The D. R. Templeman Company

Quality Control Manual

Revision 2

The D. R. TEMPLEMAN COMPANY

QUALITY CONTROL MANUAL

Described herein are the functions pertaining to the establishment of a Quality Control Department, its inspection methods, procedures and operations.

Vice President-Manufacturing Arthur O. Williams

Quality Control Manager Paula E. Brown

Number _____

Revision No. 2

Date: 8/30/11

TABLE OF CONTENTS

The D.R. Templeman Company

Mission Statement

The mission of the D.R. Templeman Company is to be the supplier of choice for precision fine wire springs produced from round wire to customer specifications. We fulfill our mission by (1) staying close to the customer throughout all phases of product development and manufacturing, (2) providing a level of service that is second to none, and (3) being relentless in our commitment to quality. We maintain our competitive edge by attracting and retaining ambitious employees and providing them with every opportunity to reach their full potential as members of our highly efficient, well equipped, close-knit team. By fulfilling our mission, we earn the respect of our customers, our suppliers, our peers and the community in which we live and work.

The D.R. Templeman Company

Introduction

This manual is written as a guide for those interested in or concerned with the policies and procedures used by the Quality Control Department for the control of raw material supplies, production procedures, in-process and final inspections, packaging and labeling of parts and containers.

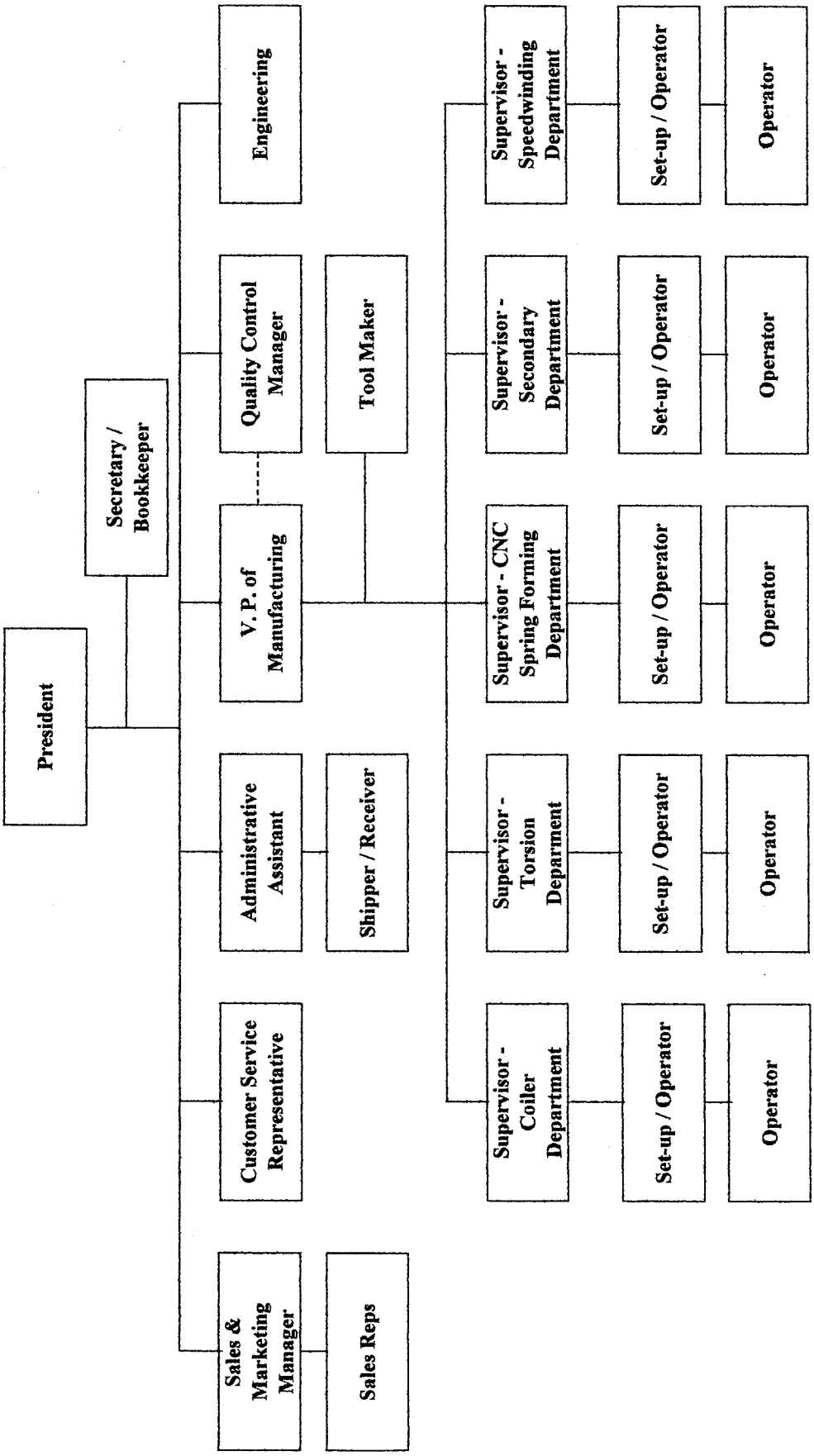
The policies set forth in this manual are designed to form the basic standard for military and commercial materials and components intended to meet customer contractual quality requirements.

The extent of the inspection controls described in this manual are in conformance with ISO 10012-1/MIL-STD-45662A and exceed those of MIL-I-45208A. Quality Control requirements imposed by customers through purchase orders or contracts which differ from these specifications must be reviewed before being accepted.

It is the intent of management that the acceptance levels set forth by the Quality Control Department and utilized throughout the production process will be equal to or more stringent than those required by the customer. In the event of a conflict pertaining to the quality of a part or parts, the contract will determine the final result.

The D. R. Templeman Co. is committed to a certified S.P.C. Program based on a first piece analysis and approval. In addition, the process techniques will be based on statistical tools, such as various process charts, to control process. Based on the stated techniques and a target of zero defects, the parts are subjected to zero number acceptance plans at final inspection. Documents at various stations are filed and available upon request. This manual will serve as a set of operating rules to help maintain the quality image of our organization. The ultimate responsibility for product quality lies with the manufacturing departments at all levels: supervisory, set up and the operating personnel.

