



EPM, INC.

The Seal Man™

**EQUISPAN PROACTIVE MARKETING, INC.
QUALITY ASSURANCE MANUAL**

ORIGINAL REV. 9/2002



**QUALITY ASSURANCE DEPARTMENT
112-G West Burke Street
Stockbridge, Georgia 30281 USA**

**Phone: (800) 659-5050
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Introduction

Established Quality Assurance System – ISG 9000

The chief business of Equispan Proactive Marketing, Inc. doing business as EPM, Inc. - The Seal Man™, a registered Georgia corporation, is that of manufacturing seals, gaskets, o-rings and other rubber and plastic parts to various government, commercial and industrial specifications. The company's office, inspection, and assembly area is located at 112 West Burke Street Suite G, Stockbridge, Georgia, 30281 USA.

Implemented Self Governing 9000 (ISG-9000) Established Quality Assurance System of EPM, Inc. – The Seal Man™ as defined in this manual has been established to attain compliance with the requirements specified in each customer's purchase order. Various customers are required to comply with government and commercial procurement specifications.

The quality assurance systems being applied in our facility are being developed to comply with the applicable parts of:

MIL-I-45208, Inspection System Requirements

MIL-C-45662, Calibration System

MIL-Q-9858, Quality Control Systems

MIL-STD-2175, Radiological Standards

QQ-C-390A, Material Requirements

Note: Some certifications provided by EPM, Inc. – The Seal Man™ are only available with additional fees.

Written procedures shall be established for implementing the policies described herein as necessitated by product design, manufacturing technique and/or customer requirements.

This manual and all procedures will be reviewed once each year to determine if changes are necessary. Any and all changes to this manual must be approved, dated, and signed by the President or his assignee.

APPROVED BY:

Jerry D. Whitlock
President

Mike E. Conner
Quality Assurance Manager



Revision History

This Quality Manual supersedes all previously approved Quality Manuals submitted under the corporate titles of Equispan Proactive Marketing, Inc. and/or EPM, Inc. – The Seal Man™.

**ORIGINAL
REVISION 1**

1 SEPTEMBER 2002
None at this time



Organization Chart

		Quality: Jerry D. Whitlock Mike E. Conner	
		Secretary: Millie Whitlock	
		Contracts: John Tomme Joe Petersen Rita Whitlock Mike Conner	
		Sales: John Tomme Joe Petersen Rita Whitlock	
Board of Directors of EPM, Inc.	Corporate Officers Jerry D. Whitlock, President Rita Whitlock, Secretary	Operations: Mike E. Conner, Manager	Seal & Gasket Manufacturing Dep.: Mike E. Conner, Manager Greg Phillips
		Fabrication: Mike E. Conner	
		Personnel: Rita Whitlock	
		Information Technology: Eric Jackson, Manager	

Responsibilities

- I. The Quality Assurance Manager reports directly to the President.
- II. The Quality Assurance Manager's responsibilities include:
 - A. Planning how to meet customer's quality requirements.
 - B. Reviewing customer drawings and specifications.
 - C. Determining inspection points.
 - D. Writing inspection points.
 - E. Establishing (and assuring employees follow) the most effective Quality assurance procedures possible.
 - F. Keeping adequate Quality Assurance records.
 - G. Reviewing quality assurance records and overseeing follow-up for correction and prevention of defects.
 - H. Assuring that our supplier's quality assurance and follow-up are adequate.
 - I. Inspecting all special and standard gauges, test equipment, and tooling (used to manufacture products) when we acquire them and calibrating them on a regularly scheduled basis.
 - J. Coordinating in-plant correction of items rejected by customers, explaining to customers what action will be taken, and evaluating the actions for effectiveness.
 - K. Making sure inspectors make unbiased decisions to accept or reject items.
 - L. Reviewing Purchase Orders to assure that all requirements are delineated.

