



### Content

No.	GB/T19001-2008		Item Page						
1			Cover						
2			Table of Contents						
3	4.2.2/5.5.2	"Qualit	"Quality Manual" 36 issuance order and management representative/quality leader appointment letter						
4	4.2.2		"Quality Manual" issuance list	3					
5	1.2		Company profile Application scope of quality management system	4					
6	2/3/5.3		Preface and Quality square needle	5					
7	5.4.1/0.1	Qua	lity Target and Quality Management System Chart (Organization Chart)	6					
8	4		Quality management system	7~9					
9	5		Management responsibilities						
10	6		Resource management	18~19					
11	7		Product realization						
12	8		Measurement, analysis and improvement						
13	4.23	Manag	Management of "Quality Manual" (revision, reprint and distribution instructions) 30						
14	5.5.1	Adminis	Administrative department/relevant personnel-list of responsibilities and authorities 31~32						
15	4.2	"Procedure Document" and GB/T19001-2008 standard clause comparison table 33~34							
16	4.2.3	"Quality Manual" Modification List 35							
17	4.2	List of supporting documents (controlled documents) of the Quality Manual 36							
18	Annex 1		Design and development flow chart						
19	Annex 2		Product process flow chart						
20	Annex 3		Technical service flow chart						







### Publication Notice

In order to strengthen the company's basic management work, promote the scientific, procedural, and standardized quality management activities, improve corporate management and product quality, shape the corporate image, ensure the establishment of a sound quality management system and maintain its compliance, suitability and operation Validity and consistency of certified products are based on "GB/T 19001—2008/ISO 9001: 2008 Quality Management System Requirements" and product certification factory quality assurance capability requirements, combined with the actual production and operation conditions and the reasons for internal and external changes (name change, Address relocation, organizational structure/personnel adjustment), the fourth edition of the "Quality Manual" was organized and revised by the Administration Department.

This "Quality Manual" has been carefully reviewed and elaborated on the company's quality policy and quality objectives. It is a programmatic document that the quality management system needs to strictly follow for the continuous and effective operation and implementation of product certification. This "Quality Manual" is now approved to be formally implemented from August 16, 2012. I hope all employees of the company will study carefully, understand and consciously implement the requirements in the "Quality Manual", and work hard to achieve the established quality policy, quality goals, continuous improvement of the quality management system and the consistency of certified products. At the same time, this "Quality Manual" can also be used when companies provide external product quality assurance and third-party audits.



In accordance with the "GB/T 19001—2008/ISO 9001: 2008 Quality Management System Requirements" and the requirements of product certification factory quality assurance capabilities, in order to implement and maintain the effectiveness of the company's quality management system and ensure the consistency of certified products, Appoint Comrade A as the management representative of the company's quality management system, Comrade B as the quality leader for product certification, and Comrade C as the technical leader for product certification. Strengthen the leadership of daily quality management and certification product consistency checks and the quality management system Liaise with external parties for related matters, and hope that all functional departments and all employees will support and cooperate.

General manager: Date: August 1, 2012 040030





### "Quality Manual" issuance list

Controlled number:	department/person
N₂.01	General Manager
№.02	Administration Department
№.03	Chief Engineer/Manager Representative/Quality Manager/Technical Manager/Technical Center
Nº.04	Deputy General Manager/Manufacturing Department, Workshop
№.05	Deputy General Manager/Business Center
№.06	Deputy General Manager/Purchasing Center, Warehouse
Original file	

"Uncontrolled" number:

If required by customers or other reasons, it must be reviewed by the representative of the management/quality leader and approved by the general manager. The administrative department will affix the seal of "uncontrolled" and register with the number, and go through relevant procedures To issue.







### Company Profile

Jiangsu Daelim Electric Co., Ltd. is located at No. 6, Bailong Road, Louzhuang Town, Jiangyan District, Taizhou City, Jiangsu Province, the National Science and Technology Demonstration Park and Jiangsu Industrial Demonstration Development Zone. Legal representative: Dong Bin, registered capital: 30 million yuan. It is a professional manufacturer of power transformers/special transformers, box transformers and complete sets of switchgear below 110kV, and is selected as a member unit of China Electrical Equipment Industry Association. The company has strong technical force, engineering and technical personnel accounted for more than 25% of the total number of employees, using advanced programming computer software for product optimization design and AutoCAD automatic drawing software, complete testing methods; advanced infrastructure, nearly 100 sets of various general and special production equipment Sets, with an annual output value of 100 million yuan production capacity. Leading products: D series single-phase distribution transformers, ZGS American box transformers, SZ11 35kV/69kv/110kV oil-immersed on-load tapping power transformers and other prototypes have successfully passed the National Transformer Quality Supervision and Inspection Center and Electric Power Industry Electric The equipment quality inspection and testing center conducted routine, type, special tests and provincial new product and new technology appraisal, and obtained the product model registration certificate issued by Shenvang Transformer Research Institute. At the same time, oil-immersed power transformers and box-type transformers have obtained the international standard product mark certificate. In June 2009, the company began to conscientiously implement the "GB/T 19001-2008/ISO9001: 2008 Quality Management System Requirements" standard, improve the quality management system, and strictly control the quality of material purchases, component procedures and product inspections, so that the company All management activities and each process stage of the company are under control to ensure the continuous and effective operation of the quality management system.

The company's business purpose: strictly in accordance with the requirements of the ISO 9001 quality management system standard, and maintain the continuous effectiveness of the quality management system, and strive to provide more and better electrical products, enthusiastically serve the power industry, and satisfy customers.

### Application scope of quality management system

This "Quality Manual" stipulates the requirements for establishing and improving the company's quality management system and ensuring the consistency of certified products. The company has stably provided the design, production and service activities of oil-immersed transformers below 110kV, dry-type transformers/special transformers below 35kV, box-type substations and high and low voltage switchgear that meet customer requirements and applicable laws and regulations. ability. And through the effective application of the quality management system, including the effective application of the continuous improvement process, the desire to enhance customer satisfaction is finally realized.

This "Quality Manual" covers the contents of all clauses in the "GB/T 19001—2008/ISO 9001: 2008 Quality Management System Requirements" and the quality assurance capability requirements of the product certification factory, without any deletion.







### Preface

This "Quality Manual" is established in accordance with "GB/T 19001—2008/ISO 9001:2008 Quality Management System Requirements" and the quality assurance capability requirements of the product certification factory. It expresses the interaction between the processes of the quality management system, not only to ensure compliance with the process/product requirements, but also to enhance customer satisfaction. It is the basic program and code of conduct for the implementation of the quality management system. It also clearly stipulates the responsibilities and authorities of the functional departments/related personnel in the company's organizational structure, and describes the mutual relationship and communication channels. Therefore, personnel at all levels should work within the scope of their duties and powers, and be responsible for the implementation of the requirements of this Quality Manual.

The content of each clause of this "Quality Manual" is complied with "GB/T 19001—2008/ISO 9001:2008 Quality Management System Requirements" and the product certification factory's quality assurance capability requirements. Relevant terms and definitions are determined in accordance with "GB/T 19001 —2008/ISO 9001:2008 Quality Management System Fundamentals and Terminology" and regulations. The company prepares the "Quality Management System Procedure Document" and other supporting documents, which shall be based on this "Quality Manual" or be cited.

This "Quality Manual" starts from Chapter 4 to Chapter 8. The marked terms correspond to the terms in "GB/T 19001—2008/ISO 9001:2008 Quality Management System Requirements" one by one ("Product Certification The content of the clauses in "Factory Quality Assurance Ability Requirements" is also run through) to facilitate familiarity, understanding and implementation.

### Quality square needle

Quality first, customer first.

Quality-oriented——In the era of fierce market economy competition, our product quality and reputation are like our own life. All employees must continuously improve their quality awareness and operational skills, and standardize various management tasks, in order to ensure the quality of our products, meet the requirements of standards, laws and regulations and customers, and strive to create the "Yili" brand.

Customer first-fully embody the company's principle of "customers as the focus" and provide customers with satisfactory services, in order to develop and win the market. Enhance customer satisfaction and strive for the survival, prosperity and development of the enterprise.







