

# Insulation Supply Company Management System Policy Manual

## QPM-301 Rev. G

### Introduction

This quality process manual describes Insulation Supply Company (also referred as INSCO) quality management system, the processes involved in the operation of our quality management system, the interaction of these processes within the system, and our established policies as they relate to AS9120 Quality Management Systems - Aerospace - Requirements. **The AS9120 Revision A standard includes the entire ISO 9001:2008 but with additional requirements.** The paragraphs required by AS9120 that are not in ISO 9000:2008, Third Edition, are shown in bold.

*The referenced numbers in parentheses and brackets are the relevant ISO or AS paragraph numbers. For example, "(5.3[1]a[1])" would indicate that the passage or word can be found in ISO 9001:2008 section 5.3, first showing up in the first paragraph, bullet 'a', first incident. It is merely intended to show links between our policies and the relevant specifications.*

Because of our diverse customer base and because of the more universal familiarity with the ISO 9000 series of specifications we will refer to ISO 9001:2008 throughout this document. Therefore we ask that our aerospace customers understand that each reference to ISO 9001:2008 in this document is intended to equate to AS9120.

**Note: The quality management system elements specified in this document are complementary (not alternative) to contractual and applicable law and regulatory requirements.**

It is important to understand how our critical (core) processes interact with each other because a change in one process may have an impact on another process that in the long term could result in sub-optimization within our organization. This quality management system is focused on process management. We have identified our critical (core) and support processes and determined how to monitor and measure these processes. Using data from these measurements, we make informed decisions on correcting and preventing nonconformance as well as for making continual improvements related to these processes. The ultimate goal is ever-improving customer satisfaction.

### Scope

This quality process manual addresses our entire quality management system and the majority of applicable requirements of the ISO 9001:2008 Quality management systems - Requirements. Those requirements not addressed in this manual are covered in related supporting procedures.

### Exceptions

Insulation Supply Company does perform value-added services for our customers but these activities are limited to the cutting, marking and/or kitting of tubing. Detailed production planning is not required for these activities.

Insulation Supply does not transfer work between facilities or suppliers and we therefore take exception to section 7.1.4.

### Documentation Structure of the Quality Management System

The quality management system is documented in the following manner consistent with the guidelines in ISO 10013 - 2000, Guidelines for Developing a Quality Manual.

1. The quality management system process manual is considered a top-level (Level I) document of Insulation Supply Company quality management system. It defines our quality policy and objectives; top management's commitment to quality and it identifies our critical processes and the resulting process owner. The quality

management system process manual is revised periodically to keep it up to date with our processes as they are continually improved. All revisions to this manual are recorded in our electronic document control system (EDMS) and may be retained electronically for an indefinite period. Obsolete or superseded printed controlled copies of this document are retrieved and destroyed. Current copies of the manual are available through our EDMS or by request through the management representative.

2. A cross-referencing system identifies the management procedures that are linked to the related core processes identified in this manual. These procedures are necessary for the proper implementation of these processes.
3. Quality procedures, a lower level document (Level II) defines the primary responsibilities within each of the documented processes. They execute the policies established in this manual and link this document to the process documents. These procedures are assigned the general prefix "QSP" (for Quality System Procedure) and a reference number. In many cases, a QSP satisfies requirements of several elements of the International Standard. This is shown in the QSP under "Policy References" and is reflected in the Policy Element Check Cross Reference report.
4. Some processes may require the execution of specific tasks. When this is required to be performed consistently on a routine basis then this activity is documented in the form of an instruction, a level III document used to support a level II procedure. An instruction may take the form of a text document, a picture, a shop router (traveler), a flowchart or other means of consistently communicating the necessary information in order to perform the task. The process owners are responsible for creating, coordinating, maintaining and improving the instructions. The amount of detail contained in the instruction may vary depending on the complexity of the task being performed, the training the individual has received and/or the education and experience level of the individual performing the task.
5. Another type of quality system document is a record. A record is a document that states results achieved or provides evidence of activities being performed. Generally speaking, records need not be under revision control. The department managers maintain records relevant to their activities.
6. The documents that define our quality management system are accessed by our employees through our Quality-Web intranet. This system is designed to deliver only the current version of all quality system documents to those individuals who have a need for those documents and are established as a "user" in the system. Access to view documents is controlled on document-by-document basis and is provided as needed. Access to edit documents is even more limited and only specifically assigned individuals are given this level of access.
7. The COO has the authority to revise quality system documents.

## **Overview**

Insulation Supply Company is located at:  
1901 Harpers Way  
Torrance, CA 90501

Insulation Supply Company sells electrical insulation and wire identification products and is classified under industry code 5063. The company was founded in 1952.

## *PREAMBLE*

We the management of INSCO, here set forth our belief as to the vision for which the company is established and the mission goals under which it should operate. We pledge our effort to the accomplishment of this vision and to follow the mission goals as presented below.

## *VISION*

INSCO's ultimate goal is to become recognized by its customers as a premier national and global distributor of electrical and electronic products. Our aim is for managed growth, annual profitability and continual process improvements. We are an organization that is driven to provide quality in customer service, diversification of products and value-added services that will provide total solutions to our customers.

## **MISSION**

The INSCO mission is to commit the skills, knowledge and resources of our organization to growth by achieving total customer solutions and satisfaction.

## **MISSION GOALS**

1. **Customers and Markets:** We believe our responsibility is to customers who produce electronic equipment for aerospace, defense systems, computers, telecommunications, automotive, medical instrumentation, energy and all others that use our products and services. Our products and services will be focused and developed for both military and commercial markets.
2. **Products and Services:** INSCO distributes electromechanical products and interconnect devices used in electronic equipment. The Principal products include: heat shrinkable tubing; electrical and thermal insulated sleeving; industrial identification products; fastener and tying materials; electronic wire and cable; power cable accessories; and heating tools and accessories. INSCO provides custom value added services such as hot stamping, cut tubing and sleeving to customer specifications. INSCO provides technical assistance highlighted by: application specific product demonstrations; product spec analysis and matching; and Customer-INSCO-supplier intermediation facilitation.
3. **Geographic Boundaries:** We are dedicated to the success of INSCO throughout the United States and global marketplace.
4. **Technology:** INSCO enhances customer service through the use of information technology. Technology will make it possible to provide on time and correct product delivery for best quality and value.
5. **Concern for Economic Benefit:** INSCO will conduct its operations prudently and will provide the profits and growth, which will assure INSCO's on-going success.
6. **Philosophy:** The most important contributing factor that influences our future success, while sustaining continual growth and prosperity, is the INSCO organization: employees, leaders and owners. Therefore, we believe it is our responsibly to create an environment that reinforces growth, self-development, and open communication. We will provide individuals with the means to achieve their highest expectations with fair compensation, safety and a healthy and fulfilling environment. The company will also expect and encourage each individual employee to develop necessary competencies to achieve both personal and company goals. The employee will be responsible to value, contribute and affirm a high level of commitment to skills and effectiveness in support of the INSCO organization.
7. **Self-concept:** INSCO has built relationships with customers that extend beyond providing electrical and electronic products. This effort will be continued with commitments to quality, accurate communications, technical expertise and problem-solving capabilities. We will not only respect, value and serve our customers, but also our co-workers, shareholders, agents, suppliers and our community with entrepreneurial policies, individual commitments to excellence and open and honest communications.
8. **Concern for Public Image:** We are responsible to the communities in which we live and work and to the United States as well. In addition, we must be sensitive to broader concerns of the public, including the general desire for improvement in the quality of life and equal opportunity for all.

## **Quality Policy**

The management of Insulation Supply Company strives to provide consistent and ever-improving customer satisfaction. We accomplish this by complying with customer requirements and improving the effectiveness of our organizational processes. We use customer feedback in various forms as well as our own observations and self-assessments when determining procedural effectiveness. We dedicate the necessary and available resources needed to support these endeavors.

## Objectives

- a) Achieve 100% on-time delivery as measured by Insko's Prelude system.
- b) Reduce customer line-item returns where Insko is at-fault for non-compliance to less than 2% of line items shipped.