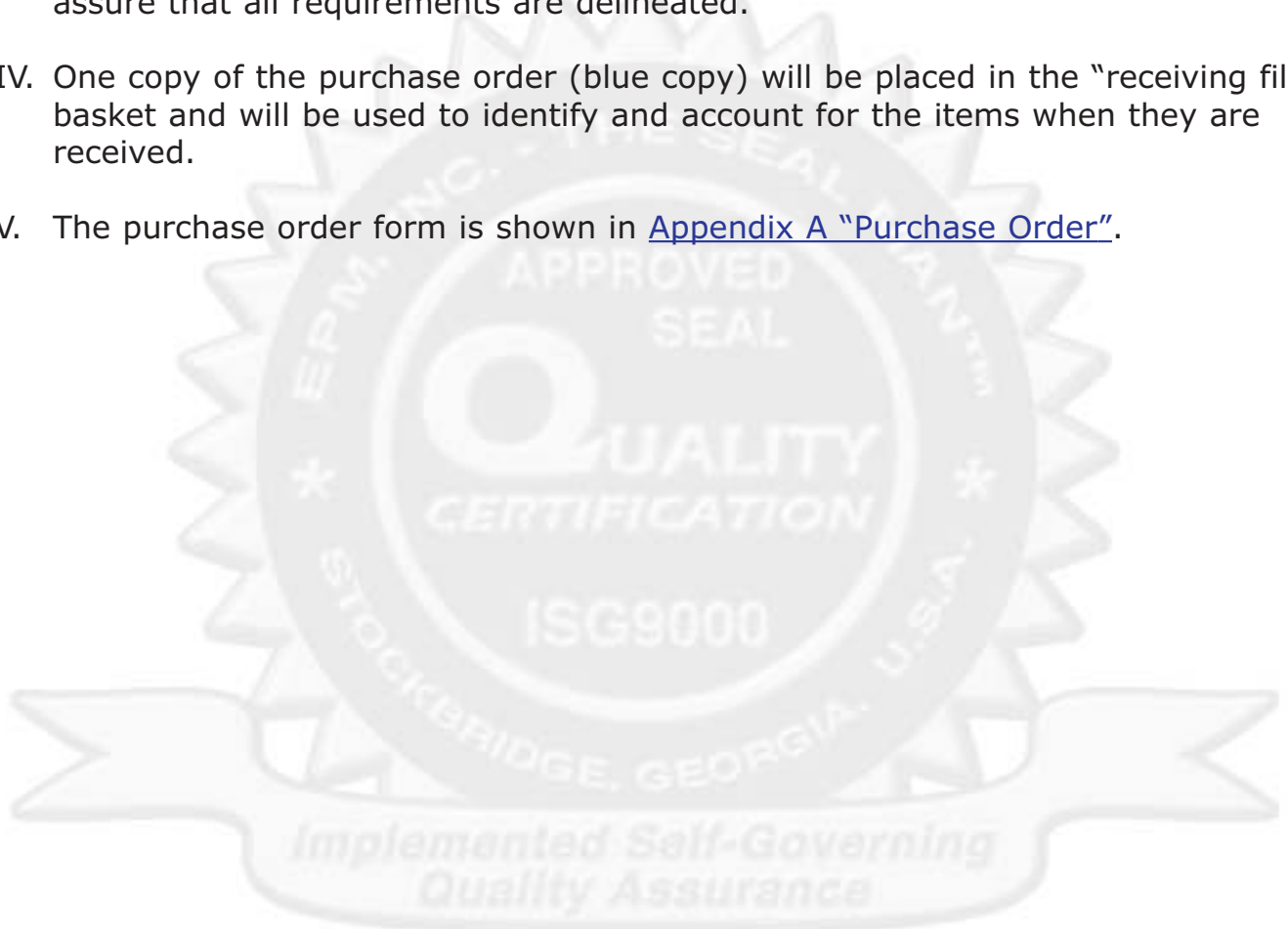
Records

- I. Equispan Proactive Marketing, Inc. will maintain records of all inspections and tests performed as evidence that all required examinations have been performed.
- II. Records will cover both conforming and nonconforming items and shall include part identification, examinations performed, number of conforming and defective items, rework and/or waiver information and recorded data where critical or as directed by customer.
- III. Records of inspection and test, together with required certifications, etc., will be maintained in contract files by work order number and shall be available to designated representatives for review. Records will be maintained for three years unless otherwise specified contractually.
- IV. If a waiver or deviation to the customers or government standards is required, a request will be made to the customer on the proper form.



