QUALITY CONTROL MANUAL

FILE NO# BQ1000D

QC	XX
PROD	X
A/E	X
M/E	X
E/E	X
MGR	X
BRDR	X

Originated: 8/21/82'
Revised A: 5/7/85'
Revised B: 10/2/88'
Revised C: 2/8/90'
Revised D: 7/18/92'
Revised F: 2/14/93'
Revised G: 3/2/94'
Revised H: 9/18/95'
Revised I: 11/2/95'
Revised J: 4/8/96'
Revised K: 8/28/97'
Revised L: 2/20/99'
Revised M: 7/4/01'
Revised N: 6/24/02'

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1. INTRODUCTION

This quality control manual, based on MIL-STD-SPEC. specifies the basic policy of quality control to meet Republic of China national quality control specifications and the specifications from various customers. The prime objective of the HO CHIEN Quality Policy Manual is the planned prevention of nonconformance. HO CHIEN recognizes the need for a total Quality Assurance Program so that through planned action, design reliability will be preserved and customer requirements met.

A reputation for quality, whether good or bad, is not a mere creature of chance. It is the direct result of the internal policies of a factory. It depends upon the effectiveness of the manufacturing and engineering data upon which the customer guarantees are established; it depends upon the success of the inspection activity in ensuring conformance to requirements; above all, it depends upon the spirit of "Quality Mindedness" that exists throughout the company.

1-1 Reference Specifications

(1) MIL-STD-SPEC. Quality Program Requirements.

(2) Republic of China Quality Assurance Association Specifications.

(3) Contractual Quality Requirements.

1-2 Requirements

This Quality Control Manual shall be applicable for a products and components manufactured in the HO CHIEN plants and our subcontractor's facilities.

2. Quality Control System

2-1 Organization Chart

See Company profile.

2-2 Quality Program

The Quality Control Department, as a function of basic corporate policy, shall be responsible for carrying out the overall quality program. The Quality Control Department shall be authorized to take those actions deemed necessary to assure the production of quality parts.

2-3 Function of Quality Control

(1) Review of all contractual quality requirements and auditing them for compliance.

(2) To assure quality of material, parts, processes, semi-finished goods and finished goods by means of appropriate inspection and testing based on drawings, specifications, operation instructions, etc.

(3) To keep records and dates which will document conformance to drawings, specifications, etc.

(4) Cognizance over and selection of all in-plant gagging and testing equipment.

(5) To answer customer complaints regarding quality by:

a. Written reports to HO CHIEN Sales and Manufacturing Divisions with recommended corrective action.

b. Investigative and corrective action replies to the customer.

c. Customer contacts at the quality control level.

d. Assisting customers on quality problems.

(6) Product Improvement Recommendations.

(7) Divisional Quality Audits (including systems and procedures compliance.)

(8) Vendor Investigation, Selection, Approval and Rating.

a. Assist vendors on quality problems.

(9) Detection of Early Trends of Quality Parameters. Reduction in Inspection costs by shifting emphasis from inspection to prevention.

3. INITIAL QUALITY PLANNING

HO CHIEN, during the earliest practical phase of contract performance, shall conduct a complete review of the requirements of the contract to identify and make timely provisions for those special controls, processes, test equipment, fixtures, tooling and skills required for assuring product quality.

3-1 Updated Techniques

This initial planning will recognize the need and provide for research, when necessary, to update inspection and testing techniques, instrumentation and correlation of inspection and test results with manufacturing methods and processes. This planning will also provide appropriate review and action to assure compatibility of manufacturing, inspection, testing and documentation.

4. INPLANT SPECIFICATION

In order to meet the requirement of this manual and all contracts, in-plant specifications and standards, etc., shall be provided.

4-1 Establishment of Specifications

Quality Control shall be responsible for preparing and issuing in-plant specifications including distribution among the sections concerned. HO CHIEN quality program shall assure that all work affecting quality (including such things as purchasing, handling, machining, assembling, plating, processing, inspection, testing, modification, installation, and any other treatment of

product, facilities, standards or equipment from the ordering of materials to dispatching of shipments) shall be prescribed in clear and complete documented instructions of a type appropriate to the circumstances. Such instructions shall provide the criteria for performing the work functions and they shall be compatible with acceptance criteria for workmanship. The instructions are intended also to serve for supervising, inspecting and managing of work. The preparation and maintenance of and compliance with work instructions shall be monitored as a function of the quality program.