## Organization

### Organization Structure

Insulation Supply Company operates its facilities at:  
1901 Harpers Way  
Torrance CA 90501

The senior executive of Insulation Supply Company operations is the President & CEO. Insulation Supply Company maintains written organization charts designating positions and responsibilities of company officers, managers and supervisors. These charts are maintained separately from this manual and are referenced in the organization references in the next section. Insulation Supply Company operations with an impact on quality are more fully described below.

Responsibilities within the quality management system are defined for the following:

### Chief Executive Officer (CEO)

- a) Creates the business and quality objectives for Insulation Supply Company;
- b) Chairs Management Review meeting.

### Chief Operations Officer (COO)

- a) Ensures necessary resources are identified and provided enabling us to accomplish our mission;
- b) Establishes the vision and direction for the organization and coordinates with the owner;
- c) Creates policy (including quality policy);
- d) Implements and demonstrates the organizations commitment to quality;
- e) Reviews and approves continual improvement of core processes.

### Management Representative (Q.A. Manager)

- a) Ensures the Quality Management System is implemented and functioning effectively;
- b) Establishes and conducts internal audits of the quality management system;
- c) Monitors the status of corrective and preventive actions;
- d) Ensures all core processes have identified measures to determine effectiveness of corrective and preventive actions and process improvements;
- e) Ensures personnel are aware of customer requirements;
- f) Ensures customer requirements are understood throughout the organization;
- g) Reviews all nonconformance and corrective actions;
- h) Reviews and dispositions nonconforming material;
- i) Is the voice of the customer.

### Inside Sales Representatives

- a) Ensures customer requirements are fully understood and communicated to appropriate personnel;
- b) Coordinates with appropriate departments to review unique customer requirements;
- c) Receives, records and works to resolve customer concerns;
- d) Tracks changes to customer purchase order and updates in Order Processing System;
- e) Establishes customer profile, related products, and new products in Order Processing System;
- f) Responds to customer RFQs.

### **Production Supervisor**

- a) Identifies necessary resources and communicates them to the COO;
- b) Coordinates production planning;
- c) Reviews unique customer requirements to determine feasibility and capability;
- d) Ensures production processes are controlled;
- e) Ensures quality policy is understood throughout the department;
- f) Ensures customer requirements are understood.

### **Production Operator**

- a) Machine set-up;
- b) Record in-process measurements;
- c) Implements identified corrective actions.

### **Quality Management System Development**

The approach used to develop, implement and maintain our quality management system consists of the following steps:

1. We determined the needs and expectations of our customers and other interested parties. An interested party is defined as a person or group having an interest in the performance or success of our organization. Interested parties include our customers, the owner and investors, our suppliers, our community, and our employees.
2. We established a quality policy and objectives for our organization. A quality policy is a statement from top management that provides the overall intentions and direction of our organization as it relates to quality and sets the framework for our quality objectives. A quality objective is something that is sought or aimed for that relates to the quality of our organization and to the quality of our products and services. Each level in our organization has established quality objectives that are relevant to their functions and to our quality policy.
3. We determined our processes and responsibilities necessary to achieve our quality objectives. These processes have documented procedures that define who the "process owner" is and related responsibilities within the process. Occasionally, some of our processes require a set of detailed instructions that define how specific activity is to be accomplished. The process owner is responsible for ensuring these instructions are properly documented, coordinated, and maintained.
4. Each functional area is responsible for identifying the resources necessary to accomplish the specific quality objectives. Top management reviews the resource requirements for final approval. Where resources requirements are not approved, top management documents the reason for disapproval and the impact on the process and on the quality management system.
5. Each process owner is responsible for establishing methods to measure the effectiveness and efficiency of their processes and any related sub-processes. The results of these measurements are subject for review by top management during the management review process.
6. Each process owner is responsible for using these process measurements as a means of preventing nonconformities and eliminating their causes and for identifying root causes for existing nonconformities and implementing corrective actions.
7. Process owners are responsible for establishing and implementing our organizational approach to continual improvement. Through our continual improvement process, our organization can determine non-value added steps in a process, improve existing processes or determine the most efficient steps to achieve a desired outcome. Continual improvement is defined as recurring activity to increase our ability to fulfill requirements more efficiently.

### **Role of Top Management**

Through the leadership of top management and more importantly, through our actions, we create an environment where employees are fully involved in our quality management system. The role of top management as it relates to our quality management system is defined as follows:

- 1) To establish and maintain the quality policy and quality objectives of our organization. The actions of top management create and maintain an environment in which we can live by our quality policy and achieve our organization's objectives.
- 2) Each department manager is responsible for understanding the quality policy, communicating it to employees in the department and to define how the quality policy is applicable within the department.
- 3) To ensure employees understand our customer requirements. Knowing our customer requirements as they apply to their jobs helps our employees understand their role and how they add value to the products and services we provide to our customers.
- 4) To ensure our processes are implemented, managed and improved, which will enable us to meet our customer requirements and our quality and financial objectives.
- 5) To ensure the availability of necessary resources to enable us to meet our objectives. Necessary resources are defined as people, equipment, and space.
- 6) To ensure employees are adequately trained to perform their functions and are involved in continual improvement of those functions.
- 7) To have regularly scheduled reviews of the status of our quality management system. These reviews include, at a minimum, the results of our internal audits, customer feedback, process and product conformity, recommendations for improvements, corrective and preventive actions and status of personnel training.

### **Continual Improvement**

Continual improvement is defined as recurring activity that is used to increase our ability to meet our customer requirements and our corporate objectives. There are two fundamental ways to conduct continual process improvement:

- a) Breakthrough projects which lead to either a major revision or an existing process leading to a significant cost savings. This is usually accomplished through the efforts of a cross-functional team outside of routine day-to-day operations.
- b) Small-step ongoing improvement activities conducted within existing processes by people involved in those processes. These improvements are usually based on the analysis of data provided by the specific process measurements.

The basic actions for continual improvement, whether small-step or breakthrough, include the following seven step approach:

1. Analyzing and evaluating the existing process/situation to identify areas for improvement. This will include the review of process data, interview people working in the process and may include benchmarking activities.
2. Establish the objectives for the improvement. Determine if the improvement provides an associated cost savings, eliminates a production problem, enables us to better meet customer requirements or improves our quality management system.
3. Determine possible solutions to accomplish the identified objective.
4. Evaluate the possible solution to determine if the desired outcome is achievable. Conduct trial tests of potential solutions and/or benchmark other organizations with a similar process in determining the desired outcome.
5. Implement the recommended change and train employees on the change.
6. Evaluate the implemented changes to determine if the improvement objectives have been met. If not then return to the beginning of the continual improvement process.
7. When the implemented change is determined to be effective, then the change is formalized, documents are updated, related processes are reviewed to determine impact, and employees are trained.

### **Core Processes**

1. Process name: **Quality management system.**

Process owner: Management representative.

Process description: Process used to ensure Insulation Supply Company develops accurate plans determining how we will meet our customer product and service requirements. This system identifies product and process nonconformance.

Using process data/measurements, we are able to determine root cause, the corrective actions to be implemented, steps for preventive action and continual improvement.

Process inputs: ISO 9001 Quality management systems - Requirements, ISO 9004 Quality management systems - Guidelines for performance improvements, top management involvement, process measurement data.

Key actions: Identify critical processes, establish process measurements, collect and analyze process data to determine preventive and improvement actions, conduct internal audits of the system, and conduct management review on scheduled basis.

Process measurement: Effectiveness of Management Review is measured by the achievement of our Quality Objectives.

Output/record: Second-party approval of QMS to ISO 9001:2008, internal audit reports, management review meeting minutes.

Linked process: Processes that directly affect the quality of the product we deliver to our customers.

## **2. Process name: Order processing (contract review).**

Process owner: Inside Sales Manager

Process description: This process is used to respond to customer request for quote and capture and review all customer requirements to determine feasibility and capability prior to acceptance of the order.

Process input: Customer Purchase Order received by verbal, fax, mail or electronically.

Key actions: ensure customer requirements are identified, identify customer and/or product in order processing software, resolve contract differences and assure our capability to perform as required, create order, operator instructions if needed, create purchase order when new equipment or tooling are required, send operator instructions to production.

Process measurement: On-time delivery and returned line items reports.

Output/record: Sales Orders, Operator Instructions with Customer Requirements when appropriate. These serve as parts contract review records.

