

# **QUALITY ASSURANCE MANUAL**

**PSI Holding Company dba  
Packaging Specialists, Inc. Southwest  
5320 W Buckeye Road  
Phoenix, AZ 85043**

**Rev. 04/14**

## **MISSION**

To be the most trusted provider of choice for quality custom packaging backed by excellence in service. Quality is the responsibility of the entire company. Our goal is to insure that we deliver a good, usable product that is in compliance with the customer specifications, our manufacturing specifications and is made from raw materials that conform to stated specifications.

## **QUALITY ORGANIZATION**

Patrick Coveney - President

Joe Henderson – Production Manager

Lisa Desmond – Controller

Mike Guthrie – Costing and Materials Manager

Craig Martin – Packaging Design and Engineering

Cindy Banks - Customer Service Manager

The Employees of Packaging Specialists, Inc. Southwest

## **QUALITY SYSTEM AUDITS**

The Quality Assurance manual is reviewed annually by the Plant Manager.

Adherence to our Quality policy and guidelines is the responsibility of every employee of Packaging Specialists, Inc. Southwest. Quality policy and guidelines will be addressed semi-annually with all employees.

Internal Audits will be performed on an annual basis.

## **EMPLOYEE TRAINING**

### **MISSION**

To provide training for all manufacturing personnel in order to maintain the quality of our product and the safety of our workforce.

### **TRAINING**

Training is specific to each area of the factory. The training will be handled by the plant manager along with the lead operator of each department. The training will encompass:

- **QUALIFICATION**  
Documentation of qualifications to perform specialized operations and to run specialized equipment. To receive general safety training and specific safety training if required.
- **MOTIVATION**  
Personnel must have a general level of understanding of quality and safety expectations. Training will give them awareness of the advantages of proper job performance and its effort on the economic health of the company.
- **APPLICABILITY**  
All personnel will be encouraged towards quality and safe performance.
- **QUALITY AWARENESS**  
Special emphasis will be given to training for quality. Documentation of training and refresher training will be provided periodically.
- **SAFETY AWARENESS**  
Special emphasis will be given to safety training, with the aim of enhancing safety. Documentation of training and refresher training will be provided periodically.
- **USE OF STATISTICAL METHODS**  
Statistical methods will be utilized only as required by a customers quality system.

Quality and safety training is given to all new employees. A record of the needs list will be specified per job description and records will be retained by personnel department. All employees of Packaging Specialists, Inc. Southwest have received the necessary training to operate the equipment they use and understand the required quality standards to achieve our quality goals.

### **PLANNING POLICY**

Engineering and Design is responsible for reviewing requirements, determining feasibility and preparing requests for material quotations.

Purchasing is responsible for obtaining costs of materials, special tooling and determines that materials meet certification requirements.

Engineering and Design prepares cost estimates based on current cost information and standard manufacturing techniques. Upon receipt of order, detailed manufacturing specifications and Bills of Material are to be prepared. Engineering and Design is to coordinate with Production on specification preparation for new line items.

Customer Service Department is responsible for reviewing all incoming customer purchase orders (contracts). All contracts will be signed by a representative of Packaging Specialists, Inc. Southwest and stamped with company name and date of acceptance. If the contract is found to be discrepant for price, quantity, terms, etc., Customer Service will contact appropriate Sales Representative or contact customer directly for correction of discrepant information. The contract will not be executed until a valid purchase order (contract) has been received. Customer Service is to notify Purchasing of quantity ordered and release requirements.

Packaging Specialists, Inc. Southwest will notify customers in writing in the event of a major process, design, material, or facility change.

## **MANUFACTURING SPECIFICATIONS**

The manufacturing specification is a document that is customer and product specific. Every product manufactured or purchased for a customer of PSI, will have a product specific part number.

The specification will contain the following:

### **Manufactured Product**

- 1) Shop Order - The actual quantity of order with required delivery date.
- 2) Bill of Material
  - List of all raw materials with part numbers
  - List of all labor steps
- 3) Engineering Revision Page
  - History of production revisions
- 4) Detailed Cutting and Assembly Instructions
  - Drawings (where applicable)
  - Quality criteria
  - Standard fabrication methodology
  - Final assembly page
- 5) Packing Slip
  - Part number of customer product
  - Quantity required
  - Specifies delivery date
- 6) Shipping Index
  - Specifies description of product shipping
  - Specifies customer specific part numbers
  - Specifies method of shipment
  - Specifies required labeling and handling

### **Distributed Product**

- 1) Packing Slip
  - Quantity required
  - Specifies delivery date
- 2) Shipping Index
  - Specifies description of product shipping
  - Specifies customer specific part numbers
  - Specifies method of shipment
  - Specifies required labeling and handling

## **FABRICATION POLICY**

Products will be fabricated from specified materials in accordance with the manufacturing specification. The specification will travel with the job as it moves from department to department. The specification may be separated if the fabrication of subassemblies is to be performed simultaneously.