Purchase Order Control

- I. Purchase orders will be issued for all purchased materials, articles, and services. Each Equispan Proactive Marketing, Inc. purchase order will be serially numbered. This number is utilized to control receipt of of material and to prepare billing and accounting records.
- II. The purchase order shall be complete in detail to reflect all information required to assure that items ordered and received are correct.
- III. All purchase orders will be reviewed by a Quality Assurance representative to assure that all requirements are delineated.
- IV. One copy of the purchase order (blue copy) will be placed in the "receiving file" basket and will be used to identify and account for the items when they are received.
- V. The purchase order form is shown in [Appendix A "Purchase Order"](#).



Receiving

- I. All items received on Equispan Proactive Marketing, Inc. purchase orders will be inspected and received by the Quality Assurance Department. The Receiving Inspection Department will check material against the purchase order to ascertain and assure that material and supplies are as ordered. All items shall be visually inspected for damage. If any damage exists, the extent of damage shall be recorded on the carrier document and the receiving portion of the purchase order ([see Appendix A "Purchase Order"](#)).
- II. It shall be the responsibility of Receiving-Inspection to ascertain and assure that all incoming materials are in conformance with all requirements of the purchase order
- III. The receiving portion of the purchase order will be completed and initialed by Receiving-Inspection and returned to the Contract Specialist.
- IV. Accepted materials will be identified with a rubber stamp by work order number and type of material and placed in the incoming materials storage area for release to manufacturing. Manufacturing will not use any material that is not properly identified.
- V. It shall be the responsibility of Receiving-Inspection to obtain all certifications, test reports, chemical, and physical reports, and all other documents required.
- VI. All the above documents will be filed in the Contract File by work order number.
- VII. If any materials are found to be defective, the vendor will be notified and replacements or rework will be required of the vendor. Follow-up will assure that this is done in a timely and correct manner.

Inspection Stamps

I. Policy

- A. Equispan Proactive Marketing, Inc. will monitor the inspection status of each item from receipt through end-item shipment by the means of signatures. If inspection stamps are required by contract, the procedures outlined in paragraph 5.2 will be followed.

II. CONTROL SYSTEM REQUIREMENTS

- A. Stamps will be issued by the Quality Control Management or his appointee. An inventory of issued stamps will be held at intervals of 6 months to identify lost or misplaced stamps. In the event that a stamp is lost, the stamp number will be removed from service. Stamps returned by employees leaving employment at Equispan Proactive Marketing, Inc. will be held out of service for a period of six months.
- B. Each stamp number will be traceable to the individual responsible for its use and records will be maintained to identify individuals with specific inspection stamps.
- C. Stamps, decals, seals, or method of their application will be designed to identify that articles have undergone in-process, partial inspection, final subassembly, inspection, functional tests, or end-item final inspection. Articles which have been rejected or are being held for MRB action need not be physically stamped, but reject or withhold stamp will be applied to the accompanying hold tag or other documentation as appropriate.
- D. Stamps will be applied to tags, cards, or labels attached to individual articles as practical. In the case of extremely small parts, the inspection card, tag, or label may be attached to the container to indicate the status of all parts included in the container. Stamp design will not resemble Government inspection stamps by including the letters "EPM" on the stamp, indicating Equispan Proactive Marketing.

III. Acceptance stamp shall be applied only to parts and materials that have been verified to comply with all drawing and specification requirements

IV. Reject stamp shall be applied to parts and materials that have been inspected and found to be non-conforming to requirements.

