



# Tronair Quality Manual

## QA Manual 001

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Approved by: Patrick Finch

Conforms to ISO 9001:2015

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## **2.0 COMPANY PROFILE**

Tronair is a manufacturer of ground support equipment with research, engineering and marketing activities aimed at one goal: The creation of quality ground support equipment at a reasonable cost.

The company was formed in 1972 to supply equipment to the emerging corporate business jet and turbo-prop market. The high growth and demands of the market gave Tronair the opportunity to develop a wide array of ground support equipment products. The experience gained has allowed the company to expand into the regional and commercial airline market as well as several government and military agencies.

### **2.1 Quality Assurance**

A complete quality assurance program is in place conforming to the concepts of ISO 9001:2015. Systems and procedures cover all products throughout the plant, including procurement, receiving, material storage, manufacturing, testing, packaging and shipping.

### **2.2 Engineering**

Core technologies include Mechanical, Structural, Hydraulic, Pneumatic and Electrical design. Degreed Engineers and Designers use state of the art design software to develop cost effective products that emphasize simplicity and serviceability.

### **2.3 Products**

Not limited to one product line, Tronair manufactures many items of ground support equipment. Current products include:

Towbars	Deicing Equipment
Hydraulic Jacks	Lavatory Service Equipment
Work Stands	Ground Power Units
Hydraulic Power Units	Transport Carts
Hydraulic Servicing Units	Tire Bead Breakers
Defueler	Cabin Pressurization Units
Engine Stands	Oxygen Booster
Engine Slings	Nitrogen Booster
Service Cranes	Turbine Engine Compressor Washers
Tail and Wings Stands	Nitrogen/Oxygen Bottle Carts
Towbarless Tugs	

### **3.0 QUALITY**

#### **3.1 Quality Mission Statement**

We, the employees of Tronair, are committed to being a global, innovative provider of quality aircraft ground support equipment for the aerospace industry.

It is our policy to design and to manufacture products efficiently, perform services as specified and deliver products on time.

We are dedicated to working together, employing our technical knowledge and utilizing the most current technology in our products and business systems.

#### **3.2 Quality Policy**

Tronair will achieve customer satisfaction by continuous measurement and improvement of our processes and systems to meet or exceed customer requirements and expectations.

#### **3.3 Quality Policy Statement**

The objective of the Company is to supply products that are fit for use and have the desired quality in accordance with customer requirements and specifications. Our customers expect safe, reliable and optimum cost products delivered on time.

To achieve the above objective and satisfy the customer's expectations, the Company is totally committed to implementing and maintaining a Quality Management System based on ISO 9001:2015.

Quality problems arising in various areas are to be identified and resolved with speed, technical efficiency and economy. We shall focus our resources, both technical and human, towards the prevention of quality deficiencies.

The successful operation of the system relies upon the co-operation and involvement of personnel at all levels. Our commitment to quality will ensure the continued success of our Company and the satisfaction of customers and staff.

The Quality Assurance Manager is authorized to ensure that the requirements of this Quality Management System are implemented. Any problems that cannot be resolved between departments or personnel shall be brought to the attention of the President/CEO for final resolution.

#### **3.4 Quality Manual Control**

The Quality Assurance Manager is responsible for the administration, control, review and distribution of the Quality Manual and Procedures.

Revisions are identified by numbers 00, 01, 02, 03, etc. The latest copy of the quality manual is stored in the controlled and secured document database.

Controlled copies are available for company personnel and to customers, as required. The controlled copy number will be stamped in red on the cover page.

Copies issued to external organizations or personnel are generally uncontrolled. These manuals shall be the current issue and revision. An uncontrolled copyholder will not receive future revisions or issues.

### 3.5 Terms and Definitions

Tronair adopts the following terms and definitions within its Quality Management System. Where no definition is provided, the company typically adopts the definitions provided in **ISO Quality Management – Fundamentals and Vocabulary**. In some cases, specific procedures or documentation may provide a different definition to be used in the context of that document; in such cases, the definition will supersede those provided for in this Quality Manual or ISO 9000.