As the product moves from operation to operation through the manufacturing process the factory personnel are empowered to accept or reject the material/product as it passes through each process. If a part is found to be non-conforming the parts will be returned to the initiating department for correction. The proper correction will be determined by the Lead Operator. Acceptance is implied as the product moves from one department to the next, until the product is finished.

Lead Operators are responsible for obtaining 1st Article approval, In-Process, and Final Inspection of all products. In addition, the Plant Manager will perform statistical inspection per sampling plans as required by a customer's Internal Quality System. This is usually given to manufacturing as a "Customer Specific" certificate of compliance. These records are retained on file for as long as the customer deems necessary. The customer will specify record retention criteria.

The Department with the majority of work on a product will retain responsibility for the finished product and subsequent administrative procedures.

At the conclusion of each job, the department's Lead Operator will reassemble the specification, verify the count of finished product, sign off, date and give specification to traffic department.

Traffic will verify (double check) the finished product is as per specification (shipping index) and will verify count from production. Traffic will ship product per specifications on packing slip and shipping index. The packing slip is filled out by the traffic department, and must be signed by the customer receiving product or by the trucking company taking receipt of goods, prior to invoicing the customer.

### **WORK IN PROCESS & FINISHED GOODS INSPECTION**

We fabricate to a +/- 1/8" tolerance unless stated otherwise. In foam fabrication, placement of foam blocks to be laminated onto corrugated, or laminating foam to foam, may have general or specific workmanship and/or placement requirements.

For example:

- A. The specification may show four blocks being laminated to the approximate middle of a sheet. There are no positioning measurements stated. In this case, "eyeball" placement is acceptable, and the soundness of the lamination should be adequate to hold the foam to the sheet.
- B. In other instances the specification will show positioning the foam "x" inches from the side. The positioning must be as shown +/- 1/8 inch. Templates will be used to achieve a consistent placement.
- C. In some instances a 90% or 100% bond is specified by the customer. If the customer specifies the level, the specification will show a required percentage. If the specification does not call out that percentage, do not assume it is required. Assembly guidelines will be given on specification.
- D. In cases where we are fabricating to general specs., operators will inspect for workmanship as part of the production process.

E. In cases where we are fabricating to specific requirements or producing a complex assembly, we will inspect to criteria required by the customer. If the customer requires quality inspection documentation, this will be incorporated into the manufacturing specification. The document will be signed and retained on file by the Plant Manager.

### **MIL SPECIFICATION INSPECTION POLICY**

When customers require conformance to Mil Standard 105-D, an inspection plan based on AQL and quantity will be prepared.

President and the Manager of Engineering & Design will prepare the plan and discuss implementation with the Plant Manager.

Engineering and Design will maintain the Mil Specification/Mil Standard library.

When required for on-going major projects, a detailed plan will be prepared and coordinated with customer.



## **FIRST ARTICLE GUIDELINES**

Check to see if the proper materials and all items on the B.O.M. are included in the product.

Do not give 1st Article Approval unless the product is in a completely finished state. Checking and approving of sub-assemblies should not and will not be considered as 1st Article Approval.

Check all dimensions against information supplied on manufacturing specification.

Check and determine if general workmanship levels and aesthetic qualities are to customer and PSI standards.

Any and all first time jobs must be 1st Articled by Design/Engineering and Production.

Master Copy of B.O.M. will have a 1st Article page which must be initialed and dated upon approval of 1st Article by Design/Engineering along with Production's copy of Specifications.

Production will proceed with manufacturing of product only after successful 1st Article approval, unless the customer wishes to 1st Article the product.

Customer 1st Article requires the customer to sign and date approval of 1st Article. Production will only begin after written approval is given.

## **INCOMING INSPECTION POLICY**

The Traffic Department will inspect upon receipt, the following:

1. Corrugated
2. Foam
3. Wood Products

Purchasing will provide copy of purchase order and print specifications. The Traffic Department will mark parts with the specific part number assigned after inspection for conformance to purchase order specification. Non-conforming parts will be marked and segregated. Receiving department will notify Purchasing of non-conforming product.