### **Quality Goal**

1. The first-time inspection qualification rate of parts is  $\geq 90\%$ , and the product factory acceptance rate is 100%;

2. Zero major safety accidents (persons, equipment, products);

3. The degree of customer satisfaction reaches over 85%, and the effective handling of customer complaints is 100%.

General manager:

Date: September 1, 2011









### 4 Quality Management System

### 4.1 General requirements

The company shall establish a quality management system in accordance with "GB/T 19001—2008/ISO 9001: 2008 Quality Management System Requirements" and the requirements of product certification factory quality assurance capabilities, and document it (the composition of the document: quality policy/objective, quality manual, Procedure documents and management systems/post responsibilities/product drawings/inspection procedures/operation procedures/technical rules and records, etc.) shall be implemented and maintained, and their effectiveness shall be continuously improved. Should do:

4.1.1 Use the "PDCA" method to determine the processes and applications required by the quality management system. That is, in accordance with customer requirements, applicable laws and regulations (product standards) and the quality policy formulated by the company, plan and establish the necessary quality goals and each process for providing results; organize and implement each process/process stage of product manufacturing and processing; according to the policy , Objectives and product requirements, monitor and measure the process and products, and report the inspection results to the general manager; take corrective measures for problems and customer complaints or complaints, and take preventive measures to prevent recurrence to continuously improve process performance . And determine the sequence and interaction of the process.

4.1.2 The "PDCA" model is firstly quality planning P, secondly organization and implementation D, thirdly inspection result C, and finally disposal A. The previous process is the preparation for the next process, which is carried out in cycles. A process can include several processes, which is a collection of multiple processes, such as "product realization". The output of one process is also the input of another process, such as output: purchase purchase; input: warehouse inspection.

4.1.3 Through the preparation, modification and improvement of the "Procedural Documents", "Technology Code/Operation Guidance Document", "Safety Operation Regulations", "Procurement Purchase/Processing/Product Factory Inspection Regulations". "Management System/Job Responsibilities/Qualifications" And competence requirements" and other documents to determine the required criteria and methods to ensure the effective operation and control of these processes.

4.1.4 By setting up an organizational structure, clearly defining the responsibilities and authorities of personnel at all levels, training personnel involved in product conformity to meet the requirements of qualifications and capabilities; by strengthening the infrastructure (production equipment/plants, testing equipment) /Hardware, software or information systems, etc.)/Work environment management, to ensure that necessary resources are obtained to support the operation of the process and ensure product quality, and to monitor these processes; and to collect customer opinions through surveys/evaluations of suppliers Feedback and monitoring of processes and products to ensure that necessary information is obtained.

4.1.5 Monitor, measure (when applicable) and analyze the process status and product quality by means of product control, internal audit, management review activities, etc.

4.1.6 Implement the necessary corrective measures and preventive measures to achieve the results of process planning and continuous improvement of the process.

4.1.7 If the company chooses to outsource any process that affects product compliance, it should ensure that it is controlled. For clearly stipulating the type and degree of its control, consideration should be given to factors such as the potential impact of its capabilities, the degree of control sharing, and the ability to achieve the required control through the application of 7.4. The company's outsourcing process includes:





high/low voltage switchgear cabinets, dry-type transformer shell processing and product transportation/delivery services.

4.1.8 The processes required by the company's quality management system include processes related to management activities, resource provision, product realization, measurement, analysis and improvement.

4.2 Document requirements

4.2.1 General

The company's quality management system documents shall include:

a) The documented company quality policy and quality objectives are understood and implemented by all employees;

b) Product standards and applicable laws and regulations related to the design, production and service activities of oil-immersed transformers below 110KV, dry-type transformers/special transformers below 35kV, box-type substations and high and low voltage switchgear sets:

c) The "Quality Manual" compiled and maintained by the company;

d) According to the "GB/T 19001—2008/ISO 9001:2008 Quality Management System Requirements" and the product certification factory quality assurance capability requirements and the company's "Quality Manual" requirements, the "Quality Management System Procedure Documents" and records formed are compiled, one Documents may include requirements for one or more procedures, and be implemented and maintained;

e) Determine the documents, including records, required to ensure the effective planning, operation (effective operation of related processes) and control of the process. Such as: product drawings, operating procedures/inspection procedures, process rules/work instructions, management system/post responsibilities and qualification requirements, etc.; various records required to provide objective evidence of the company's quality management system effective operation and certification product consistency.

4.2.2 "Quality Manual"

The manager's representative/the person in charge of quality is responsible for organizing the preparation of the "Quality Manual" that meets the "GB/T 19001—2008/ISO9001: 2008 Quality Management System Requirements" and the quality assurance capability requirements of the product certification factory, and the effective text of the "Quality Manual" is timely Review and control. The content of the "Quality Manual" should include:

a) The scope of the company's quality management system, including details and justified reasons for any deletions;

b) The documented procedures developed for the quality management system are cited. See the separate "Procedure Documents" catalog for specific content, including the 6 procedure documents that must be formed as required by the standard;

c) Expression of the interaction between the processes of the quality management system. Through the description of the responsibilities and authorities of the functional departments/related personnel in the organizational structure, clarify their mutual relationships and communication channels.

After the "Quality Manual" is approved by the general manager, it will be distributed by the administrative department to functional departments/related personnel.

4.2.3 Document control

The Administration Department is responsible for the preparation of documented procedures, and controls the documents required by the quality management system. In order to make the document adequate and appropriate, the document should be approved before it is released; review and update the document if







necessary, and approve it again; ensure that the changes and current revision status of the document are identified; ensure that applicable/corresponding documents are available at the point of use The controlled/valid version and documents of the document are kept clear and easy to identify; ensure that the determined external documents required for planning and operating the quality management system are identified, and control their distribution and prevent the unintended use of invalid documents.

The specific requirements are to implement DL-CX-01 "Document Control Procedures".

4.2.4 Record control

The company shall control the records established to provide evidence of product compliance and the effective operation of the quality management system. The Administration Department is responsible for preparing documented procedures to specify the controls (including appropriate retention periods) required for the identification, storage, protection, retrieval, retention, and disposal of records. Records should be clear, complete, easy to identify and retrieve.

Specific implementation of DL-CX-02 "Record Control Procedure" regulations.









### 5 Management responsibilities

### 5.1 Management commitment

The general manager of the company shall establish and implement quality by communicating the importance of meeting customer and product standards and applicable laws and regulations, formulating the company's quality policy and ensuring the formulation of quality objectives, organizing management reviews, and ensuring adequate resources. Provide evidence of the commitment to the management system and continuous improvement of its effectiveness.

5.2 Focus on customers

The general manager of the company shall aim to enhance customer satisfaction and ensure that customer requirements are determined and met (see 7.2.1 and 8.2.1). The business center is responsible for formulating DL-CX-08 "Customer Oriented Control Procedures", and the requirements specified by customers should be communicated/decomposed to various functional departments/related personnel, and they will be organized and implemented. And by monitoring customer feelings and gaining input to seek opportunities for continuous improvement.

When considering the needs and expectations of customers, it is necessary to be clear: if there are substandard products and unsatisfactory services, the general manager of the company is the primary bearer of responsibility.

5.3 Quality Policy

The general manager of the company shall formulate a clear quality policy (see page 6 of this "Quality Manual" for details) and ensure its organization and implementation. The documented quality policy shall meet the following requirements:

5.3.1 The quality policy formulated by the company is not empty and isolated, but is in line with the purpose of the company's production and business activities and reflects the principle of "focusing on customers";

5.3.2 Including the commitment to meet the requirements and continuously improve the effectiveness of the quality management system;

5.3.3 The company's quality policy provides a framework and basis for formulating and reviewing the company's quality objectives;

5.3.4 The company's quality policy is announced using various publicity media/tools, and communicated to each employee through meetings/training, to be communicated and understood, and consciously implemented in their respective actions;

5.3.5 The continuous suitability of the company's quality policy should be reviewed regularly, and should be carried out once a year under normal circumstances (can be conducted through management review activities).

