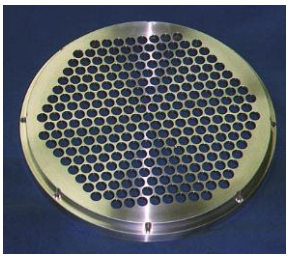
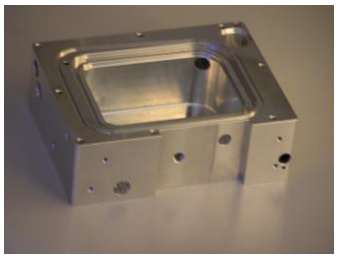
SPARTON TECHNOLOGY CORP.

Excellence in machining & precision sheet metal fabrication

Quality Manual

AS9100D:2016/ISO 9001:2015





Management Approvals	
President:	Victor Breton
VP Sheet Metal Operations/ISO Rep.Technical:	Scott Breton
VP of Machining Operations:	Steve Breton
VP Human Resources/Finance/ISO Rep. Admin:	Mike Breton
Quality Manager:	Jeff Newell

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Contents

Introduction

Sparton Technology Corporation developed and implemented a Quality Management System in order to document the company's best business practices, better satisfy the requirements and expectations of its customers and improve the overall management of the company.

The Quality Management System of Sparton Technology Corporation meets the requirements of the international standard AS9100:2016. This system addresses the Machining Components, Fabrication of Sheet Metal Parts and Related Assemblies of the customer's products.

The manual is divided into ten sections that correlate to the Quality Management System sections of AS9100:2016. Each section, where appropriate, begins with a policy statement expressing Sparton Technology Corporation's obligation to implement the basic requirements of the referenced Quality Management System section. Each policy statement is followed by specific information pertaining to the procedures that describe the methods used to implement the necessary requirements.

This manual describes the Quality Management System, delineates authorities, inter- relationships and responsibilities of the personnel responsible for performing within the system. The manual also provides procedures or references for all activities comprising the Quality Management System to ensure compliance to the necessary requirements of the standard.

Sparton Technology Corporation uses the manual internally to guide the company's employees through the various requirements of the AS9100/ISO standards that must be met and maintained in order to ensure customer satisfaction, continuous improvement and provide the necessary instructions that create an empowered work force.

This manual, when used externally, introduces our Quality Management System to our Customers and other external interested parties or individuals.

The manual familiarizes them with the controls that Sparton Technology Corporation has implemented and assures them that the integrity of the Quality Management System is maintained and focused on customer satisfaction and continuous improvement.

Sparton Technology Corporation Quality Policy:

Sparton Technology Corporation employees are fully committed to meeting customer expectations by delivering defect free products on time, every time. We will measure our performance and strive for continuous improvement.

We, at Sparton Technology Corporation, affirm this commitment, and have established a comprehensive quality assurance system, which will allow our company to meet all of the requirements of the AS9100:2016 quality assurance standard. Our quality assurance system concentrates on providing:

- *defect-free products to our customers,*
- *on-time and in-full delivery of our products,*
- *continual improvement to all aspects of our quality assurance system.*

The entire Sparton Technology Corporation team will adhere to the spirit and intent of this firm's quality policy, as well as the directives of this quality assurance manual and its supporting quality system documentation. We will continue to aggressively strive to ensure that customer satisfaction is achieved at all times, and in all things.

Quality Objectives:

Sparton Technology Corporation management team will establish quality objectives which support the firm's quality policy. These objectives will be measurable. Results will be tracked and reviewed periodically as part of the ongoing management review process. Objectives will be revised and/or new ones established as appropriate to support the quality policy. Current objectives and their status can be found in the minutes of the most recent Management Review Meeting.

Quality Manual Distribution

The Quality Manual is located on the Server with only the latest revision available for viewing by all employees. The Quality Manual is a controlled internal document, but is available for distribution outside Sparton Technology Corporation as an uncontrolled document. One Master Copy of QMS documents is maintained by the MR for reference purposes.

Management is responsible for approving changes to the Quality and Procedures Manuals, although immediate corrections may initially be authorized by the MR. Level three documents are controlled and approved by the appropriate Process Owner. The MR is responsible for approving Level four documents.

Non-impact changes, those which do not alter content, but which are made purely for aesthetic purposes, i.e. spelling corrections, do not require revision change, nor do they require entry in the Revision Summary. These changes may be identified as "Red-line" changes within the document, to be revised at some later time.

Amendment Record

The management representative will process all authorized changes and keep the server document current.

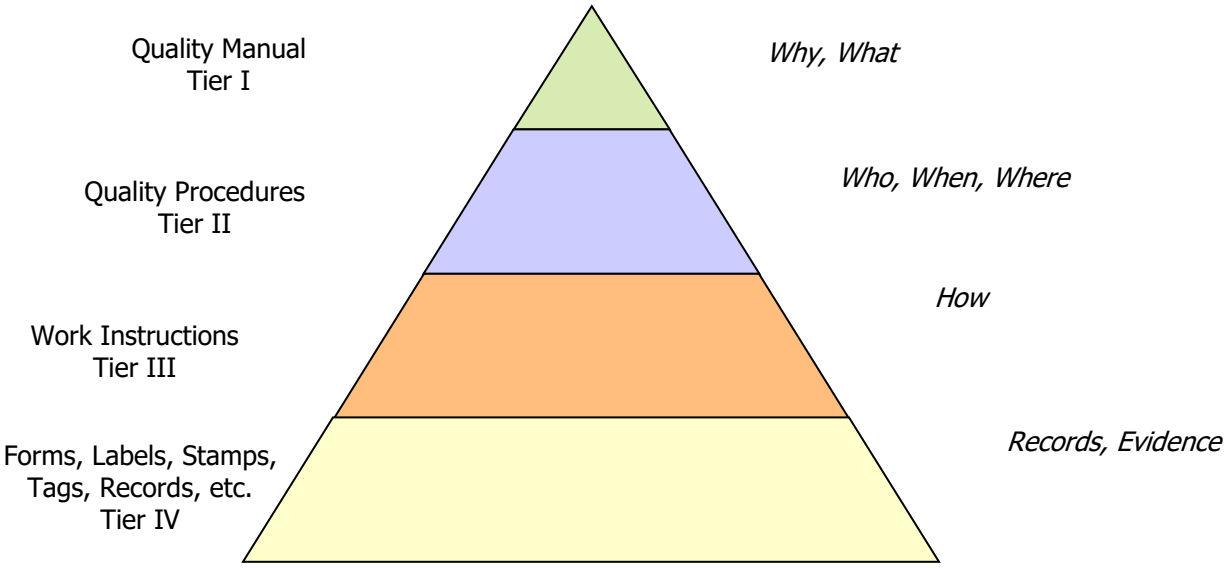
Date	Rev	Section/ Page	Details	Initials
3/6/17	A	All	Initial release of the AS9100D:2016 Quality Manual	S. Breton
11/9/17	B	All	Reviewed with Management Team for approval	S. Breton
12/22/17	C	All	Up-dated the Interaction of Processes flowchart for AS9100D:2016 Standard	S. Breton
1/18/18	D	All	Revised the section answering who has authority to change shop documents.	S. Breton
9/12/18	E	All	Revised 8.3 Design & Development as non-applicable, manufacturing to customer specifications.	S. Breton
01/7/2019	F	IOP	Simplified process call outs on Interaction of Processes	M. Breton
01/13/2021	G	8.1.2	Limited Configurations	M. Breton
11/28/2023	H	IOP	Minor changes to IOP and procedure wording	M. Breton
12/12/2024	I	IOP	Added Output descriptions	M. Breton
1/20/2026	J	IOP	Changed 10.0 to 10.1 in Manufacturing and 8 to 8.1 in Control of Production descriptions	M. Breton

Section 1: Scope

1.1 General

The quality manual outlines the policies, procedures and requirements of the Quality Management System. The system is structured (See Below) to comply with the conditions set forth in the International Standard AS9100:2016.