Linked processes: Production, Purchasing, Receiving, Shipping

## **3. Process name: Purchasing**

Process owner: Purchasing Manager

Process description: Obtain correct product and documentation to support sales efforts and customer requirements.

Process input: Suggested order reports, purchase requisitions.

Key actions: Analyze and buy purchased goods requirements, flow customer requirement information to suppliers, update due dates on goods ordered

Process measurement: C.A.R.s for wrong material purchased.

Output/record: Purchase orders

Linked processes: Sales, Receiving

## **4. Process name: Receiving.**

Process owner: Receiving supervisor.

Process description: Process of receiving and accepting of raw material, assemblies and tooling into inventory.

Process input: Goods Receipt Note (GRN), certification documents, product, packing slip.

Key actions: Unloading of material, visual checks to determine transit damage, confirmation with bill of lading and packing slip, visual checks of product and equipment to determine acceptance, record items into inventory.

Process measurement: Stock taking accuracy.

Output/record: Packing slip, supplier corrective action for damaged or otherwise nonconforming material.

Linked processes: Purchasing.

## **5. Process name: shipping.**

Process owner: shipping supervisor

Process description: picking, packing, labeling, inspecting and shipping product.

Process input: products ready for delivery to customer, customer special handling instructions

Key actions: determine the appropriate shipping container for product, review operator instructions for special packaging or shipping instructions, package the products to prevent damage during shipping, weigh product, produce shipping label, notify customer for customer pick up, when required notify customer that package has shipped by carrier, complete and file operator instructions.

Process measurement: number of line items shipped and reduction of shipping related returns/errors.

Output/record: shipping record, operator instruction.  
Linked processes: final inspection, purchasing, order processing.

**6. Process name: Product inspection.**

Process owner: cut and mark supervisor, quality assurance administrator  
Process description: identification and disposition of product/parts that do not meet customer requirements.  
Process input: product inspection specification, standard inspections required for this type of product.  
Key actions: physical product measurement, characteristics observations and recordation of findings.  
Process measurement: Customer rejections.  
Output/record: inspection records and notations on shop traveler.  
Linked processes: inventory control, control of customer supplied product, receiving, cutting and marking, and shipping.

**7. Process name: inventory storage.**

Process owner: receiving supervisor.  
Process description: storage and control of raw materials, stock, and customer supplied material or equipment.  
Process input: purchased material, purchase order, operator instruction, and packing slip.  
Key actions: movement of materials and equipment from receiving, in-process and final audit to safe, secure locations.  
Process measurement: Reduced dollar amount variance at stocktaking.  
Output/record: inventory tag, operator instruction, receiving log.  
Linked processes: purchasing, production, shipping.

**8. Process name: Internal audit.**

Process owner: Management representative.  
Process description: Process for assessing the processes in the organization to determine compliance and improvement activity.  
Process input: Process measurement data, documents, records, standards.  
Key actions: Planning, checklist development, conducting interviews, observation, nonconformance identification, audit report, corrective action request.  
Process measurement: Observation and findings reduction.  
Output/record: Checklist, process nonconformance, audit report, corrective action request.  
Linked processes: Corrective Action, Preventive Action, Continual Improvement, and Management Review.

**9. Process name: Management review.**

Process owner: President.  
Process description: Process to review the status and effectiveness of the quality management system.  
Process input: Process measurement data, customer feedback, internal audit results, status of corrective and preventive actions, follow-up actions from previous meetings, recommended improvements.  
Key actions: Review information provided, determine actions to be taken, update meeting schedule, and create minutes of meeting.  
Process measurement: Profitability and customer rejections.  
Output/record: Meeting minutes, system improvements, resources needed.  
Linked processes: Continual Improvement, Corrective & Preventive Action, and Internal Audit.

**10. Process name: Corrective action.**

Process owner: Management representative.  
Process description: Actions taken to identify and eliminate root cause of nonconformance.  
Process input: Process data, customer feedback, nonconformance report, records, documents.  
Key actions: Understand nonconformance, interview process owner and other interested parties, determine cause of nonconformance, and implement actions to eliminate cause.  
Process measurement: Reduction of corrective action requests from customers.  
Output/record: Completion of CAR, actions to be implemented, processes changed.  
Linked processes: Internal Audit, Preventive Action, and Management Review.

**11. Process name: Preventive action.**

Process owner: Management representative.

Process description: Process used to monitor system to determine if a potential product/process nonconformance will occur if no action is taken.

Process input: Process measurement information, documents, instructions. Observations, employee suggestions

Key actions: Monitor process measurements, process parameters, determine potential nonconformance root cause, develop action plan to eliminate potential nonconformance, determine outcome, and standardize change in process.

Process measurement: Customer rejections

Output/record: Process Change, preventive action report.

Linked processes: Management Review, Corrective Action, and Continual Improvement.

## 12. Process name: **Continual improvement.**

Process owner: COO.

Process description: Process used to monitor system to determine non-value added activity. Method used to decrease internal costs.

Process input: Process measurement information, documents, procedures and instructions, customer and employee feedback, observation.

Key actions: Monitor process measurements, process parameters, determine non-value added activity, small steps of improvement, breakthrough improvement.

Process measurement: Profit and customer rejections.

Output/record: Meeting minutes

Linked processes: Management review, all other processes

## **Organization References**

Chart ORG1

## **4 Quality Management System**

### **Policy**

Insulation Supply Company uses a process management approach to operate the organization successfully. Top management has established a customer-oriented organization by defining systems and processes that are clearly understood and continually improved in effectiveness and efficiency. Insulation Supply Company utilizes process measurements and data to determine the satisfactory performance of our quality management system.

### **4.1 General Requirements**

#### **Key System Components**

- Insulation Supply Company has established, documented, implemented, maintains, and continually improves a quality management system that meets the requirements of AS9120 Rev. A (ISO 9001:2008 ) Quality management systems - Requirements. (4.1[1])
- To accomplish the above, we identified the processes needed for the quality management system, their application, sequence and interaction throughout the organization. (4.1[2]a[1], 4.1[2]b[1]) The process map showing these interactions is located on our intranet "Quality-Web"
- Processes are established with defined criteria and methods needed to ensure both their effective operation and control. (4.1[2]c[1])
- Top management identifies and ensures all processes have adequate resources to support the operation and information to manage the process. (4.1[2]d[1])
- The data from the established process measures are analyzed to determine a plan of action that ensures the operation achieves planned results and identifies areas for continual improvement. (4.1[2]e[1], 4.1[2]f[1])
- All the identified processes are managed in accordance with the requirements outlined in the ISO Standard. (4.1[3])

## Responsibility

- All Department Managers
- Executive Management

## References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

## Related Procedures

### 4.2 Documentation Requirements

#### Key System Components

- The documents of our Quality Management System include this Quality Manual (4.2.1[1]b[1]) which states our Quality Policy and Quality Objectives(4.2.1[1]a[1]), the procedures required by ISO 9001:2008 and AS9120 (AS) Quality Management Systems – Requirements (4.2.1[1]c[1]). Also included are other documents needed to ensure a consistent and effective approach to the planning, operation and control of our processes(4.2.1[1]d[1]), associated records that validate our Quality Management System(4.2.1[1]e[1]) and **quality system requirements imposed by the applicable regulatory authorities**. (AS4.2.1[1]f[1]).
- Our Quality Manual defines the scope of the Quality Management System, including details of and the justification for [any] exclusions (4.2.2[1]a[1])
- The Quality Manual provides a brief description of the processes of the quality management system, how they are measured and what processes are linked to each other(4.2.2[1]c[1]). Where applicable, a procedure is created identifying the major responsibilities of individuals in the process (4.2.2[1]c[1]). **The relationship between the AS9120 and our documented procedures are shown.**
- Insulation Supply Company maintains documented procedures (4.2.3[3]) to define the controls over documents and data that relate to our QMS and product/service 4.2.3[1]). These controls apply to both internal and documents of external origin (4.2.3[3]f[1]).
- Control extends from the initial concept through review, approval, issuance and obsolescence(4.2.3[1]).
- Document access is controlled on a document-to-document basis for creation, editing, viewing and printing. Only those granted proper access will be able to make electronic transactions (4.2.3[1]).
- **Insulation Supply Company assures that our personnel have access to the quality management system and are aware of relevant procedures. Customers and/or regulatory authorities shall also have access to quality system management documentation.** (AS4.2.1[2] 1)
- Where documentation is held on electronic media, it is subject to back up procedures and storage control.
- A master list is available as a report to identify the current revisions of all controlled and approved documentation and is readily available (4.2.3[3]c[1])
- Documents and data are reviewed by authorized personnel for adequacy and approved by the designated final approval authority prior to use (4.2.3[3]a[1]).
- Up-to-date documentation such as referenced customer drawings, specifications and standards required for the effective function of the quality system is available at relevant locations (4.2.3[3]d[1]).
- Invalid and/or obsolete documents are promptly removed from points of issuance and use or otherwise prevented from unintended use, except as required for record retention (4.2.3[3]g[1]).
- Documents are controlled in our Electronic Document Control System (EDMS) to ensure they remain legible, identifiable (4.2.3[3]e[1]) and possess the proper review and approvals prior to issue (4.2.3[3]b[1]). Changes and

previous versions of business-critical documents are maintained in the EDMS. Access to these previous versions is restricted (4.2.3[1]).