5.4 Planning

5.4.1 Quality objectives

The general manager of the company shall ensure that quality objectives are established in all functional departments and different levels of the company. The quality objectives include the content required to meet the product requirements [see 7.1a content]. The quality objective should be measurable and consistent with the quality policy. All functional departments/relevant personnel are required to report the completion of quality objectives on a regular basis and organize inspections and assessments. To analyze the gap between the establishment of quality goals and find opportunities for improvement.

5.4.2 Quality management system planning







In order to achieve the company's quality policy and quality objectives, the company's general manager should ensure:

a) Plan the company's quality management system (including the processes required by the company's quality management system) to meet

Meet the company's quality objectives and the requirements of Clause 4.1 in the ISO9001:2008 standard;

b) The manpower, infrastructure/equipment and working environment provided and obtained should be sufficient:

c) The production/operation, product design/process/inspection and technical services involved in the operation of the company's quality management system should be considered (including the company's future development direction and philosophy);

d) When considering changes in internal and external environmental conditions, or when planning and implementing changes to the quality management system, the integrity of the quality management system shall be maintained.

Specific implementation of DL-CX-03 "Quality Management System Planning and Control Procedures" regulations.

5.5 Responsibilities, authority and communication

5.5.1 Responsibilities and authority

The general manager of the company should clearly define the responsibilities and authorities of the functional departments/relevant personnel set up in the quality management system organization to achieve the purpose of mutual communication and maintaining the effective operation of the quality management system. The responsibilities and authorities of the main functional departments/related personnel are as follows:

General manager:

a) Responsible for the company's various tasks and provide sufficient resources for the operation of the quality management system.

b) Leading the company to implement the GB/T 19001-2008 standard. The general manager is the top manager of the quality management system, approves the quality policy, quality objectives and the "Quality Manual", and appoints the manager representative/quality leader/technical leader . Responsible for the planning, establishment, implementation and product quality of the quality management system.

c) Familiar with, understand and be able to take the lead in implementing customer requirements, product standards and applicable laws and regulations, strive to improve working conditions, attach great importance to safe production, and operate legally.

d) Responsible for approving the company's quality work plan/target decomposition and assessing the completion of functional departments/related personnel, and earnestly grasping the company's

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various basic management tasks. And pay attention to strengthening training work, continuously improve staff quality awareness and operational skills, and strengthen team spirit and staff team building.

e) Preside over the company's management review work and determine the strategy for continuous improvement of the company's quality management system.

Manager representative/quality person in charge/technical person in charge (acquired qualifications and appointed by the general manager)

a) In accordance with the requirements of the GB/T 19001-2008 standard and the quality assurance ability of the product certification factory, be responsible for the process of establishing, implementing and maintaining the company's quality management system.

b) Responsible for managing and directing the daily work of the quality management system, coordinating, supervising and controlling the implementation of the quality management system, organizing internal audit activities, and ensuring the continuous effectiveness of the quality management system.

c) Responsible for reporting the performance of the quality management system and any improvement needs to the general manager.

d) Raise the awareness of "customers as the focus" of all employees and ensure that all quality activities of the company are carried out around the theme of "customer satisfaction".

e) Ensure that the products affixed with mandatory/voluntary certification marks meet the requirements of the certification standards.

f) Establish documented procedures to ensure the proper storage and use of certification marks.

g) Establish documented procedures to ensure that non-conforming products or certified products have been changed. Compulsory certification marks/voluntary certification marks are not allowed to be affixed without confirmation by the certification body.

e) Responsible for liaison, communication and coordination with internal and external matters related to the quality management system.

Technical person in charge (obtained qualifications and appointed by the general manager)

a) Responsible for the inspection and identification of changes to the key components and materials (key parts) used in the certified product, and the approval of other key components and material changes except for the approval of the certification body at the time of the change.

b) According to the requirements of the certification implementation rules, the inspection, approval, and reporting of the key component changes in the certified products should be carefully performed, and the certification factory and the certified products should be responsible for the consistency.

c) Make and save the change record carefully for review during factory inspection.







### **Technology Center**

### **Design and development**

Responsible for the organization, coordination and implementation of the entire process of new product research and development. Carry out new product research and development planning, and determine the interface relationship between its organization and technology. Do a good job in the input, output, verification, review, confirmation and modification of new product designs, as well as the trial production, operation, and identification of new products.

b) Responsible for the preparation of the procurement and outsourcing technical documents of the main raw materials and key components of the product. Draw up a list of product raw materials, parts, and key components, and clarify its technical requirements.

c) Strictly implement the product drawing countersigning system to ensure that the product drawings and technical documents are basically correct, complete, unified and clear, in line with relevant national standards and industry-related drawing regulations, and can guide production. And is responsible for the management of external technical documents (drawings and documents provided by customers).

d) Instruct the workshop/process to implement the company's technical documents, and urge the operators to process according to the product standards and drawings. At the production site, carefully deal with the technical problems arising from the trial production and testing of new products, and do a good job in mass production of new products and improvement of old products.

e) For changes in product technical requirements (raw materials, key components, structures, etc. may affect compliance with relevant standards or the consistency of type test prototypes), prepare a change report in accordance with regulations, and declare to the certification body before implementation and obtain approval. Executable.

f) Responsible for the company's computer installation and maintenance and the application of the product computer-aided design system.

g) Responsible for organizing the planning of continuous improvement of processes and products required by the quality management system, and supervising and inspecting the implementation of quality planning by functional departments/related personnel.

Manufacturing process

a) Responsible for process planning, formulating process plans, determining process routes, preparing key process/special process operation instructions for key processes/special process quality control points.

b) Responsible for process improvement, process equipment design, review and verification of technical documents, equipment, tooling and molds in the product manufacturing process, and the implementation of process disciplines (consistency inspection of certified products) on schedule.

c) Responsible for establishing and controlling product identification and traceability documents.

d) Responsible for the training of employees' business knowledge, and strive to improve their operational skills.

Quality Inspection Department (Test Station)

a) Responsible for the preparation of inspection documents (including confirmation inspection and inspection status identification) of raw materials, key components/parts processing process and product final inspection to verify that the product meets the specified requirements.

b) Responsible for the verification of purchased products, confirming that the outsourcing/outsourcing inspection is carried out in accordance with the requirements of the inspection specification

c) Responsible for process and product measurement and monitoring. Perform the functions of identifying,







checking, and reporting product quality, do a good job in product inspection, and provide a basis for product quality improvement.

d) Responsible for the calibration of monitoring and measuring equipment and the tracking of monitoring and measuring equipment that deviate from the calibration state.

e) Responsible for the identification, identification, and isolation of non-conforming products, organizing the evaluation of the disposal of non-conforming products, and tracking the results of corrective and preventive measures for non-conforming products. And is responsible for the control of product identification and traceability.

Manufacturing department (workshop/shift/process)

a) Familiar with the relevant national (industry) standards, laws and regulations for electrical products and the quality assurance requirements of the certified product factory, and strictly implement the "three requirements" (according to standards, processes, drawings) and "five inaccuracies" during the production process (Unqualified materials are not allowed to be put into production, uninspected parts are not allowed to be transferred, unqualified parts are not allowed to be assembled, unqualified products are not allowed to leave the factory, and unqualified products are not allowed to calculate the output) principle, prevent In the event of unqualified parts or products, be responsible for the quality of product manufacturing and processing to ensure the consistency of certified products.

b) According to the customer's contract or order, prepare the production plan in time and organize the implementation carefully to provide customers with thoughtful, fast and high-quality service. And is responsible for the assessment of product production.

c) Responsible for the equipment management and the establishment of equipment technical data files. Organize the formulation of equipment safety operation procedures, timely grasp the operating status of production equipment, and earnestly implement the equipment/tooling maintenance system to ensure the normal operation of the equipment. Improve the safety and labor protection awareness of all operators, and supervise the operators in the production process to strictly implement the "Safety Operating Regulations" and the safety production management system to prevent abnormal situations (safety hazards) or major accidents. Do a good job in safe and civilized production and labor protection, and implement 5S (organization, rectification, cleaning, cleaning, and quality) at the production site to ensure that the production environment meets the specified requirements and prevent abnormal situations or major accidents.

d) Responsible for technical and business knowledge training for employees, and strive to improve their quality. In addition, as required by regulations, special equipment operators have the corresponding operating skills and must be certified to work.

e) Responsible for supervising and urging the identification, handling, storage, protection, packaging and delivery of materials, work-in-process (parts) and finished products at the production site.

f) Carry out "nonconforming product control procedures"/"corrective measures and preventive measures control procedures", and carry out quality analysis activities frequently to ensure the stable improvement of work quality.

g) Participate in contract or order review, and select and evaluate qualified suppliers.

h) Responsible for making and maintaining various records as required.