4-2 Index of In-Plant Specifications

In-plant specifications and their numbers shall be assigned and maintained in a designated order. An index of in-plant specifications shall be made and kept up-to date at all times. The index shall be submitted to the customer whenever contractual requirements indicate such a need.

4-3 Maintenance of In Plant Specifications

Quality Control shall be responsible for monitoring specifications to the latest revision.

4-4 Establishment and Readjustment of Specifications

Whenever an in-plant specification needs to be revised and/or obsolete, Quality Control will arrange and review the requirement with the departments concerned. Quality Control shall notify all departments concerned of the effective date of the effective date of revisions and/or obsolescence. All old specifications shall be collected and the new and/or revised specifications issued. A record of the date of issuance shall be maintained, and the recipient.

4-5 Checking of In-Plant Specifications

Quality Control shall periodically check in-plant specifications based on contractual requirements, effectiveness and utilization.

4. QUALITY CONTROL RECORDS

All the records of Quality Control obtained and based on this Quality Control Manual shall be kept and filed for documenting the quality of products and evaluating efficiency of the quality program.

5-1 Record of Inspection and Testing

HO CHIEN shall maintain and use any records or data essential to the economical and effective operation f its quality program. These records shall be available for review by the customer representative and copies of individual records shall be furnished upon request. Records are considered of the principal forms of objective evidence of quality. The quality program shall assure that records are complete and reliable. Inspection and testing records shall, as a minimum, indicate the nature of the observations together with the number of observations made and the number and type of deficiencies found. Also, records for monitoring work performance and for inspection and testing shall indicate the acceptability of work or products and the action taken in connection with deficiencies by the authorized inspector. The quality program shall provide for the analysis and use of records as a basis for management action.

5-2 Lot Control Record

All products shall be recorded on a lot control sheet. Each lot has to be clearly recorded from material issuance to final assembly.

5-3 Measuring Equipment Control Record

HO CHIEN shall provide and maintain gages and other measuring and testing devices necessary to assure that supplies conform to technical requirements. These devices shall be calibrated against verified measurement standards, which have known valid relationships to national standards at established periods to assure continued accuracy. The objective is to assure that inspection and test equipment is adjusted, replaced repaired before it becomes inaccurate. The calibration of

measuring and testing equipment shall be in conformity with Military Specification MILCSPEC. In addition, HO CHIEN shall insure the use of only such subcontractor and vendor sources that depend upon calibration systems, which effectively control the accuracy of measuring and testing Equipment.

5-4 Record for Special Processes

Special process and heat treatment, surface treatment and destructive testing has to have their own records, since such processes are so critical and important. Facilities, operators and inspectors have to keep such records and have them available for review whenever required.

5-5 Records of Rejection

HO CHIEN quality program shall detect promptly and correct assignable conditions having an adverse effect on quality. Design, purchasing, manufacturing, testing or other operations which could result in or have resulted in defective supplies, services, facilities, technical data, standards or other elements of contract performance which create excessive losses or costs must be identified and changed as a result of the quality program. Corrective action will extend to the performance of all suppliers and vendors and will be responsive to data and product information forwarded from users. Corrective action shall include as a minimum:

a. **Analysis of data and examination of product scrapped or reworked to determine extent and causes.**

a. **Analysis of trends in processes or performance of work to prevent making a nonconforming product; and**

b. **Introduction of required improvements and corrections, an initial review of the adequacy of such measures and monitoring of the effectiveness of corrective action taken.**

5-6 Recording of Processes

To conform that all parts were manufactured per standard and drawing in each process and that they meet engineering and quality requirements, each lot has to have its own record for each process. After completion, inspectors will verify all records. In order to pass inspection, all parts shall be manufactured per specification.

5-7 Custody of Records

All records stated in 51 to 56 shall be kept in Quality Control and available whenever required. All records shall be kept for that period of time indicated by the customer's requirements.

5. DRAWING CONTROL

Drawing and specifications related thereto shall be maintained and updated as required. This shall be the Engineering Department's responsibility.