The structure of **Sparton Technology Corporation's** QMS document hierarchy is as follows:

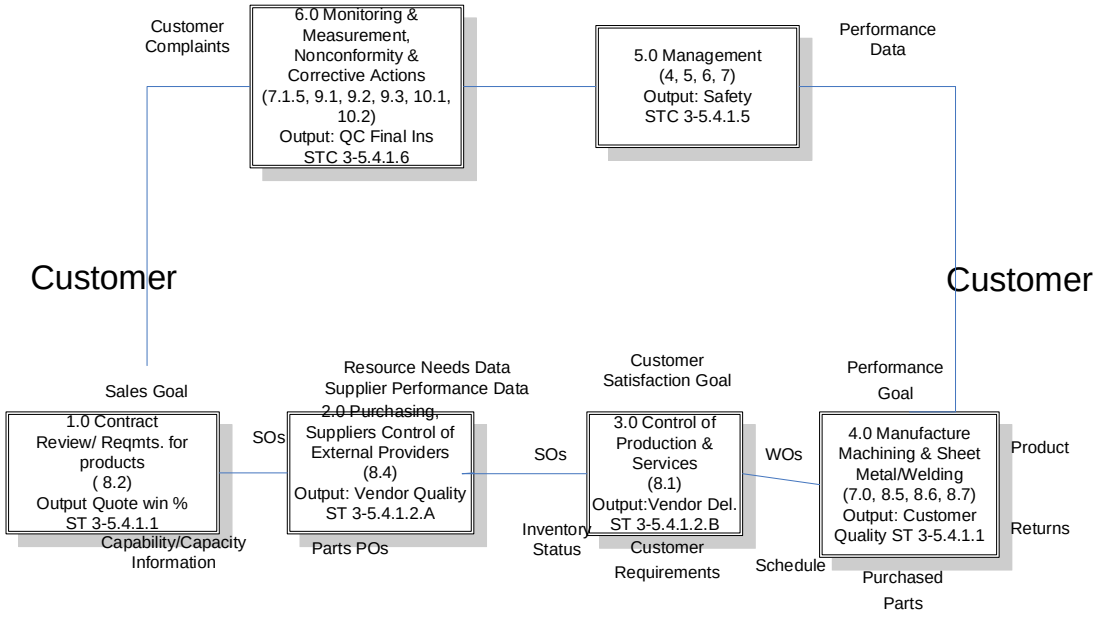


Scope of Registration

Machining Components and Manufacturing of Sheet Metal Parts and Related Assemblies.

SIC Code(s): 3599

Sparton Technology Interaction of Processes



1.1 Application

Sparton Technology Corporation has determined that 8.3 Design and Development is not applicable in the QMS.

Section 2: Normative Reference

2.1 Quality Management System References

The following document was used as reference during the preparation of the Quality Management System:

- SAE Aerospace AS9100:2016

3. TERMS AND DEFINITIONS

For the purposes of this document, the terms and definitions given in ISO 9000:2015 ***and the following*** apply.

3.1 Counterfeit Part
An unauthorized copy, imitation, substitute, or modified part (e.g., material, part, component), which is knowingly misrepresented as a specified genuine part of an original or authorized manufacturer.

NOTE: Examples of a counterfeit part can include, but are not limited to, the false identification of marking or labeling, grade, serial number, date code, documentation, or performance characteristics

3.2 Critical Items
Those items (e.g., functions, parts, software, characteristics, processes) having significant effect on the provision and use of the products and services; including safety, performance, form, fit, function, producibility, service life, etc.; that require specific actions to ensure they are adequately managed. Examples of critical items include safety critical items, fracture critical items, mission critical items, key characteristics, etc.

3.3 Key Characteristic
An attribute or feature whose variation has a significant effect on product fit, form, function, performance, service life, or producibility, that requires specific actions for the purpose of controlling variation.

3.4 Product Safety
The state in which a product is able to perform to its designed or intended purpose without causing unacceptable risk of harm to persons or damage to property.

3.5 Special Requirements
Those requirements identified by the customer, or determined by the organization, which have high risks of not being met, thus requiring their inclusion in the operational risk management process. Factors used in the determination of special requirements include product or process complexity, past experience, and product or process maturity. Examples of special requirements include performance requirements imposed by the customer that are at the limit of the industry's capability, or requirements determined by the organization to be at the limit of its technical or process capabilities.

NOTE: Special requirements (3.5) and critical items (3.2), along with key characteristics (3.3), are interrelated. Special requirements are identified when determining and reviewing requirements related to the product (see 8.2.2 and 8.2.3). Special requirements can require the identification of critical items. Design output (see 8.3.5) can include identification of critical items that require specific actions to ensure they are adequately managed. Some critical items will be further classified as key characteristics because their variation needs to be controlled.

This section is for definitions unique to Sparton Technology Corporation

- Customer owned property - Any type of instrumentation, accessories, manuals, tooling or shipping containers that belong to a customer.

- Customer supplied product - Any type of service or material supplied to Sparton Technology Corporation for use in the manufacture, modification or repair of product.
- Product – A commercial item provided to a customer by Sparton Technology Corporation with the intention to meet contract terms and conditions. (e.g.: manufactured goods, merchandise, etc.)
- Quality Records – Documentation of those activities wherein records of said activities are required as specified in the procedure or work instruction level documents, as applicable.

4. CONTEXT OF THE ORGANIZATION

Sparton Technology Corporation has established, documented and implemented a Quality Management System (QMS) in accordance with the requirements of AS9100:2016. Sparton Technology Corporation's Management Representative is responsible for the Quality Management System (QMS) meeting the requirements of AS9100:2016. Sparton Technology Corporation maintains and continually improves the system using the quality policy, quality objectives, audit results, analysis of data, corrective and preventive action and management review.

To design and implement the QMS, Sparton Technology Corporation has:

- identified the processes needed for the QMS and their application throughout Sparton Technology Corporation,
- determined the sequence and interaction of these,
- determined criteria and methods needed to ensure the operation and control of the processes are effective and documented them in quality plans, procedures and work instructions,
- ensured the continuing availability of resources and information necessary to achieve planned results and continual improvement of these processes,
- established systems to monitor, measure and analyze these processes, and

4.1 Understanding Sparton Technology Corporation and Its Context

Sparton Technology Corporation determines external and internal issues that are relevant to its purpose and its strategic direction and that affect its ability to achieve the intended result(s) of its quality management system. Sparton Technology Corporation monitors and reviews information about these external and internal issues.

NOTE 1: Issues can include positive and negative factors or conditions for consideration.

NOTE 2: Understanding the external context can be facilitated by considering issues arising from legal, technological, competitive, market, cultural, social, and economic environments, whether international, national, regional, or local.
NOTE 3: Understanding the internal context can be facilitated by considering issues related to values, culture, knowledge, and performance of Sparton Technology Corporation.

4.2 Understanding the Needs and Expectations of Interested Parties

Due to their effect or potential effect on Sparton Technology Corporation's ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements, Sparton Technology Corporation determines:
a. the interested parties that are relevant to the quality management system;
b. the requirements of these interested parties that are relevant to the quality management system.
Sparton Technology Corporation monitors and review information about these interested parties and their relevant requirements.

4.3 Determining the Scope of the Quality Management System

Sparton Technology Corporation determines the boundaries and applicability of the quality management system to establish its scope.

When determining this scope, Sparton Technology Corporation considers
a. the external and internal issues referred to in 4.1;
b. the requirements of relevant interested parties referred to in 4.2;
c. the products and services of Sparton Technology Corporation .