Business center

a) Responsible for conducting market research, grasping market trends, providing product forecasts/supply and demand information in a timely manner, identifying customer needs and expectations, and organizing relevant departments/personnel to review contracts or orders that meet the review criteria. And is responsible







for establishing customer files and managing customer personal information as required.

b) Responsible for completing the company's annual business plan and the task of collecting business receivables.

c) Responsible for the management and control of the property (raw materials, key components) provided by the customer. The technical documents (design plan or agreement) provided by the customer are delivered to the manufacturing department, technical center, and purchasing center in a timely manner.

d) Maintain contact and communication with customers, take the initiative to visit new and old customers, and humbly listen to the requirements of new and old customers for products. Responsible for product after-sales service (including service feedback, accepting customer complaints), carefully organize and deal with effective customer complaints, and keep relevant service records.

e) According to the training needs, be responsible for organizing and coordinating the training of marketing staff's business ability.

f) Responsible for responding to and handling emergencies during product operation, and strive to achieve service promises to satisfy customers.

g) Do a good job in handing over products to customers and providing technical services to customers after sales.

h) Responsible for the transmission, analysis and processing of internal and external related data, and put forward quality improvement suggestions and measures.

Purchasing Center/Warehouse

a) Responsible for formulating a procurement plan, and timely purchasing qualified raw materials, key components/components and outsourced parts into the warehouse. And is responsible for controlling the quality of product storage, protection, transportation and delivery.

b) Responsible for organizing the selection, evaluation and daily management of suppliers (supplier performance), compiling a "list of qualified suppliers", and assisting the quality inspection department to do a good job of inspection or verification of purchases, ensuring that raw materials and key components meet certification Product requirements (consistency check of certified products).

c) Responsible for the issuance, storage, protection, and management of raw materials, key components, outsourcing parts, and labor insurance supplies required for production, so that accounts, materials, and cards are consistent.

Administration Department

a) Responsible for handling the company's daily affairs and doing a good job in the communication between the top and bottom of the company.

b) Responsible for equipping the company with corresponding human resources, proposing the company's "Post Qualifications and Ability Requirements" to ensure that personnel engaged in work that affect product quality have the necessary capabilities. Identify employee training needs, prepare training plans, organize and implement them according to the plan, and keep training records.

c) Responsible for compiling the management system of the company's functional departments and the job responsibilities of personnel at all levels.

d) Responsible for assisting the management representative/the person in charge of quality in organizing the preparation of the company's "Quality Manual", "Procedural Documents" and the control of their documents.

e) Responsible for the organization, coordination, inspection and assessment of the company's quality management activities.







f) Responsible for the use of various records for supervision, management system operation and certification product consistency check, and keep relevant records (design/technology, process, inspection/service, management, etc.) as required. Responsible for the filing management of the company's various documents and materials, such as classification and creation of books. Fire prevention, theft prevention, moisture prevention, and insect prevention shall be implemented, and documents shall not be leaked or lost.

g) Responsible for providing the necessary resources for the company's supporting services such as communication/information systems, transportation, office space and warehouses to meet standards/customer requirements and fulfill service commitments.

h) Responsible for providing resources for all kinds of technical training for the company's inspectors, special equipment operators and other employees, and can meet the qualification and ability requirements of relevant personnel.

For details of the responsibilities of personnel at all levels of the company, please refer to the provisions of DL-ZZ-01 $\sim$ 029 "Job Responsibilities".

5.5.2 Management representative/Quality person in charge/Technical person in charge

The general manager of the company appoints A as the manager's representative, B as the quality person in charge; C as the technical person in charge, whose responsibilities and authorities are described above.

5.5.3 Internal communication

The general manager of the company should clearly establish appropriate communication processes and channels between functional departments and between personnel at different levels, and ensure communication on the effectiveness of the quality management system.

It is specifically required to implement DL-CX-04 "Internal and External Communication Control Procedures".

5.6 Management review

5.6.1 General

The general manager of the company shall review the company's quality management system at planned intervals and preside over management review meetings to ensure its continued suitability, adequacy and effectiveness. The review shall include evaluating opportunities for improvement and the need for changes to the quality management system, including the need for changes to the quality policy and quality objectives. The Administration Department assists in the management review and management work and maintains the records of management review.

5.6.2 Review input

The general manager of the company shall make a request for planning before presiding over the management review meeting. Each functional department/relevant personnel should prepare the input documents for review, which mainly include the following information:

a) Audit results (internal and external audit reports/non-conformance reports);

b) Customer feedback information (including customer satisfaction and customer complaints/complaints analysis);

c) Process performance and product requirements compliance (self-evaluation);

d) The status after taking preventive measures and corrective measures (verification effect);

e) Follow-up measures of previous management reviews (completion and remaining issues);

f) Changes in the quality management system may be affected when there are major adjustments in the responsibilities and powers of internal organizations and personnel or major changes in external markets, competitors, suppliers and national policies;

g) Suggestions for continuous improvement of the company's quality management system.





### 5.6.3 Review output

The output of the management review shall form a management review report, which shall be distributed to various functional departments/related personnel. The management review report shall include any decisions and measures related to:

a) Evaluation and improvement of the effectiveness of the quality management system and its process effectiveness;

b) Evaluation and improvement of product conformity related to customer requirements;

c) Determine the company's resource requirements in terms of manpower, infrastructure/equipment, and working environment.

The specific requirements are to implement the provisions of DL-CX-05 "Management Review Control Procedures".









### 6 Resource Management

### 6.1 Resource Provision

The general manager of the company organizes an annual review of the resource provision of manpower, infrastructure/equipment and working environment (can be conducted through management review activities). When changes that may affect the quality management system or major changes occur in the operation of the system, the number of reviews should be increased. The resources needed in the following areas should be determined and provided:

a) Implement and maintain the company's quality management system and continuously improve its effectiveness.

b) Enhance customer satisfaction and improve product competitiveness by meeting customer requirements.

c) Meet the requirements for stable production of products that comply with mandatory/voluntary certification standards.

6.2 Human Resources

6.2.1 General

Personnel at all levels of the company (persons who undertake any task in the quality management system) should be competent or competent for those engaged in work that affects the effectiveness of the operation process/product requirements based on appropriate education, training, skills and experience. Have the necessary abilities.

6.2.2 Competence, training and awareness

The Administration Department determines the required abilities of personnel engaged in the work that affects the effective operation of the system/product requirements and is responsible for compiling the company's DL-ZG-01 "Position Qualification and Ability Requirements" document; when applicable, provide training or take other measures to Acquire the required competencies; evaluate the effectiveness of the measures taken; ensure that employees are aware of the relevance and importance of the activities undertaken, and strive to contribute to the achievement of quality goals; appropriate records of education, training, skills and experience should be maintained (see 4.2.4 Clause content).

The specific requirements shall be implemented in accordance with DL-CX-06 "Human Resources Control Procedures".

### 6.3 Infrastructure

The Administration Department, Manufacturing Department, Technology Center and Purchasing Center shall respectively determine, provide and maintain the infrastructure required to achieve process/product compliance. Where applicable, the infrastructure should include:

a) Company buildings, production plants/workplaces, warehouses/storage conditions and related facilities;

b) Energy (water/electricity), production equipment/tooling, monitoring/measuring equipment/measuring instruments (including computer hardware and software) required by the process and products;

c) Supporting services such as transportation tools, office/fire fighting facilities, communication means or information systems.

Companies should pay attention to and gradually use management information systems based on the development of information systems and their own needs.