6-1 Customer's Drawing and Specifications

(1) All to filed in Engineering Department. No other department shall be allowed to remove them from the Engineering area.

(2) Engineering Department shall generate HO CHIEN drawings based on the customer's specifications, and issue them for internal use.

6-2 In-Plant Drawing and Specifications

Original in-plant drawings and specifications shall be kept Up-to-date with the latest customer drawing and specification. This shall be an Engineering responsibility.

6-3 Process Drawings and Product Drawings

Copies of Process and Product Drawings shall be issued to the Production and Inspection Departments. Lot number and/or valid period shall be stated on copy of drawing.

No original drawings shall be issued

6-4 Drawing Corrections and Revisions

Whenever corrections and revisions of drawings are required, the Engineering Department shall inform all concerned sections and replace with a revised drawing, stating effective date and indicating the revision and its effect on work-in-process, if any.

6-5 Engineering Changes

In the event a situation arises that requires an Engineering and/or process change, such a change shall be effective after customer's approval, if required by contract.

6-6 Quality Control shall assure that all drawings in Manufacturing are up-to-date and that all drawings in the processes of Manufacturing and Inspection are based on it.

6. MEASURING AND TESTING EQUIPMENT

Measuring and testing devices shall be adjusted or calibrated at established periods based on the frequency of use, type of use and in accordance with a specified plan. According to the plan, HO CHIEN shall assure that measuring and testing devices are always accurate and that they maintain the established accuracy, and also shall keep and maintain those records, which show they are properly controlled.

7-1 Calibration

The details such as classification of accuracy of measuring devices, method of calibration and the number of times of calibration, etc., shall be in conformity with the Equipment control regulation, which has been established. We can classify roughly the places where equipment is calibrated, as shown below. In principle, the measurement standard used to adjust the equipment shall be those, which have relationships to national standards, or those, which were adjusted at an outside calibration laboratory.

(1) HO CHIEN.

(2) Outside Calibration Laboratory.

(3) Manufacturers of measuring equipment.

7-2 Calibration Records

Calibration records shall express clearly at least the following

(1) Control number of measuring equipment.

(2) Name and model of measuring equipment.

(3) Rating and powers, etc., of measuring equipment.

(4) Name of measuring standard used.

(5) Readings on a measurement standard and the measuring equipment to be adjusted at the point of calibration.

(6) Place, time and date, expiration date and the name of the person who performed the calibration.

(7) Other necessary matters.

7-3 Identification

In principle, control numbers, expiration date and the name of the adjuster or the person who performed the calibration shall appear on the measuring equipment.

7-4 Control of Measuring Equipment at Sub-Contractors

When selecting subcontractors, HO CHIEN shall pay full attention to whether the control of measuring equipment is practiced there. Also, HO CHIEN shall verify that the proper control is performed according to the type of equipment, use, and amount of usage. HO CHIEN shall assure the accuracy of subcontractor measuring equipment

by advising and cooperating with them as occasion demands.

7-5 Customer's Use of Inspection and Testing Equipment

Gages and measuring and testing devices shall be made available for use by the customer when required, to determine conformance with contract requirements. If conditions warrant, HO CHIEN personnel shall be made available for operation of such devices and for verification of their accuracy and condition.

7-6 Advanced Metrology Requirements

HO CHIEN shall suitably identify and report to contributing personnel of any precision measurement and unusual testing equipment needs exceeding the known capability of HO CHIEN, and the necessary investigation and action shall be taken

7. CONTROL OF PURCHASES AND SUPPLIES

HO CHIEN shall assure that all purchases and supplies produced from its suppliers conform to contract requirements, regardless of their details of manufacturing service.

8-1 Selection of Sources

The selection of sources shall be dependent upon the types of supplies, complexity of services, quantity of products, requirements for reliability and the manufacturing techniques indicated. Prime material suppliers shall have a documented quality planning and enforce statistical process control HO CHIEN shall control those sources who are regarded as being capable of satisfying the requirements as qualified sources, and procurement shall be from those sources.

8-2 Control of Sources

HO CHIEN shall inspect periodically the condition of quality control of the suppliers selected as qualified sources. The inspection shall include supplies

conformance with contract requirements and shall advise and regulate them if required. To assure an adequate and economical inspection of such sources, HO CHIEN shall utilize to the fullest extent objective evidence furnished by its suppliers. When necessary, such inspection of the state of control and supplies shall be performed at a supplier's plant.