### Corrugated Inspection -

Corrugated will be inspected for dimensional accuracy and print layout, any discrepancies found will be entered on the receiver. The quantity to be inspected will be based on a random sampling of the amount received. If corrugated is found to be out of dimensional tolerance, additional product will be inspected. When more than one skid is to be checked, corrugated from different skids will be randomly inspected.

### Foams -

Check appearance, condition, count, type and bun size. Enter discrepancies on receiver.

### Wood -

Check appearance, condition, size, grade stamp, mill stamp (heat treated/kiln dried) and count. Non-conforming items are to be removed and segregated in holding area, and prominently marked "Do Not Use." Purchasing is to be notified as soon as possible. Traffic is to note any discrepancies and the mill stamp on all receivers.

## **CALIBRATED EQUIPMENT POLICY -**

PSI normally fabricates to +/- 1/8 inch industry standard due to type of material we use.

The items requiring calibration are:

1. Electronic Scales - Traffic Department
2. Calipers and Digital Micrometers - Engineering
3. Tape Measures - All Personnel

Traffic will use a scale to verify weight and tare of items shipped. Production Management will use this scale to weigh small parts during inventory. The scale will be calibrated by Avery Weigh-tronix Inc., and every time maintenance is performed by Avery Weigh-tronix Inc., a date will be affixed to the scale. Scales will be calibrated by a certified company on an annual basis. These records will be retained in the purchasing department.

The Factory will use calipers and micrometers only when special requirements are specified by a customer specific to a part. When this scenario exists the calipers and micrometers will be calibrated annually or only as needed by Washington Calibration. A copy of the inspection record will be retained on file. A date will be affixed to the equipment by Washington Calibration. The equipment will be controlled by the engineering department.

Tape measures are used on a daily basis by all employees. The Maintenance department will issue new equipment any time a tape measure appears to be worn. Each employee is empowered to keep track of the wear and tear of their personal equipment.

## **CUSTOMER/GOVERNMENT OWNED TOOLING -**

The Standard Operative Procedure on PSI, Customers and Government owned tooling, covers the following administrative points:

Documentation

Activation

Identification

Protection

Inspection

Maintenance and Repair

Special Requirements

Destruction

## **STANDARD OPERATING PROCEDURES**

### **SCOPE:**

This SOP applies to PSI owned commercial items, Government owned property and Government owned property provided to PSI by a Prime Contractor.

Documentation: Engineering and Design is responsible for ordering all new tooling and assigning a number to all tooling. The number will be recorded in the Die Log. A description of the tool will be appended in the space marked description.

Activation: Engineering and Design will initially inspect all tooling prior to releasing to production. At that time the tool will be identified with the number entered in the Die Log.

Identification: All tools and dies will be assigned a number which will be prominently and permanently placed on the item. Permanent ink marker may be used. Additional identifying information such as customer name and product number may be added.

Protection: Tools and dies will be stored in the racks provided when not in use. Items may be placed on the floor only during brief periods prior to or just after use. Tools will be returned to storage location immediately after use.

Inspection: All items will be inspected prior to use to insure that no damage has occurred in storage. Items will be inspected at conclusion of job to insure no damage has occurred during production.

Maintenance and Repair: Lead Operator will inform Plant Manager when damage is observed. Plant Manager will submit requisition to Engineering and Design for repair. Customer will be advised as deemed appropriate by President.

Special Requirements: In the event a customer requires additional identification or protection procedures, they will be implemented. This would include procedures such as affixing colored stickers showing that inventory was accomplished.

Release: When a tool is returned to a customer, it will be delivered on a regular Bill of Lading. The signed B/L will be retained in the product jacket by Customer Service. No tooling will be released without a signature.

Destruction: The life of tooling is variable. We have determined average life span to be approximately 2 years. If a tool is not used for 1 year or more, the tool will be identified and the customer will be contacted for destruction or release approval.

#### **VENDOR PERFORMANCE POLICY**

It is the responsibility of the Purchasing Department to record performance by vendors.

Instances of less than satisfactory, (materials received not conforming to purchase specifications), will be noted on Purchasing Department copy of purchase order. Vendors will be notified of each unsatisfactory instance giving them an opportunity to make correction.

In the event the materials are rejected, a debit memo will be issued to the vendor. The vendor will replace the discrepant material.

Vendors with chronic delivery or material conformance problems will be notified. If performance does not improve, alternate sources of supply will be used and business with the non-conforming vendor will be limited.