Samples of Stamps



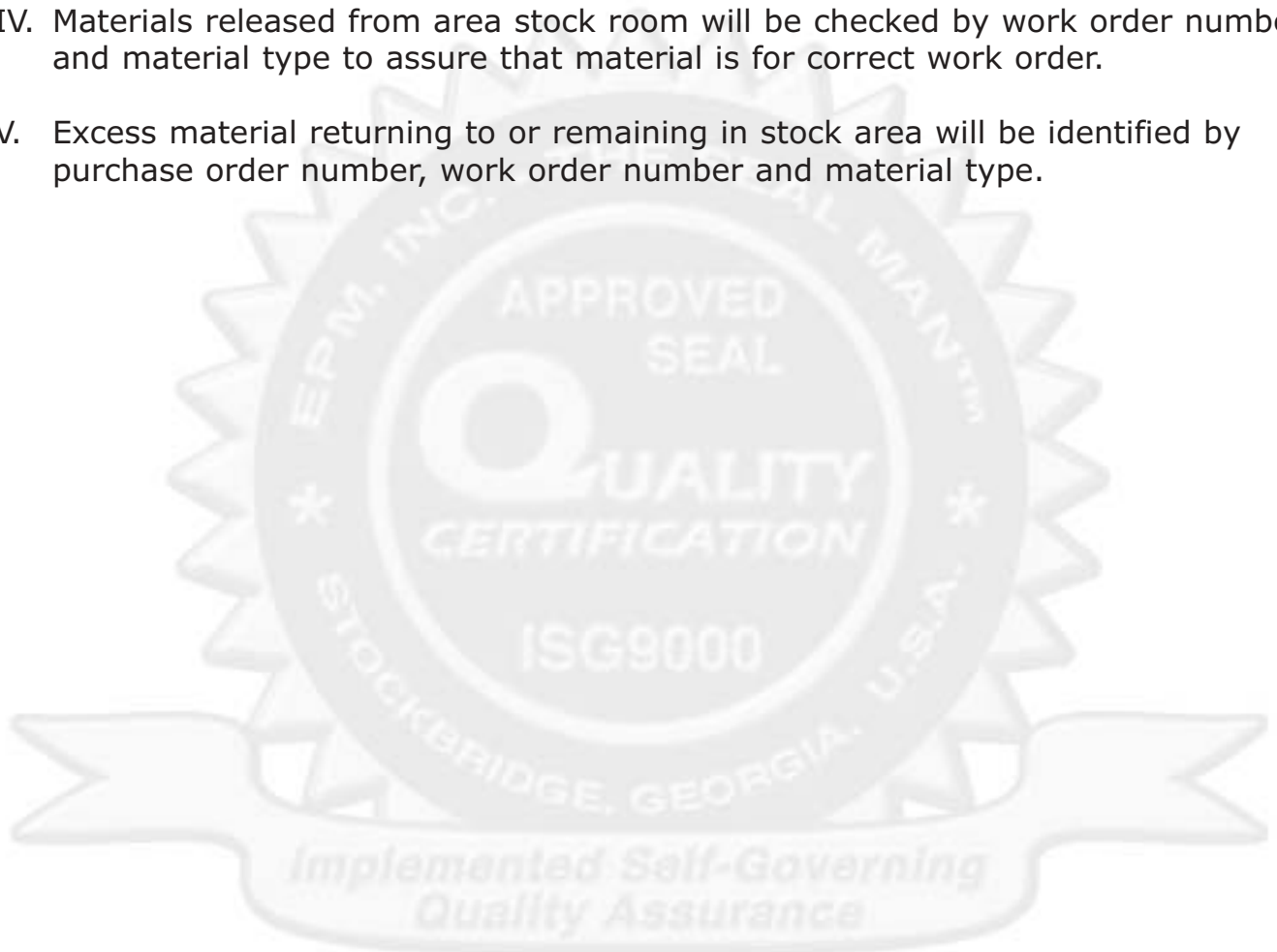
QUALITY CONTROL CHECK						
THE FOLLOWING WERE DOUBLE CHECKED						
QTY	PROF	MAT'L	ID	DD	HT	
1.	---	---	---	---	---	---
2.	---	---	---	---	---	---
3.	---	---	---	---	---	---
4.	---	---	---	---	---	---
5.	---	---	---	---	---	---
6.	---	---	---	---	---	---

BY: _____



Raw Material Control

- I. Raw material, bar stock, sheet stock and casting will be identified to the proper work order number and material type.
- II. Only material which has been accepted by Receiving-Inspection will be released to manufacturing.
- III. Precautionary measures will be initiated for storage and handling and to prevent damage or loss and substitutions of materials.
- IV. Materials released from area stock room will be checked by work order number and material type to assure that material is for correct work order.
- V. Excess material returning to or remaining in stock area will be identified by purchase order number, work order number and material type.



Control of Purchased Items

- I. Incoming assemblies, sub-assemblies, components, and detailed parts purchased from outside suppliers will be received by the Receiving-Inspection Department.
- II. Receiving-Inspection will check for receipt of documentation required by the purchase order.
- III. Dimensional inspection will be performed as required to verify that items meet Purchase Order, Contract and/or drawing requirements. Conforming items will be accepted and placed in proper area for further processing. Nonconforming items will be handled as outlined in [Nonconforming Materials](#).
- IV. If any item is found to be defective, the vendor will be notified and replacement or re-work will be required of the vendor. Follow-up will assure that this is done in a timely and correct manner.