- Insulation Supply Company establishes and maintains documented procedures for creating and handling records that document the performance of our QMS and demonstrate conformance to specified requirements (4.2.3[2], 4.2.4[1]).
- Records are identified, collected, indexed, accessed, filed, stored and maintained according to a documented procedure (4.2.4[3]).
- Records are readily available, legible and identifiable to the product and activity involved (4.2.4[2]).
- Records are maintained in a suitable environment to prevent damage or deterioration and prevent loss (4.2.4[3]).
- Record retention periods are established and recorded for each type of record (4.2.4[3]). Retention periods are considered "minimums" and expired records are eventually destroyed. They are retained as contractually required and/or required by regulatory agencies.
- AS9120 7.1.1 Configuration Management - Insulation Supply Company has a Configuration Management process appropriate to the product.

### Responsibility

- All Department Managers
- Management Rep

### References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

### Related Procedures

- QSP-7.1.3 Configuration Management
- QSP-4.2.102 Document Control – External Documents
- QSP-4.2.101 Document Control – Internal Documents
- QSP-4.2.103 Quality Records

## 5 Management Responsibility

### Policy

The foundation of our Quality Management System is the leadership, commitment and active involvement of our top management team. The top management team establishes the vision, policies and strategic objectives, develops trust with all interested parties through leading by example, participates in improvement projects, obtains feedback on the effectiveness and efficiency of the Quality Management System and creates an environment that encourages the involvement and development of people.

### 5.1 Management Commitment

#### Key System Components

- Top management is committed to the development, implementation and the continual improvement of the Quality Management System. Evidence of this commitment is provided: (5.1[1]);

- By ensuring all employees are aware of the importance of meeting all customer, statutory and regulatory requirements and the consequences to the organization for failing to meet these requirements (5.1[1]a[1]).
- Through the establishment of the quality policy(5.1[1]b[1]) and quality objectives(5.1[1]c[1]). Top management ensures quality objectives are established at each functional level and are related to the organizational quality objectives.
- By reviewing resource requirements and ensuring each process has the resources necessary to meet customer and product requirements(5.1[1]e[1]).
- By conducting management reviews at defined intervals to ensure feedback is received to determine the effectiveness and efficiency of the quality management system(5.1[1]d[1]).

### Responsibility

- All Department Managers
- Executive Management

### References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

### Related Procedures

- QSP-6.2.103 Human Resource Management
- QSP-6.3.101 Infrastructure
- QSP-5.6.101 Management Review

## 5.2 Customer Focus

### Key System Components

Top management ensures customer requirements are determined and met with the main focus of improving customer satisfaction(5.2[1]) This is accomplished by:

- identifying all interested parties of our organization. Interested parties include customers, end users of the product, employees, suppliers, investors and our local community (5.2[1]);
- identifying, understanding and satisfying the current and future needs and expectations of our customer s(5.2[1]);
  - To better understand the needs and expectations of our interested parties a process is defined to translate those needs and expectations into requirements, those requirements are communicated throughout the organization with a focus on improving the processes used to realize customer product (5.2[1]);
  - To satisfy customer and end-user requirements our organization assesses competition in the market, determines the key product characteristics, and identifies market opportunities, weaknesses and future competitive advantage (5.2[1]);
- identifying our employees needs and create an environment for personal development, work satisfaction and recognition (5.2[1]);

### Responsibility

- All Department Managers
- Executive Management

## References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

## Procedures

- QSP-8.2.101 Customer Concerns and Complaints

## 5.3 Quality Policy

### Key System Components

- Top management has created a Quality Policy that is appropriate to the purpose of the company and is used as a means for leading the organization toward continual improvement (5.3[1]a[1], 5.3[1]b[1]).
- The Quality Policy addresses our commitment to comply with customer requirements and improve the effectiveness of the quality management system (5.3[1]b[1]).
- The Quality Policy is communicated throughout the organization. Each Department Manager reviews the Quality Policy within their department to communicate how the policy applies to their specific function (5.3[1]d[1]).
- The Quality Policy is used as the basis for creating our organizational quality objectives. Each functional area creates quality objectives relevant to their function and to the organization's objectives (5.3[1]c[1]).
- The Quality Policy and Objectives are reviewed for continued suitability during our management review activities (5.3[1]e[1]).

### Responsibility

- All Department Managers
- Executive Management

## References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

## Related Procedures

- QSP-5.6.101 Management Review
- QSP-5.3.101 Quality Policy

## 5.4 Planning

### Key System Components

- Top management mandates quality objectives are established at relevant functional and levels within the organization (5.4.1[1]). These objectives are consistent with the quality policy and are measurable (5.4.1[2]). Progress toward these objectives is tracked and reviewed during our management review activities.

- When establishing the quality objectives, management gives consideration to current product and process performance, internal audit results, level of customer satisfaction, resources needed to meet the objectives and future needs of the industry.
- Top management plans the quality management system (QMS) in order to meet defined objectives and requirements (5.4.2[1]a[1]). When changes are proposed or implemented to the QMS, the advance planning ensures the integrity of the system is maintained (5.4.2[1]b[1]).

### Responsibility

- All Department Managers
- Executive Management

### References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

### Related Procedures

- Quality Planning

## 5.5 Responsibility, Authority and Communication

### Key System Components

- Top management defines and communicates the responsibilities and authorities necessary to implement, maintain and improve the effectiveness of the quality Management System (5.5.1[1]). The organization chart shows the interrelations of the organizations functions, this quality manual identifies the primary responsibilities and quality system procedures identify the related authorities within the quality management system (5.5.1[1]).
- The management representative reports to top management, through the management review process, the performance of the quality management system and any need for improvements (5.5.2[2]b[1]).
- The management representative is responsible for promoting the awareness of customer requirements throughout the organization and the potential consequences for not meeting these requirements (AS 5.5.2[2]c[1]), **and the organizational freedom to resolve matters pertaining to quality. (5.5.2[2]d[1]).**
- Various channels of communications are established within the organization to ensure necessary information is exchanged regarding the effectiveness of the quality management system (5.5.3[1]). Examples of such communication channels include notice boards, team meetings in the work area, email and other electronic means of communication (5.5.3[1]).

### Responsibility

- All Department Managers
- Executive Management
- Management Rep

### References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance

- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

## Related Procedures

n/a

## 5.6 Management Review

### Key System Components

- Top management reviews the quality management system at planned intervals ensuring its continued suitability, adequacy and overall effectiveness (5.6.1[1]). This review assesses opportunities for improvement, the need for changes in the system, and the continued validity of the quality policy and established objectives (5.6.1[2]). The results of these reviews are recorded and maintained (5.6.1[3]).
- Input for our management review activities is derived from many sources including, but not limited to reviewing the results of audits (5.6.2[1]a[1]), customer feedback( 5.6.2[1]b[1]), status of corrective and preventive actions(5.6.2[1]d[1]), improvement actions(5.6.2[1]g[1]), process measurements and controls (5.6.2[1]c[1]), performance toward objectives, supplier performance, competitive market analysis, items or actions from previous reviews(5.6.2[1]e[1]), financial effects of quality related activities and changes that could affect the QMS (5.6.2[1]f[1]).
- The results or output from our management review activities include decisions and actions related to the improvement of the quality management system and its processes (5.6.3[1]a[1]), improvements of the product related to customer requirements (5.6.3[1]b[1]), and associated resource needs (5.6.3[1]c[1]).
- The schedule for management review activity is coordinated with the timely submission of process data to facilitate the strategic planning process. Outputs of management review is communicated throughout the organization so employees can understand how these reviews leads to new objectives that will benefit the entire organization.