8-3 Contract Documentation

On the occasion of administrating a contract with it suppliers, HO CHIEN shall regulate or quote at least following item to make the contract requirement clear

(1) Applicable drawings and specifications.

(2) Requirements of quality control.

(3) Requirements for First Article Inspection or special processes.

(4) Details of testing or inspection requirements and test report or certification required.

(5) Requirements for anticorrosion, packaging and identification.

8-4 Technical Support

Regarding the details of services provided to a qualified supplier when required to maintain product quality and reliability, technical guidance or training shall be given to them to improve the supplier's quality level performance.

8-5 Correction of

When discrepancies are found in the state of control at a supplier's facility, or in supplier's quality, HO CHIEN shall report it immediately to the supplier and note that effective corrective action is taken. If the supplier requires specific guidance to correct the discrepancy, this will be provided by HO CHIEN.

8-6 Cancellation of Qualification

In the case where HO CHIEN considers the supplier as not having maintained the capability of quality assurance needed to satisfy contract requirements due to repetitive discrepancies and/or a serious quality defect, etc., HO CHIEN Quality Control Department shall cancel the qualification of the supplier and notify each department of the cancellation of the Qualification Status of that supplier.

8. RECEIVING INSPECTION

Materials, purchases and supplies furnished by customers shall be subjected to Receiving Inspection to assure conformance to contract requirements and only those, which are regarded as meeting contractual requirements shall be accepted.

9-1 Person in Charge of Receiving Inspection

Receiving Inspection shall be performed by Receiving Inspectors of each Quality Control Department in charge, or Inspectors designated by the quality Control Manager. Each Inspector shall be responsible for inspection results, and the dispositions he renders.

9-2 Method of Receiving Inspection

The details of Receiving Inspection shall be dependent upon the state of Quality Control at the supplier level and the objective evidence of quality furnished by the supplier, and shall be established as a Receiving Inspection standard to verify conformance to contract requirements.

9-3 Products Awaiting Receiving Inspection

Products awaiting Receiving Inspection, necessary test reports or certifications and the products awaiting acceptance must be controlled separately from inspected and approved products.

9-4 Control of Products Which Passed Receiving Inspection

A notice of inspection results, inspection certification or the document which substitutes for it shall be attached to all the products which pass Receiving Inspection and they shall be transmitted to the appointed department after the results of the inspection and the expiration date, etc., are expressed clearly.

9-5 Disposition of Non-Conforming Parts

When any discrepancy is found during Receiving Inspection, the parts shall be disposed of promptly according to the Discrepancy Disposition Standard, and at the same time HO CHIEN shall take corrective action and make efforts to prevent discrepancy recurrence. This will be done in cooperation with the supplier in accordance with Discrepancy Disposition Standard details and as a function of the number of times the discrepancies have occurred.

9-6 Receiving Inspection of Raw Materials

Receiving Inspection of raw materials shall be dependent upon the clauses from 91 to 95, and also the following points shall be taken into account:

(1) HO CHIEN shall verify that the test and inspection reports attached to the raw materials conform completely to the contract requirements.

(2) Even though a part of Receiving Inspection may be abbreviated upon the basis of the reports submitted by the supplier, laboratory testing at in-house or an outside organization shall be employed at established intervals for the applicable physical, chemical and other technical requirements to verify the conformance to the applicable standard or specification.

(3) Receiving Inspectors of in-house equipment shall be of the technical level where adequate judgment and evaluation can be performed regarding contract requirements, and the level shall be maintained and improved to have them proficient with the progress of techniques used

in the field.

9-7 Receiving Inspection of Customer-Furnished Material

With respect to the material furnished by the customer, the following shall be employed, and at the same time, HO CHIEN shall report the conditions or the cause to the customer immediately when customer-finished material is found to be damaged, malfunctioning, or otherwise unsuitable to use.

(1) Receiving Inspection consistent with practicability to detect damage in transit.

(2) Inspection for the visual defects and proper type.

(3) Periodic inspection and precautions to assure adequate storage conditions and to guard against damage from handling and deterioration during storage.

