006 Electromagnetic compatibility experiment and measurement technology immunity experiment summary | IEC61000-4-1: 2000 |
| GB17626.2-2006 Electromagnetic compatibility experiment and measurement technology Electrostatic discharge immunity experiment | IEC61000-4-2: 2001 |
| GB17626.3-2006 Electromagnetic compatibility experiment and measurement technology Radio frequency electromagnetic field radiation immunity experiment | IEC61000 -4-3: 2002 |
| GB17626.4-1998 Electromagnetic compatibility experiment and measurement technology Electrical fast transient pulse group immunity experiment | IEC61000-4-4: 1995 |
| GB17626.5-1999 Electromagnetic compatibility experiment and measurement technology surge (impact) immunity experiment | IEC61000-4-5: 1995 |
| GB17626.6-1998 Electromagnetic compatibility experiment and measurement technology Radio frequency field induced conducted disturbance immunity experiment | IEC61000-4-6: 1996 |
| GB17626.7-1998 Electromagnetic compatibility experiment and measurement technology Power supply system and connected equipment harmonics, interharmonic wave measurement and measurement instrument guide | IEC61000 -4-7: 1991 |
| Machine safety-a safe distance to prevent the upper and lower limbs from touching the danger zone | EN ISO 13857:2008 |
| Machinery Directive | 98/37/EC |
| Low Voltage Directive | 73/23/EC |
| Electromagnetic Compatibility Directive | 93/97/EC |
| Machine safety-functional safety | IEC 61508 |
| Machine safety-the positioning of protective equipment related to the approach speed of various parts of the human body | EN 999:1999 |
| Machine safety-a safe distance to prevent the upper limbs from touching the danger zone | EN 294:1992 (replaced by 13857 on April 30, 2008) |
| Machine safety-a safe distance to prevent the lower limbs from touching the danger zone | EN 811:1997 ( replaced by 13857 on April 30 , 2008 ) |
| Machine safety-related to the safety of control system components | EN954-1 (replaced by 13849 on December 29, 2009) |

# 8. ANNEX III - Standard symbols and standard prefix by industry sector

| | Prefix Code | Industry Sector | Issuing Authorities/Agencies |
|---|---|---|---|
| | GB.GB/T,GB/Z | China National Standards | Standardization Administration of the People's Republic of China (SAC) |
| | AQ, AQ/T, AQT | Safety & Security | State Administration of Work Safety |
| | CJ, CJ/T, CJT | Urban Construction | Ministry of Housing and Urban-Rural Development of PRC |
| | DL, DL/T, DLT | Electricity & Power | National Energy Administration |
| | FZ, FZ/T, FZT | Spinning & Textile | Ministry of Industry and Information Technology of PRC |
| | GY, GY/T, GYT | Radio, Film & TV | State Administration of Press, Publication, Radio, Film and TV of PRC |
| | HG, HG/T, HGT | Chemical Industry | Ministry of Industry and Information Technology of PRC |
| | HJ, HJ/T, HJT | Environmental Protection | Ministry of Environmental Protection of PRC |
| | JB, JB/T, JBT | Machinery | Ministry of Industry and Information Technology of PRC |
| | JC, JC/T, JCT | Building Materials | Ministry of Industry and Information Technology of PRC |
| | JG, JG/T, JGT | Building & Construction | Ministry of Housing and Urban-Rural Development of PRC |
| | JJF | Metrological Specifications | General Administration of Quality Supervision, Inspection and Quarantine of PRC |
| | JJG | Metrological Verification | General Administration of Quality Supervision, Inspection and Quarantine of PRC |
| | JR, JR/T, JRT | Finance | The People's Bank of China |
| | JT, JT/T, JTT | Highway & Transportation | Ministry of Transport of PRC |
| | MT, MT/T, MTT | Coal | State Administration of Work Safety |
| | NB, NB/T, NBT | Energy | National Energy Administration |