#### 3.5.1 General Terminology

**Product:** The result of activities or processes. The term "product" is used throughout the Quality Management System documentation to denote as appropriate, "hardware", software, processed material and service or a combination thereof and shall apply to "intended product" only.

**Quality Management System:** The organizational structure, responsibilities, procedures, processes and resources for implementing Quality Management.

**Sub-contractor:** Person or company engaged by Tronair, Inc. to supply or manufacture any of the work included in Tronair, Inc.'s scope of work. Sub-contractors include suppliers and vendors.

**Document** – written information (procedure, work instruction, flowchart, other) used to describe how an activity is done.

**Record** – captured evidence of an activity having been done.

#### 3.5.2 Risk-Based Thinking Terminology

**Risk:** Negative effect of uncertainty

**Opportunity:** Positive effect of uncertainty

**Uncertainty:** A deficiency of information related to understanding or knowledge of an event, its consequence, or likelihood. (Not to be confused with measurement uncertainty.)

#### 3.5.3 Nonconforming Product Terminology

**Rework:** Efforts to bring nonconforming product into conformance through additional operations that do not alter the original design of the product.

**Repair:** Efforts to bring nonconforming product into conformance through additional operations that alter the original design of the product; this may be through the addition of material not specified in the original design, or through altering pre-existing design features.

**Scrap:** The discard of nonconforming product in lieu of rework or repair.

**Reject / Rejected:** A nonconformance or nonconforming product in need of Rework, Repair or Scrap.

## 4.0 CONTEXT OF THE ORGANIZATION

### 4.1 Understanding the Organization and Its Context

Tronair has reviewed and analyzed key aspects of itself and its stakeholders to determine the strategic direction of the company. This requires understanding internal and external issues that are of concern to Tronair and its interested parties (per 4.2 below). Such issues are monitored and updated as appropriate, and discussed as part of management reviews.

### 4.2 Understanding the Needs and Expectations of Interested Parties

The issues determined per 4.1 above are identified through an analysis of risks facing Tronair and its interested parties. “Interested parties” are those stakeholders who receive our Products or Services or who may be impacted by them, or those parties who may otherwise have a significant interest in our company.

This information is then used by senior management to determine the company’s strategic direction. This is defined in records of management review, and periodically updated as conditions and situations change.

### 4.3 The Scope of the Quality Management System

Based on an analysis of the above issues of concern, interests of stakeholders, and in consideration of its products and services, Tronair has determined the scope of the management system as follows:

To demonstrate its ability to be a **Full Service, Design, Manufacture, and Provider of Support Equipment for the Aerospace and Defense Industries** and to consistently provide products that meet customer and applicable regulatory requirements (ref: 2.0 – 2.3). To enhance customer satisfaction through the:

- a) Effective application of the QMS (ref: Sec 3.0)
- b) Processes for continual improvement of the QMS.
- c) Assurance of conformity to customer and applicable statutory and regulatory requirements.
- d) Reduction in waste, during manufacturing, through reduced rejects, effective corrective action and improvements in process understanding and compliance.
- e) To assist in the creation of an effective knowledge database for the consistent provision of product and service, and for business continuity purposes

The Quality Management System is based on the applicable requirements of ISO 9001:2015.

#### 4.3.1 Application

The Quality Management System described in this manual is applicable to all work undertaken by Tronair, Inc.

The quality system applies to all processes, activities and employees within the company. The facility is located at:

1 Air Cargo Pkwy East.  
Swanton, Ohio 43558

*The Note: “business processes” such as accounting, employee benefits management and legal activities are out of scope of the QMS.* 4.4 Quality Management System and Its Processes

#### 4.4.1 Process Identification

Tronair has adopted a process approach for its management system. By identifying the top-level processes within the company, and then managing each of these discretely, this reduces the potential for nonconforming products discovered during final processing or after delivery. Nonconformities and risks are identified in real time, by actions taken within each of the top-level processes.