The specific requirements shall be implemented in accordance with DL-CX-07 "Infrastructure Control Procedures".

6.4 Working environment







The Administration Department is responsible for determining and managing the working environment/conditions (including physical, environmental and other factors such as noise, noise, etc.) required to meet the requirements of the process/product (product production, inspection/testing, storage, etc.) Temperature, humidity, lighting or weather, etc.).

Specific requirements shall be implemented in accordance with DL-CX-07 "Working Environment Control Procedures".

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### 7 Product realization

### 7.1 Planning of product realization

The company should plan and develop the processes required for product realization. Product realization planning should be consistent with the requirements of other processes in the quality management system (see 4.1).

When planning the product realization, the following aspects should be determined as appropriate:

7.1.1 Product quality objectives and requirements;

7.1.2 Determine the process, documents and resource requirements for the product;

7.1.3 The verification, confirmation, monitoring, inspection and test activities required by the product, as well as the product acceptance criteria;

7.1.4 Records required to provide evidence for the realization process and its products meet the requirements (see 4.2.4).

Documents that provide for the effective operation of relevant processes (including design goals and realization processes) and testing and related resources applied to specific products, projects or contracts can be called "quality plans."

7.2 Customer-related processes

7.2.1 Determination of requirements related to the product

The company should determine the requirements specified by the customer, including the requirements for delivery and post-delivery activities [including measures such as guarantee clauses, contractual obligations (maintenance services), additional services (recycling or final disposal)], etc.; although the customer did not express it, but Requirements necessary for the specified use or known intended use; standards (GB, JB) and legal requirements applicable to the product; any additional requirements deemed necessary.

7.2.2 Review of requirements related to the product

The business center is responsible for organizing the review of product-related requirements. The review should be carried out before making a commitment to the customer to provide products (such as submitting a bid, accepting a contract or order, and accepting changes to the contract or order), and should ensure that: a) Product requirements have been specified;

b) The requirements of contracts or orders that are inconsistent with those previously stated have been resolved;

c) The company has the ability to meet the specified requirements.

Records of the results of the review and the actions resulting from the review shall be maintained (see 4.2.4). If the customer does not provide documented requirements, they should be confirmed before accepting the customer's request.

The specific requirements shall be implemented in accordance with DL-CX-08 "Customer Oriented Control Procedures".

7.2.3 Customer communication

The company shall determine and implement effective arrangements for communication with customers in the following aspects:

a) Adopt a variety of forms, using promotional tools or media to deliver company product information to customers. Such as TV, radio, newspapers, internet, mail, seminars, samples/picture albums, qualification documents, etc.;

b) The business center is responsible for handling customer inquiries, contracts/orders or technical







agreements/plans, including modifications to them. Customers should be asked to confirm if necessary;

c) In the acceptance and handling of customer feedback, including complaints/complaints, relevant functional departments/personnel should analyze the reasons in time, quickly take corrective and preventive measures, and solve them to prevent similar problems from recurring.

7.3 Design and development (for product design and development flow chart, please refer to appendix 6 of this manual)

7.3.1 Design and planning

The technical center is responsible for planning and controlling the design and development of the product. When designing and planning the development, it shall determine:

a) Design and development stage;

b) Appropriate for review, verification and validation activities in each design and development stage;

c) Responsibilities and authority for design and development.

The technical center is responsible for the management of the interfaces between the different responsibilities involved in design and development to ensure effective communication and clear division of responsibilities. As the design and development progress, the planned output should be updated when appropriate.

The review, verification and confirmation of design and development have different purposes. The technical center shall conduct and record separately or in any combination according to product characteristics/requirements.

7.3.2 Design and development inputs

The Technical Center is responsible for determining the design and development inputs related to product requirements and maintaining records.

These inputs should include:

a) Product standards/product features/functional requirements and performance requirements;

b) Applicable laws and regulations;

c) When applicable, information derived from previous similar designs;

d) Other requirements necessary for design and development.

The adequacy and suitability of these inputs should be reviewed. The requirements should be complete, clear and not contradictory.

7.3.3 Design and development output

The method of design and development output should be suitable for verification against the input of design and development, and should be approved before release. The design and development output should have the following aspects:

a) Meet the design and development input requirements;

b) Provide appropriate information for procurement, production and service provision (including details of product protection);

c) Include or quote product acceptance criteria;

d) Specify the product characteristics necessary for the safe and normal use of the product.

7.3.4 Design and development review

The Technical Center is responsible for organizing a systematic review of design and development at an appropriate stage according to the planned arrangement (see 7.3.1 content), so as to:

a) Evaluate the ability of design and development results to meet requirements;

b) Identify any problems and propose necessary measures.

The procurement center, business center, manufacturing department, quality inspection department,







administration department and other functional departments/personnel related to the reviewed design and development stage shall participate in the review. Records of the review results and any necessary measures shall be maintained (see 4.2.4).

7.3.5 Design and development verification

In order to ensure that the design and development output meet the input requirements, the technical department shall verify the design and development according to the planned arrangement (see 7.3.1 content). Records of verification results and any necessary measures shall be maintained (see 4.2.4).

7.3.6 Design and development confirmation

To ensure that the product can meet the specified use requirements or the requirements of the known intended use, the technical center shall

Confirm the design and development according to the planned arrangement (see 7.3.1 content). Whenever feasible, validation should be completed before product delivery or implementation. Records of the results of the confirmation and any necessary measures shall be maintained (contents of clause 4.2.4).

7.3.7 Control of design and development changes

The technical center is responsible for identifying design and development changes and keeping records. The design and development changes shall be properly reviewed, verified and confirmed, and approved before implementation. The review of design and development changes shall include evaluation of the impact of the changes on product components and delivered products. Records of the review results of changes and any necessary measures shall be maintained (see 4.2.4).

The specific requirements shall be implemented in accordance with DL-CX-09 "Design and Development Control Program".

7.4 Procurement

7.4.1 Procurement process

Purchasing purchases is the first hurdle to meet product requirements compliance. The control types and procedures for suppliers and purchased products should depend on the impact of purchased products on subsequent product realization or final products. The Purchasing Center is responsible for evaluating and selecting suppliers based on their ability to provide products, formulating criteria for selecting, evaluating and re-evaluating suppliers, and maintaining records of evaluation results and any necessary measures (including daily management records) caused by the selection and evaluation (See the content of 4.2.4) to ensure that the supplier has the ability to ensure that the production of key components and materials meet the requirements.

### 7.4.2 Purchasing information

The purchasing center is responsible for preparing purchasing documents/plans (purchasing contracts/orders), and shall state the product information to be purchased, including when appropriate:

a) Approval requirements for products, procedures, processes and equipment;

b) Requirements for personnel qualifications;

c) Requirements of the quality management system, etc.

Before communicating with the supplier, the purchasing center shall obtain the approval of the purchasing documents/plans to ensure that the specified purchasing product requirements and outsourcing process requirements are adequate and appropriate.

7.4.3 Verification of purchased products

The Quality Inspection Division is responsible for compiling DL-JY-01 "Procurement Incoming Inspection Procedures", confirming and implementing the inspection activities of purchased raw materials, key components and outsourcing parts to ensure that the quality of purchased raw materials, key components and







outsourcing parts meets the requirements of the certification institute Prescribed requirements. When the company or its customers intend to implement verification at the supplier's site, the planned verification arrangements and product release methods shall be specified in the purchasing information. And should keep relevant inspection records and the qualification certificate provided by the supplier.

Specific requirements shall be implemented in accordance with DL-CX-010 "Procurement Control Procedures".

7.5 Production and service provision

7.5.1 Control of production and service provision

The company shall plan and conduct production and service provision under controlled conditions. When applicable, the controlled conditions should include the following:

a) To obtain information describing product characteristics, product standards and other requirements should be clearly specified;

b) When necessary, prepare documents such as process rules, work instructions, and operating procedures to guide production;

c) Provide appropriate equipment/tooling/mold and other resources, and maintain them well;

d) Obtain and use monitoring and measuring equipment, and implement periodic verification or calibration systems for them;

e) When feasible, appropriate process parameters and product characteristics should be monitored. It can effectively monitor and measure the product at the appropriate stage/the whole process of product realization to ensure that the product meets the requirements and is consistent with the certified product.

f) During the product production process, ensure that the working environment meets the specified requirements;

g) The implementation of product release, delivery and post-delivery activities should be done well, and its responsibilities and authorities should be clearly defined, including receiving customer feedback/complaints, and enhancing customer satisfaction.