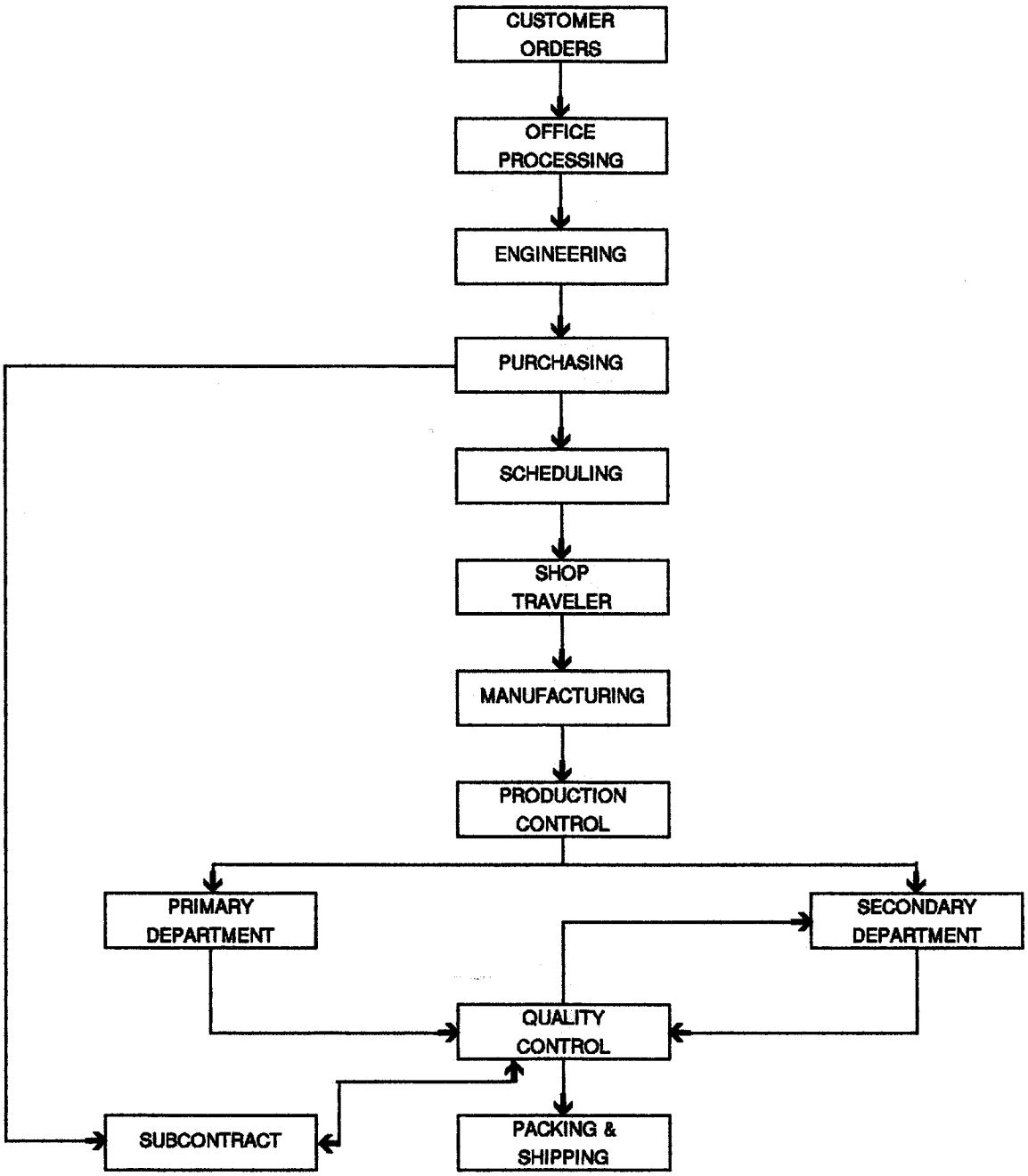
The D. R. Templeman Co.
Organization Chart



The D. R. Templeman Co.

Section II

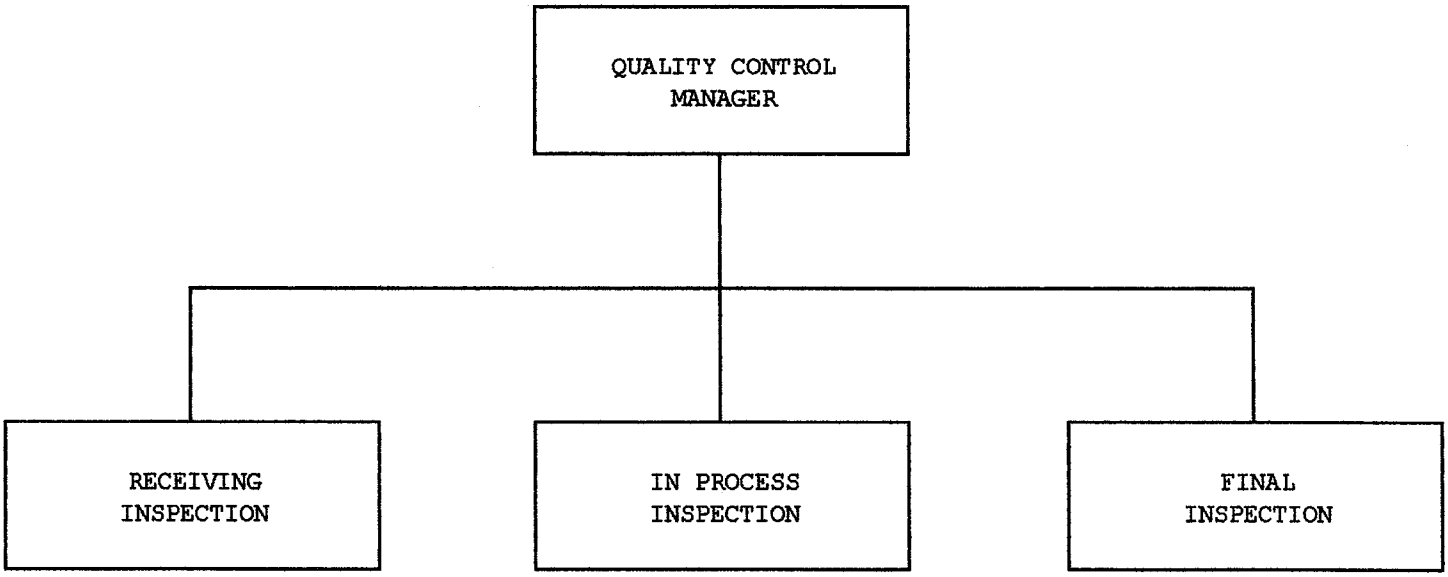
Process Flow Chart



The D. R. Templeman Company

Section III

Quality Control Organization Chart



The D.R. Templeman Company

Section IV

Administration of Quality Control

The Quality Control Department consists of a Quality Control Manager and one or more inspectors. It is the department's function to assist and give service to the engineering and manufacturing departments in order to assure the high quality standards set forth by management.

1. Responsibilities of The Quality Control Manager:

    a. To set and maintain a standard of efficiency for the Inspection Department.

    b. To work with Engineering in developing quality standards for new products.

    c. To work with Statistical Process Capabilities for assisting Manufacturing Engineering in gathering data.

    d. To establish better process inspection procedures to approach a level of zero defects.

    e. To review departmental procedures related to gaging and gaging methods and make improvements when needed.

    f. To maintain a final inspection function assuring parts are to customers' requirements.

    g. To develop programs to keep quality mindedness actively instilled in the plant.

    h. To investigate customer complaints and act promptly against reoccurrence.

    i. To meet with the Material Review Board weekly to review rejections and rework and perform immediate corrective action when required.

    j. To maintain quality records and at least once a month give reports to appropriate departments of quality progress.

    k. To provide on the job training and list courses that are required for all personnel in the department.

    l. To review new product drawings and revisions to existing product drawings.