*Note: not all activities are considered “processes” – the term “process” in this context indicates the activity has been elevated to a higher level of control and management oversight. The controls indicated herein are applicable only to the top-level processes identified.*

The following top-level processes have been identified for Tronair:

- Strategic Planning – Establishes Business Objectives for the QMS based on external and internal influences, risks and opportunities.
- New Business development – ensures that QMS requirements, inputs and outputs are known that meet customer expectations.
- Workflow Management – Defines process throughput requirements throughout the value stream to ensure that requirements, risks and opportunities are known.
- Engineering – Design and Development of Products
- Engineering Service Request – Ensures that change requests are controlled in a manner consistent with customer requirements.
- Operations – Ensures that processes needed to meet requirements for provision of products are planned, implemented and controlled.
- Purchasing or Sourcing – Ensures that processes needed to meet requirements for provision of raw materials and outside services (i.e. plating) are planned and controlled.
- Sales and Marketing – Ensures that the processes needed for gaining new and repeat business in accordance with objectives, communication, enquiries, contracts, order handling and customer perceptions meet requirements and are controlled.
- Human Resources – Ensures the systems necessary for providing personnel resources for the effective implementation of the QMS.
- Finance - Ensures for the provision of financial processes to support the QMS requirements.
- Quality - Ensures that processes needed to meet requirements are maintained, communicated and controlled.
- IT - Ensures for the provision of Information technology processes to support the QMS requirements.

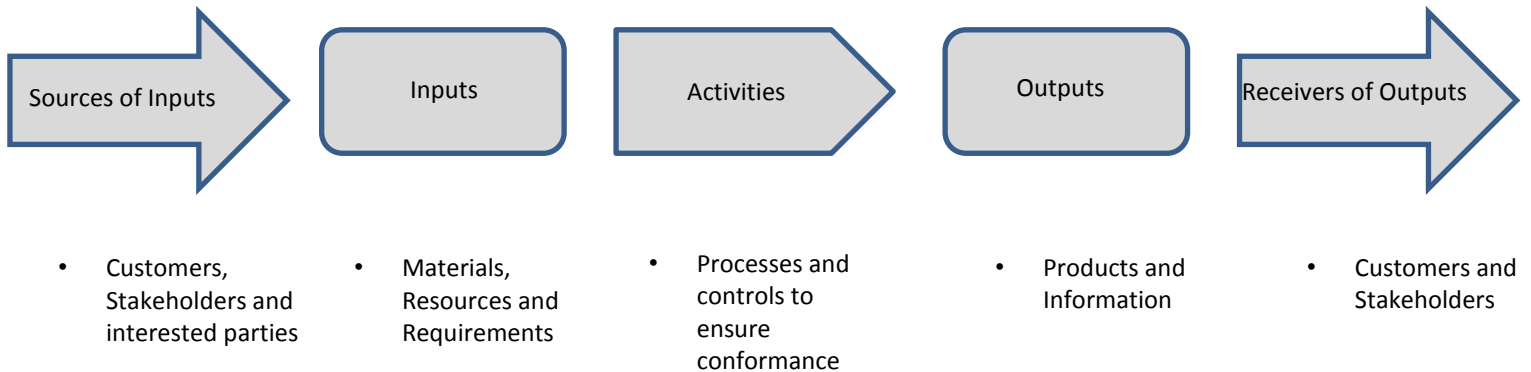
Each process may be supported by other activities, such as tasks or sub-processes. Monitoring and control of top level processes ensures effective implementation and control of all subordinate tasks or sub-processes.

Each top-level process has objectives which include:

- applicable inputs and outputs
- process owner(s)
- applicable responsibilities and authorities
- applicable risks and opportunities
- critical and supporting resources
- criteria and methods employed to ensure the effectiveness of the process
- quality objectives related to that process



The sequence of interaction of these processes is illustrated;



*Note: This illustration represents the typical sequence of processes, and may be altered depending on customer or regulatory requirements at the job or contract level, as needed.*

#### 4.4.2 Process Controls & Objectives

Objectives are supported by key performance indicators (KPI) which are then measured to determine the process' ability to meet the QMS objective. KPI are part of the Management Reviews.