Sparton Technology Corporation applies all the requirements of this International Standard if they are applicable within the determined scope of its quality management system.

The scope of Sparton Technology Corporation's quality management system shall be available and be maintained as documented information. The scope shall state the types of products and services covered, and provide justification for any requirement of this International Standard that Sparton Technology Corporation determines is not applicable to the scope of its quality management system. Conformity to this International Standard may only be claimed if the requirements determined as not being applicable do not affect Sparton Technology Corporation's ability or responsibility to ensure the conformity of its products and services and the enhancement of customer satisfaction.

4.4 Quality Management System and Its Processes

4.4.1 Sparton Technology Corporation establishes, implement, maintain, and continually improve a quality management system, including the processes needed and their interactions, in accordance with the requirements of this International Standard.

Sparton Technology Corporation's quality management system shall also address customer and applicable statutory and regulatory quality management system requirements.
Sparton Technology Corporation determines the processes needed for the quality management system and their application throughout Sparton Technology Corporation, and shall:
a. determine the inputs required and the outputs expected from these processes;
b. determine the sequence and interaction of these processes;
c. determine and apply the criteria and methods (including monitoring, measurements and related performance indicators) needed to ensure the effective operation and control of these processes;
d. determine the resources needed for these processes and ensure their availability;
e. assign the responsibilities and authorities for these processes;

f. address the risks and opportunities as determined in accordance with the requirements of 6.1;
g. evaluate these processes and implement any changes needed to ensure that these processes achieve their intended results;
h. improve the processes and the quality management system.

4.4.2 To the extent necessary, Sparton Technology Corporation shall:
a. maintain documented information to support the operation of its processes;
b. retain documented information to have confidence that the processes are being carried out as planned.

Sparton Technology Corporation establishes and maintains documented information that includes:
− a general description of relevant interested parties (see 4.2 a);
− the scope of the quality management system, including boundaries and applicability (see 4.3);
− a description of the processes needed for the quality management system and their application throughout Sparton Technology Corporation;
− the sequence and interaction of these processes;
− assignment of the responsibilities and authorities for these processes.

- ***NOTE: The above description of the quality management system can be compiled into a single source of documented information and referred to as a quality manual.***

5. LEADERSHIP

5.1 Leadership and Commitment

5.1.1 General
Top management shall demonstrate leadership and commitment with respect to the quality management system by:
a. taking accountability for the effectiveness of the quality management system;
b. ensuring that the quality policy and quality objectives are established for the quality management system and are compatible with the context and strategic direction of Sparton Technology Corporation;
c. ensuring the integration of the quality management system requirements into Sparton Technology Corporation's business processes;
d. promoting the use of the process approach and risk-based thinking;
e. ensuring that the resources needed for the quality management system are available;
f. communicating the importance of effective quality management and of conforming to the quality management system requirements;
g. ensuring that the quality management system achieves its intended results;
h. engaging, directing, and supporting persons to contribute to the effectiveness of the quality management system;
i. promoting improvement;
j. supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

NOTE: Reference to "business" in this International Standard can be interpreted broadly to mean those activities that are core to the purposes of Sparton Technology Corporation's existence, whether Sparton Technology Corporation is public, private, for profit, or not for profit.

5.1.2 Customer Focus

Top management shall demonstrate leadership and commitment with respect to customer focus by ensuring that:
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***;***
d. product and service conformity and on-time delivery performance are measured and appropriate action is taken if planned results are not, or will not be, achieved.

5.2 Policy

5.2.1 Establishing the Quality Policy

Top management shall establish, implement, and maintain a quality policy that:
a. is appropriate to the purpose and context of Sparton Technology Corporation and supports its strategic direction;
b. provides a framework for setting quality objectives;
c. includes a commitment to satisfy applicable requirements;
d. includes a commitment to continual improvement of the quality management system.

5.2.2 Communicating the Quality Policy

The quality policy shall:
a. be available and maintained as documented information;
b. be communicated, understood, and applied within Sparton Technology Corporation;
c. be available to relevant interested parties, as appropriate.

5.3 Sparton Technology Corporation al Roles, Responsibilities, & Authorities

Top management shall ensure that the responsibilities and authorities for relevant roles are assigned, communicated, and understood within Sparton Technology Corporation.
Top management shall assign the responsibility and authority for:

a. ensuring that the quality management system conforms to the requirements of this International Standard;
b. ensuring that the processes are delivering their intended outputs;
c. reporting on the performance of the quality management system and on opportunities for improvement (see 10.1), in particular to top management;

d. ensuring the promotion of customer focus throughout Sparton Technology Corporation;
e. ensuring that the integrity of the quality management system is maintained when changes to the quality management system are planned and implemented.

Top management shall appoint a specific member of Sparton Technology Corporation's management, identified as the management representative, who shall have the responsibility and authority for oversight of the above requirements.
The management representative shall have Sparton Technology Corporation al freedom and unrestricted access to top management to resolve quality management issues.

NOTE: The responsibility of a management representative can include liaison with external parties on matters relating to the quality management system.

6. PLANNING

6.1 Actions to Address Risks and Opportunities

6.1.1 When planning for the quality management system, Sparton Technology Corporation considers the issues referred to in 4.1 and the requirements referred to in 4.2 and determine the risks and opportunities that need to be addressed to:
a. give assurance that the quality management system can achieve its intended result(s);
b. enhance desirable effects;
c. prevent, or reduce, undesired effects;
d. achieve improvement.

6.1.2 Sparton Technology Corporation plans:
a. actions to address these risks and opportunities;
b. how to:
    1. integrate and implement the actions into its quality management system processes (see 4.4);
    2. evaluate the effectiveness of these actions.

Actions taken to address risks and opportunities shall be proportionate to the potential impact on the conformity of products and services.

NOTE 1: Options to address risks can include avoiding risk, taking risk in order to pursue an opportunity, eliminating the risk source, changing the likelihood or consequences, sharing the risk, or retaining risk by informed decision.

NOTE 2: Opportunities can lead to the adoption of new practices, launching new products, opening new markets, addressing new customers, building partnerships, using new technology and other desirable and viable possibilities to address Sparton Technology Corporation's or its customers' needs.

6.2 Quality Objectives and Planning to Achieve Them

6.2.1 Sparton Technology Corporation establishes quality objectives at relevant functions, levels, and processes needed for the quality management system.

The quality objectives shall:
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.

Sparton Technology Corporation maintains documented information on the quality objectives.

6.2.2 When planning how to achieve its quality objectives, Sparton Technology Corporation determines:
a. what will be done;
b. what resources will be required;
c. who will be responsible;
d. when it will be completed;
e. how the results will be evaluated.

6.3 Planning of Changes

When Sparton Technology Corporation determines the need for changes to the quality management system, the changes shall be carried out in a planned manner (see 4.4).

Sparton Technology Corporation considers
a. the purpose of the changes and their 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. SUPPORT

7.1 Resources

7.1.1 General
Sparton Technology Corporation determines and provides the resources needed for the establishment, implementation, maintenance, and continual improvement of the quality management system.

Sparton Technology Corporation considers:

a. the capabilities of, and constraints on, existing internal resources;
b. what needs to be obtained from external providers.

7.1.2 People
Sparton Technology Corporation determines and provides the persons necessary for the effective implementation of its quality management system and for the operation and control of its processes.

7.1.3 Infrastructure
Sparton Technology Corporation determines, provides, and maintains the infrastructure necessary for the operation of its processes and to achieve conformity of products and services.

NOTE: Infrastructure can include:
a. buildings and associated utilities;
b. equipment, including hardware and software;
c. transportation resources;
d. information and communication technology.