| | Prefix Code | Industry Sector | Issuing Authorities/Agencies |
|---|---|---|---|
|  | NY, NY/T, NYT | Agriculture | Ministry of Agriculture of PRC |
|  | QB, QB/T, QBT | Light Industry | Ministry of Industry and Information Technology of PRC |
|  | QC, QC/T, QCTT | Automobile & Vehicle | Ministry of Industry and Information Technology of PRC |
|  | SB, SB/T, SBT | Commerce | Ministry of Commerce of PRC |
|  | SH, SH/T, SHT | Petrochemical | Ministry of Industry and Information Technology of PRC |
|  | SJ, SJ/T, SJT | Electronics | Ministry of Industry and Information Technology of PRC |
|  | SL, SL/T, SLT | Water Resources (Irrigation) | Ministry of Water Resources of PRC |
|  | SN, SN/T, SNT | Commodity Inspection | General Administration of Quality Supervision, Inspection and Quarantine of PRC |
|  | SY, SY/T, SYT | Oil & Gas | National Energy Administration |
|  | TB, TB/T, TBT | Railway & Train | National Railway Administration (previously Ministry of Railway) |
| | YB, YB/T, YBT | Ferrous Metallurgy | Ministry of Industry and Information Technology of PRC |
|  | YC, YC/T, YCT | Tobacco | State Tobacco Monopoly Administration |
|  | YD, YD/T, YDT | Telecommunication | Ministry of Industry and Information Technology of PRC |
| | YS, YS/T, YST | Non-ferrous Metallurgy | National Development and Reform Commission |
|  | YY, YY/T, YYT | Medicine & Medical Device | China Food and Drug Administration |

# 9. ANNEX IV - List of products for self-declaration

Example list of products with the possibility of self-declaration:

| Number | Name of product | | CNCA Implementation Rules | Procedure A or B |
|---|---|---|---|---|
| | Product category | Sub product category and code | | |
| 1 | Electrical tools | Electric drill (0501) | CNCA-C05-01:2014 | Self-declaration procedure A (Type test in optional laboratory + self-declaration) |
| 2 | | Electric grinder(0503) | | |
| 3 | | Electric hammer(0506) | | |
| 4 | Electric welder | DC arc welder (0603) | CNCA-C06-01:2014 | |
| 5 | | TIG arc welder (0604) | | |
| 6 | | MIG/MAG arc welder (0605) | | |
| 7 | | Plasma arc cutting machine (0607) | | |
| 8 | Circuit switch and electrical device for protection or connection | Thermal fuses (0205) | CNCA-C02-01:2014 | Self-declaration procedure B (Type test in designated laboratory + self-declaration) |
| 9 | | Cartridge fuse-links of miniature fuses (0207) | | |
| 10 | low-voltage apparatus | Leakage protector (0306) | CNCA-C03-02:2014 | |
| 11 | | Circuit breaker (0307) | | |
| 12 | | Fuse (0308) | | |
| 13 | | Low-voltage switchgear (disconnectors, switch-disconnectors and fuse-combination units)0302) | | |
| 14 | | Other circuit protection devices (0304, 0307, 0309) | | |
| 15 | | Relay (0303) | | |
| 16 | | Other switches (0305) | | |
| 17 | | Other device (0304, 0305) | | |
| 18 | | low-voltage switchgear assemblies (0301) | CNCA-C03-01:2014 | |
| 19 | Low power motor | Low power motor (0401) | CNCA-C04-01:2014 | |
| 20 | Equipment for Household and similar uses | Motor-compressor (0704) | | |