2. Responsibilities of In-Process Inspectors

   In-Process Inspectors must meet the minimum requirements established by the Quality Control Manager with regard to education, experience and aptitude. These requirements shall include the ability to read complex blueprints, familiarity with standard inspection instruments used within the department, knowledge of statistical techniques and a general knowledge of manufacturing procedures and operations. Their duties include the following:

   a. To inspect first piece and sample runs to assure conformance with customer specifications.

   b. To assist the Quality Control Manager and Engineering in the development of In-Process Inspection Procedures.

   c. To perform periodic inspections at established time intervals for all running jobs to assure conformance with customer specifications and established control limits.

   d. To utilize statistical techniques, such as $\bar{X}$ and R charts, at sampling and for the analysis of a process.

   e. To shutdown any operation which is not meeting established control limits, segregate non-conforming or suspect parts and to initiate Material Review Board action in accordance with Section IX.

3. Responsibilities of Receiving Inspectors

   a. The Receiving Inspector will inspect finished and semi-finished parts from vendors to methods outlined in Section VIII.

   b. The Receiving Inspector will inspect all raw material to methods outlined in Section VIII.

   c. There are no minimum education requirements, however the inspector must have some previous experience as an inspector in this plant or at another place of employment.

4. Responsibilities of Final Inspectors:

   a. Must be able to perform statistical inspection on finished goods using zero sampling plans, variable charts and analysis to a 1.33 C_{pk}

   b. Will inspect and accept parts using the Final Inspection Record sheet as a guide.

c. Will complete all forms necessary for filing in the Quality Control Department and, when requested, send a duplicate copy to the customer. (See Exhibit #6)

5. Training of Personnel

New personnel are given on the job training in connection with various duties outlined in their respective titles. All personnel are required to take a basic course in statistical quality control. These courses are offered by the Quality Control Manager or nearby technical schools. All quality personnel are reviewed periodically in relationship to their duties.

The D.R. Templeman Company

Section V

Drawing and Change Control

1. The Engineering Department is responsible for controlling the release and issue of all drawings and specifications. This is accomplished as follows:

    a. A master file is maintained of all drawings and specifications. When practical, only duplicated copies are issued with a production order and a copy is sent to the Quality Control Department.

    b. If a master drawing has to be removed for a specific purpose, a special form is inserted in place of the blueprint noting date and person who has the blueprint. This blueprint shall be returned immediately after use and the form removed.

    c. Engineering changes on active orders will be issued with a change order. This change order will indicate when and where the change is to be incorporated.

    d. All obsolete drawings are retired to a separate file and stamped obsolete; all obsolete duplicated copies will be destroyed.

2. Any department supervisor and/or set-up person can obtain a current or duplicate drawing by making a request to the Engineering Department.

The D.R. Templeman Company

Section VI

Material Control

A. Control of raw materials

1. Upon receipt of raw materials, all pertinent information listed on the shipping documents is checked against the Purchase Order for subject material, and recorded on a Material Control Record after verification.

   a. The Material Control Record will contain the following information when applicable:

      1) Source of supply.
      2) Type of material.
      3) Amount received and date.
      4) Size, shape and tolerances.
      5) Heat code or box number.
      6) Specification number and revision.
      7) Material conditions--hardened, annealed, cold rolled, etc.
      8) Storage area.
      9) Date of manufacturing issue and quantity.
      10) Inspection approval when performed.

2. The certification specified for the lot of purchased material must be checked and be in strict conformance with required military or customer specifications.

   a. The certification must include the information noted on the Material Control Record as well as chemical and physical properties.

   b. In case of non-conformance, the lot will be rejected and segregated. A notice of rejected material will then be forwarded to the Material Review Board for further action. (See Exhibit #1)

   c. Material Certifications received with the material will be forwarded to the Purchasing Department to be kept on file for a minimum of five (5) years.

3. When a Material Control Record is completed, the following will then be performed as required:

   a. A sample cut from the front and back of one coil as a minimum from each lot is subjected to physical tests and/or a chemical review. The cast and helix of a coil is also tested.

   b. Each lot is properly identified by an inspection stamp or tag.

   c. Each lot is placed in a designated area, pending the judgment of the inspector and the results of inspection of sample pieces. A material identification ticket will accompany the material to the designated area.

4. Rejected spools, reels or coils are separated from the lot. An Incoming Inspection form will then be forwarded to the Material Review Board for further action.

5. Accepted spools, reels or coils in the hold or designated areas are properly identified with a material identification ticket and an acceptance ticket or stamp with applicable information. Accepted spools, reels and coils are then stored, if required, in a designated area to prevent damage and corrosion.

6. Information is then recorded on the Material Control Record with an acceptance or rejection and the proper inspection identification.

7. Raw material is issued only with the proper authorization from the Quality Control Department, and its correct identification is the responsibility of the Quality Control Department.

8. Any surplus or unused material will be placed in designated areas with proper identification and inspection tickets.

9. Refer to Exhibit #1, for acceptance or rejection notice, Incoming Material Inspection Report.

B. Control of Finished and Semi-Finished Material

1. Finished material is stored in a manner suited to its physical characteristics and provided with adequate protection to minimize corrosion or damage, and properly identified.

   a. Finished material shall be inspected before storage.

   b. Upon removal from the storage area, the containers shall be opened and subjected to a visual inspection prior to shipment to the customer.

2. Semi-finished material is stored in designated areas and properly identified so that its exact stage of processing can be determined.

3. All semi-finished material must be inspected prior to release for further processing.

4. Refer to Exhibit #2 for Move and Routing Slip.

The D.R. Templeman Company

Section VII

Control Of Purchases

1. Suppliers of semi-finished and finished goods will be reviewed by the Purchasing Department and the Quality Control Manager routinely for their records and service.

2. Records of Receiving Inspection will be kept on file for periodic review.

    a. It shall be up to the discretion of the Quality Control manager when to review suppliers and records with the Purchasing Department.

        1) The review will be governed by:
            a) Number of shipments
            b) Nature of parts
            c) Quantities of parts
            d) Number of discrepancies
            e) Delivery of Material

    b. This review will be done on a regular basis, but not more than twelve months shall pass before a documented report will be submitted to the Purchasing Department.

    c. It shall be up to the discretion of the Quality Control Manager and/or Purchasing Department on what type of rating customers or suppliers should be given for future material supply.

4. Raw material suppliers should have facilities to certify material to a purchase order specification. In addition, specific suppliers should have the facilities to certify to ISO 10012-1/MIL-STD-45662A and MIL-I-45208A and related specifications when applicable.

5. Finished and semi-finished goods suppliers should have facilities to certify material to a purchase order specification. In addition, specific suppliers should have the facilities to certify to ISO 100012-1/MIL-STD-45662A and MIL-I-45208A and related specifications when applicable.

6. Periodic surveys, visits, communications, and/or correspondence with suppliers will be made and documented when applicable.

The D.R. Templeman Company

Section VIII

Receiving Inspection

1. Receiving inspection will inspect all material to either customer or D.R. Templeman Company blueprints and any special instructions or specifications.

2. These inspections shall include all applicable dimensional characteristics and material certifications of compliance for physical, chemical and other properties.

3. Material that conforms to all specifications and requirements shall be accepted and recorded on an Incoming Inspection Report and signed by the Receiving Inspector.

4. All plated parts will be visually inspected for plate quality, pitting, blisters, uniform plate, etc. The thickness of plate and salt spray results shall be reviewed when practical and/or applicable.

5. All other parts received by the Receiving Department will be subject to an inspection applicable to the parts and characteristics involved.

6. All vendors will be evaluated every twelve months for product conformance and quality. This information shall be sent to the Purchasing Department for their evaluation.