7.1.4 Environment for the Operation of Processes
Sparton Technology Corporation determines, provide, and maintain the environment necessary for the operation of its processes and to achieve conformity of products and services.

NOTE: A suitable environment can be a combination of human and physical factors, such as:
a. social (e.g., non-discriminatory, calm, non-confrontational);
b. psychological (e.g., stress-reducing, burnout prevention, emotionally protective);
c. physical (e.g., temperature, heat, humidity, light, airflow, hygiene, noise).

These factors can differ substantially depending on the products and services provided.

7.1.5 Monitoring and Measuring Resources

7.1.5.1 General

Sparton Technology Corporation determines and provides the resources needed to ensure valid and reliable results when monitoring or measuring is used to verify the conformity of products and services to requirements.

Sparton Technology Corporation ensures that the resources provided:
a. are suitable for the specific type of monitoring and measurement activities being undertaken;
b. are maintained to ensure their continuing fitness for their purpose.

Sparton Technology Corporation retains appropriate documented information as evidence of fitness for purpose of the monitoring and measurement resources.

7.1.5.2 Measurement Traceability
When measurement traceability is a requirement, or is considered by Sparton Technology Corporation to be an essential part of providing confidence in the validity of measurement results, measuring equipment shall be:

a. calibrated or verified, or both, at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards; when no such standards exist, the basis used for calibration or verification shall be retained as documented information;
b. identified in order to determine their status;
c. safeguarded from adjustments, damage, or deterioration that would invalidate the calibration status and subsequent measurement results.
Sparton Technology Corporation establishes, implement, and maintain a process for the recall of monitoring and measuring equipment requiring calibration or verification.
Sparton Technology Corporation maintains a register of the monitoring and measuring equipment. The register shall include the equipment type, unique identification, location, and the calibration or verification method, frequency, and acceptance criteria.

NOTE: Monitoring and measuring equipment can include, but are not limited to: test hardware, test software, automated test equipment (ATE), and plotters used to produce verification data. It also includes personally owned and customer supplied equipment used to provide evidence of product and service conformity.
Calibration or verification of monitoring and measuring equipment shall be carried out under suitable environmental conditions (see 7.1.4).

Sparton Technology Corporation determines if the validity of previous measurement results has been adversely affected when measuring equipment is found to be unfit for its intended purpose, and shall take appropriate action as necessary.

7.1.6 Sparton Technology Corporation Knowledge

Sparton Technology Corporation determines the knowledge necessary for the operation of its processes and to achieve conformity of products and services.

This knowledge shall be maintained and be made available to the extent necessary.
When addressing changing needs and trends, Sparton Technology Corporation considers its current knowledge and determine how to acquire or access any necessary additional knowledge and required updates.

NOTE 1: Sparton Technology Corporation knowledge is knowledge specific to Sparton Technology Corporation; it is generally gained by experience. It is information that is used and shared to achieve Sparton Technology Corporation's objectives.

NOTE 2: Sparton Technology Corporation knowledge can be based on:

a. internal sources (e.g., intellectual property; knowledge gained from experience; lessons learned from failures and successful projects; capturing and sharing undocumented knowledge and experience; the results of improvements in processes, products and services);
b. external sources (e.g., standards; academia; conferences; gathering knowledge from customers or external providers).

7.2 Competence

Sparton Technology Corporation shall:

a. determine the necessary competence of person(s) doing work under its control that affects the performance and effectiveness of the quality management system;
b. ensure that these persons are competent on the basis of appropriate education, training, or experience;
c. where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken;
d. retain appropriate documented information as evidence of competence.

NOTE: Consideration should be given for the periodic review of the necessary competence.

NOTE: Applicable actions can include, for example, the provision of training to, the mentoring of, or the re-assignment of currently employed persons; or the hiring or contracting of competent persons.

7.3 Awareness

Sparton Technology Corporation ensures that persons doing work under Sparton Technology Corporation's control are aware of:
a. the quality policy;
b. relevant quality objectives;
c. their contribution to the effectiveness of the quality management system, including the benefits of improved performance;
d. the implications of not conforming with the quality management system requirements***;***
e. relevant quality management system documented information and changes thereto;
f. their contribution to product or service conformity;
g. their contribution to product safety;
h. the importance of ethical behavior.

7.4 Communication

Sparton Technology Corporation determines the internal and external communications relevant to the quality management system, including:
a. on what it will communicate;
b. when to communicate;
c. with whom to communicate;
d. how to communicate;
e. who communicates.

NOTE: Communication should include internal and external feedback relevant to the quality management system.

7.5 Documented Information

7.5.1 General

Sparton Technology Corporation's quality management system shall include:

a. documented information required by this International Standard;
b. documented information determined by Sparton Technology Corporation as being necessary for the effectiveness of the quality management system.

NOTE: The extent of documented information for a quality management system can differ from one company to another due to:
− the size of Sparton Technology Corporation and its type of activities, processes, products, and services;
− the complexity of processes and their interactions;
− the competence of persons.

7.5.2 Creating and Updating
When creating and updating documented information, Sparton Technology Corporation ensures appropriate:
a. identification and description (e.g., a title, date, author, or reference number);
b. format (e.g., language, software version, graphics) and media (e.g., paper, electronic);
c. review and approval for suitability and adequacy.

NOTE: Approval implies authorized persons and approval methods are identified for the relevant types of documented information, as determined by Sparton Technology Corporation.

7.5.3 Control of Documented Information

7.5.3.1 Documented information required by the quality management system and by this International Standard shall be controlled to ensure:
a. it is available and suitable for use, where and when it is needed;
b. it is adequately protected (e.g., from loss of confidentiality, improper use, or loss of integrity).

7.5.3.2 For the control of documented information, Sparton Technology Corporation addresses the following activities, as applicable:
a. distribution, access, retrieval, and use;
b. storage and preservation, including preservation of legibility;
c. control of changes (e.g., version control);
d. retention and disposition***;***
e. prevention of the unintended use of obsolete documented information by removal or by application of suitable identification or controls if kept for any purpose**.**

Documented information of external origin determined by Sparton Technology Corporation to be necessary for the planning and operation of the quality management system shall be identified as appropriate, and be controlled.

Documented information retained as evidence of conformity shall be protected from unintended alterations.

When documented information is managed electronically, data protection processes shall be defined (e.g., protection from loss, unauthorized changes, unintended alteration, corruption, physical damage).

NOTE: Access can imply a decision regarding the permission to view the documented information only, or the permission and authority to view and change the documented information.

8. OPERATION

8.1 Operational Planning and Control

Sparton Technology Corporation plans, implement, and control the processes (see 4.4) needed to meet the requirements for the provision of products and services, and to implement the actions determined in clause 6, by:

a. determining the requirements for the products and services;

NOTE: Determination of requirements for the products and services should include consideration of:
− personal and product safety;
− producibility and inspectability;
− reliability, availability, and maintainability;
− suitability of parts and materials used in the product;
− selection and development of embedded software;
− product obsolescence;
− prevention, detection, and removal of foreign objects;
− handling, packaging, and preservation;
− recycling or final disposal of the product at the end of its life.

b. establishing criteria for:
1. the processes;
2. the acceptance of products and services;

NOTE: According to the nature of the product and depending on the specified requirements, statistical techniques can be used to support:
− design verification (e.g., reliability, maintainability, product safety);
− process control;
• selection and verification of key characteristics;

• process capability measurements;

. statistical process control;

• design of experiments;
− verification;
− failure mode, effects, and criticality analysis.

c. determining the resources needed to achieve conformity to the product and service requirements ***and to meet on-time delivery of products and services***;
d. implementing control of the processes in accordance with the criteria;
e. determining, maintaining, and retaining documented information to the extent necessary:
1. to have confidence that the processes have been carried out as planned;
2. to demonstrate the conformity of products and services to their requirements***;***

f. determining the processes and controls needed to manage critical items, including production process controls when key characteristics have been identified;
g. engaging representatives of affected company functions for operational planning and control;
h. determining the process and resources to support the use and maintenance of the products and services;

i. determining the products and services to be obtained from external providers;
j. establishing the controls needed to prevent the delivery of nonconforming products and services to the customer.