*Note: some processes have multiple objectives and multiple metrics. This is determined by the nature of the process, it's impact on Products and associated risks.*

*Note: Whereas ISO 9001 discusses process measurements and "quality objectives" as separate concepts, Tronair combines them; i.e., quality objectives are used to control the processes. Additional objectives for products may be assigned, but these will also be used to measure process effectiveness.*

Throughout the year, metrics data is measured and gathered by process owners or other assigned managers, in order to present the data to Management. The data is then analyzed and discussed in order that Top Management may set goals and make adjustments for the purposes of long-term continual improvement. Metrics, along with current standings and goals for each objective, are recorded in records of management review.

When a process does not meet a goal, or an unexpected problem is encountered with a process, actions are implemented to research and resolve the issue. In addition, opportunities for improvement are sought and implemented, for the identified processes.

#### 4.4.3 Outsourced Processes

Any process performed by a third party is considered an "outsourced process" and must be controlled, as well. The type and extent of control to be applied to the outsourced process take into consideration:

- a) the potential impact of the outsourced process on the company's capability to provide product that conforms to requirements,
- b) the degree to which the control for the process is shared,
- c) the capability of achieving the necessary control through the purchasing contract requirements.

## 5.0 LEADERSHIP

### 5.1 Leadership & Commitment

#### 5.1.1 General

The Top Management of Tronair provides evidence of its leadership and commitment to the development and implementation of the management system and continually improving its effectiveness by:

- a) taking accountability of the effectiveness of the management system;
- b) ensuring that the **Quality Policy** and quality objectives are established for the management system and are compatible with the strategic direction and the context of the organization;
- c) ensuring the integration of the management system requirements into the organization's other business processes, as deemed appropriate (see note);
- d) promoting awareness of the process approach;
- e) ensuring that the resources needed for the management system are available;
- f) communicating the importance of effective quality management and of conforming to the management system requirements;
- g) ensuring that the management system achieves its intended results;
- h) engaging, directing and supporting persons to contribute to the effectiveness of the management system;
- i) promoting continual improvement;
- j) supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

*Note: "business processes" such as accounting, employee benefits management and legal activities are out of scope of the QMS.*

#### 5.1.2 Customer focus

The Top Management of Tronair adopts a customer-first approach which ensures that customer needs and expectations are determined, converted into requirements and are met with the aim of enhancing customer satisfaction.

This is accomplished by assuring:

- a) customer and applicable statutory and regulatory requirements are determined, understood and consistently met;
- b) the risks and opportunities that can affect conformity of products and services and the ability to enhance customer satisfaction are determined and addressed;
- c) the focus on enhancing customer satisfaction is maintained.

### 5.2 Policy

Top Management has developed the Quality Policy, defined in section 3.0 above, that governs day-to-day operations to ensure quality.

The Quality Policy is released as a standalone document as well, and is communicated and implemented throughout the organization.

#### **The Quality Policy of Tronair is as follows:**

*Tronair will achieve customer satisfaction by continuous measurement and improvement of our processes and systems to meet or exceed customer requirements and expectations.*

### 5.3 Organizational Roles Responsibilities and Authorities

The Top Management has assigned responsibilities and authorities for all relevant roles in the company. These are communicated through the combination of the **Tronair Org Chart** and Position Descriptions. In addition, the following overall QMS responsibilities and authorities are assigned as follows:

Responsibility	Assigned To
Ensuring that the management system conforms to applicable standards	CEO and Executive Management Team
Ensuring that the processes are delivering their intended outputs	Applicable process owner
Reporting on the performance of the management system and providing opportunities for improvement for the management system	Executive Team
Ensuring the promotion of customer focus throughout the organization	Executive Management Team
Ensuring that the integrity of the management system is maintained when changes are planned and implemented	Executive Management Team