## Responsibility

- Executive Management
- Management Rep

## References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

## Related Procedures

- QSP-8.5.101 Corrective Action
- QSP-8.2.103 Internal Audits
- QSP-5.6.101 Management Review
- QSP-8.5.103 Preventive Action Procedure
- QSP-7.4.103 Supplier Performance

## Resource Management

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## Policy

Top management ensures that the resources necessary to the implementation of our business strategy and the achievement of our objectives are identified and made available.

### 6.1 Provision Of Resources

#### Key System Components

- Department Managers identify the resources needed to implement, maintain, and improve the effectiveness of their processes within the quality management system and to enhance their ability to meet customer requirements (6.1[1]a[1], 6.1[1]b[1]). Once identified these resource needs are submitted to top management for review and approval. When (if) the request is denied, top management identifies the impact on the process and the ability to meet identified objectives.

#### Responsibility

- All Department Managers
- Executive Management

#### References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

#### Related Procedures

- QSP-6.2.103 Human Resource Management
- QSP-6.3.101 Infrastructure

### 6.2 Human Resources

#### Key System Components

- Insulation Supply Company ensures that training needs are identified and training provided to all personnel performing activities affecting quality. Personnel are qualified based on appropriate education, skills, training, and/or experience (6.2.1[1]).
- The necessary competence is determined and an individual training plan is developed (6.2.2[1]a[1]). Education and training to achieve the required level of performance is conducted (6.2.2[1]b[1]). The results of the training are evaluated to determine effectiveness (6.2.2[1]c[1]). Employees are made aware of the relevance and importance of their assigned responsibilities and how they contribute to the success of the organization (6.2.2[1]d[1]).
- Records of employee training, education, experience and skills are maintained (6.2.2[1]e[1]).

#### Responsibility

- All Department Managers

#### References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

#### **Related Procedures**

- QSP-6.2.103 Human Resource Management

### **6.3 Infrastructure**

#### **Key System Components**

- In determining, providing and maintaining the infrastructure needed to achieve product conformity, consideration is given to the objective, function, performance, availability, and associated costs (6.3[1], 6.3[1]a[1], 6.3[1]b[1], 6.3[1]c[1]).
  - Maintenance methods are in place to ensure the infrastructure continues to meet our needs (6.3[1]).
- The infrastructure is evaluated annually in the strategic planning process to determine the continued suitability to meet customer requirements (6.3[1]).

#### **Responsibility**

- All Department Managers
- Executive Management

#### **References**

- AS9120 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

#### **Related Procedures**

- QSP-6.3.101 Infrastructure

### **6.4 Work Environment**

#### **Key System Components**

- Department Managers ensures the work environment has a positive influence on employee motivation and satisfaction(6.4[1]). A suitable work environment considers ergonomics, workplace location, hygiene and cleanliness, creative work methods and workplace safety (6.4[1]). The proper work environment contributes to the organization's ability to achieve conformity to product requirements (6.4[1]).

#### **Responsibility**

- All Department Managers

## References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

## Related Procedures

- QSP-6.3.101 Infrastructure

## 7 Product Realization

### Policy

Top management ensures the effective and efficient operations of realization and support processes, the interrelations of these processes and their impact on the ability and capability to satisfy the requirements of all interested parties.

### 7.1 Planning Of Product Realization

#### Key System Components

n/a

#### 7.1.1 Configuration Management

Insulation Supply Company does not design or produce our own products so configuration management of products is the responsibility of our customers. INSCO maintains customer drawings to ensure that correct revision of specifications are used in production and supply operations. See QSP-7.1.103.

#### 7.1.2 Control of Work Transfers

Insulation Supply Company does not transfer work to other facilities or suppliers. We do purchase completed parts on occasion. See Purchasing 7.4.

### 7.2 Customer Related Processes

#### Key System Components

- Insulation Supply Company ensures requirements received from the customer are fully understood and current capability (7.2.2[3]c[1]) exists to meet aspects of the customer requirements prior to acceptance of the contract. Requirements are reviewed (7.2.2[1]) prior to acceptance of the contract or order (7.2.2[2]). This review ensures:
  - Requirements are adequately defined and documented (7.2.2[3]a[1]).
  - Every attempt is made to understand how the customer intends to use the product, the environment it will be exposed to and other unstated requirements (7.2.2[5]). This is accomplished through our knowledge of the industry and the various applications of our product. This assures that defined requirements are met.
- The requirements for orders received by verbal means are agreed before their acceptance (7.2.2[5]).
  - Requirements differing from the quote are resolved prior to contract acceptance (7.2.2[3]b[1], 7.2.2[6]). Requirements are entered into our order tracking software system. Appropriate personnel have access to this system and are notified when changes occur (7.2.2[6]).

- Contract amendments are reviewed and approved through a similar process. Upon acceptance of contract amendments, affected functions are advised of the impact (7.2.2[6]).
- Records of contract reviews and resulting actions are kept in our order tracking software system (7.2.2[4]).
- Customer Service is the primary function designated for communicating with the customer in relation to product information (7.2.3[1]a[1]), changes to requirements (7.2.3[1]b[1]) and customer feedback (7.2.3[1]c[1]).
- Risks (new technology, short lead time) have been evaluated. (AS 7.2[3]d[1]).

### Responsibility

- Inside Sales Manager

### References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

### Related Procedures

- QSP-7.2.101 Contract Review

## 7.3 Design and Development

### Key System Components

- Our role as a distributor is to provide product as determined by the customers' designs. While we occasionally suggest possible solutions, design is the responsibility of the customer.

### Responsibility

- Customer

### References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance

### Related Procedures

n/a

## 7.4 Purchasing

### Key System Components

- Insulation Supply Company maintains documented procedures to ensure products and services obtained from outside suppliers conform to specified requirements (7.4.1[1]).
  - Supplier controls depend upon the type of product, impact on final product quality and previous history of supplier (7.4.1[4], 7.4.1[2]). These controls are described in more detail in related procedures (7.4.1[5]). Suppliers who are certified to ISO 9001 requirements by third parties are exempt from the supplier evaluation process.

- Suppliers are selected based on customer demand. Suppliers are added to our approved supplier list after an evaluation based on their ability to meet requirements are verified on the products supplied (7.4.1[3]), (AS7.4.1[6]a[1]). **If it is found that a supplier does not meet our requirements, the supplier will be removed from our approved supplier list (placed on inactive) until such time as they respond to a corrective action request and we and our customer find the proposed preventive action(s) to be satisfactory (AS7.4.1[1]c[1]). The purchasing manager and assigned designee(s) have the responsibility to approve and disapprove the use of sources (AS7.4.1[1]e[1])**
- Supplier performance is reviewed, at a minimum, semi-annually and considered during management review (7.4.1[4]), (AS7.4.1[7]b[1]). Criteria used to evaluate supplier performance fall into four categories, cost, quality, delivery performance and customer preference (7.4.1[4]). As a distributor, we are often required to place the greatest evaluation emphasis on customer preference. **Insulation Supply Company is responsible for the quality of all products purchased from suppliers, including customer-designated sources (AS7.4.1[3]). Insulation Supply Company only uses customer-approved special process sources (AS7.4.1[1])**
- Records of supplier evaluations and any resulting actions are maintained (7.4.1[5]).
- Purchasing documents clearly describe the products ordered (7.4.2[1]) and where applicable requirements for approval of product, processes, equipment (7.4.2[1]a[1]), requirements for qualifications of personnel (7.4.2[1]b[1]), and quality management system requirements (7.4.2[1]c[1]). Specifically, the following information is included where appropriate:
- **the name or other positive identification, and applicable issues of specifications, drawings, process requirements, inspection instructions and other relevant technical data (AS7.4.2[1]d[1]), \*requirements for design, test, examination, inspection and related instructions for acceptance by Insulation Supply Company (AS 7.4.2[1]e[1]), \*requirements for test specimens e.g., production method, number, storage conditions) for design approval, inspection, investigation or auditing (AS7.4.2[1]f[1]) \*requirements relative to supplier notification to organization of nonconforming product and arrangements for Insulation Supply Company approval of supplier nonconforming material (AS 7.4.2[1]g[1]) \*requirements for the supplier to notify Insulation Supply Company of changes in product and/or process definition and, where required, obtain Insulation Supply Company approval (AS7.4.2[1]h[1]) \*right of access by Insulation Supply Company, our customer, and authorities to all facilities involved in the order and to all applicable records (AS 7.4.2[1]i[1]), and \*requirements for the supplier to flow down to sub-tier suppliers the applicable requirements in the purchasing documents, including key characteristics where required (AS 7.4.2[1]j[1])**

Certificate of Conformance or Certificate of Analysis is accepted in place of product inspection data.