7. Refer to Exhibit #1, Incoming Material Inspection Report.

The D.R. Templeman Company

Section IX

First Piece and Process Inspection

1. Shop Orders are issued to manufacturing based on Manufacturing Methods established by the Engineering Department. Accompanying these orders will be a duplicate copy of the correct master drawing and any additional special instructions.

    a. Where applicable and practical, an In-Process Inspection Procedure will accompany each job designating control limits for the purpose of assuring that the parts produced will conform to customer specifications.

    b. An In-Process Inspection Procedure is completed by the Quality Control Manager and/or an In-Process Inspector in cooperation with the Engineering Department.

    c. Either $\bar{X}$ and R, or Median-Range Control Charts will be used when required. Other control charts and statistical data analyses will be utilized when practical. (See to Exhibit #3).

2. All gages necessary for the various operations will be supplied with the In-Process Inspection Procedure.

    a. Each department shall have its own gage area relating to their respective jobs, with the main gaging equipment located in the Quality Control Department.

    b. Once gages are removed to the manufacturing area, it will be the responsibility of the Quality Control Manager for the recall of gages at their expiration dates. It will be the responsibility of the Quality Control Manager to spot check these gages at various intervals.

3. The product of each separate operation, as spelled out by the Shop Order, must be approved by the Quality Control Manager and/or the In-Process Inspector.

    a. At First Piece Inspection, the operator must submit a minimum of five pieces for approval. These five pieces will be subjected to a statistical analysis for a mini-capability study. This is done with the use of statistical techniques to analyze the dimensions and tolerances to the blue print. All data and/or results are documented on a First Piece Inspection record.

b. $\bar{X}$ and R Charts, Median Range Charts and/or other statistical charts are available and kept on file. (See Exhibit #3).

c. Upon approval, the Quality Control Manager will make out an In-Process Inspection Procedure using pre-control techniques and/or other control charts. Samples of approved parts are sealed in an envelope, filed and recorded.

d. The purpose of first piece inspection is to assure that the setup is correct before proceeding with production. This provides a final review of specifications, inspection procedures and gages for full control of the process quality.

e. Secondary work: parts from processes prior to the secondary operations shall be submitted to Quality Control for approval by the first piece inspection procedure method. Samples are then analyzed, data taken, and approval given to the operator to start production. The In-Process Inspection Procedure and gages will be given to the operator for the control of quality.

f. If defective work is found during a process check, the machine or operation is stopped. The foreman is then notified of the condition and the parts submitted to the Material Review Board for further action.

4. When customer approval of first piece samples is either required or requested, the following additional procedures will apply:

a. Following approval of first piece samples by the Quality Control Department, any additional samples needed are produced and inspected. These samples are forwarded to the Sales Department along with the First Piece Inspection Record.

b. The Sales Department works through shipping to expedite shipment of the samples and the inspection record to the customer. Samples of the parts are also saved for future reference.

c. The Sales Department maintains contact with the customer to expedite the approval process and notifies the Quality Control Department when customer approval is received. Notification may be verbal to save time, but must be followed up with written approval.

d. Upon receipt of customer approval, a minimum of two parts are removed from the samples saved with the First Piece Inspection Record and are placed in an envelope marked Customer Approved Samples. This envelope will also be marked with the customer name, part number, revision and date of approval. The envelope is then placed in the shop folder for future reference.

e. Following customer approval, processing continues per section 3 above.

f. Refer to Exhibit #4, First Piece Inspection Report.

g. Refer to Exhibit #5, In-Process Procedure.

The D.R. Templeman Company

Section X

Final Inspection

1. Areas for the acceptance of finished and semi-finished parts have been established by the Quality Control Manager and the Vice President-Manufacturing. All parts requiring a Final Inspection must pass through these designated areas.

2. Parts will only be inspected one hundred percent (100%) when stated by the customer or the Quality Control Manager.

3. Parts will be inspected according to C=0 Sampling Plan.

4. Parts and dimensions may be subjected to a statistical analysis based on customer requirements or a 1.33 C_{pk}.

5. The inspection plan for a given job or characteristic will be specified by the Quality Control Manager and listed on the Final Inspection Record. Customer quality requirements will be considered.

6. When applicable, results of each lot are recorded on the Final Inspection Record. (See Exhibit #6)

7. A record of all final inspections performed will be maintained by the Final Inspectors in a Final Inspection Log. At a minimum, this log will contain the following:

    a. Customer.
    b. Part number and revision.
    c. Date
    d. Quantity.
    e. Acceptance level applied (e.g., C=0).
    f. Result (e.g., accepted).
    g. Initials of Inspector.

8. The Final Inspection Record will be made out in duplicate when required.

    a. One copy may be sent to the customer with the packing list and/or with the material certificate of compliance when specified by the customer.

    b. One copy will be filed in the Quality Control Department.

9. All records are kept on file for a minimum of 12 months or longer depending upon the requirements of the contracts.

10. Refer to Exhibit #6, Final Inspection Record.

11. Where applicable, Inspection, Rejected and Do Not Mix Tickets are used to identify the status of the inspected parts. (See Exhibit #7).

The D.R. Templeman Company

Section XI

Material Review Board (MRB)

1. All raw material, material in process or finished products which do not meet the established specifications or control limits will be properly identified and removed to a Material Review Board area for review.

2. The reporting Inspector will be responsible for initiating a Material Review Board Report indicating the customer, part number, quantity, description of defects, date of rejection, and inspector's name. (See Exhibit #8)

3. The foreman's responsibility is to receive and act on the Material Review Board Report stating cause and what corrective action could be taken to prevent a reoccurrence. In addition, the foreman would then recommend his disposition to the Material Review Board.

4. Disposition shall be the responsibility of the Material Review Board. This consists of the following:

    a. President
    b. Vice President-Manufacturing
    c. Quality Control Manager

5. Quality Decisions - MRB

    a. Any member of the MRB can make an on the spot decision regarding quality relative to raw material, first piece, in-process and/or final inspection. This decision must be documented on an applicable inspection form.

    b. If any disputes are encountered regarding the disposition of parts, the final decision will be made by the Quality Control Manager. Production history and customer communications will be reviewed for final disposition.

6. Acceptable Material.

    After disposition by the MRB, parts that are accepted will be marked MRB Accepted, documented on a Material Review Board Report and returned for further processing.

7. Deviated Material.

   Any non-conforming material is withheld until the return of the customer's authorized disposition. In addition, disposition may be made by The D. R. Templeman Company's Material Review Board when applicable. All authorizations shall be noted on the Material Review Board Report form and filed until customer approval is received to either ship or reject. Meanwhile, if rejected, it is documented on a Final Inspection Record and in the Final Inspection Log.

8. Scrapping of Parts.

   a. Upon scrapping of parts, the proper identification ticket will be placed in the containers noting the reasons for scrapping. This ticket will be destroyed by the Inspector after the parts are documented and scrapped.

   b. Refer to Exhibit #8, Material Review Board Report.

9. Returned Goods.

   When defective lots are returned by a customer for one reason or another, the following procedures are followed:

   a. The Receiving Department will issue parts to the Inspector with the following information:

      1. Customer and part number.

      2. Customer documents noting defects.

   b. The Inspector will inspect the parts, paying particular attention to dimensions that are not met.

   c. If parts are defective, a Material Review Board Report is filled out by the Inspector and reviewed by the Material Review Board. The Material Review Board will issue rework or scrap instructions.

   d. The Inspector and/or Quality Control Manager will make the proper entries in a Final Inspection Log and also to other documents, to future orders and to assigned shop orders, where applicable.