Vendor Control

- I. All items and processes purchased from subcontract sources will be purchased by purchase order.
- II. The Contract Specialist will coordinate all activities relating to vendors such as facility surveys, purchase orders, drawings, and specifications.
- III. When contractually required, subcontractors will be required to maintain a quality program, which conforms to contract requirements.



Final Inspection and Test

- I. The final inspection by the quality department will measure the overall performance of the product as related to the Customers requirements and EPM's standards. This will be accomplished as follows:
- A. Quality Assurance receives all production parts for final acceptance before shipment.
 - B. Quality Assurance does not accept lots for final inspection unless all operations called out on the folder are identified as completed or not required.
 - C. Final inspection uses applicable written inspection instructions and procedures, as specified by the purchasing documents. Inspection data are recorded and retained.
 - D. Each lot is inspected prior to shipment to ensure, as a minimum, the following standards:
 - E. Parts are of the type and quantity that the purchase order requires.
 - F. Part and package marking conforms with marking requirements of the order.
 - G. Documents required by the purchase order are included. Example: Certificate of Conformance, etc.
 - H. All source inspection requirements are met.
 - I. Special conditions note on the purchase order are satisfied.
 - J. Accepted parts will be so indicated in the route folder and released for shipping
- II. Sampling inspection will be performed in accordance with **ANSI/ASQC Z1-4-1993** Single Sampling Plan, Level II with an AQL of 4% unless otherwise required by customer, contract, or purchase order. In the case of problem vendors, repetitive discrepancies, etc. sampling will be tightened as deemed necessary by the Quality Control manager.
- III. The results of a final inspection will be noted on the Inspection Report. Sampling inspection will be per above. All drawing characteristics (dimensions, requirements, etc.) will be noted and checked. This document will be initialed or stamped by the inspector.

Table I- Sample Size Code Letters (source ANSI/ASQC Z1.4-1993)

Lot or Batch Size			Special Inspection Levels				General Inspection Levels		
			S-1	S-2	S-3	S-4	I	II	III
2	to	8	A	A	A	A	A	A	A
9	to	15	A	A	A	A	A	A	A
16	to	25	A	A	B	B	B	C	D
26	to	50	A	B	C	B	C	D	E
51	to	90	B	B	C	C	C	E	F
91	to	150	B	B	D	C	D	F	G
151	to	280	B	C	E	D	E	G	H
281	to	500	B	C	E	D	F	H	J
501	to	1,200	C	C	F	E	G	J	K
1,201	to	3,200	C	D	G	E	H	K	L
3,201	to	10,000	C	D	G	F	J	L	M
10,001	to	35,000	C	D	H	F	K	M	N
35,001	to	150,000	D	E	J	G	L	N	P
150,001	to	500,000	D	E	J	G	M	P	Q
500,001	and	over	D	E	K	H	N	Q	R



Drawing and Change Control

- I. All drawings and specifications will be controlled by the Quality Assurance Department, including receipt and distribution. Upon receiving the order/contract, all drawings will be verified as to correct number and revision.
- II. All such documents shall be marked to indicate that they have been included in the system.
 - (R5C4) Marking is comprised of a stamp in red ink or a printed label identifying the document as a "Master Document" and an appropriate ID number shall be obtained from the Manager Software Drawing form. The ID number is the file link for the drawing, not for the part number.
 - The master document is filed appropriately. There is only 1 copy marked master. All subsequent controlled or uncontrolled documents must be copied from the original
 - To identify the master document it is stamped in RED or labeled with an adhesive label.
- III. Distributed copies of master documents must be marked as controlled or uncontrolled. Controlled documents should be numbered serially (1,2,3...n) and recorded in the contract file.
- IV. A controlled document must be kept updated at every document change or engineering change. The contract administrator under the guidance of QA will insure that all controlled documents, whether in house or out, will be updated.
- V. Controlled documents must be returned to QA or the contract administrator at the end of their use. At that time they will be removed from the controlled list.
- IV. Uncontrolled documents are documents that will not be updated and should be marked accordingly.
- VII. Obsolete master documents are filed in a separate file cabinet and cannot be stored with active documents. Obsolete documents shall be stamped "Obsolete", repeatedly as necessary.
- VIII. Obsolete controlled documents will be returned or collected by QA, or the contract administrator under the direction of QA, and removed from the controlled list. Documents will then be destroyed.
- IX. Methods for adding drawings, part numbers, and other documents are covered in the help file for the Drawing Form of the Manager Software.
- X. Upon receipt of drawing and specification changes, Quality Assurance will remove obsolete drawing specification and issue the latest drawing specification to proper personnel. Obsolete drawings will be marked "obsolete" if needed for record or destroyed.