The specific requirements shall be implemented in accordance with DL-CX-011 "Production Process Control Procedure" and DL-CX-012 "Technical Service Process Control Procedure".

7.5.2 Confirmation of the production and service provision process (for the product process flow chart, see Appendix 2 of this manual)

When the output of the company's production and service provision process cannot be verified by subsequent monitoring or measurement, so that the problem only appears after the product is used or the service is delivered, any such process should be confirmed. Validation shall demonstrate the ability of these processes to achieve the planned results. The technical center is responsible for making arrangements for these processes, and should include the following when applicable:

a) Criteria specified for process review and approval;

b) Approval of equipment and identification of personnel qualification/capability requirements;

c) Specify the use of specific methods and procedures;

d) Record requirements (see 4.2.4 content);

e) Confirm again.

The company's special process: electric welding process of parts.

7.5.3 Identification and traceability

When appropriate, the quality inspection department shall be responsible for specifying the use of appropriate methods to identify the product during the entire process of product realization; and identify the status of the product for monitoring and measurement requirements. Where there is a traceability







requirement, the unique identification of the product should be controlled and records should be kept (see 4.2.4).

The specific requirements are to implement the provisions of DL-CX-011 "Production Process Control Procedure".

7.5.4 Customer property

The company should take good care of and use customer property under control. It shall be able to identify, verify, protect and maintain customer property (intellectual property and personal information) that provides its use or forms part of the product.

7.5.4.1 The identification of customer property (referred to as "hardware and software") generally includes:

a) Provide technical documents (product plan/drawings, manuals, technical agreements), etc.; (software)

b) Customer intellectual property rights such as: operating procedures, patented technology, business secrets or personal information/items of customers provided by customers (software);

c) Materials, key parts, outsourced parts, etc. (hardware) provided by the customer.

7.5.4.2 verification of customer property (hardware)

a) The quality inspection department is responsible for the verification according to the monitoring and measurement requirements of products in 8.2.4, and issue the inspection report. In case of any non conformity, it shall be reported to the customer, who shall decide the handling method;

b) The company's verification cannot exempt customers from the responsibility of providing qualified materials, key parts and outsourcing parts;

c) When the raw materials, key parts and outsourcing parts provided by qualified customers are stored in the warehouse, they shall be placed in the designated area or marked with "customer property".

7.5.4.3 verification of customer property (software): take good care of software such as technical documents / intellectual property / personal information provided by customers. The specific implementation of DL-CX-01 "document control procedures".

7.5.4.4 protection and maintenance (storage) of customer property:

a) According to the processing or customer requirements, the warehouse is responsible for the protection and maintenance (storage) of customer property (hardware), and regularly check its quality status to prevent loss, deterioration or damage due to improper storage and maintenance.

b) In case of loss, damage or inapplicability of customer property, the business center shall timely report to the customer, listen to the customer's handling opinions, and keep records (see 4.2.4).

7.5.5 product protection

In order to meet the requirements of customers, the company purchases incoming parts from materials, key components / outsourcing parts

During each period / stage of product inspection and delivery to customers (scheduled location), protection shall be provided to keep the products in line with the requirements, and the implementation shall be organized and implemented by relevant functional departments / personnel. When applicable, such protection shall include the control of identification, handling, packaging, storage and protection.

The specific implementation of DL-CX-011 "production process control procedures".

7.6 control of monitoring and measuring equipment

The quality inspection department is responsible for determining the monitoring and measuring activities to be implemented in the whole process of product realization and the necessary monitoring and measuring equipment, so as to provide evidence for the products to meet the determined requirements. Establish three stages of inspection process, i.e. purchasing, parts processing / process and product delivery, to ensure that monitoring and measurement activities are feasible and implemented in a manner consistent with the







requirements of monitoring and measurement. To ensure the effectiveness of the results, if necessary, the monitoring and measuring equipment shall:

a) Calibration and / or verification (verification) shall be carried out according to the measurement standards traceable to international or national standards at specified intervals or before use. When there is no such standard, the basis of calibration and / or verification (verification) shall be recorded (see 4.2.4);

b) Adjust or readjust if necessary;

c) With identification to determine its calibration or verification (verification) status;

d) Prevent adjustment that may make the measurement result invalid;

e) Prevent damage or failure during handling, maintenance and storage.

In addition, when it is found that the monitoring and measuring equipment does not meet the requirements, the effectiveness of the previous monitoring and measurement results shall be evaluated and recorded. Appropriate measures should be taken for the equipment and any affected products. Records of calibration and verification (verification) results shall be maintained (see 4.2.4).

When computer software is used for monitoring and measuring specified requirements, its ability to meet the intended purpose shall be confirmed. The confirmation shall be carried out before the initial use and shall be reconfirmed if necessary.

Monitoring and measuring equipment shall have operation procedures, and inspectors shall be able to master and use them skillfully and accurately.

The specific requirements shall be in accordance with DL-CX-013 control procedure for monitoring and measuring equipment.

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### 8 Measurement, analysis and improvement

### 8.1 general

The technical center is responsible for planning and implementing the monitoring, measurement, analysis and improvement processes required for the following aspects:

8.1.1 confirm the conformity of product requirements;

8.1.2 ensure the conformity of the company's quality management system;

8.1.3 continuously improve the effectiveness of the company's quality management system operation.

This should include the determination of applicable methods, including statistical techniques, and their degree of application.

8.2 monitoring and measurement

8.2.1 customer satisfaction

The company should regard customer satisfaction as a measurement of the performance of the company's quality management system. The business center is responsible for monitoring the relevant information of customers' feelings about whether the company meets its requirements, and determines the methods to obtain and use such information.

Monitoring customer feelings can include obtaining input from sources such as customer satisfaction, data on delivered product quality from customers, user opinion surveys, churn business analysis, customer praise, claims, and dealer reports. Including oral telephone / face-to-face communication / written questionnaire and other methods, any choice, can directly communicate with customers and obtain all-round and multi-channel information in this respect, so as to improve and perfect our work and most satisfy customers.

The specific requirements shall be in accordance with dl-cx-08 customer oriented control procedure.

8.2.2 internal audit

The management representative / person in charge of quality shall organize internal audit activities according to the planned time interval to determine whether the quality management system:

a) Comply with the planning arrangement (see clause 7.1), GB / T 19001-2008 standard, factory quality assurance capability of certified products and requirements of quality management system determined by the company;

b) It has been effectively implemented and maintained.

The management representative / person in charge of quality shall plan the audit scheme, which shall consider the process to be audited, the status and importance of the area and the results of previous audits. The audit criteria, scope, frequency and method shall be specified. The selection of auditors and the implementation of audit should ensure the objectivity and impartiality of the audit process. Auditors should not audit their own work.

The management representative / person in charge of quality is responsible for the preparation of documented procedures to specify the responsibilities and requirements for the planning, implementation, recording and reporting of audit results, so as to ensure the effectiveness of system operation and the consistency of certified products.

Records of audits and their results shall be maintained (see 4.2.4).

All functional departments / relevant personnel shall ensure that necessary corrective and corrective measures are taken in time to eliminate the identified nonconformities and their causes. The follow-up activities shall include the verification of the measures taken and the report of the verification results (see (8.5.2)). As a guide, see GB / T 19011.







The specific requirements shall be in accordance with dl-cx-014 internal audit control procedure.

8.2.3 process monitoring and measurement

The technical center is responsible for specifying the appropriate methods to monitor the quality management system process, and measure when applicable. These methods should demonstrate the ability of the process to achieve the planned results. When the planned results are not achieved, appropriate corrective and corrective measures should be taken to ensure the effectiveness of the system operation process.