NOTE: One method to achieve operational planning and control can be through using integrated phased processes.

As appropriate to Sparton Technology Corporation, customer requirements, and products and services, Sparton Technology Corporation plans and manage product and service provision in a structured and controlled manner including scheduled events performed in a planned sequence to meet requirements at acceptable risk, within resource and schedule constraints.

NOTE: This activity is generally referred to as project planning, project management, or program management.

The output of this planning shall be suitable for Sparton Technology Corporation's operations.

NOTE: As an output of this planning, documented information specifying the processes of the quality management system and the resources to be applied to a specific product, service, project, or contract can be referred to as a quality plan.

Sparton Technology Corporation controls planned changes and review the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary.
Sparton Technology Corporation ensures that outsourced processes are controlled (see 8.4).

Sparton Technology Corporation establishes, implement, and maintain a process to plan and control the temporary or permanent transfer of work, to ensure the continuing conformity of the work to requirements. The process shall ensure that work transfer impacts and risks are managed.

NOTE: For the control of work transfer from Sparton Technology Corporation to an external provider, or from an external provider to another external provider, see 8.4. For the control of work transfer from one Sparton Technology Corporation facility to another, or from an external provider to Sparton Technology Corporation, see 8.5.

8.1.1 Operational Risk Management

Sparton Technology Corporation plans, implement, and control a process for managing operational risks to the achievement of applicable requirements, which includes as appropriate to Sparton Technology Corporation and the products and services:
a. assignment of responsibilities for operational risk management;
b. definition of risk assessment criteria (e.g., likelihood, consequences, risk acceptance);
c. identification, assessment, and communication of risks throughout operations;
d. identification, implementation, and management of actions to mitigate risks that exceed the defined risk acceptance criteria;
e. acceptance of risks remaining after implementation of mitigating actions.

NOTE 1: While clause 6.1 addresses the risks and opportunities when planning for the quality management system of Sparton Technology Corporation, the scope of this clause (8.1.1) is limited

to the risks associated to the operational processes needed for the provision of products and services (clause 8).
NOTE 2: Within the aviation, space, and defense industry, risk is generally expressed in terms of the likelihood of occurrence and the severity of the consequences.

8.1.2 Configuration Management

Sparton Technology Corporation plans, implement, and control a process for configuration management as appropriate to Sparton Technology Corporation and its products and services in order to ensure the identification and control of physical and functional attributes throughout the product lifecycle. This process shall:
a. control product identity and traceability to requirements, including the implementation of identified changes; Sparton Technology making limited aerospace assemblies, therefore, limited configurations
b. ensure that the documented information (e.g., requirements, design, verification, validation and acceptance documentation) is consistent with the actual attributes of the products and services.

Configuration management is handled with revision control at Sparton Technology with limited aerospace assemblies requiring configuration. First Articles are done in-house using ST 4-8.2.4.6 Rev. 12/2013 Form. This form is being up-dated for AS9102 Revision B and delta FAIRs are generated if part is over two years since last made or done.

8.1.3 Product Safety

Sparton Technology Corporation plans, implement, and control the processes needed to assure product safety during the entire product life cycle, as appropriate to Sparton Technology Corporation and the product.

NOTE: Examples of these processes include:
− assessment of hazards and management of associated risks (see 8.1.1);
− management of safety critical items;
− analysis and reporting of occurred events affecting safety;
− communication of these events and training of persons.

8.1.4 Prevention of Counterfeit Parts

Sparton Technology Corporation plans, implement, and control processes, appropriate to Sparton Technology Corporation and the product, for the prevention of counterfeit or suspect counterfeit part use and their inclusion in product(s) delivered to the customer.

NOTE: Counterfeit part prevention processes should consider:
− training of appropriate persons in the awareness and prevention of counterfeit parts;
− application of a parts obsolescence monitoring program;
− controls for acquiring externally provided product from original or authorized manufacturers, authorized distributors, or other approved sources;
− requirements for assuring traceability of parts and components to their original or authorized manufacturers;
− verification and test methodologies to detect counterfeit parts;
− monitoring of counterfeit parts reporting from external sources;

- quarantine and reporting of suspect or detected counterfeit parts.

8.2 Requirements for Products and Services

8.2.1 Customer Communication
Communication with customers shall include:
a. providing information relating to products and services;
b. handling enquiries, contracts, or orders, including changes;
c. obtaining customer feedback relating to products and services, including customer complaints;
d. handling or controlling customer property;
e. establishing specific requirements for contingency actions, when relevant.

8.2.2 Determining the Requirements for Products and Services
When determining the requirements for the products and services to be offered to customers, Sparton Technology Corporation ensures that:
a. the requirements for the products and services are defined, including:
    1. any applicable statutory and regulatory requirements;
    2. those considered necessary by Sparton Technology Corporation;
b. Sparton Technology Corporation can meet the claims for the products and services it offers***;***
c. special requirements of the products and services are determined;
d. operational risks (e.g., new technology, ability and capacity to provide, short delivery time frame) have been identified.

8.2.3 Review of the Requirements for Products and Services
8.2.3.1 Sparton Technology Corporation ensures that it has the ability to meet the requirements for products and services to be offered to customers. Sparton Technology Corporation shall conduct a review before committing to supply products and services to the customer, to include:
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 the specified or intended use, when known;
c. requirements specified by Sparton Technology Corporation;
d. statutory and regulatory requirements applicable to the products and services;
e. contract or order requirements differing from those previously expressed.

This review shall be coordinated with applicable functions of Sparton Technology Corporation. If upon review Sparton Technology Corporation determines that some customer requirements cannot be met or can only partially be met, Sparton Technology Corporation shall negotiate a mutually acceptable requirement with the customer.

Sparton Technology Corporation ensures that contract or order requirements differing from those previously defined are resolved. The customer requirements shall be confirmed by Sparton Technology Corporation before acceptance, when the customer does not provide a documented statement of their requirements.

NOTE: In some situations, such as internet sales, a formal review is impractical for each order. Instead, the review can cover relevant product information, such as catalogues.

8.2.3.2 Sparton Technology Corporation retains documented information, as applicable:
a. on the results of the review;

b. on any new requirements for the products and services.

8.2.4 Changes to Requirements for Products and Services
Sparton Technology Corporation ensures that relevant documented information is amended, and that relevant persons are made aware of the changed requirements, when the requirements for products and services are changed.

8.3 Design and Development of Products and Services

8.3.1 General

Sparton Technology Corporation considers this section as non-applicable due to manufacturing to customer‘s specifications.

8.4 Control of Externally Provided Processes, Products, and Services

8.4.1 General

Sparton Technology Corporation ensures that externally provided processes, products, and services conform to requirements.
Sparton Technology Corporation is responsible for the conformity of all externally provided processes, products, and services, including from sources defined by the customer.
Sparton Technology Corporation ensures, when required, that customer-designated or approved external providers, including process sources (e.g., special processes), are used.
Sparton Technology Corporation identifies and manages the risks associated with the external provision of processes, products, and services, as well as the selection and use of external providers.
Sparton Technology Corporation requires that external providers apply appropriate controls to their direct and sub-tier external providers, to ensure that requirements are met.

Sparton Technology Corporation determines the controls to be applied to externally provided processes, products, and services when:
a. products and services from external providers are intended for incorporation into Sparton Technology Corporation’s own products and services;
b. products and services are provided directly to the customer(s) by external providers on behalf of Sparton Technology Corporation;
c. a process, or part of a process, is provided by an external provider as a result of a decision by Sparton Technology Corporation .