(4) Functional testing, either prior to or after installation, or both, to determine satisfactory operation prior to use.

(5) Verification of quantity.

9. QUALITY CONTROL AND INSPECTION IN PROCESS

Quality Control and Inspection in Process designate and patrol check, which are performed organically and effectively between processes after Receiving Inspection and prior to Final Inspection to assure conformance to the drawing requirements, the stable quality of products and the conformance of operations to the operation standard.

10-1 Quality Control and Inspection in Process shall be performed cooperatively by Inspectors of the Quality Control Department, or Inspectors designated by the Quality Control Manager.

10-2 Quality Control of Processes

The Quality Control Manager shall establish an effective and proper level of manufacturing processes. The purpose is to have operations being performed in conformance with the standards and to have First Article Inspection, processing inspection and patrol check being put together organically and effectively to achieve the required quality level.

(1) Inspectors of each processes shall assure that the proper quality control records are taken and shall verify that the necessary action is taken in case of any discrepancy and that the records have been kept.

(2) Discrepant parts at each process shall be disposed of in accordance with a discrepancy disposition procedure. The discrepant parts which cannot be disposed of at that time shall be segregated, identified or tagged, and placed in the Inspection Area in such a manner as to prevent mixing. After the disposition has been formally established, they should be disposed of in accordance with the appropriate discrepancy disposition procedure.

10-3 First Article Inspection

At the time when a machine has completely been set up, a First Article Inspection shall be employed for all products. After verifying that the product has been manufactured in conformance with the drawing requirements, production shall be allowed to start.

10-4 Processing Inspection

Processing Inspection shall be performed between processes for semi-finished products, prior to completion of the products, and then shall be forwarded to the next operation station.

10-5 Patrol Check

Inspectors shall patrol the shop to check all manufacturing aspects of quality control, including First

Article Inspection, operations in accordance with the proper drawing the proper use of measuring devices, products being made and the condition of product, control, etc.

10. PRODUCTION TOOLING

Production tooling and jigs shall be properly controlled in accordance with the type, kinds, use, purpose and the number of times of use to assure a uniform quality of products which will be manufactured with such tooling.

11-1 All tooling shall be controlled under a system whereby proper records as to the storage conditions, identification and repair can be maintained.

11-2 Periodic inspection of all tooling shall be employed to assure their accuracy. These inspection results shall be controlled and recorded so that they may be exhibited at any time when required.

11-3 Storage of tooling shall be such as to prevent the wrong use, damage and deterioration. Periodic inspection shall be conducted to see that the proper storage conditions are maintained.

11-4 When production jigs and tooling are used in the inspection process, they shall be certified for accuracy prior to release for inspection usage.

11. SPECIAL PROCESSES

Special Processes designate those manufacturing and inspection processes in which it is difficult to assure quality by usual inspection methods. Effective control shall be employed, especially for the equipment, workers and inspectors relating to special processes, based on their complexity and the importance of the process to assure the quality of the product. Included in special processes at HO CHIEN are heat treatment, surface treatment and non-destructive testing, etc.

12-1 In case special processes such as heat treatment and non-destructive testing, etc., are employed at HO CHIEN, internal standards shall be regulated and controlled internally. When required, HO CHIEN shall get the

approval of the China Quality Assurance Associate Agency (CQAAA) or the contractor for those special processes that depart HO CHIEN internal standards.

12-2 When a special process is performed by an HO CHIEN sub-contractor, in principle the subcontractor shall have the approval of the CQAAA, HO CHIEN, or the HO CHIEN customer Periodic inspection and evaluation of the whole of Quality Control at these plants shall be employed at a suitable interval to verify that proper quality control methods are used to satisfy contract requirements.

12-3 Regarding examination, certification of equipment, operators and inspectors employed in the use of special processes, a list shall be maintained so that the latest issue may be submitted to the contractor when required.

13 COMPLETED PRODUCT INSPECTION

Completed product inspection is a final inspection to assure the conformance of products with the applicable drawing and specification requirements. Accordingly, it may include endurance tests and performance tests which simulate product end use and function.

13-1 All products shall be subject to Final Inspection prior to shipping to customers or forwarding to the stockroom.