The D.R. Templeman Company

Section XII

Gage Inspection, Control, and Maintenance

1. The requirements set forth in this section apply to all gages and equipment used in the acceptance of all parts by The D.R. Templeman Company.

2. The D.R. Templeman Company has adopted the following procedure on all gages and equipment to designate the frequency of reinspection or recalibration applicable to a gage or piece of equipment.

Six Months:	Dial Calipers
	Spring Testers
	All Micrometers*
Annually:	All Dial Indicators
	Working Gage Blocks***
	Master Gage Blocks***
	Plug Gages**
	Special Fixtures and Gages****
	Optical Comparators***
Two Years:	Surface Plates

*Daily, if used by inspection personnel.
**Before and after issue by inspection personnel.
***Certificate inspection to N.I.S.T., Washington, D. C.
****Before and after issue to job inspection personnel.

3. The frequencies listed in the above table are to serve as a guide only. Precision gages of a critical nature, or which check critical dimensions shall be placed on a 24 hour frequency.

   Precision apparatus subject to negligible wear may be on a one year frequency. The frequency of inspection for all gages shall be determined by the Quality Control Manager on the basis of good judgment, taking into consideration wear, use, critical dimension, etc.

4. To assure compliance with the inspection cycles established for the gages and equipment, a record of inspection will be maintained on a suitable report such as the Gage History Card shown in Exhibit #9. Alternatively, an inspection or calibration report received from an independent testing or calibration laboratory may be used in place of the Gage History Card, provided that the report contains essentially the same information. At a minimum, the report must contain a detailed description of the gage

or equipment being tested, the date of the inspection, the actual test results and identification of the person who performed the tests.

The cards or reports will be indexed with information noting recall date.

5. There will be storage facilities for gages to provide adequate protection when not in use.

6. It shall be the responsibility of all Quality personnel to see that the procedures set forth in this section are followed. It shall be the responsibility of all Quality personnel to work with the Vice President-Manufacturing and to assure that all gages are calibrated by the due date.

7. Master Size Blocks Certificates, attesting to the approval of the National Institute of Standards and Technology, shall form the foundation of The D.R. Templeman Company's Gage Control.

8. Personal Equipment

   Where personal equipment is authorized for use by the Quality Control Manager, all requirements outlined in procedures shall apply. If the owner of the instruments objects to marking them for identification and due date, the owner will be notified and may not use these instruments.

9. Customer supplied gages and fixtures shall be excluded from this procedure and shall be reinspected and calibrated at the customer's discretion or at our request.

10. Calibration of Measuring Equipment

    a. Calibration of measuring and testing equipment will be scheduled at established frequencies with a calibration source traceable to N.I.S.T.

    b. This source shall be an approved independent testing or calibration laboratory or the manufacturer of measuring and test equipment. This depends on the methods and calibration to be completed.

    c. These sources must certify that calibration standards are traceable to N.I.S.T. Certifications of calibration will be kept on file for examination.

The D.R. Templeman Company

Section XIII

Corrective Action

1. Corrective action shall be initiated by a MRB report.

    a. This report shall originate at the time of defective or out of control parts relative to process, final inspection and/or returned goods.

    b. The report shall list the following:

        1) Identifying Number
        2) Customer and Part Number
        3) Department Responsibility
        4) Defective Status
        5) Quantity

2. Using the Material Review Board Report, the foreman will fill out Cause of Defects, Corrective Action, Time, Date and Signature. This should be completed within 48 Hrs.

3. MRB disposition shall be approved or rejected noting time, date and signature.

4. If parts are to be scrapped, cost will be noted.

5. If parts are to be salvaged by a rework operation, these costs will be estimated by the Quality Control Manager. Applicable documents will be forwarded to the department with the work for salvage.

6. After the MRB Form is completed, copies shall be sent to the responsible Foreman, Quality Control Manager, Production Control and Purchasing if parts are to be Scrapped. Entries are recorded in the MRB log for further corrective action.

7. The Material Review Board will meet once a month to review all MRB records. The purpose of this meeting is to review the records pertinent to the material presented during the previous month and to determine that progress is being made towards effective corrective action.

8. The Quality Control Manager will initiate any follow-up on corrective action when required.

9. Records shall be kept on file noting comments or corrective action taken on specific jobs.

10. Refer to Exhibit #8, Material Review Board Report.

The D.R. Templeman Company

Section XIV

Preservation, Packaging and Shipping

1. Inspection of all parts and assemblies will be made by a member of the Inspection Dept. to assure that packing, preservation and shipping instructions are in conformance with the customer's requirements.

    a. This inspection shall be performed on a random basis.

    b. This inspection shall include checking to see that the material is free from moisture, dirt and foreign matter and is properly oiled to prevent corrosion.

2. Material requiring a final inspection will not be shipped unless:

    a. A final inspection is performed and approval is given.

    b. All documents and analysis certifications are included.

3. The packaging of all parts shall be performed in accordance with the best commercial practice designated by the Shipping Department Supervisor unless specified by customer Specifications or the Purchase Order.

The D.R. Templeman Company

Section XV

Training of Employees For Statistical Quality Control Practices and S.P.C.

1. Organized Programs for employees relative to S.P.C. techniques

    a. Process Control Charts
    b. Pre-Control Techniques
    c. Process Capability Analysis
    d. Histogram Data Analysis
    e. Newer Techniques and when to use them.

    The QC Manager shall maintain a record of S.P.C. training in a training matrix such as the sample shown in Exhibit #12.

2. Team Concept

    a. Focus on Customer
    b. Better communications
    c. Measurable results relative to costs
    d. Problem solving techniques

The D.R. Templeman Company

Section XVI

Revisions

1. Any employee of The D. R. Templeman Company may request a revision to this Quality Control Manual by submitting a request to the Quality Control Manager. This request may be either verbal or written and will include a brief description of the requested change, an explanation of the need for the change and, if appropriate, marked pages showing the requested change(s).

2. Upon receipt of a request for revision, the Quality Control Manager will initiate the following process:

    a. The Quality Control Manager will review the requested revision with the employee who submitted the request to further clarify the need for and nature of the revision.

    b. The Quality Control Manager will submit the requested revision to the Vice President-Manufacturing for review and further discussion.

    c. If both the Quality Control Manager and the Vice President-Manufacturing agree that the revision is needed, then the Quality Control Manager will prepare the revision.

    d. If both the Quality Control Manager and the Vice President-Manufacturing agree that the revision is not needed, then the Quality Control Manager will prepare a response to the employee who requested the revision explaining why the requested revision is not needed.

    e. If the Quality Control Manager and the Vice President-Manufacturing cannot agree on whether or not the revision is needed, then the request will be submitted to the President whom will make the final decision.

    f. Once a decision to revise the manual has been made, the Quality Control Manager will prepare a revision package consisting of the following:

        1. A cover sheet including the Revision Number and space for approval signatures from the Quality Control Manager and the Vice President-Manufacturing. (See Exhibit #10)

        2. A contents page listing Section, Page Number and brief description of each revision. (See Exhibit #11)

        3. Copies of all pages that have been revised.

g. Once the revision package has been approved by both the Quality Control Manager and the Vice President-Manufacturing, the Quality Control Manager will update the master copy of the Quality Control Manual and will distribute copies of the revision package to all holders of controlled copies of the Quality Control Manual.

h. Each holder of a controlled copy of the Quality Control Manual will be responsible for keeping that copy up-to-date by inserting the revised pages, discarding obsolete pages, signing and dating the revision package cover sheet and inserting the cover sheet and Revision Contents Sheet into an appendix at the back of the manual.