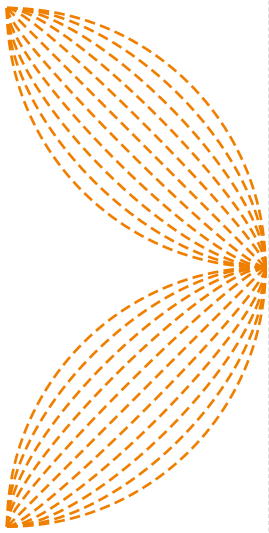
| Number | Name of product | | CNCA Implementation Rules | Procedure A or B |
|---|---|---|---|---|
| | Product category | Sub product category and code | | |
| 21 | Motor vehicle and safety accessories | Car seat belt (1104) | CNCA-C11-04:2014 | |
| 22 | | Motor vehicle exterior lighting and light signal devices (1109, 1116) | CNCA-C11-07:2014 CNCA-02C-065:2005 | |
| 23 | | Car seat and seat headrest (1114) | CNCA-C11-12:2014 | |
| 24 | | Motor vehicle indirect vision device (1110, 1115) | CNCA-C11-08:2014 CNCA-02C-064:2005 | |
| 25 | | Car drive recorder (1117) | CNCA-C11-14:2014 | |
| 26 | | Car reflecting marking (1118) | CNCA-C11-13:2014 | |
| 27 | Safety glass | Car safety glass (1301) | CNCA-C13-01:2014 | |
| | Information technology equipment, Audio and video equipment | Equipment with rated voltage less than or equal to 5VDC, rated power consumption less than 15W (or 15VA) and no rechargeable battery (class III equipment) | CNCA-C09-01:2014 CNCA-C08-01:2014 | Self-declaration procedure A (Type test in optional laboratory + self-declaration) |

# 10. ANNEX V products with choice of self-declaration OR private certification

## PRODUCTLIST WITH CCC SELF DECLARATION OR PRIVATE CERTIFICATION CQC.

- Electric products and electronic components
- Household electric appliance accessories
- Electrical accessories
- Tools for lighting apparatus (lamps and luminaries)
- Electric tools
- **Small and medium sized electric machines and accessories**
- Medical instruments
- Household and similar electrical appliances
- Commercially used machines
- Lighting apparatus
- Electric wires and cable
- Low voltage apparatus
- Automotive accessories
- Motorbike accessories
- Tyres
- Glass
- Power system relay protection and automation devices
- Water pumps
- Electric meters
- Low voltage apparatus and accessories
- High voltage equipment and appliances
- Generator sets
- Photovoltaic products
- **Motors**
- Additional CQC Certification for CCC certified wires and cables
- Test and control instruments
- **Earthmoving machineries and accessories**
- Electric vehicle charging stations and plugs
- **Wind power products**
- Thermal energy products
- Construction materials
- Textiles
- Building products
- Sanitary products
- Cement products
- **Machines**
- Office equipment (functional)
- Surge protection
- Audio and video apparatus (functional)
- Light electric vehicles and accessories
- Electric cars and accessories
- Bearing products
- Restriction of Hazardous Substances (RoHS1 certification)
- Certification for non-metallic materials and parts
- CQC certification for non-metallic material and parts
- School supplies
- Certification for the restricted use of Polycyclic Aromatic Hydrocarbons (PAHs) Accumulators and batteries

- **Metal welding, cutting and heat treatment Equipment**
- Spray guns for non-flammable liquids
- Electric scissors
- Tappers
- **Electric chain saws**
- **Electric planers**
- **Electric pruning shears**
- Color picture tubes
- Antenna amplifiers
- Computer gaming machines
- Learning machines
- **Motorcycle engines**
- Motor vehicle horns
- Motor vehicle brake hoses
- Car fuel tanks
- Modems (with card)
- ISDN Terminals
- Anti-theft alarm systems for cars
- Wireless LAN Products
- Concrete Anti-freeze
- Plugs and sockets for industrial purposes
- Appliances couples for industrial purposes
- Construction site equipment (ACS)
- Public power grid power distribution equipment
- Combustible Gas alarm products
- Electrical fire monitoring systems
- Aerosol fire extinguishing devices



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