- A receiving inspection process is in place to verify products conform to specified purchasing requirements (7.4.3[1]). When a Certificate of Conformance or Analysis is provided, the amount and type of receiving inspection is modified.
  - **Where test reports are used to verify purchased product, data is accepted per applicable specifications (AS 7.4.3[3]).**
  - **Tests for raw materials are periodically evaluated (AS 7.4.3[4]).**
  - **Where verification activities are delegated to the supplier, delegation is defined and a register of delegations will be maintained (AS 7.4.3[5]).**
  - **When specified by contract, customer's representatives may verify product at our, or our suppliers premises (AS 7.4.3[7]).**

## Responsibility

- Purchasing Supervisor or Manager

## References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

## Related Procedures

### 7.5 Production And Service Provision

#### Key System Components

- Insulation Supply Company ensures that production processes are planned, analyzed and qualified to ensure quality performance (7.5.1[1]). Processes are carried out under the following controlled conditions:
  - The use of suitable production equipment is used to carry out product realization processes (7.5.1[2]c[1]). **When applicable, consideration is given to the design, manufacture and use of tooling so that variable measurements can be taken, particularly for key characteristics and special processes (AS7.5.1[1]).**
  - **Provisions are made for the prevention, detection and removal of foreign objects (AS7.5.1[1]i[1]).**
  - **Utilities and supplies (air, primarily) are monitored to eliminate possible negative impacts on product quality (AS7.5.1[1]j[1]).**
  - **All product is accounted for during value-added operations (e.g. parts quantities, split orders, nonconforming product) (AS7.5.1[1]g[1]).**
  - the availability of information describing the characteristics of the product (7.5.1[2]a[1]), **including criteria for workmanship (AS7.5.1[1]k[1]). Process controls are established where key characteristics have been identified (AS7.5.1[1]).**
  - Documented instructions are accessible at operator workstations for operation and process monitoring(7.5.1[2]b[1]). **In-process verification points are identified when adequate verification of conformance cannot be performed at a later stage of realization (AS7.5.1[1]).**

**NOTE: These processes are frequently referred to as special processes (AS7.5.2). Criteria for the review and approval of these special processes are defined solely by the customer (AS7.5.2[1]a[1]). The customer also defines methods or procedures used in controlling significant operations and parameters of these special processes (AS7.5.2[1]c[1]).** Insulation Supply Company does not perform work requiring special processes. We therefore take exception to this requirement.

- Having the correct monitoring and measuring devices available for use (7.5.1[2]d[1]).
- Implementing the proper process measurements to control critical process parameters (7.5.1[2]e[1]).
- Implementation of product release and delivery activities(7.5.1[2]f[1]).
- **Evidence that all manufacturing and inspection operations have been completed as planned, or as otherwise documented or authorized in maintained. (AS 7.5.1[1]h[1]).**
- **Production Documentation: Production operations are carried out in accordance with approved data. This data contains as necessary (AS 7.5.1.1[1]:**
- **drawings, parts lists, process flow charts including inspection operations, production documents (e.g., traveler, router, work order); and inspection documents (see 8.2.4.1), (AS7.5.1.1[1]a[1]) and**
- **a list of specific or non-specific tools and numerical control (NC) machine programs (if applicable) required and any specific instructions associated with their use. (AS 7.5.1.1[1]b[1])**
- **Control of Production Process Changes (AS 7.5.1.2[1]:**

- **Persons authorized to approve changes to production processes shall be identified (AS 7.5.1.2[1]).**
- **The organization shall identify and obtain acceptance of changes that require customer and/or regulatory authority approval in accordance with contract or regulatory requirements (AS 7.5.1.2[2]).**
- **Changes affecting processes, production equipment, tools and programs shall be documented. Procedures shall be available to control their implementation (AS 7.5.1.2[3]).**
- **The results of changes to production processes shall be assessed to confirm that the desired effect has been achieved without adverse effects to product quality (AS 7.5.1.2[4]).\*\*\***
- **Control of Production Equipment, Tools and Numerical Control (N.C.) Machine Programs:**
- **Production equipment, tools and programs shall be validated prior to use and maintained and inspected periodically according to documented procedures (AS 7.5.1.3[1]).**
- **Validation prior to production use shall include verification of the first article produced to the design data/specification (AS 7.5.1.3[2]).**
- **Storage requirements, including periodic preservation/condition checks, shall be established for production equipment or tooling in storage (AS 7.5.1.3[3]).**
- **New production processes and other associated production equipment is properly tested and validated prior to production usage (7.5.2[1]). Process measurements are identified for monitoring and measuring the process and process data is analyzed to make necessary improvements or changes to the process (7.5.2[3]a[1], 7.5.2[3]c[1]).**
- **Control of Work Transferred, on a Temporary Basis, Outside the Insulation Supply Company's Facilities:**
- **When planning to temporarily transfer work to a location outside Insulation Supply Company's facilities, Insulation Supply Company shall define the process to control and validate the quality of the work (AS 7.5.1.4[1]). We do not, however, transfer work to locations outside of Insulation Supply Company and have no future plans to do so.**
- **Insulation Supply Company has a defined process to ensure that products, whole or in part (7.5.5[3]), are controlled through handling, storage, packaging, preservation, and delivery in such a manner that product integrity is maintained (7.5.5[1]).**
  - **Preservation of product shall also include, where applicable in accordance with product specifications and/or applicable regulations, provisions for (AS7.5.5[4]):**
  - **cleaning (AS7.5.5[4]a[1]);**
  - **prevention, detection and removal of foreign objects (AS 7.5.5[4]b[1]);**
  - **special handling for sensitive products (AS 7.5.5[4]c[1]);**
  - **marking and labeling including safety warnings (AS 7.5.5[4]d[1]);**
  - **shelf life control and stock rotation (AS 7.5.5[4]e[1]);**
  - **special handling for hazardous materials (AS 7.5.5[4]f[1]).**
  - **Insulation Supply Company ensures that documents required by the contract/order to accompany the product are present at delivery and are protected against loss and deterioration (AS 7.5.5[5]).**
  - **Designated storage areas are maintained that utilize appropriate methods for preservation, segregation, receipt, and dispatch (7.5.5[2]). Stock is periodically assessed for deterioration. Packaging, preservation, storage, and shipping processes are monitored and controlled to ensure compliance to customer requirements.**
- **Insulation Supply Company ensures products maintain identification and traceability through product realization.**
  - **A defined process is established to maintain the identification of the product through each stage of receipt, processing, and delivery (7.5.3[1]).**
  - **All products sold by Insulation Supply Company carry a unique identification that is maintained throughout all phases of the distribution and value-added processes including \*\*\*delivery or scrap and is maintained for the life of the product or per customer contract (.7.5.3[3]). **This identification is traceable to the batch level. (AS 7.5.3[5]a[1], (AS 7.5.3[5]b[1])****

- for an assembly, the identity of its components and those of the next higher assembly to be traced (AS 7.5.3[5]c[1]).
- for a given product, a sequential record of its production (manufacture, assembly, inspection) to be retrieved (when required by customer contract).(AS7.5.3[5]d[1]).
- AS9120C 7.5.1.5 covers servicing. Insulation Supply Company does not provide services such as are described in the specification. We therefore take exception to this requirement.