## **6.0 PLANNING**

### **6.1 Actions to Address Risks and Opportunities**

*Note: Tronair deviates slightly from the approach towards risk and opportunity presented in ISO 9001. Instead, Tronair views “uncertainty” as neutral, but defines “risk” as a negative effect of uncertainty, and “opportunity” as a positive effect of uncertainty. Tronair has elected to manage risks and opportunities separately, except where they may overlap. Formal risk management may not be utilized in all instances; instead, the level of risk assessment, analysis, treatment and recordkeeping will be performed to the level deemed appropriate for each circumstance or application.*

Tronair considers risks and opportunities when taking actions within the management system, as well as when implementing or improving the management system; likewise, these are considered relative to products and processes. Risk Identification and risk management will be identified through Potential Failure Mode Analysis tools relating to achieving desired results, reducing risk and driving continual improvement.

Risks and opportunities are managed throughout the QMS process. New Business Development Meeting includes Risk and Opportunity. Work Flow meetings are conducted to identify opportunities in efficiency as well as possible process risk. FMEA and Control plan tools help to minimize risk and are updated as necessary to drive continual improvement and Lessons Learned.

### **6.2 Quality Objectives and Planning to Achieve Them**

As part of the adoption of the process approach, Tronair utilizes its process objectives, as discussed in 4.4 above, as the main quality objectives for the QMS. These include overall product-related quality objectives; additional product-related quality objectives may be defined in work instructions or customer requirements.

The process objectives (KPI's) have been developed in consideration that they:

- a) be consistent with the quality policy;
- b) be measurable;
- c) take into account applicable requirements;
- d) be relevant to conformity of products and services and to enhancement of customer satisfaction;
- e) be monitored;
- f) be communicated;
- g) be updated as appropriate.

Key Process Indicators and objectives (KPI's) are defined in the minutes of management review per section 9.3 below.

The planning of process quality objectives is defined in section 4.4. above.

### **6.3 Planning of Changes**

Changes to the quality management system may stem from Internal or external influences or may because of other interested parties. Changes will be identified during Top Management strategic planning or through the Management Review process.

During the discussions of the proposed changes Tronair will consider the following:

- a) the purpose of the change and potential consequences;
- b) the integrity of the quality management system;
- c) the availability of resources;
- d) the allocation or reallocation of responsibilities and authorities.

## **7.0 SUPPORT**

### **7.1 Resources**

#### **7.1.1 General**

Tronair determines and provides the resources needed for the establishment, implementation, maintenance and continual improvement of the Quality Management System.

Tronair also considers;

- a) The capabilities of and the constraints on existing resources;
- b) What may need to be obtained from external providers;

#### **7.1.2 People**

Senior management ensures that it provides sufficient staffing for the effective operation of the management system, as well its identified processes.

#### **7.1.3 Infrastructure**

Tronair determines, provides and maintains the infrastructure needed to achieve conformity to product requirements. Infrastructure includes, as applicable:

- a) buildings, workspace and associated facilities;
- b) process equipment, hardware and software;
- c) supporting services such as transport;
- d) information and communication technology.

Customers will be notified of any changes that would impact product realization.

#### **7.1.4 Environment for the Operation of Processes**

Tronair provides a clean, safe and well-lit working environment. The Executive Management Team of Tronair manages the work environment needed to achieve conformity to product requirements. Specific environmental requirements for products are determined during quality planning and are documented in subordinate procedures, work instructions, or job documentation. Where special work environments have been implemented, these shall also be maintained per 6.3 above.

Human factors are considered to the extent that they directly impact on the quality of Products.

*Note: Social, psychological and safety aspects of the work environment are managed through activities outside of the scope of the management system. Only work environment aspects which can directly affect process efficiency or product and service quality are managed through the management system.*

#### **7.1.5 Monitoring and Measuring Resources**

Where equipment is used for critical measurement activities, such as inspection and testing, these shall be subject to control and either calibration or verification; see the procedure.