Sparton Technology Corporation determines and applies criteria for the evaluation, selection, monitoring of performance, and re-evaluation of external providers, based on their ability to provide processes or products and services in accordance with requirements. Sparton Technology Corporation retains documented information of these activities and any necessary actions arising from the evaluations.

NOTE: During external provider evaluation and selection, Sparton Technology Corporation can use quality data from objective and reliable external sources, as evaluated by Sparton Technology

Corporation (e.g., information from accredited quality management system or process certification bodies, external provider approvals from government authorities or customers). Use of such data would be only one element of an Sparton Technology Corporation's external provider control process and Sparton Technology Corporation remains responsible for verifying that externally provided processes, products, and services meet specified requirements.

8.4.1.1 Sparton Technology Corporation:
a. defines the process, responsibilities, and authority for the approval status decision, changes of the approval status, and conditions for a controlled use of external providers depending on their approval status;
b. maintains a register of its external providers that includes approval status (e.g., approved, conditional, disapproved) and the scope of the approval (e.g., product type, process family);
c. periodically reviews external provider performance including process, product and service conformity, and on-time delivery performance;
d. define the necessary actions to take when dealing with external providers that do not meet requirements;
e. defines the requirements for controlling documented information created by and/or retained by external providers.

8.4.2 Type and Extent of Control

Sparton Technology Corporation ensures that externally provided processes, products, and services do not adversely affect Sparton Technology Corporation's ability to consistently deliver conforming products and services to its customers.
Sparton Technology Corporation shall:
a. ensure that externally provided processes remain within the control of its quality management system;
b. define both the controls that it intends to apply to an external provider and those it intends to apply to the resulting output;
c. take into consideration:
1. the potential impact of the externally provided processes, products, and services on Sparton Technology Corporation's ability to consistently meet customer and applicable statutory and regulatory requirements;
2. the effectiveness of the controls applied by the external provider***;***
3. the results of the periodic review of external provider performance (see 8.4.1.1 c);
d. determine the verification, or other activities, necessary to ensure that the externally provided processes, products, and services meet requirements.

Verification activities of externally provided processes, products, and services shall be performed according to the risks identified by Sparton Technology Corporation. These shall include inspection or periodic testing, as applicable, when there is high risk of nonconformities including counterfeit parts.

NOTE 1: Customer verification activities performed at any level of the supply chain does not absolve Sparton Technology Corporation of its responsibility to provide acceptable processes, products, and services and to comply with all requirements.

NOTE 2: Verification activities can include:

− review of objective evidence of the conformity of the processes, products, and services from the external provider (e.g., accompanying documentation, certificate of conformity, test documentation, statistical documentation, process control documentation, results of production process verification and assessment of changes to the production process thereafter);
− inspection and audit at the external provider's premises;
− review of the required documentation;
− review of production part approval process data;
− inspection of products or verification of services upon receipt;
− review of delegations of product verification to the external provider.

When externally provided product is released for production use pending completion of all required verification activities, it shall be identified and recorded to allow recall and replacement if it is subsequently found that the product does not meet requirements.

When Sparton Technology Corporation delegates verification activities to the external provider, the scope and requirements for delegation shall be defined and a register of delegations shall be maintained. Sparton Technology Corporation shall periodically monitor the external provider's delegated verification activities.

When external provider test reports are utilized to verify externally provided products, Sparton Technology Corporation requires a process to evaluate the data in the test reports to confirm that the product meets requirements. When a customer or Sparton Technology Corporation has identified raw material as a significant operational risk (e.g., critical items), Sparton Technology Corporation requires a process to validate the accuracy of test reports.

8.4.3 Information for External Providers

Sparton Technology Corporation ensures the adequacy of requirements prior to their communication to the external provider.

Sparton Technology Corporation shall communicate to external providers its requirements for:
a. the processes, products, and services to be provided ***including the identification of relevant technical data (e.g., specifications, drawings, process requirements, work instructions);***
b. the approval of:
    1. products and services;
    2. methods, processes, and equipment;
    3. the release of products and services;
c. competence, including any required qualification of persons;
d. the external providers' interactions with Sparton Technology Corporation;
e. control and monitoring of the external providers' performance to be applied by Sparton Technology Corporation;
f. verification or validation activities that Sparton Technology Corporation, or its customer, intends to perform at the external providers' premises***;***
g. design and development control;
h. special requirements, critical items, or key characteristics;
i. test, inspection, and verification (including production process verification);
j. the use of statistical techniques for product acceptance and related instructions for acceptance by Sparton Technology Corporation;

k. the need to:

− implement a quality management system;
− use customer-designated or approved external providers, including process sources (e.g., special processes);
− notify Sparton Technology Corporation of nonconforming processes, products, or services and obtain approval for their disposition;
− prevent the use of counterfeit parts (see 8.1.4);
− notify Sparton Technology Corporation of changes to processes, products, or services, including changes of their external providers or location of manufacture, and obtain Sparton Technology Corporation's approval;
− flow down to external providers applicable requirements including customer requirements;
− provide test specimens for design approval, inspection/verification, investigation, or auditing;
− retain documented information, including retention periods and disposition requirements;

l. the right of access by Sparton Technology Corporation, their customer, and regulatory authorities to the applicable areas of facilities and to applicable documented information, at any level of the supply chain;
m. ensuring that persons are aware of:
− their contribution to product or service conformity;
− their contribution to product safety;
− the importance of ethical behavior.

8.5 Production and Service Provision

8.5.1 Control of Production and Service Provision
Sparton Technology Corporation requires production and service provision under controlled conditions. Controlled conditions shall include, as applicable:
a. the availability of documented information that defines:
1. the characteristics of the products to be produced, the services to be provided, or the activities to be performed;
2. the results to be achieved;

NOTE 1: Documented information that defines characteristics of products and services can include digital product definition data, drawings, parts lists, materials, and process specifications.

NOTE 2: Documented information for activities to be performed and results to be achieved can include process flow charts, control plans, production documents (e.g., manufacturing plans, travelers, routers, work orders, process cards), and verification documents.

b. the availability and use of suitable monitoring and measuring resources;
c. the implementation of monitoring and measurement activities at appropriate stages to verify that criteria for control of processes or outputs, and acceptance criteria for products and services, have been met;
1. ensuring that documented information for monitoring and measurement activity for product acceptance includes:
− criteria for acceptance and rejection;
− where in the sequence verification operations are to be performed;
− measurement results to be retained (at a minimum an indication of acceptance or rejection);
− any specific monitoring and measurement equipment required and instructions associated with their use;

2. ensuring that when sampling is used as a means of product acceptance, the sampling plan is justified on the basis of recognized statistical principles and appropriate for use (i.e., matching the sampling plan to the criticality of the product and to the process capability).

d. the use of suitable infrastructure and environment for the operation of processes;

NOTE: Suitable infrastructure can include product specific tools (e.g., jigs, fixtures, molds) and software programs.

e. the appointment of competent persons, including any required qualification;
f. the validation, and periodic revalidation, of the ability to achieve planned results of the processes for production and service provision, where the resulting output cannot be verified by subsequent monitoring or measurement;

NOTE: These processes can be referred to as special processes (see 8.5.1.2).

g. the implementation of actions to prevent human error;
h. the implementation of release, delivery, and post-delivery activities***;***
i. the establishment of criteria for workmanship (e.g., written standards, representative samples, illustrations);
j. the accountability for all products during production (e.g., parts quantities, split orders, nonconforming product);
k. the control and monitoring of identified critical items, including key characteristics, in accordance with established processes;
l. the determination of methods to measure variable data (e.g., tooling, on-machine probing, inspection equipment);
m. the identification of in-process inspection/verification points when adequate verification of conformity cannot be performed at later stages;
n. the availability of evidence that all production and inspection/verification operations have been completed as planned, or as otherwise documented and authorized;
o. the provision for the prevention, detection, and removal of foreign objects;
p. the control and monitoring of utilities and supplies (e.g., water, compressed air, electricity, chemical products) to the extent they affect conformity
q. the identification and recording of products released for subsequent production use pending completion of all required measuring and monitoring activities, to allow recall and replacement if it is later found that the product does not meet requirements.