\*\*\*\*\*responsibility\*\*\*\*\*reference\*\*\*\*\*related\*\*\*\*\*

## 7.6 Control And Monitoring Of Measuring Devices

### Key System Components

- Insulation Supply Company maintains documented procedures to ensure that inspection, measuring and test equipment is controlled, calibrated, handled, stored and maintained. This equipment is consistent with the required measurement capability. This capability is verified.
  - During the quality planning process for a new product, the product characteristics measurements and its related frequency are identified (7.6[1]). The proper monitoring and measuring devices to be used in capturing the measurements are identified during this process (7.6[1]).
  - Insulation Supply Company maintains a defined process to ensure that inspection, measuring and test equipment is controlled, calibrated, adjusted (7.6[3]b[1]), handled, stored and maintained (7.6[3]e[1]). **Measuring equipment is recalled per a defined method (AS 7.6[4]f[1]).** This equipment is consistent with the required measurement capability and the methodology used to collect the data is consistent with the monitoring and measurement requirements(7.6[2]). This capability is verified and recorded (7.6[6]).
  - Environmental conditions are maintained so as to ensure the suitability for calibrations, inspections and tests being carried out (AS 7.6[4]).
  - A process is defined for the calibration of inspection, measuring and test equipment. Acceptance criteria and corrective action are also included in this process.
  - Inspection, measuring and testing equipment is identified, calibrated and adjusted at prescribed intervals or prior to use against certified equipment traceable to nationally recognized standards (7.6[3]a[1]). When no standards exist, the basis for calibration is documented (7.6[3]a[1]). prescribed intervals are established for each testing medium and records of results are maintained (7.6[6], (AS 7.6[2]).

**NOTE Monitoring and measuring devices include, but are not limited to: test hardware, test software, automated test equipment (ATE) and plotters used to produce inspection data. It also includes personally owned and customer supplied equipment used to provide evidence of product conformity.**

- If equipment is found to be out of calibration, validity of prior inspections is assessed appropriate action is initiated (7.6[4]). Handling, preservation and storage practices ensure that accuracy is maintained.
- A master list of all gages, measuring and test equipment is maintained. Calibration records are maintained (7.6[6]). (AS 7.6[2]).

### Effectiveness

The effectiveness of our calibration process is measured by the occurrence of out-of-calibration conditions discovered during the calibration process.

### Responsibility

- Quality Manager

## References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

## Related Procedures

- QSP-7.6.102 Inspection Equipment Control, Maintenance and Calibration

## 8 Measurement, Analysis And Improvement

### Policy

Management ensures proper data is used for making fact-based decisions. This is accomplished by ensuring effective and efficient measurement, collection and validation of data and its intended use for adding value to the organization.

### 8.1 General

#### Key System Components

- Insulation Supply Company plans and implements improvement processes by monitoring process measurements and analyzing process data (8.1[1]). This method is used to demonstrate conformity of the product (8.1[1]a[1]), the quality management system (8.1[1]b[1]) and to continually improve the effectiveness of the system (8.1[1]c[1]).
  - In order to utilize this method, we have determined the tools, methodology and statistical techniques we use to monitor and measure our processes and product/service (8.1[2]). We have also determined to what extent we utilize these tools, methodologies and statistical techniques to monitor and measure our processes and product/service (8.1[2]).

Insulation Supply Company identifies and uses statistical techniques where applicable, to provide information for establishing, controlling, and verifying process capability and product characteristics. Management ensures proper data is used for making fact-based decisions. This is accomplished by ensuring effective and efficient measurement, collection and validation of data and its intended use for adding value to the organization.

#### NOTE

According to the nature of the product and depending on the specified requirements, statistical techniques may be used to support:

- design verification (e.g., reliability, maintainability, safety);
- process control;
- selection and inspection of key characteristics;
- process capability measurements;
- statistical process control;
- design of experiment;
- inspection - matching sampling rate to the criticality of the product and to the process capability;
- failure mode and effect analysis. (AS 8.1)

### Responsibility

- All Department Managers

- Executive Management

## References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

## Related Procedures

n/a

## Monitoring And Measurement

### Key System Components

- Sales monitors information relating to customer perception as to whether Insulation Supply Company has fulfilled its customer requirements (8.2.1[1]). This information is submitted for management review. Various methods are used and examples include surveys, feedback relating to the product, market needs, and customer requirements compared to contract information (8.2.1[2]).
- Insulation Supply Company has a documented process established for planning and performing internal audits (8.2.2[1]). Internal audits are conducted periodically to verify conformance to our QMS and International Standards (8.2.2[1]a[1]) as well as assess the operational effectiveness of the quality system (8.2.2[1]b[1]).
  - Our audit plans give consideration to the status and importance of the activity to be audited and results of previous audits (8.2.2[2]). Each planned audit has a scope, criteria and method defined (8.2.2[3]).
  - Audits are conducted by personnel who are independent of responsibility in the areas being audited (8.2.2[4]) and do not audit their own work (8.2.2[5]).
  - A documented procedure describes the responsibility for planning, conducting, recording the results and reporting the results of audits (8.2.2[6]).
  - Results of the audits are communicated to management who are responsible for the area being audited and timely action is taken to eliminate the cause of identified nonconformity (8.2.2[7]).
  - Corrective action taken is recorded and verified for effectiveness. The results of this verification are recorded. The results of the audit activities, corrective action taken and the results of verification are submitted to the management representative to be included in management review activities (8.2.2[8]).
  - The internal auditing process is the primary method used to measure and determine the overall effectiveness of the quality management system (8.2.3[1], 8.2.3[2]). When system nonconformity is identified, correction and corrective activity is taken to ensure continued product conformity (8.2.3[3]).
  - **Detailed tools and techniques such as check sheets, process flowcharts, or any similar method to support audit of the quality management system requirements are used. The acceptability of the selected tools will be measured against the effectiveness of the internal audit process and overall organization performance. (AS 8.2.2[8]) Internal audits shall also meet contract and/or regulatory requirements. (AS 8.2.2[9]). In the event of process nonconformity, the organization shall:**
    - **a. take appropriate action to correct the nonconforming process, (AS8.2.3[4]a[1])**
    - **b. evaluate whether the process nonconformity as resulted in product nonconformity (AS 8.2.3[4]b[1]), and**
    - **c. identify and control the nonconforming product in accordance with clause (8.3). (AS 8.2.3[4]c[1])**

- Insulation Supply Company maintains defined processes for inspection and testing to verify that specified requirements for products/services are met (8.2.4[1]). The requirements for inspection and testing are detailed and necessary records are identified. Review, analysis and recording of process data provide us with evidence of product conformance (8.2.4[3]).
  - Product characteristics are measured and monitored during stages of product realization where it is possible for this to occur as defined in our control plans (8.2.4[2]).
  - **When key characteristics have been identified, they shall be monitored and controlled (AS8.2.4[3]).\*\*\***
  - Material is not released prior to verification unless positive recall is provided (8.2.4[5], AS8.2.4[7]). Release under positive recall does not preclude verification activities. No product is dispatched until all required inspections and tests are carried out (8.2.4[5]). Insulation Supply Company prefers to not ship uninspected product under any circumstances.
- **Inspection Documentation: Measurement requirements for product or service acceptance are be documented (AS8.2.4.1[1]). This documentation is part of the production documentation, and includes;**
  - a. **criteria for acceptance and/or rejection (AS8.2.4.1[2]a[1]),**
  - b. **where in the sequence measurement and testing operations are performed (AS8.2.4.1[2]b[1]),**
  - c. **a record of the measurement results (AS8.2.4.1[2]c[1]), and**
  - d. **type of measurement instruments required and any specific instructions associated with their use (AS 8.2.4.1[2]d[1]).**
- **Test records show actual test results when required by contract, specification or acceptance test plan (AS 8.2.4.1[3]). Where required to demonstrate product qualification Insulation Supply Company shall ensure that records provide evidence that the product meets the defined requirements (AS 8.2.4.1[4]).**
- **First Article Inspection: Insulation Supply Company's system provides a process for the inspection, verification, and documentation of a representative item from the first production run if a new part, or following any subsequent change that invalidates the previous first article inspection result. (AS 8.2.4.2[1])**
- **When required, Insulation Supply Company shall provide the customer with evidence of conformity (AS 8.2.5[1]).**
- **When splitting product, copies of original documents shall be annotated with the following information: amount delivered relative to amount received, purchase order number, customer's name and supplier's name (AS 8.2.5[2]).**
- **Where there a formal agreement with the customer ( agreed in writing in advance of order acceptance) Insulation Supply Company can deliver a certifying statement that references the original manufacturer's certification of conformity and documents that are retained and traceable; and, if applicable, that defined requirements have been met throughout our processes (AS 8.2.5[3]).**