Nonconforming Material

- I. All nonconforming material, supplies, and parts will be placed in a segregated area or tagged with a red reject tag. The item will be clearly identified by work order and the discrepancy.
- II. No one is authorized to remove a nonconforming item from the segregated area or remove the reject tag until disposition is approved by the Quality Department.
- III. Reworked products will be reinspected to assure conformance to drawing.



Corrective Action

- I. Corrective action shall include preventive measures as well as corrections of defects, inspection, test results and detailed examination of defective items shall be used to determine cause of failure.
- II. The Quality Assurance Department shall be responsible for administration of corrective actions effort and will take action as required to assure adequate corrective measures are being performed.
- III. (R4C3) Corrective actions are issued using appropriate software.
- IV. (R5C4) Corrective action clarified.
 - Corrective and Preventative actions are issued via Manager Program using the Route Sheet form.
 - Actions are "attached" to Master Route sheet so they apply at the part number level.
 - Actions can also be "cross" posted to other part numbers so that a single action can be applied to a family of parts or a process in general.
- V. A corrective action should initiate a search for the root cause of the process problem. This search should encompass as many departments as necessary to identify and correct the problem(s). Thinking tools/logic tools should be employed in complicated cases.
- VI. Corrective actions shall address these area:
 - root cause if identifiable
 - short term corrections
 - long term process changes if applicable
- VII. Once a corrective action is issued a copy will be printed and forwarded to the appropriate buying agency.
- VIII. It shall be the responsibility of the QA department to insure that the corrective action is communicated throughout the manufacturing process.

Calibration

- I. Calibration will be performed in accordance with MIL-STD-45662.
- II. All inspection, measuring, and test equipment shall be inspected and calibrated against certified standards. These standards are traceable to NITS/NBS . the measurement standard accuracy shall be more than a 4 to 1 ratio to the gage being calibrated. The calibration shall be repeated at established intervals to insure continued accuracy.
- III. Each piece of equipment, tools, and gauges shall be assigned a number designating its individual identity and a record for each piece will be maintained indicating date calibrated, the next due date, and the initial of the person who performed the calibration.
- IV. The miscellaneous linear measuring equipment shall be calibrated at the frequency listed herein.

Measuring Devices

Micrometers, all types and sizes	180 Days
Vernier Calipers, all	180 Days
Height Guages, all	180 Days
Guage Blocks, all	2 Years
Surface Plates, all	2 Years
Angle Plats, all	2 Years

- A. A recall system is used to insure that the calibration per above is adhered to. A metal file box (containing tabs for each month) is used to store the Equipment Calibration Record Cards. These cards shall be filed in the month calibration is due and the current month shall be checked at the first of each month.
- B. Detailed procedures for calibration of the measuring devices are given in [Appendix B](#). The calibration room temperature and humidity will be monitored as prescribed in these procedures.
- V. When inspection and test equipment is found to be out of calibration, Quality Assurance will document the finding and notify management immediately. If it is determined by Quality Assurance that defective parts have been shipped, management will notify the customer of the possible discrepancy and make arrangements for disposition of the nonconforming items.
- VI. The equipment found to be out of calibration will be removed from use and recalibrated ([R4C3](#)) and tested for accuracy. Equipment too large to be moved will be tagged with a red tag "Do Not Use". If the equipment cannot be calibrated and has any previous record of discrepancy, it shall be discarded and its calibration card removed from the file and marked as a discrepant tool and an out of calibration tool.
- VII. Equipment that has been dropped or mishandled will be recalibrated for accuracy, also frequency of calibration shortened until deemed necessary to reestablish accuracy.
- VIII. Equipment Calibration Records are kept and shall be reviewed at each re-calibration. Trends or drifts can thus be ascertained and calibration intervals can be shortened as necessary.
- IX. If any measuring equipment is moved or transported, adequate cases, packing and protection shall be provided to insure their protection and continued accuracy.
- X. Calibration of outside calibration sources measuring equipment will be insured by mail. This will be done yearly.
- XI. An internal self audit will be conducted yearly in December to assure that all internal quality functions are being performed.
- XII. If production tooling (molds, jigs, fixtures, etc) are being used in the manufacturing process, An inspection of the first and last piece manufactured will be made to assure no change in the tooling status. At present, it is not planned to use production tooling as a medium of inspection.