Sparton Technology Corp. generates a First Article Inspection on an AS9102 form or customer approved alternative as specified by customers/Quality Manager. First piece inspections are generated on production runs of parts and assemblies to verify that the production processes, production documentation and tooling are capable of producing parts and assemblies that meet requirements. This process is repeated when changes occur that modify the original results (e.g., engineering changes, manufacturing process changes, tooling changes).

Production operations are carried out in accordance with approved Job Package documents.

Job Packages include:
Drawings, travelers, parts lists, and as needed inspection sheets, inspection methods sheets and operation sheets.

Additional data includes Set up Sheets with a list of specific tools and part programs required and any specific instructions associated with their use.

Job Package AS9100 documentation is approved by Estimators including VPs Machining and or Sheet Metal in the electronic part revision master on server for the Traveler. This indicates that the Instructions contained within will meet customer requirements."

8.5.1.1 Control of Equipment, Tools, and Software Programs

Equipment, tools, and software programs used to automate, control, monitor, or measure production processes shall be validated prior to final release for production and shall be maintained.
Storage requirements shall be defined for production equipment or tooling in storage including any necessary periodic preservation or condition checks.

8.5.1.2 Validation and Control of Special Processes

For processes where the resulting output cannot be verified by subsequent monitoring or measurement, Sparton Technology Corporation establishes arrangements for these processes including, as applicable:
a. definition of criteria for the review and approval of the processes;
b. determination of conditions to maintain the approval;
c. approval of facilities and equipment;
d. qualification of persons;
e. use of specific methods and procedures for implementation and monitoring the processes;
f. requirements for documented information to be retained.

8.5.1.3 Production Process Verification

Sparton Technology Corporation requires production process verification activities to ensure the production process is able to produce products that meet requirements.

NOTE: These activities can include risk assessments, capacity studies, capability studies, and control plans.

Sparton Technology Corporation uses a representative item from the first production run of a new part or assembly to verify that the production processes, production documentation, and tooling are able to produce parts and assemblies that meet requirements. This activity shall be repeated when changes occur that invalidate the original results (e.g., engineering changes, production process changes, tooling changes).

NOTE: This activity can be referred to as First Article Inspection (FAI).
Sparton Technology Corporation retains documented information on the results of production process verification.

8.5.2 Identification and Traceability

Sparton Technology Corporation uses suitable means to identify outputs when it is necessary to ensure the conformity of products and services.

Sparton Technology Corporation maintains the identification of the configuration of the products and services in order to identify any differences between the actual configuration and the required configuration.

Sparton Technology Corporation identifies the status of outputs with respect to monitoring and measurement requirements throughout production and service provision.
When acceptance authority media are used (e.g., stamps, electronic signatures, passwords), Sparton Technology Corporation establishes controls for the media.
Sparton Technology Corporation controls the unique identification of the outputs when traceability is a requirement, and shall retain the documented information necessary to enable traceability.

NOTE: Traceability requirements can include:
− the identification to be maintained throughout the product life;
− the ability to trace all products manufactured from the same batch of raw material, or from the same manufacturing batch, to the destination (e.g., delivery, scrap);
− for an assembly, the ability to trace its components to the assembly and then to the next higher assembly;
− for a product, a sequential record of its production (manufacture, assembly, inspection/verification) to be retrievable.

8.5.3 Property Belonging to Customers or External Providers

Sparton Technology Corporation shall exercise care with property belonging to customers or external providers while it is under Sparton Technology Corporation's control or being used by Sparton Technology Corporation.
Sparton Technology Corporation identifies, verify, protect, and safeguard customers' or external providers' property provided for use or incorporation into the products and services.
When the property of a customer or external provider is lost, damaged, or otherwise found to be unsuitable for use, Sparton Technology Corporation shall report this to the customer or external provider and retain documented information on what has occurred.

NOTE: A customer's or external provider's property can include materials, components, tools and equipment, premises, intellectual property, and personal data.

8.5.4 Preservation

Sparton Technology Corporation shall preserve the outputs during production and service provision, to the extent necessary to ensure conformity to requirements.

NOTE: Preservation can include identification, handling, contamination control, packaging, storage, transmission or transportation, and protection.

Preservation of outputs shall also include, when applicable in accordance with specifications and applicable statutory and regulatory requirements, provisions for:
a. cleaning;

b. prevention, detection, and removal of foreign objects;
c. special handling and storage for sensitive products;
d. marking and labeling, including safety warnings and cautions;
e. shelf life control and stock rotation;
f. special handling and storage for hazardous materials.

8.5.5 Post-Delivery Activities

Sparton Technology Corporation shall meet requirements for post-delivery activities associated with the products and services. In determining the extent of post-delivery activities that are required, Sparton Technology Corporation considers:
a. statutory and regulatory requirements;
b. the potential undesired consequences associated with its products and services;
c. the nature, use, and intended lifetime of its products and services;
d. customer requirements;
e. customer feedback***;***
f. collection and analysis of in-service data (e.g., performance, reliability, lessons learned);
g. control, updating, and provision of technical documentation relating to product use, maintenance, repair, and overhaul;
h. controls required for work undertaken external to Sparton Technology Corporation (e.g., off-site work);
i. product/customer support (e.g., queries, training, warranties, maintenance, replacement parts, resources, obsolescence).
When problems are detected after delivery, Sparton Technology Corporation takes appropriate action including investigation and reporting.

NOTE: Post-delivery activities can include actions under warranty provisions, contractual obligations such as maintenance services, and supplementary services such as recycling or final disposal.

8.5.6 Control of Changes

Sparton Technology Corporation reviews and control changes for production or service provision, to the extent necessary to ensure continuing conformity with requirements.

Persons authorized to approve production or service provision changes are identified as: Estimators including VPs Machining and or Sheet Metal in the electronic part revision master on server for the Traveler.

NOTE: Production or service provision changes can include the changes affecting processes, production equipment, tools, or software programs.

Sparton Technology Corporation retains documented information describing the results of the review of changes, the person(s) authorizing the change, and any necessary actions arising from the review.

8.6 Release of Products and Services

Sparton Technology Corporation requires planned arrangements, at appropriate stages, to verify that the product and service requirements have been met.

The release of products and services to the customer shall not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority and, as applicable, by the customer.

Sparton Technology Corporation retains documented information on the release of products and services. The documented information shall include:
a. evidence of conformity with the acceptance criteria;
b. traceability to the person(s) authorizing the release.

When required to demonstrate product qualification, Sparton Technology Corporation ensures that retained documented information provides evidence that the products and services meet the defined requirements.
Sparton Technology Corporation ensures that all documented information required to accompany the products and services are present at delivery.

8.7 Control of Nonconforming Outputs

8.7.1 Sparton Technology Corporation ensures that outputs that do not conform to their requirements are identified and controlled to prevent their unintended use or delivery.
NOTE: The term "nonconforming outputs" includes nonconforming product or service generated internally, received from an external provider, or identified by a customer.
Sparton Technology Corporation takes appropriate action based on the nature of the nonconformity and its effect on the conformity of products and services. This shall also apply to nonconforming products and services detected after delivery of products, during or after the provision of services.