*Note: Calibration and measurement traceability is not employed for all measurement devices. Instead, Tronair determines which devices will be subject to calibration based on its processes and products or in order to comply with specifications or requirements. These decisions are also based on the importance of a measurement, and considerations of risk.*

### **7.1.6 Organizational Knowledge**

Tronair also determines the knowledge necessary for the operation of its processes and to achieve conformity of products. This may include knowledge and information obtained from:

- a) internal sources, such as lessons learned, feedback from subject matter experts, and/or intellectual property;
- b) external sources such as standards, academia, conferences, and/or information gathered from customers or suppliers.

This knowledge shall be maintained, and made available to the extent necessary.

When addressing changing needs and trends, Tronair shall consider its current knowledge and determine how to acquire or access the necessary additional knowledge.

### **7.2 Competence**

Staff members performing work affecting product quality are competent on the basis of appropriate education, training, skills and experience. The documented position descriptions that detail required skills are available and performance evaluations take place at least annually.

*Note: the management system does not include other aspects of Human Resources management, such as payroll, benefits, insurance, labor relations or disciplinary actions.*

### **7.3 Awareness**

Training and subsequent communication ensures that staff is aware of:

- a) the quality policy;
- b) relevant quality objectives;
- c) their contribution to the effectiveness of the management system, including the benefits of improved performance;
- d) the implications of not conforming to the management system requirements.

### **7.4 Communication**

The Executive Management Team of Tronair ensures internal communication takes place regarding the effectiveness of the management system. Internal communication methods include;

- a) use of corrective and preventive action processes to report nonconformities or suggestions for improvement
- b) use of the results of analysis of data
- c) meetings (periodic, scheduled and/or unscheduled) to discuss aspects of the QMS
- d) use of the results of the internal audit process
- e) regular company meetings with all employees
- f) internal emails
- g) memos to employees
- h) Tronair Management culture allows any employee access to Executive Management for discussions or suggestions on improving the quality system.

## 7.5 Documented Information

The management system documentation includes both documents and records.

*Note: the ISO 9001:2015 standard uses the term “documented information”; Tronair does not use this term, but instead relies on the terms “document” and “record” to avoid confusion. In this context the terms are defined by Tronair as provided for in section 3.0 above. Documents and records undergo different controls as defined herein.*

The extent of the management system documentation has been developed based on the following:

- a) The size of Tronair
- b) Complexity and interaction of the processes
- c) Risks and opportunities
- d) Competence of personnel (i.e. skilled labor)

Documents required for the management system are controlled in accordance with the **Document Control Procedure**. The purpose of document control is to ensure that staff has access to the latest, approved information, and to restrict the use of obsolete information. All documented procedures are established, documented, implemented and maintained.

A documented procedure **Control of Records** has been established to define the controls needed. These controls are applicable to those records which provide evidence of conformance to requirements; there may be evidence of product requirements, contractual requirements, procedural requirements, or statutory/regulatory compliance. In addition, quality records include any records which provide evidence of the effective operation of the management system.

## **8.0 OPERATION**

### **8.1 Operational Planning and Control**

Tronair plans and develops the processes needed for realization of its products. Planning of product realization is consistent with the requirements of the other processes of the management system. Such planning considers the information related to the context of the organization (see section 4.0 above), current resources and capabilities, as well as product requirements.

Such planning is accomplished through:

- a) determining the requirements for the products;
- b) establishing criteria for the processes and the acceptance of products;
- c) determining the resources needed to achieve conformity to the product requirements;
- d) implementing control of the processes in accordance with the criteria;
- e) determining, maintaining and retaining documented information to the extent necessary to have confidence that the processes have been carried out as planned and to demonstrate the conformity of products to their requirements.

Changes to operational processes are done in accordance with the document ***Engineering Floor Change (also Ref Engineering Service Requests)***.

Tronair will ensure that outsourced processes are controlled in accordance with 8.4.

### **8.2 Requirements for Products and Services**

#### **8.2.1 Customer Communication**

Tronair has implemented effective communication with customers in relation to:

- a) providing information relating to Products;
- b) handling enquiries, contracts or orders, including changes;
- c) obtaining customer feedback relating to products, including customer complaints;
- d) handling or controlling customer property when applicable;
- e) establishing specific requirements for contingency actions, when relevant.