Packaging Control

- I. All packaging requiring barcoding and/or DD250 will be done as an inside process by Equispan Proactive Marketing, Inc.

Samples of EPM Labels



EPM, INC
THE SEAL MAN

STOCKBRIDGE (ATLANTA) GEORGIA USA

PH: (770) 389-0501 • FX (770) 389-0552

Quantity:
Part No.:
Material:

Customer/Order Information Here

REORDER THIS ITEM FROM



EPM, INC
THE SEAL MAN

112 W. BURKE ST., UNIT G
STOCKBRIDGE(ATLANTA), GEORGIA 30281 USA

LOCAL & INT'L PHONE (770) 389-0501 • FAX (770) 389-0552

YOU CAN REACH US
24 HOURS A DAY • 7 DAYS A WEEK **1-800-SEAL-911**

Quantity:
EPM Part No.:
Size:
Customer No.:
Material:

Customer/Order Information Here



5331-01-480-9509

5331-01-480-9509
P/N 79.5 X 3.0
100 EA
SP0540-02-M-FV08
08/02

5331-01-480-9509
PN 79.5 x 3.0
100 EA
08/02
WT 1 LBS
SP0540-02-M-FV08



5331-01-480-9509



SP0540-02-M-FV08

TCN: N527782203G716

FM EPM, INC.
112-G WEST BURKE STREET
STOCKBRIDGE, GA 30281

TO N52778
ANY GOVERNMENT LOCATION
123 INDUSTRIAL DR.
ANY TOWN, USA 12345-6789

RDD 07/31/2002 PROJ 874 TP 3
WT 1LB CU 10 X 10 X 5
BOX 1 OF 1

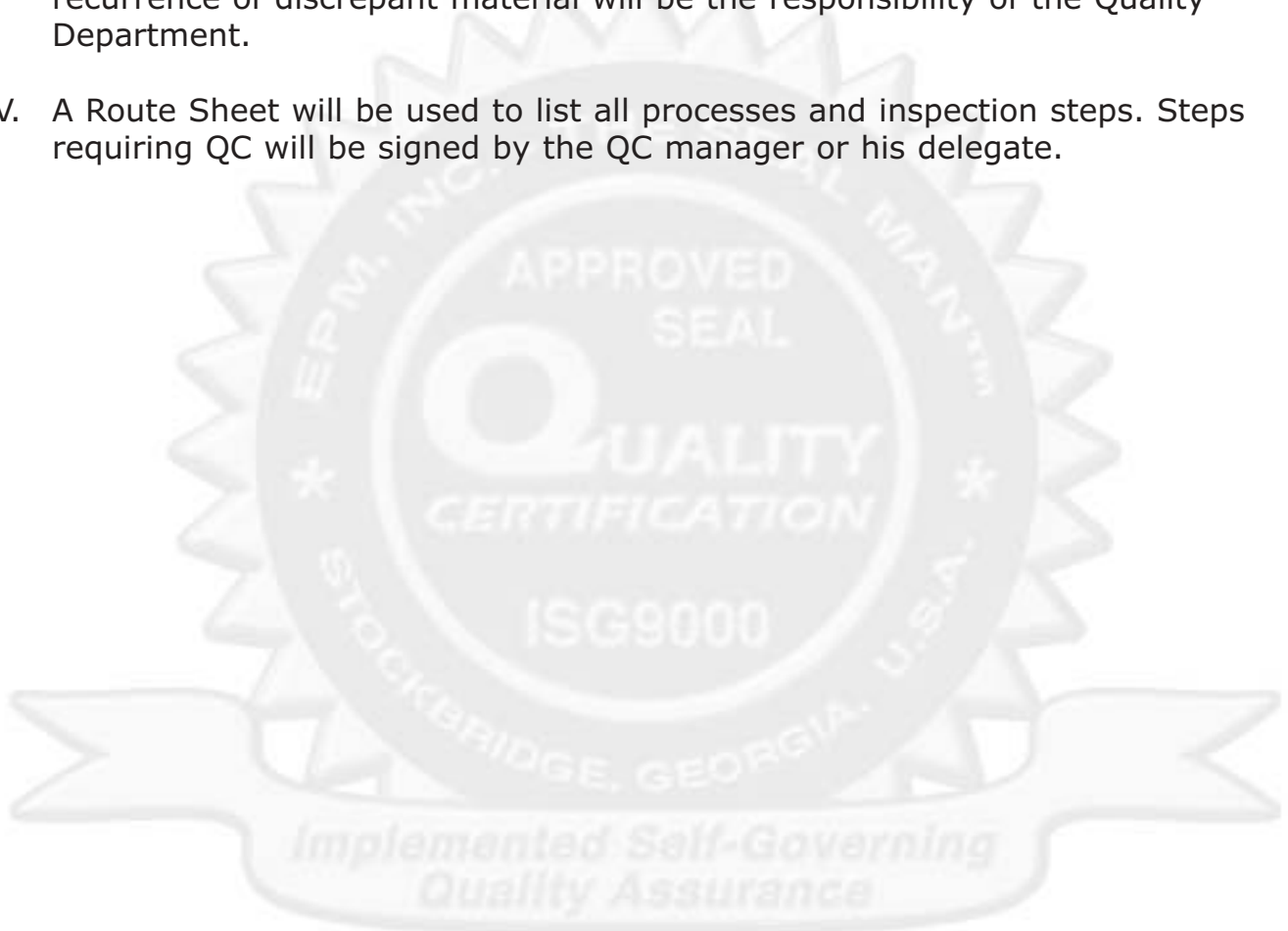
Government and Customer Furnished Materials