## Responsibility

- Quality Manager

## References

- ISO 10011-1 – Guidelines for auditing quality systems – Part 1: Auditing ISO
- ISO 10011-2 Guidelines for Auditing Quality Systems – Part 2 – Guidelines for Auditors, ISO
- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

## Related Procedures

- QSP-8.2.101 Customer Concerns and Complaints
- QSP-7.5.107 Inspection and Test Status
- QSP-8.2.103 Internal Audit Procedure

## 8.3 Control Of Nonconforming Product

### Key System Components

- Insulation Supply Company maintains documented procedures to ensure that product/service that does not conform to specified requirements is prevented from unintended use. Control provides for identification, documentation, evaluation, segregation (when practical), disposition and notification of areas affected. Active programs to reduce scrap and rework are in effect.
  - Responsibilities for review and disposition authority are clearly defined.
  - Nonconforming product is reviewed in accordance with our defined process
  - Action is taken to eliminate the cause of the nonconformity (8.3[3]a[1]).
  - Rework/repair of the nonconforming product (8.3[3]b[1]);
    - accept the product "as is," only if, when required, customer authorization is obtained(8.3[3]b[1]);
    - reject or scrap the product(8.3[3]b[1]).
- **Insulation Supply Company does not use dispositions of use-as-is or repair, unless specifically authorized by the customer, if;**
  - **the product is produced to customer design, or**
  - **the nonconformity results in a departure from the contract requirements. Unless otherwise restricted in the contract, Insulation Supply Company-designed product which is controlled via a customer specification may be dispositioned by Insulation Supply Company as use-as-is or repair, provided the nonconformity does not result in a departure from customer-specified requirements. (AS 8.3[5])**
- Nonconforming product that is repaired or reworked is re-inspected to determine it meets all specified requirements(8.3[5]).
- **Product dispositioned for scrap is positively controlled, until physically rendered unusable. (AS 8.3[6])** Material shipped under a customer-authorized deviation or waiver is properly identified and tracked per customer requirements. Unless otherwise specified, the accepted nonconformity, and the condition upon shipment is re-documented in the shipper and the operator instruction (traveler).
- Records of the product nonconformance and the resulting actions are maintained (8.3[4]). This includes concessions or waivers obtained from customers (8.3[4]).
- When system nonconformity is identified, correction and corrective activity is taken to ensure continued product conformity (8.2.3[3]).
- **In addition to any contract or regulatory authority reporting requirements, Insulation Supply Company's system provides for timely reporting of delivered nonconforming product that may affect reliability or safety (AS 8.3[10]). Notification shall include a clear description of the nonconformity, which includes as necessary parts affected, customer and/or organization part numbers, quantity, and date(s) delivered (AS 8.3[11]).**

**NOTE Parties requiring notification of nonconforming product may include suppliers, internal organizations, customers, distributors, and regulatory authorities. (AS 8.3)**

## Responsibility

- Quality Manager

## References

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- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

#### Related Procedures

- QSP-8.5.101 Corrective Action and Problem Solving
- QSP-8.3.101 Control of Nonconforming Product

### 8.4 Analysis Of Data

#### Key System Components

- A process is defined to collect and analyze system data from process monitoring and measurement and other relevant sources to demonstrate the suitability and effectiveness of the quality management system (8.4[1], 8.4[2]). The data used for analysis provide information relating to customer satisfaction (8.4[3]a[1], product conformance (8.4[3]b[1], suppliers (8.4[3]d[1], and trends to identify preventive actions (8.4[3]c[1]).

#### Responsibility

- All Department Managers

#### References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements
- INSCO Quality Web Intranet – <http://insco.local/quality-web>

#### Related Procedures

n/a

### 8.5 Improvement

#### Key System Components

- Insulation Supply Company takes a proactive approach to continual improvement. Insulation Supply Company continually looks for ways to improve our operations rather than wait for a problem to occur and then implement system improvement (8.5.1[1]). Our quality policy and objectives brings focus to our continual improvement efforts and through the use and proper analysis of audit results, process data, corrective and preventive action and management review improvements are made in the system before problems occur (8.5.1[1]).
- Insulation Supply Company maintains documented procedures for implementing corrective and preventive action (8.5.2[3], 8.5.3[3]). Actions taken are commensurate with the problems identified (8.5.2[2]) and their impact (8.5.3[2]).
- Corrective action practices include:
  - effective handling of customer complaints and reports of nonconformities (8.5.2[3]a[1];
  - investigating and documenting the causes of nonconformance (8.5.2[3]b[1] and the action needed to prevent recurrence (8.5.2[1], 8.5.2[3]c[1];

- the analysis of processes, work operations, concessions, quality records, customer complaints, and returned product to detect and eliminate potential causes of the nonconformities (8.5.2[3]d[1];
- verification corrective actions are taken and are effective (8.5.2[3]f[1]).
  - **flow down of the corrective action requirement to a supplier, when it is determined that the - supplier is responsible for the root cause (AS8.5.2[3]g[1]), and**
  - **specific actions where timely and/or effective corrective actions are not achieved (AS8.5.2[3]h[1]).**
- Preventive action includes:
  - maintaining and utilizing information on performance to detect, analyze and eliminate potential causes of nonconformities (8.5.3[1], 8.5.3[3]a[1], 8.5.3[3]b[1]);
  - determining and planning the steps needed to improve and obtaining customer approval where needed (8.5.3c[1]);
  - implementing the plan and verifying the results (8.5.3c[1]).
  - submit relevant information for management review activities (8.5.3[3]e[1]).
- Records of corrective and preventive action activities and results are kept (8.5.2[3]e[1], 8.5.3[3]d[1]).

## Responsibility

- All Department Managers
- Executive Management
- Management Rep

## References

- AS 9100 Quality Systems – Aerospace – Model for Quality Assurance
- ISO 9000 – Quality Management Systems – Fundamentals and Vocabulary
- ISO 9001 – Quality Management Systems Requirements
- ISO 9004 – Quality Management Systems – Guidelines for Performance Improvements

INSCO Quality Web Intranet – <http://insco.local/quality-web>

## Related Procedures

- QSP-8.5.101 Corrective Action and Problem Solving
- QSP-8.2.101 Customer Concerns and Complaints
- QSP-8.5.103 Preventive Action Procedure

## Revision Notes:

### Revision A.5:

- Clarifies Clause 7 exceptions (see Scope).
- Moves the document out of Powerway® and into Microsoft Word® to allow editing.
- Changes the document format to improve readability.

### Revision C:

- Changed to single alpha revision code
- Changed QSP numbers to current format (AS9120 5 clause vs. ISO 9001 20 element)3
- Changed from <http://s2k3/quality-web> to <http://insco.local/quality-web>
- Changed formatting various locations to help readability
- Removed “\*\*\*” and replaced with **bold text**.

- *Added “The paragraphs required by AS 9100 that are not in ISO 9000:2008 are shown in bold. The referenced numbers in parantheses and brackets are the relevant ISO or AS paragraph numbers.”*
- *QSP-8.4.101 Statistical Methods*

*Revision D:*

- *Updates specification references from*
  - *ISO 9000-2004 to ISO 9000-2005*
  - *ISO 9001-2000 to ISO 9002-2008*
  - *Removed references to AS 9100 7.1 and 7.5.2 from QPM section 7.5*

*Revision E:*

- *Adds section 7.1.1 – Project Management and 7.1.2 – Risk Management*
- *Fixes reference to incorrect and obsolete revisions of AS9120 and ISO 9000*
  - *(Some references were fixed at a later date without referencing a new rev level)*

*Revision F:*

- *Changed objectives so they are measurable*
- *Added process measurements to all 12 core processes listed*
- *Described calibration effectiveness*

*Revision G:*

- *Removed references to AS 9100 and replaced them with AS 9120.*
- *Added missing section 8.2.5, Evidence of Conformity.*