#### **8.2.2 Determining the Requirements Related to Products**

During the intake of new business Tronair captures:

- a) requirements specified by the customer, including the requirements for delivery and post-delivery activities;
- b) requirements not stated by the customer but necessary for specified or intended use, where known
- c) statutory and regulatory requirements related to products;
- d) any additional requirements determined by Tronair.

These activities are defined in greater detail in the documents for ***New Business Development and Work flow routing***.

#### **8.2.3 Review of Requirements Related to Products**

Once requirements are captured, Tronair reviews the requirements prior to its commitment to supply the product. This review ensures that Tronair has the capability and capacity to:

- a) meet all requirements specified by the customer, including requirements for delivery and post-delivery activities;
- b) meet any requirements not stated by the customer, but which Tronair knows as being necessary;
- c) meet all requirements determined necessary by Tronair itself;
- d) meet all related statutory and regulatory requirements;
- e) meet any contract or order requirements differing from those previously expressed (i.e., from a previous quote).

These activities are defined in greater detail in the document ***New Business Development and Work flow routing***.





## **8.4 Control of Externally Provided Processes, Products and Services**

Tronair ensures that purchased Product or Services conform to specified purchase requirements. The type and extent of control applied to the supplier and the purchased products or services are dependent on the effect on subsequent [Product or Service] realization or the final product.

Tronair evaluates and selects suppliers based on their ability to supply products and services in accordance with the organization's requirements. Criteria for selection and evaluation are established.

Purchases are made via the release of formal purchase orders and/or contracts which clearly describe what is being purchased. Received products or services are then verified against requirements to ensure satisfaction of requirements. Suppliers that send nonconforming product or services may be requested to take action and submit a documented formal corrective action report. Multiple violations may lead to supplier de-sourcing.

## **8.5 Production and Service Provision**

### **8.5.1 Control of Production and Service Provision**

To control its provision of products, Tronair considers, as applicable, the following:

- a) the availability of documents or records that define the characteristics of the products as well as the results to be achieved;
- b) the availability and use of suitable monitoring and measuring resources;
- c) the implementation of monitoring and measurement activities;
- d) the use of suitable infrastructure and environment;
- e) the appointment of competent persons, including any required qualifications;
- f) the validation and revalidation of special processes if applicable (see below);
- g) the implementation of actions to prevent human error;
- h) the implementation of release, delivery and post-delivery activities.

If no in-house special processes, but some done by suppliers:

At this time, Tronair does not utilize any in-house “special processes” where the result of the process cannot be verified by subsequent monitoring or measurement. Any such special processes are sent to outside suppliers, and controlled and an outsourced process.

### **8.5.2 Identification and Traceability**

Where appropriate, Tronair identifies its products or other critical process outputs by suitable means. Such identification includes the status of the products with respect to monitoring and measurement requirements. Unless otherwise indicated as nonconforming, pending inspection or disposition, or some other similar identifier, all product shall be considered conforming and suitable for use.

If unique traceability is required by contract, regulatory, or other established requirement, Tronair controls and records the unique identification of the product.

### **8.5.3 Property Belonging to Customers or External Providers**

Tronair currently does not control property belonging to customers or external providers.

### **8.5.4 Preservation**

Tronair preserves conformity of product or other process outputs during internal processing and delivery. This preservation includes identification, handling, packaging, storage, and protection. Preservation also applies to the constituent parts of a product.

### **8.5.5 Post-Delivery Activities**

As applicable, Tronair conducts the following activities which are considered “post-delivery activities”:

- a. Maintenance (if requested)
- b. Training (if requested)
- c. Warranty

Post-delivery activities are conducted in compliance with the management system defined herein. In determining the extent of post-delivery activities that are required, Tronair considers:

- a) statutory and regulatory requirements;
- b) the potential undesired consequences associated with its of Products
- c) the nature, use and intended lifetime of its of Products
- d) customer requirements;
- e) customer feedback.