13-2 Final Inspection shall be performed by an Inspector designated by the Quality Control Department in charge or an Inspector designated by the Quality Control Manager, in accordance with the applicable drawing and specifications. After completion of the inspection report, it shall be forwarded to the Quality Control Manager. Products which passed inspection shall be identified as required and may be packaged and shipped. Among the inspection-passed products, a passing stamp shall be put on them if required. When nonconforming parts are found at Final Inspection, if the performance of the product is doubtful it shall be disposed of in accordance with the Clause 16 Disposition of Discrepant Products. Unusual difficulties and deficiencies relating to product performance shall be reported to the Design Department promptly.

13-3 Qualification

When a qualification test is performed by a customer inspector, an inspector designated by the Quality Control Department Manager shall show the above inspection report noted in Clause 132, and after completion of the inspection under the presence of the customer inspector, the final report shall be made and submitted for customer approval.

14. CONTROL OF STOCK

This procedure regulates that which assures the protection, storage and inspection of products in stock at the warehouse. The control shall be such to prevent deterioration in quality and to maintain quality

14-1 Stocking of Purchase Items

(1) Raw materials and other purchases shall be stored so as to distinguish their specification inspection conditions clearly. Copies of the equivalent purchase orders, copies of the Receiving Inspection reports and other related papers which were showed the stock quantity shall be maintained and controlled.

(2) With respect to the storage of raw materials, the protection against corrosion and deterioration shall be taken into consideration. Periodic inspection for these conditions shall be taken, as required. Flow of material shall be based on the principle of the "first in, first out" method.

(3) Materials such as molding compound which need to be protected against quality deterioration through a refrigerated storage environment shall be controlled, taking notice of storage place, temperature, humidity, and expiration date, etc.

(4) With respect to the use of stock, it must be regulated so that authorized personnel only can draw stock from storage and only by an established procedure.

14-2 Materials in Process

Materials in Process shall be put into proper containers with tags and stored temporarily to prevent loss or damage at each processing operation station.

14-3 Stock of Products

Products which will be stored as stock for sales shall be put in proper containers with tags and shall be sealed and controlled so as to protect against deterioration in quality during storage. When necessary, re-Inspection shall be performed prior to shipping.

15. PACKAGING AND DELIVERY

15-1 The completed products which are accepted by Final Inspection are approved for packaging and shipment to the customer. The quality program shall monitor packaging and shipping work to assure that products shipped are accompanied with applicable shipping and technical documents which are required to assure safe arrival an identification at destination.

15-2 Generally, packaging work is governed by an HO CHIEN specification. Packaging in compliance with contractual requirements shall be performed to the customer's specification.

15-3 Prior to the shipment of completed products, the Shipping Department is required to inspect or confirm the customer's name, part number, identification of specification and condition of packaging.

15-4 The Quality Control Section shall require and monitor periodically and/or irregularly the use of procedures to prevent handling damaged to articles. Handling procedures of this type include the use of special carts, boxes, containers, transportation vehicles and any other equipment for materials handling.

15-5 Inspection certification or inspection data is

attached to completed products for shipping depending upon the customer's requirements. Quality Control Section has the responsibility to prepare and issue inspection certification or inspection data sheets

16. NON-CONFORMING MATERIAL

HO CHIEN shall establish and maintain an effective and positive system for controlling nonconforming material which is generated in-house or is returned by the customer In the process of evaluating nonconforming material, the cause of the discrepancy, corrective action and prevention of recurrence shall be considered. Generally, discrepancy control is provided by the Discrepancy Control Specification and material review process. The Discrepancy Control Specification is applied to completed products which are controlled by contractual requirements. A customer' rejection claim is applied to returned material from a customer.

16-1 The Quality Control Manager has final responsibility for discrepancy control and the Quality Control Supervisor is in charge of the actual transaction, as a general rule A council system or committee for discrepancy control may be established for in-house products other than customer's material review, if the need arises.

16-2 Identification of NonConforming Supplies

(1) All nonconforming suppliers shall be positively identified by tag or other suitable method to prevent unauthorized use, shipment and intermingling with conforming supplies.

(2) Identification shall be clarified on non-conforming supplies which are under investigation is completed or after the investigation is completed. Holding areas shall be maintained for nonconforming supplies.