- I. GUFFAW and CHEF material received at Equispan Proactive Marketing, Inc. will be processed as in Section 4.1.
- II. The Inspector will check quantity and condition of furnished material and perform any dimensional inspection and or test to verify compliance to requirement. The Inspector will record, initial, and date the inspection report on all material received. All furnished material will be properly identified and placed in segregated areas until required for further processing.
- III. Should any furnished material be found unsuitable for use, the customer will be notified immediately and material will be properly marked and placed in a segregated area until disposition is made by customer.
- IV. All Government and customer furnished material will be identified, handled, stored, and protected from damage, deterioration and loss.



Process Control

- I. First piece inspection will be performed by the Quality Department.
- II. After first piece inspection acceptance, in-process inspection will be performed at adequate intervals to provide early detection of nonconforming parts.
- III. Rejected items will be clearly marked and moved to a designated area for nonconforming parts.
- IV. Obtaining corrective action and performing follow-up action to prevent recurrence of discrepant material will be the responsibility of the Quality Department.
- V. A Route Sheet will be used to list all processes and inspection steps. Steps requiring QC will be signed by the QC manager or his delegate.



Appendix A - Purchase Order



EPM, INC.
The Seal Man™

112-G WEST BURKE ST.
STOCKBRIDGE, GA 30281
PHONE: (770)389-0501
FAX: (770) 389-0652

Purchase Order

DATE	P.O. NO.
9/24/2002	123

Vendor
ANY VENDOR 123 YOUR ST YOURTOWN, USA

SHIP TO
EPM, INC. 112-G WEST BURKE ST. STOCKBRIDGE, GA 30281 PHONE: (770)389-0501 FAX: (770) 389-0652

Expected	SHIP VIA
9/24/2002	UPS

ITEM	DESCRIPTION	QTY	REC'D	RATE	AMOUNT
O-RING	ANY DIMENSION	1		0.00	0.00
Total					0.00



EPM, INC.
The Seal Man™



Appendix B: Calibration Procedures

Calibration Procedure 1242.1	Procedure for outside micrometers with vernier, digital or combination scales.
Calibration Procedure 1242.2	Procedure for standard dial calipers.
Calibration Procedure 1242.3	Procedure for standard dial calipers.
Calibration Procedure 1242.4	Procedure for inside indicating calipers and inside micrometers.
Calibration Procedure 1242.6	Procedure for height gauges.