The company's daily quality management, inspection and assessment of quality objectives, internal audit and management review, etc

It is an appropriate monitoring and measuring method for the operation process of quality management system. Of course, the technical center should consider the type and degree of monitoring and measurement according to the impact of each process on the conformity of product requirements and the effectiveness of quality management system.

The specific requirements shall be in accordance with dl-cx-015 control procedure for process monitoring and measurement.

8.2.4 product monitoring and measurement

In addition to monitoring and measuring the process of quality management system, the company shall also monitor and measure the characteristics of products to verify that the product requirements have been met. Such monitoring and measurement shall be carried out at the appropriate stage of the product realization process according to the planning arrangement (see 7.1). The quality department is responsible for maintaining the evidence that meets the acceptance criteria, preparing, modifying and improving DL-cx-01-03 product inspection procedures, and organizing the implementation.

The record shall indicate the person who has the right to release the product and deliver it to the customer (see 4.2.4). Unless approved by the relevant authorized personnel, the customer's approval shall be obtained when applicable. Otherwise, products and services shall not be released to customers before the planned arrangement (see clause 7.1) has been successfully completed.

The specific requirements shall be in accordance with dl-cx-015 control procedure for product monitoring and measurement.

8.3 control of nonconforming products

The quality inspection department shall ensure that the products that do not meet the product requirements are identified and controlled to prevent their unintended use or

Delivery. The quality inspection department is responsible for the preparation of documented procedures to specify the control of nonconforming products (identification method, isolation / disposal, corrective measures / preventive measures taken) and relevant responsibilities and authorities for the disposal of non-conforming products, so as to implement the control of non-conforming products.

When applicable, the quality inspection department shall deal with unqualified products through one or more of the following methods:

8.3.1 Take measures to eliminate the unqualified found;

8.3.2 With the approval of the relevant authorized personnel, and the customer's approval when applicable, concession use, release or acceptance of non-conforming products;

8.3.3 Take measures to prevent its intended use or application.

8.3.4 When a non-conformity is found after delivery or start of use, measures appropriate to the impact or potential impact of the non-conformity shall be taken.







After the nonconforming product is corrected (rework, repair), it should be verified again to verify compliance with the requirements. Records of the nature of the non-conformities and any subsequent measures taken, including records of approved concessions (see 4.2.4) shall be maintained.

The specific requirements are to implement the provisions of DL-CX-016 "Non-conforming Product Control Procedure".

### 8.4 Data analysis

The Technical Center is responsible for organizing various functional departments/related personnel to use statistical techniques or other data analysis methods to determine, collect, and analyze the data generated in the quality management system to evaluate the operation of the quality management system, identify problems, and find opportunities for continuous improvement, And evaluate where the effectiveness of the quality management system can be continuously improved. Including the results from monitoring and measurement and other relevant sources of data (the data mainly comes from the whole process from the input of customer requirements).

Data analysis should provide information about:

8.4.1 Use "Technical Service Work Contact Form", "Customer Satisfaction Survey Form" and other forms to conduct understanding investigations, analyze and evaluate customer satisfaction or accept customer complaints/complaints (see 8.2.1);

8.4.2 According to customer requirements, product standards and applicable laws and regulations, combined with product monitoring and measurement, analyze and evaluate the conformity with product requirements, and compare it with the past level (see 8.2.4);

8.4.3 Use statistical techniques to analyze and evaluate the characteristics and trends of the process and products, including opportunities to take preventive measures, to achieve the purpose of continuous improvement (see 8.2.3 and 8.2.4);

8.4.4 Use "Supplier Capability Survey Form" and "Supplier Performance Record" to analyze and evaluate qualified suppliers (see 7.4).

Specific requirements to implement DL-CX-017 "Data Analysis Control Program" regulations.

8.5 Improvement

8.5.1 Continuous improvement

The company shall use quality policies, quality objectives, audit results, data analysis, corrective and preventive measures, and management reviews to continuously improve the effectiveness of the quality management system. The specific contents are as follows:

a) Evaluate and formulate the company's quality policy, and fundamentally point out the direction of continuous improvement;

b) Through the establishment of the company's quality objectives, decomposition, quantification and assessment at various functional departments/different levels. And implement specific improvement measures to achieve the quality target, and improve it year by year;

c) Analyze the results of the company's internal audit and external audit, especially the unqualified found (including the unqualified in daily life). The root cause should be carefully found, effective corrective measures and preventive measures should be actively taken to eliminate the causes of nonconformity (including potential causes), prevent and prevent the recurrence of nonconformities, and continuously improve the process and products;

d) Perform statistical analysis on various quality data formed in the process of the quality management system to ensure that the proposed improvement measures are further intuitive and data-based, and solve practical problems scientifically and purposefully;







e) Normally carry out management review work and continuously improve the effectiveness of the company's quality management system.

### 8.5.2 Corrective actions

The Technical Center is responsible for organizing relevant departments/personnel to take corrective measures in time to eliminate the cause of the disqualification and prevent the recurrence of the disqualification. The corrective actions should be commensurate with the impact of the non-conformities encountered.

The Technical Center is responsible for preparing documented procedures to specify the following requirements:

- a) Unqualified review (including customer complaints);
- b) Determine the cause of the non-conformity;
- c) Evaluate the need for measures to ensure that nonconformities no longer occur;
- d) Determine and implement the required measures;
- e) Record the results of the measures taken (see 4.2.4);
- f) Review the effectiveness of the corrective actions taken.

It is specifically required to implement the provisions of the corrective measures part of DL-CX-018 "Corrective Measures and Preventive Measures Control Procedures".

8.5.3 Preventive measures

The Technical Center is responsible for organizing relevant departments/personnel to actively take preventive measures to eliminate the causes of potential nonconformities and prevent the occurrence of nonconformities. Preventive measures should be adapted to the impact of potential problems.

The Technical Center is responsible for preparing documented procedures to specify the following requirements:

a) Determine potential nonconformities and their causes;

b) Evaluate the need for measures to prevent the occurrence of nonconformities;

- c) Determine and implement the required measures;
- d) Record the results of the measures taken (see 4.2.4).
- e) Review the effectiveness of the preventive measures taken.

It is specifically required to implement the provisions of the corrective measures part of DL-CX-018 "Corrective Measures and Preventive Measures Control Procedures".





### Management of "Quality Manual" (revision, reprint and distribution instructions)

1. The "Quality Manual" is prepared by the management representative/quality person in charge of organizing various functional departments/related personnel, and after its review, it is issued and implemented after being approved by the general manager.

2. Revision and reprint of "Quality Manual":

2.1 During the implementation of the "Quality Manual", the company encourages all employees to put forward suggestions for modification/improvement of the contents of this manual; meanwhile, the applicability and compliance of the "Quality Manual" are reviewed regularly every year.

2.2 The revision/improvement opinions of the "Quality Manual" are proposed by various functional departments/relevant personnel. If it is found to be inappropriate after management review, the management representative/person in charge of quality shall organize various functional departments/related personnel to review and modify. The specific requirements are to implement the provisions of DL-CX-01 "Document Control Procedure". The Administration Department is responsible for controlling the revision of the "Quality Manual" and ensuring that the controlled text of the "Quality Manual" is the current effective version. After the modification, it will still be carried out in accordance with the provisions of Clause 2.1 above.

2.3 Modification method of "Quality Manual": swap the modified page number. After modification, the modified version, page number, date, etc. should be written into the modification list. If necessary, it can be marked with "——" under the text of the modified content to cause concern.

2.4 The version numbers of the "Quality Manual" are arranged consecutively from 1, 2.....5.....10.....; the revision numbers are arranged consecutively from 0, starting from 0, 1.....5..... 10...... If there are many revisions at one time, the version number of the "Quality Manual" should be reissued and arranged in order, and the old version of the "Quality Manual" should be replaced by the new version of the "Quality Manual". The version/modification time of this "Quality Manual" is expressed as 4/0.

3. Distribution of "Quality Manual":

The distribution of the "Quality Manual" implements the provisions of DL-CX-01 "Document Control Procedures", and the administrative department is responsible for the distribution procedures.