16-3 Discrepancy Control Records

(1) A Discrepancy Control Record shall be initiated and maintained to cover all discrepant situations. These records shall be available to use for the investigation and analysis of the discrepancy.

(2) The safekeeping period of discrepancy control records shall be defined by a Quality Records Control Specification.

16-4 Returned Material

The Quality Control Section shall investigate details of any discrepancy which is caused by handing, packaging or workmanship, etc., for all returned materials from the customer and shall take necessary corrective action.

17. STATISTICAL QUALITY CONTROL ANALYSIS

17-1 In Receiving Inspection, Process Inspection and Final Inspection, a sampling plan may be used if a reduction in inspection or testing can be achieved without jeopardizing quality.

HO CHIEN may employ sampling inspection in accordance with MILSTD105, unless otherwise contractually specified An AQL shall be specified for individual case. In the case which the Quality Control Supervisor makes a judgment that a sampling inspection is not applicable, a sampling inspection shall not be employed.

In the case that other sampling plans are provided by contractual requirements, these plans shall be exempted from the above systems. Statistical planning analysis, test and quality control procedures must be suitable to maintain the required control of quality.

17-2 Statistical Process Control shall be employed on high volume production in accordance with customer requirement and/or by judgment of the quality control supervisor for specific pre-characteristics.

18. IDENTIFICATION OF INSPECTION STATUS

HO CHIEN shall maintain a positive system for identifying the inspection status of products which are inspected by Receiving Inspection, In-Process Inspection and Final Inspection. Identification may be accomplished by means of stamps, tags, labels, or other normal control devices.

18-1 Identification of Inspection Status by Stamping

An inspection Stamp shall be applied on the job card, which is matched with the product, by an authorized inspector of the Quality Control Section in the following types of inspection:

(1) Identification of Receiving Inspection.

(2) Identification of Process Inspection.

(3) Identification of Final Inspection.

(4) Identification of Special Process Inspection.

The inspector shall apply stamps which show acceptance for Final Inspection on the product or package after assuring the product and packaging meet the contractual requirements.

18-2 Identification of Rejected Products

(1) Rejected products shall be distinguished from accepted products by the method of keeping in a special marked container or attaching tags to the parts.

(2) In the case where rejected product are accepted for use by material review, special acceptance stamps shall be applied to distinguish these parts from parts that have not been subjects to Material Review action.

18-3 Inspection Certification

In receiving Inspection, accepted products which are

going to stock shall be identified as to their inspection condition by an inspection certification. The certification will include the number of parts, part number, inspection date, identification of inspector and if necessary, the term of validity shall be designated on the inspection certification.

18-4 Control of Inspection Stamps

Each inspection stamp shall designate the applicable facility and each inspector. The Quality Control Supervisor has responsibility of registration, issue and recall of inspection stamps and shall maintain their records. Each inspector has the responsibility of using and keeping his/her own stamps.

19. CONTROL OF QUALIFICATION TEST ITEMS

19-1 For qualification test items, pre-production test items and First Article Inspection items which require technical testing and approval, Quality Control shall assure their quality in their pre-production period as well as in their production period.

19-2 Quality and processing of approved items in their production phase shall be maintained at the same level as their pre-production period. In the case that design and/or process required, the change details shall be examined from the Engineering and Quality Control standpoint and all information relating to the change shall be governed by contractual requirements.
All changes shall be approved by the customer and if necessary, re-testing shall be conducted to assure the validity of the changes.

(1) Change of design may include:

a. Change of material.

b. Change of performance level.

c. Change of dimensions on the contractual drawing.

d. Change of basic dimensions other than shown on the contractual drawing.

e. Others.

(2) Change of Process may include:

a. Change in the number and order of processes which may have an effect on quality Change of performance level.

b. Change of operation method which may have an effect on quality.

c. Others.

19-3 Records and Data

Records and data relating to 19-1, 19-2 shall be maintained, kept current and shall be available for review.

20. CORRECTIVE ACTION

The quality Control Section shall establish and implement whatever corrective action is required to correct a quality deficiency. This will be done promptly and in keeping with established quality control procedures.

20-1 Evaluation of Quality Level

The quality level and occurrence rate of discrepancies shall be evaluated systematically during the production process and inspection in order to improve quality and prevent re occurrence of any discrepancies. All information related to the above shall be collected by a suitable method and shall be analyzed to determine what, if any, corrective action is needed. Also this information shall be utilized to evaluate the quality program.