The D.R.Templeman Company

Section XVII

Internal Audits

1. Internal audits of the quality management system shall be undertaken at least annually to verify adherence to and the effectiveness of the procedures outlined in this QC Manual.

2. The scheduling of audits shall be the responsibility of the QC Manager. Audits will be performed by Quality Control Department staff and by other trained personnel under the guidance of the QC Manager. The auditor(s) shall be chosen to ensure objectivity and impartiality and shall not be directly responsible for the function(s) being audited.

3. Results of audits shall be reported to the QC Manager, the V.P. of Manufacturing, the Company President and the manager or supervisor of the unit(s) involved.

4. It is the responsibility of the unit(s) involved to develop and implement corrective actions to address any nonconformance identified by the audit.

EXHIBIT #1

INCOMING MATERIAL INSPECTION REPORT

SUPPLIER _____ DATE RECEIVED _____

PURCHASE ORDER NO. _____ DATE INSPECTED _____

QUANTITY RECEIVED _____ INSPECTED BY _____

NO. OF COILS CHECKED _____ PASS / FAIL _____

CHARACTERISTIC	DIMENSION	TOL. ±	MEASURES	COMMENTS

MATERIAL REVIEW BOARD SECTION:

DISPOSITION _____

COMMENTS _____

APPROVED BY _____ DATE _____

THE D. R. TEMPLEMAN COMPANY, P. O. BOX H, PLAINVILLE, CT. 06062

FORM NO. 1120

EXHIBIT #2

ROUTING SLIP

CUSTOMER

PART NO. | ORDER

OPERATION - 1

DATE

CHART NO.

MACHINE NO. | OPERATOR

WIRE ORDER NO. | QUANTITY

COMMENTS

OPERATION - 2

DATE

CHART NO.

QUANTITY | OPERATOR

COMMENTS

THE D. R. TEMPLEMAN COMPANY

FORM NO. 2525

OPERATION - 3

DATE

CHART NO.

QUANTITY | OPERATOR

COMMENTS

OPERATION - 4

DATE

CHART NO.

QUANTITY | OPERATOR

COMMENTS

FOR QUALITY CONTROL USE ONLY

ACCEPT ☐

REJECT ☐

DATE _____

INSPECTION STAMP

CONTROL CHART

CHART NO. _____

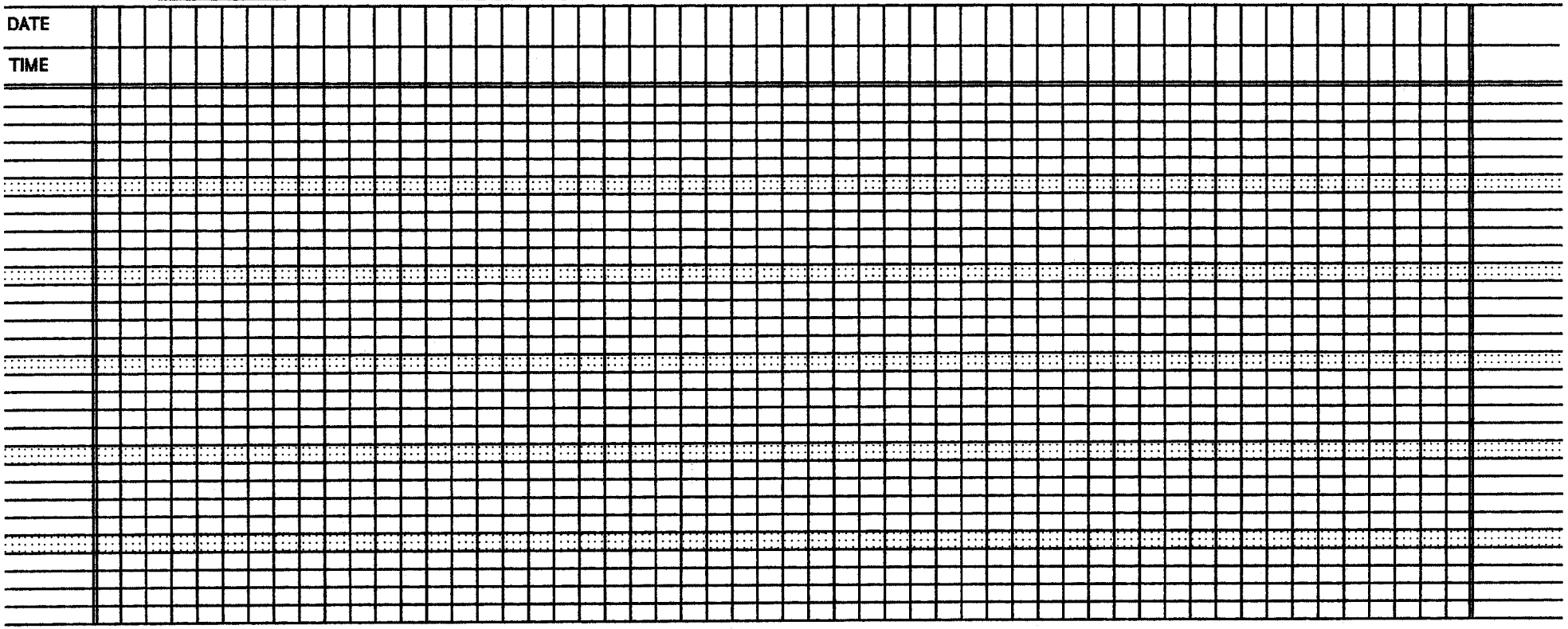
CUSTOMER	PART NO.	DEPT.	OPERATION	MACHINE NO.	CHARACTERISTIC

BLUEPRINT SPEC.	AS OFF MACHINE	OPERATOR	SAMPLE / FREQ.	START DATE	FINISH DATE

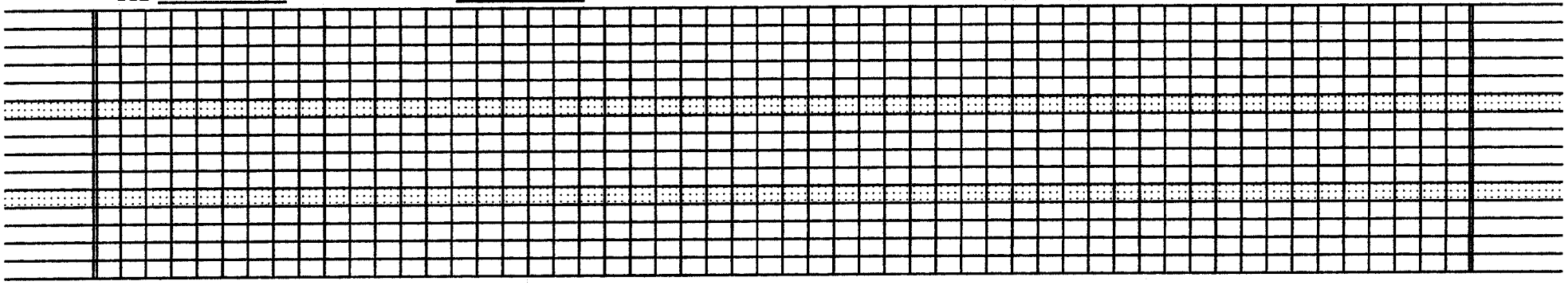
UCL _____ LCL _____ MEDIANS CHART $\tilde{\bar{X}}$ _____ SIGMA _____