The "Quality Manual" is an intangible asset of the company, and the holder of the "Quality Manual" should keep it properly. Without general

The manager or manager's representative/quantitative person in charge agrees that the controlled text of the "Quality Manual" shall not be provided to the public, and its content shall not be disclosed to the public.





### Relevant personnel-list of responsibilities and authorities

SO 9001:			Director of				<b>N</b> 1 ·		
B/T 19001 Standard clause	-2008 Standard terms content requirements	General Manager	Management/ Quality/ Technology	Technology Center	Business center / after sales	Manufacturing department / Workshop	Purchasing center / warehouse	Administration Department	
4.1	General requirements	*	0	0	0	0	0	0	
4.2.1	Documentation requirements		*	0	0	0	°R	0	
4.2.2	Quality Manual	*	*	0	0	0	0	0	
4.2.3	document Control			*	0	0	0	*	
4.2.4	Recording control			0	0	0	0	*	
5.1	Management commitment	*	0	0	0	0	0	0	
5.2	focus on customer	*	*	*	*	*	*	*	
5.3	Quality policy	*	*	*	*	*	*	*	
5.4	Plan	*	*	0	0	0	0	0	
5.5	Responsibilities, authority and communication	*	0	0	0	o	0	0	
5.6	Management review	*	o	0	0	0	0	0	
6.1	Resources	*	n Angella						
6.2	Human Resources			0	0	0	0	*	
6.3	Infrastructure			*	0	*	0	0	
6.4	working environment			0	0	*	0	*	
7.1	Planning of product realization			*	0	*	0	0	
7.2	Customer-related processes			0	*	0	*	0	
7.3	Design and development			*	0	0	0	0	







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8.5	Improve	*	*	*		*	*	*
8.4	Data analysis			0	0	0	0	0
8.3	Non-conforming product control			*		0	0	
8.2.4	Inspection and measurement of product		Т	*	RI	0		= T (
8.2.3	Process monitoring and measurement		*	o	0	0	0	0
8.2.2	internal review		*	0	0	0	0	0
8.2.1	Customer Satisfaction	*	*	*	*	*	*	*
8.8.1	Measurement, analysis and improvement			*	0	0	0	0
7.6	Control of monitoring and measuring equipment			*		0	R	0
7.5.5	Product Protection				*	*	*	
7.5.4	Customer property			*	*	0	0	
7.5.3	Identification and traceability			*		0	0	
7.5.2	Confirmation of production service provision process			*		0		0
7.5.1	Control of production and service provision			0	*	*	0	0
7.4	Purchase			0		0	*	

★——Main duty○——Secondary duty





### Comparison table between "Procedure Document"

### and GB/T 19001-2008 standard clauses

	Company "Procedural Documen	ts"	GB/T 19	001-2008
Item	Procedure file name	File No	Standard clause	Standard content requirements
1	Document control program	DL-CX-01	4.2.3	document Control
2	Recording control program	DL-CX-02	4.2.4	Recording control
3	Quality management system planning and control procedures	DL-CX-03	5.4.2	Quality management
4	Internal and external com <mark>munication</mark> control procedures	DL-CX-04	5.5.3	Responsibilities, authority and communication
5	Management review control procedures	DL-CX-05	5.6	Management review
6	Human Resource Control Program	DL-CX-06	6.2	Human Resources
7	Infrastructure and work environment control procedures	DL-CX-07	6.3、6.4	Infrastructure, working environment
8	Customer-oriented control program	DL-CX-08	7.2	Customer-related processes
9	Design and develop control programs	DL-CX-09	7.3	design and development
10	purchasing control procedure	DL-CX-10	7.4	Purchase
11	Production process control program	DL-CX-11	7.5	Production and service provision
12	Technical service process control program	DL-CX-12	7.5	Production and service provision
13	Control program for monitoring and measuring equipment	DL-CX-13	7.6	Control of monitoring and measuring equipment
14	Internal audit control procedures	DL-CX-14	8.2.2	internal review
15	Process and product monitoring and measurement procedures	DL-CX-15	8.2.3、8.2.4	Process and product monitoring and measurement
16	Control of nonconforming product program	DL-CX-16	8.3	Non-conforming product control
17	Data analysis control program	DL-CX-17	8.4	data analysis







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18	Corrective action and preventive action control procedures	DL-	-CX-18	8.5		Improve	
	Product Certifica	tion Manag	gement Procedu	ire Document			
1	Product certification mark storage control procedures	and use	DL-CC	CC-01	Product certification factory qua capability requirements		
2		Key components and material inspection/verification procedures		DL-CCC-02		rtification factory quality bility requirements	
3	Periodic confirmation procedures components and materials	for key	DL-CC	CC-03	Product certification factory quali capability requirements		
4	Routine inspection and confirmation inspection control procedures		n DL-CCC-04		Product certification factory qualit capability requirements		
5	Product change control proced	ures	DL-CO	CC-05	Product certification factory qual capability requirements		
6	Inspection and testing equipment o inspection control program		DL-CO	CC-06	Product certification factory quali capability requirements		

# DAELIM BELEFIC





### "Quality Manual" change/modification list

Item	Abstract	Page	Revision date	Version	Modify	Review	Approve
1	Adjustment of functional departments, adjustment of management representatives	2	2012.7.18	4	1		
2	Document distribution department adjustment	3	2012.7.18	4	1		
3	Organizational structure adjustment	7	2012.7.18	4	1	(	
4	Department function adjustment	12	2012.7.18	4	1	R)	
5	Business center function adjustment	13	2012.7.18	4	1		
6	Function adjustment of the administration department	14	2012.7.18	4	1		
7	Management representative adjustment	15	2012.7.18	4	1		
8	Function adjustment of quality inspection department	20	2012.7.18	4	1		
9	Function adjustment of quality inspection department	21	2012.7.18	4	1	FT	
10	Technical center function adjustment	22	2012.7.18	4	1		
11	Department function adjustment	23	2012.7.18	4	1		
12	Department function adjustment	24	2012.7.18	4	1		
13	Responsibilities and authority adjustment of relevant departments	26	2012.7.18	4	1		





### List of supporting documents (controlled documents) of the Quality Manual

Item	Supporting document name	File number/code	Page	Document Management Department
1	Quality Management System Procedure Document	DL-CX-01~018	51	Administration Department
2	Product Certification Management Procedure Document	DL-CCC-01~06	12	Administration Department
3	Various management documents	DL-ZD-01~011	18	Administration Department
4	Job responsibilities of personnel at all levels	DL-ZZ-01~029	31	Administration Department
5	Job qualification and ability requirements	DL-ZG-01	2	Administration Department
6	Purchase purchase inspection/confirmation inspection procedures	DL-JY-01	21	Quality Inspection Division
7	Part processing/process inspection procedures	DL-JY-02	13	Quality Inspection Division
8	Product factory inspection/confirmation inspection procedures	DL-JY-03	32	Quality Inspection Division
9	Craft Code (Box Transformer/Complete Switchgear)	DL-GY-01~016	52	Technology Center
10	Craft Code (Electric/Dry-Type Transformer)	DL-GY-100~506	116	Technology Center
11	Craft Code (SGH10 dry-type transformer)	ODL.910.1200~1209	29	Technology Center
12	Process rules (SBH15 amorphous distribution transformer)	ODL.910.1101.~1111	26	Technology Center
13	Craft Code (110kV class transformer)	ODL.910.16100.GY	122	Technology Center
14	Operating Instructions for Special Process of Electric Welding	DL-ZY-01	2	Technology Center
15	Gas shielded welding special process operation instructions	DL-ZY-02	2	Technology Center
	Product technical conditions	ODL.710.1100.JT 等	23	Technology Center
16		DL-JT-GGD/GCS 等	36	
		ODL.710.6100.JT 等	15	
17	Safety production management documents	DL-AQ-01~034	39	Manufacturing
18	List of records (115 types in total)	DL-CX-02-01	139	Administration Department
19				





Annex 1: Design and development flow chart



**ANNEX 2** 

## Transformer manufacturing process







Annex 3: technical service flow chart

Objective: to provide customers with high quality, timely, thoughtful and satisfactory service