20-2 Requirements for Corrective Action

In the case where it is necessary to correct a condition causing a discrepancy, the Quality Control Section shall

introduce the required improvements and corrections to all suppliers and vendors, and shall review the adequacy of such measures and monitor the effectiveness of the corrective actions taken

20-3 Discrepancy After Delivery

Immediate investigation and corrective action shall be taken for any discrepancy which is reported by the customer. The results of such investigations shall be reported to the customers in compliance with their established procedures.

21. COST RELATED TO EQUALITY

HO CHIEN shall maintain and use quality cost data as a management element to improve and certify effiency of the quality program.

21-1 The Cost of NonConforming Supplies

The cost of nonconforming supplies (i.e., the labor and material involved in material spoilage caused by defective work, and correction of defective work) shall be collected and recorded to determine its effect on the factory cost of the product.

21-2 The Cost of Quality Control

The costs which are accumulated for quality control needed to prevent occurrence of discrepancies and variations of quality at our own or at a vendor's facility shall be identified and collected.

21-3 Data Reporting

The above data shall be reported to top periodically in order that they may evaluate the efficiency of the quality control program.

21-4 Data Submitted to the Customer

Above data shall, on request, be identified and made available for review by customer representatives when contractually required

22. EDUCATIONAL TRAINING

Educational training shall be held periodically or as required by the party concerned with a view to transmitting information or understanding of the function and scope of his duties.

22-1 Planned Educational Training

Planned educational training shall be provided to new employees who belong to other related departments to provide them with the necessary knowledge and techniques regarding quality control.
The Quality Control Supervisor shall conduct training programs as a part of a normal quality control program.

22-2 Occasional Educational Training

In the case that there are process changes, the potential for processing errors could increase. Therefore, educational training shall be held as required in order to maintain acceptable quality levels.

22-3 Contents of Educational Training

Contents educational training shall include knowledge of product, procedures used in purchasing, handling of equipment, methods of manufacturing or processing, methods of testing or inspection, and methods associated with quality control.
Particularly, the contents of training shall information regarding the end application of products, new sophisticated materials and high technology processes.

22-4 Record of Educational Training

During the above educational training period, the Quality Control Section shall maintain records as to content, material, and student performance with respect to the

company educational system and quality cost control system.

23 NTROL OF QUALITY PROGRAM

The quality program assures that all processes and manufacturing operations required will produce sufficient products continuously which will satisfy customer contractual requirements and the quality levels established by HO CHIEN in an economical and effective manner. Also, the quality program shall be able to respond to any changes of technical environment. Adequateness of the quality program shall be examined periodically to improve their technical and economic levels of performance.

23-1 Report of Quality Program

The Quality Control Department shall submit their quality program with details of an enforcement plan to factory top management for their approval in accordance with basic corporate policies of quality control.

23-2 Evaluation of Quality Program

The Quality Control Department shall record all details of the quality control activity which is conducted under their cognizance The Quality Control Department shall collect and disseminate data regarding product quality level in each process, process discrepancy and customer rejection, costs for the discrepancy and cost for the quality control activity. Above all, data shall be submitted to Management for purpose of evaluating the primary object of the quality program and necessary actions to be taken.

23-3 Internal Audit

The Quality Control Department, with the direction of top management, shall include a third party who has no direct relation to the above department. The committee shall examine the quality program periodically.

Examination shall comprise following subjects as minimum:

(1) Re-examination of a product which has be accepted by an inspector of quality control department.

(2) Inspection for safe keeping condition and substance of specifications, standards and other documents.

(3) Examination for operator's and inspector's knowledge and proper handling methods with regard to the above document.

(4) Confirmation for the recording of discrepancy reporting and corrective action.

(5) Examination of inspection records and their contents, and the methods used in reporting these records.

Conclusions of the examination committee shall be reported to the Quality Control Department and to the factory top management.

23-4 <u>Correction of Quality Program</u>

In the case where an inadequacy of the quality program is indicated as a result of the examination according to an internal audit (paragraph 233) and/or contractual requirement, the inadequacy of the quality program shall be corrected.