The Plant Manager will be notified of each instance. Purchasing will brief the President periodically on vendor status.

## **CUSTOMER COMPLAINTS**

Any customer complaint involving damaged, rejected or out-of-specification product will be written as a memo, to the Plant Manager. The memo will specify the corrective action required.

Customer Service will act as coordinator of Complaint Memo.

Sales Representatives are responsible for obtaining complete information on problem.

The Plant Manager will write up the corrective action when applicable, or distribute the memo to the appropriate department. The memo should be returned to the Plant Manager for approval.

The President will review all responses and formally approve corrective action.

Engineering and Design will amend and/or clarify the manufacturing specification when necessary.

Once the corrective action has been completed the appropriate department will outline the steps taken, sign, date and return form to Customer Service.

The complaint memo will be filed in the customer specific product file. A copy will be retained by the Plant Manager. Customer complaints will be reviewed by the management team as they occur.

The complaints will be categorized as to "type" and become part of the annual internal audit review process. The Plant Manager will discuss the Quality Complaint with all members of the department responsible for the non-conforming product. The Lead Operator and the department members will sign the Quality Complaint form.

## **DESIGN AND DOCUMENT CONTROL – DESIGN, DRAWING AND SPECIFICATIONS -**

Packaging Specialists will design custom packaging per customer requirements. A customer will provide drawings, specifications, or the product for design consideration. The customer, our design team, and the salesperson have input into the design process. Once a design has been executed by our design team several things may occur:

1. The customer may require a drawing. This would be executed using computer aided design software (CAD). The customer would sign-off as acceptance.
2. A sample may be required. The customer may need this for testing purposes. The sample would be signed for as acceptance.
3. The customer is willing to accept design on its own merits, and would issue a purchase contract as acceptance.

Design and drawing revisions will be made as the product evolves until there is final acceptance by the customer. After the design has been accepted and a purchase contract has been received, then a master file will be created for this specific product.

One set of drawings will be maintained in the Master product file.

The Master file will be maintained in Customer Service. The files are kept in alphabetical order by customer and a product number is assigned to each customer specific product.

Prior to establishing a product file, Engineering and Design will review the customer drawing and specifications to insure that all critical dimensions, tolerances and instructions have been included in the Manufacturing Specification.

If more than one revision is active, a separate file and product number will be established.

There will be only one set of current drawings in any one product file.



Engineering and Design will review all revisions received from the customer, amend existing B.O.M. and Specification, as necessary, and enter revision date on Specification. Engineering and Design will physically remove outdated drawings, etc., and insert revision in master file.

### **CONTROL OF SUBCONTRACTORS**

All materials, supplies, and tooling will be purchased using purchase orders.

The Purchasing Department will issue all purchase orders.

Purchase orders will have sufficient detail to identify the product that is being ordered.

Quantity, size, type, mil specification, when appropriate, description, stock number, and certification requirements will be included in the P.O. as necessary.

The only individuals authorized to issue and sign Purchase Orders are:

Materials Buyer

Director of Finance & Administration

President

Maintenance is authorized to coordinate with manufacturers on parts required to repair major production machines. A P.O. number will be obtained from Purchasing prior to authorizing shipment of parts. The cost will be obtained prior to issuing the P.O. This authority is to be used only when equipment is down for unscheduled maintenance.

## **RAW MATERIAL CONTROL**

When certifications are required, they will be annotated on the Purchase Order.

Certifications will be filed by Customer Service in the product jacket.

They will be retained for a period of three years.

Verification of chemical and physical properties are performed by vendors. Visual inspection of wood products is used to verify grade.

Upon receipt of raw materials by the receiving department, the product will be checked for conformity to the purchase order requirements and all certifications. The Receiving Department is authorized to bring a "1st Article" to the Engineering and Design department for initial verification of conformity. The receiving copy will be signed and dated if acceptable.

All Raw Materials are stored inside the building.

Purchasing department will be notified of any non-conforming raw materials. Non-conforming materials will be marked "REJECTED" and set-aside until reasonable disposition can be made.

If raw materials are "Acceptable" a product specific part number will be written on the raw materials prior to storage or use in the factory.

Purchasing will notify vendor of non-conforming product. Vendor will replace or rework non-conforming product.

## **CONCLUSION**

Packaging Specialists, Inc. Southwest makes every effort to manufacture products of the highest quality. All documentation referred to on the previous pages is available upon request.

## **EXHIBITS**

- A. Drawing
- B. B.O.M.
- C. Table of Organization