### **8.5.6 Control of Changes**

Tronair reviews and controls both planned and unplanned changes to processes to the extent necessary to ensure continuing conformity with all requirements.

Process change management is defined in the document ***Engineering Floor Change Doc***  
Documents are changed in accordance with procedure ***Document Control Procedure***

### **8.6 Release of Products and Services**

Acceptance criteria for products are defined in appropriate subordinate documentation. Reviews, inspections and tests are conducted at appropriate stages to verify that the requirements have been met. This is done before products are released or services are delivered.

Each process utilizes different methods for measuring and releasing products. These methods are defined in ***Final Inspection Doc***

### **8.7 Control of Nonconforming Outputs**

Tronair ensures that products or other process outputs that do not conform to their requirements are identified and controlled to prevent their unintended use or delivery.

The controls for such nonconformance are defined in ***Control of NCP Procedure***

## **9.0 PERFORMANCE EVALUATION**

### **9.1 Monitoring, Measurement, Analysis and Evaluation**

#### **9.1.1 General**

Tronair has determined which aspects of its quality management system must be monitored and measured, as well as the methods to utilize and records to maintain, within this Quality Manual and subordinate documentation.

Monitoring and measurement of the processes, as defined in 4.4 above, ensure that the Executive Management Team evaluates the performance and effectiveness of the quality management system itself.

#### **9.1.2 Customer Satisfaction**

As one of the measurements of the performance of the management system, Tronair monitors information relating to customer perception as to whether the organization has met customer requirements. The methods for obtaining and using this information include:

- a. recording customer complaints
- b. product rejections or returns
- c. trends in on-time delivery
- d. obtain customer scorecards from certain customers
- e. submittal of customer satisfaction surveys

Customer Satisfaction improvement may include corrective and preventive action, enhanced product designs, actions to improve systems that address deficiencies identified by these evaluations, and assess the effectiveness of the results.

#### **9.1.3 Analysis and Evaluation**

Tronair analyzes and evaluates the data and information arising from monitoring and measurement in order to evaluate:

- a) conformity of products;
- b) the degree of customer satisfaction;
- c) the performance and effectiveness of the quality management system;
- d) if planning has been implemented effectively;
- e) the effectiveness of actions taken to address risks and opportunities;
- f) the performance of external providers;
- g) the need for improvements to the quality management system.

### **9.2 Internal Audit**

Tronair conducts internal audits at planned intervals to determine whether the management system conforms to contractual and regulatory requirements, to the requirements of ISO 9001, and to management system requirements. Audits also seek to ensure that the management system has been effectively implemented and is maintained. **Ref: Internal Audit Procedure.**

### **9.3 Management Review**

The Executive Management Team reviews the management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. The review includes assessing opportunities for improvement, and the need for changes to the management system, including the **Quality Policy** and quality objectives.

Management review records, frequency, agenda (inputs), outputs, required members, actions taken and other review requirements are maintained.

## **10.0 IMPROVEMENT**

### **10.1 General**

Tronair uses the management system to improve its processes, products and services. Such improvements aim to address the needs and expectations of customers as well as other interested parties, to the extent possible. Improvement shall be driven by an analysis of data related to:

The results of analysis shall be used to evaluate:

- h) conformity of products and services;
- i) the degree of customer satisfaction;
- j) the performance and effectiveness of the management system;
- k) the effectiveness of planning;
- l) the effectiveness of actions taken to address risks and opportunities;
- m) the performance of external providers;
- n) other improvements to the management system.

### **10.2 Nonconformity and Corrective Action**

Tronair takes corrective action to eliminate the cause of nonconformity in order to prevent recurrence. Likewise, the company takes preventive action to eliminate the causes of potential nonconformities in order to prevent their occurrence. The nature and extent of the corrective action will depend on the severity of the concern.

### **10.3 Continual Improvement**

Through the process effectiveness reviews, done as part of Management Review, Tronair works to continually improve the suitability, adequacy and effectiveness of the quality management system. This includes seeking opportunities for improvement.