DATE

TIME



UCL _____ $\bar{R}$ _____ RANGES CHART CP _____ CPK _____



THE D. R. TEMPLEMAN COMPANY

FORM NO. 2550

EXHIBIT #3a

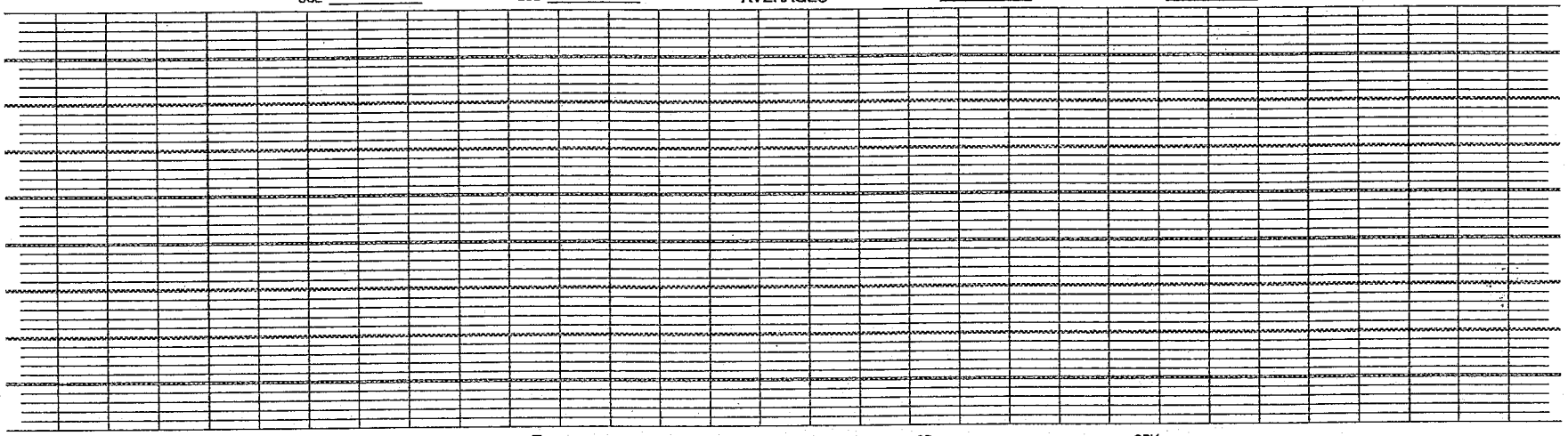
CONTROL CHART

CHART NO. _____

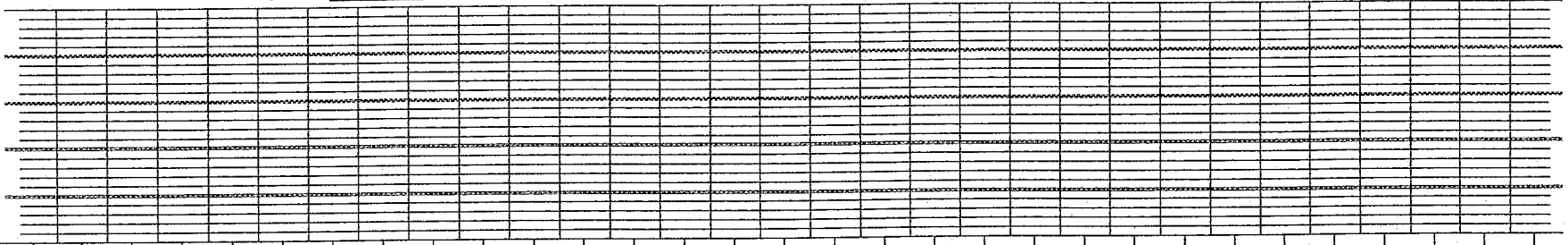
CUSTOMER	PART NO.	DEPARTMENT	OPERATION	MACHINE NO.	CHARACTERISTIC

BLUEPRINT SPEC.	AS OFF MACHINE	DATE CONTROL LIMITS CALCULATED	OPERATOR	SAMPLE / FREQ.	START DATE	FINISH DATE

UCL _____ LCL _____ AVERAGES $\bar{\bar{X}}$ _____ SIGMA _____



UCL _____ $\bar{R}$ _____ RANGES CP _____ CPK _____



DATE TIME																													
READINGS	1																												
	2																												
	3																												
	4																												
	5																												
X BAR																													
RANGE																													