Sparton Technology Corporation's nonconformity control process shall be maintained as documented information including the provisions for:
− defining the responsibility and authority for the review and disposition of nonconforming outputs and the process for approving persons making these decisions;
− taking actions necessary to contain the effect of the nonconformity on other processes, products, or services;
− timely reporting of nonconformities affecting delivered products and services to the customer and to relevant interested parties;
− defining corrective actions for nonconforming products and services detected after delivery, as appropriate to their impacts (see 10.2).

NOTE: Interested parties requiring notification of nonconforming products and services can include external providers, internal Sparton Technology Corporation, customers, distributors, and regulatory authorities.

Sparton Technology Corporation deals with nonconforming outputs in one or more of the following ways:
a. correction;
b. segregation, containment, return, or suspension of provision of products and services;
c. informing the customer;
d. obtaining authorization for acceptance under concession ***by a relevant authority and, when applicable, by the customer.***

Dispositions of use-as-is or repair for the acceptance of nonconforming products shall only be implemented:
− after approval by an authorized representative customer designer responsible for design or by persons having delegated authority from the design;
− after authorization by the customer, if the nonconformity results in a departure from the contract requirements.
Product dispositioned for scrap shall be conspicuously and permanently marked, or positively controlled, until physically rendered unusable.
Counterfeit, or suspect counterfeit, parts shall be controlled to prevent reentry into the supply chain.
Conformity to the requirements shall be verified when nonconforming outputs are corrected.

8.7.2 Sparton Technology Corporation retains documented information that:
a. describes the nonconformity;
b. describes the actions taken;
c. describes any concessions obtained;
d. identifies the authority deciding the action in respect of the nonconformity.

9. PERFORMANCE EVALUATION

9.1 Monitoring, Measurement, Analysis, and Evaluation

9.1.1 General

Sparton Technology Corporation determines:
a. what needs to be monitored and measured;
b. the methods for monitoring, measurement, analysis, and evaluation needed to ensure valid results;
c. when the monitoring and measuring shall be performed;
d. when the results from monitoring and measurement shall be analyzed and evaluated.

Sparton Technology Corporation evaluates the performance and the effectiveness of the quality management system.

Sparton Technology Corporation retains appropriate documented information as evidence of the results.

9.1.2 Customer Satisfaction

Sparton Technology Corporation monitors customers' perceptions of the degree to which their needs and expectations have been fulfilled. Sparton Technology Corporation determines the methods for obtaining, monitoring, and reviewing this information.

NOTE: Examples of monitoring customer perceptions can include customer surveys, customer feedback on delivered products and services, meetings with customers, market-share analysis, compliments, warranty claims, and dealer reports.

Information to be monitored and used for the evaluation of customer satisfaction shall include, but is not limited to, product and service conformity, on-time delivery performance, customer

complaints, and corrective action requests. Sparton Technology Corporation shall develop and implement plans for customer satisfaction improvement that address deficiencies identified by these evaluations, and assess the effectiveness of the results.

9.1.3 Analysis and Evaluation
Sparton Technology Corporation shall analyze and evaluate appropriate data and information arising from monitoring and measurement.

NOTE: Appropriate data can include information on product and service problems reported by external sources (e.g., government/industry alerts, advisories).

The results of analysis shall be used to evaluate:
a. conformity of products and services;
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.

NOTE: Methods to analyze data can include statistical techniques.

9.2 Internal Audit

9.2.1 Sparton Technology Corporation shall conduct internal audits at planned intervals to provide information on whether the quality management system;
a. conforms to:

1. Sparton Technology Corporation's own requirements for its quality management system;

NOTE: Sparton Technology Corporation's own requirements should include customer and applicable statutory and regulatory quality management system requirements.

2. the requirements of this International Standard;

b. is effectively implemented and maintained.

NOTE: When conducting internal audits, performance indicators can be evaluated to determine whether the quality management system is effectively implemented and maintained.

9.2.2 Sparton Technology Corporation shall:
a. plan, establish, implement, and maintain an audit program(s) including the frequency, methods, responsibilities, planning requirements, and reporting, which shall take into consideration the importance of the processes concerned, changes affecting Sparton Technology Corporation, and the results of previous audits;
b. define the audit criteria and scope for each audit;
c. select auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
d. ensure that the results of the audits are reported to relevant management;
e. take appropriate correction and corrective actions without undue delay;

f. retain documented information as evidence of the implementation of the audit program and the audit results.
NOTE: See ISO 19011 for guidance.

9.3 Management Review

9.3.1 General

Top management reviews Sparton Technology Corporation's quality management system, at planned intervals, to ensure its continuing suitability, adequacy, effectiveness, and alignment with the strategic direction of Sparton Technology Corporation.

9.3.2 Management Review Inputs

The management review meetings are planned and carried out taking into consideration:
a. the status of actions from previous management reviews;
b. changes in external and internal issues that are relevant to the quality management system;
c. information on the performance and effectiveness of the quality management system, including trends in:

1. customer satisfaction and feedback from relevant interested parties;
2. the extent to which quality objectives have been met;
3. process performance and conformity of products and services;
4. nonconformities and corrective actions;
5. monitoring and measurement results;
6. audit results;
7. the performance of external providers***;***
8. on-time delivery performance;

d. the adequacy of resources;
e. the effectiveness of actions taken to address risks and opportunities (see 6.1);
f. opportunities for improvement.

9.3.3 Management Review Outputs

The outputs of the management review includes decisions and actions related to:
a. opportunities for improvement;
b. any need for changes to the quality management system;
c. resource needs;
d. risks identified.

Sparton Technology Corporation retains documented information as evidence of the results of management reviews.

10. IMPROVEMENT

10.1 General

Sparton Technology Corporation determines and select opportunities for improvement and implements any necessary actions to meet customer requirements and enhance customer satisfaction.

These include:
a. improving products and services to meet requirements as well as to address future needs and expectations;
b. correcting, preventing, or reducing undesired effects;
c. improving the performance and effectiveness of the quality management system.

NOTE: Examples of improvement include correction, corrective action, continual improvement, breakthrough change, innovation, and re-organization.

10.2 Nonconformity and Corrective Action

10.2.1 When a nonconformity occurs, including any arising from complaints, Sparton Technology Corporation:
a. reacts to the nonconformity and, as applicable:
    1. takes action to control and correct it;
    2. deals with the consequences;
b. evaluates the need for action to eliminate the cause(s) of the nonconformity, in order that it does not recur or occur elsewhere, by:
    1. reviewing and analyzing the nonconformity;
    2. determining the causes of the nonconformity, ***including, as applicable, those related to human factors***;
    3. determining if similar nonconformities exist, or could potentially occur;
c. implements any action needed;
d. reviews the effectiveness of any corrective action taken;
e. updates risks and opportunities determined during planning, if necessary;
f. makes changes to the quality management system, if necessary***;***
g. flows down corrective action requirements to an external providers when it is determined that the external provider is responsible for the nonconformity;
h. takes specific actions when timely and effective corrective actions are not achieved.

Corrective actions are appropriate to the effects of the nonconformities encountered.
Sparton Technology Corporation maintains documented information that defines the nonconformity and corrective action management processes.

10.2.2 Sparton Technology Corporation retains documented information as evidence of:
a. the nature of the nonconformities and any subsequent actions taken;
b. the results of any corrective action.

10.3 Continual Improvement

Sparton Technology Corporation continually improves the suitability, adequacy, and effectiveness of the quality management system.

Sparton Technology Corporation considers the results of analysis and evaluation, and the outputs from management review, to determine if there are needs or opportunities that shall be addressed as part of continual improvement.

Sparton Technology Corporation monitors the implementation of improvement activities and evaluates the effectiveness of the results.

NOTE: Examples of continual improvement opportunities include lessons learned, problem resolutions, and the benchmarking of best practices.