THE D. R. TEMPLEMAN COMPANY

FORM NO. 2500

EXHIBIT #3b

EXHIBIT #3c

FREQUENCY DISTRIBUTION

COMPANY _____ CHARACTERISTIC _____

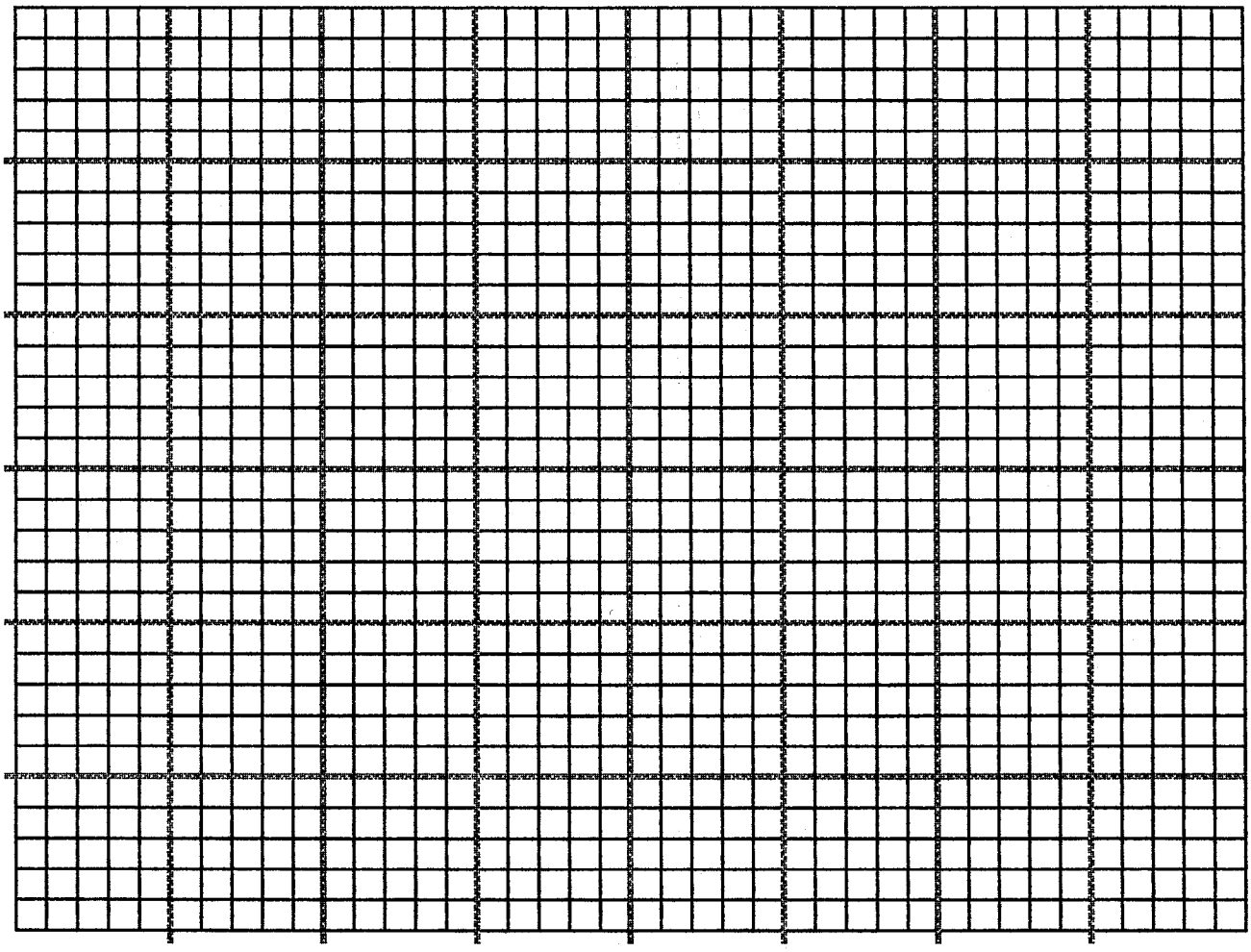
ART NUMBER _____ SPECIFICATION _____

P. O. NUMBER _____ SAMPLE TYPE _____

ROUTING SLIP N0. _____ SAMPLE SIZE _____

INSPECTED BY _____ DATE _____

FREQUENCY



MEASURED _____

BLUE PRINT MEAN _____ LOWER PREDICTED LIMIT _____

LOWER SPECIFIED LIMIT _____ UPPER PREDICTED LIMIT _____

UPPER SPECIFIED LIMIT _____ CP _____

X BAR _____ CPK _____

SIGMA _____ PREDICTED PERCENTAGE OUT OF SPEC. _____

THE D. R. TEMPLEMAN COMPANY

FORM NO. 1111

EXHIBIT #4

FIRST PIECE INSPECTION RECORD

CUSTOMER _____ PART NO. _____ REV. _____

DATE						
SAMPLE SIZE						
INSPECTOR						
DISPOSITION						
REMARKS						

CHARACTERISTIC	SPEC.	METHOD	ACTUAL					

THE D. R. TEMPLEMAN CO.

FORM NO. DRT-1011

EXHIBIT #5

IN-PROCESS INSPECTION PROCEDURE

DATE _____

CUSTOMER _____ PART NO. _____ REV. ____

DEPARTMENT _____ OPERATION _____

B.P. SPEC.	AS OFF MACH.	CONTROL LIMITS	METHOD OF GAGING	FREQUENCY

REMARKS: _____

PLEASE RETURN INSPECTION PROCEDURE TO Q.C. AFTER JOB IS FINISHED

THE D. R. TEMPLEMAN CO.

FORM NO. DRT-1026

EXHIBIT #6

FINAL INSPECTION RECORD

CUSTOMER _____ PART NO. _____ REV. _____

DATE						
QUANTITY						
SAMPLE SIZE						
SAMPLING PLAN						
INSPECTOR						
ROUTING SLIP NUMBER						
NUMBER OF DEFECTIVES						
DISPOSITION						
REMARKS						

AQL	CHARACTERISTIC	SPEC.	METHOD	ACTUAL					

THE D. R. TEMPLEMAN CO.

FORM NO. DRT-1016

INSPECTION TICKET

NEXT OPERATION _____

_____

COMMENTS _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO DRT-1052

INSPECTION TICKET

NEXT OPERATION _____

_____

COMMENTS _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO. DRT-1052

Exhibit #7

INSPECTION TICKET

NEXT OPERATION _____

_____

COMMENTS _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO DRT-1052

INSPECTION TICKET

NEXT OPERATION _____

_____

COMMENTS _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO. DRT-1052

REJECTED

REASON _____

_____

DISPOSITION _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO. DRT-1050

REJECTED

REASON _____

_____

DISPOSITION _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO. DRT-1050

Exhibit #7

REJECTED

REASON _____

_____

DISPOSITION _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO. DRT-1050

REJECTED

REASON _____

_____

DISPOSITION _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO. DRT-1050

DO NOT MIX

REASON _____

_____

REMARKS _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO. DRT-1051

DO NOT MIX

REASON _____

_____

REMARKS _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO. DRT-1051

Exhibit #7

DO NOT MIX

REASON _____

_____

REMARKS _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO. DRT-1051

DO NOT MIX

REASON _____

_____

REMARKS _____

DATE _____ BY _____

KEEP THIS TICKET WITH GOODS

FORM NO. DRT-1051

EXHIBIT #8

MATERIAL REVIEW BOARD REPORT

NO. _____

CUSTOMER	PART NO.
ORDER NO.	QUANTITY
DEPARTMENT	INSPECTOR DATE TIME

DESCRIPTION OF DEFECT _____

CAUSE OF DEFECT _____

CORRECTIVE ACTION _____

APPROVED BY DATE TIME

FINAL DISPOSITION _____

COMMENTS _____

APPROVED BY DATE TIME

COST _____

THE D. R. TEMPLEMAN COMPANY

FORM NO. 2526

Exhibit #9

GAGE HISTORY CARD

TYPE OF GAGE ______________________ SERIAL NO. ______________________

GAGE PROCEDURE NO. ______________________ FREQUENCY ______________________

LOCATION ______________________ APPROVED BY ______________________

ISSUED TO	
NAME	DATE

RECHECK DATE	GAGE SIZE LIMIT	RECHECK SIZE	AMOUNT OF WEAR	RECHECKED BY	REMARKS	RECHECK DATE	GAGE SIZE LIMIT	RECHECK SIZE	AMOUNT OF WEAR	RECHECKED BY	REMARKS

5274 (Rev.2-86)

EXHIBIT #10

The D. R. Templeman Company

REVISIONS TO THE QUALITY CONTROL MANUAL

Revision Number _____

Dated _____

Approved By: _____
Vice President-Manufacturing Date

_____
Quality Control Manager Date

Copy Number: _____

Manual Update Completed on_____ By_____
(Date) (Signature)

EXHIBIT #11

The D. R. Templeman Company

REVISIONS TO THE QUALITY CONTROL MANUAL

REVISION CONTENTS, REVISION No. ____

Section Number	Page Number	Description of Revision

The D. R. Templeman Company

Employee Training Record

Statistical Quality Control Practices and S.P.C.

Topic	Employee Name																	
	(Record Date Completed/Updated or enter NA if not applicable)																	
Intro. to Statistical Controls																		
Intro. to S.P.C. Techniques																		
Process Control Charts																		
Pre-Control Techniques																		
Process Capability Analysis																		
Histogram Data Analysis																		

EXHIBIT #12