

# Starn Tool and Manufacturing Quality Manual AS9100 REV D/ISO9001:2015

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## 1.0 Scope

At Starn Tool & Manufacturing Company, diversity and flexibility enables us to meet and exceed customer expectations. Our manufacturing diversity is evident in the range of industries we serve. We supply consumer products as well as tooling and fixturing for manufacturing.

**Scope:** Manufacturer of build to print precision components, tooling, fixtures, gages, and short run production of precision machined parts.

## 2.0 Normative References

### PROCEDURES

FORM 1.B.1.- (Management Review)

FORM 1.B.2.- (Document Control)

FORM 1.B.3.- (Training/HR)

FORM 4.B.1.- (DMR/NCR/Corrective Action)

FORM 2.B.1.- (Quoting/Contract Review/Job Set-Up)

FORM 2.B.2.- (Purchasing)

FORM 3.B.1.- (Manufacturing)

FORM 4.B.2.- (Inspection)

FORM 5.B.1.- (Shipping)

FORM 4.B.3.- (Internal Audit)

FORM 4.B.4.- (Calibration)

### WORK INSTRUCTIONS

FORM 2.A.1.3 (Purchasing)

FORM 2.A.2.- (Quoting-Contract review)

FORM 2.A.3.2 (Suspect and Counterfeit Product Containment)

FORM 3.A.1.- (CNC Lathe)

FORM 3.A.2.- (CNC Mill)

FORM 3.A.3.- (Grind)

FORM 3.A.4.- (Manual Mill)

FORM 3.A.5.- (Saw-Material Prep)

FORM 3.A.6.- (Wire-EDM)

FORM 3.A.7.- (Radius)

FORM 3.A.8.- (Laser)

FORM 3.A.9.- (Tagging)

FORM 4.A.1.4 (Naming Documents)

FORM 4.A.2.- (Inspection)

FORM 4.A.3.- (Certification Packages)

FORM 4.A.4.- (Internal Audit)

FORM 4.A.5.- (Gauge Calibration)

FORM 4.A.6.3 (Calibration Database)

FORM 4.A.7.- (Scrap/Repair/Remake)

FORM 5.A.1.- (Shipping)

## SUPPORTING DOCUMENTATION

FORM 1.C.1.- (Employee Sign In Sheet)

FORM 1.C.2.- (Orientation)

FORM 1.C.3.- (S.H.I.T. Training)

FORM 1.C.4.- (OJT – Yearly Review)

FORM 1.C.5.- (OJT – CNC Lathe)

FORM 1.C.6.- (OJT – CNC Mill)

FORM 1.C.7.- (OJT – Grind)

FORM 1.C.8.- (OJT – Manual Mill)

FORM 1.C.9.- (OJT – Saw-Material Prep)

FORM 1.C.10.- (OJT – Wire-EDM)

FORM 1.C.11.- (OJT – Radius)

- FORM 1.C.12.- (OJT – Inspection)
- FORM 1.C.13.- (OJT – Shipping)
- FORM 1.C.14.- (Management Review Agenda)
- FORM 2.C.1.- (Supplier Terms and Conditions)
- FORM 4.C.1.- (Organization Chart)
- FORM 4.C.2.- (RACI Matrix)
- FORM 4.C.3.- (Process Map)
- FORM 4.C.4.- (Process Matrix)
- FORM 4.C.5.- (Interested Parties)
- FORM 4.C.6.- (Risk Analysis)
- FORM 4.C.7.- (SWOT Analysis)
- FORM 4.C.8.- (Internal Audit Schedule)
- FORM 4.C.9.2 (Internal Audit Checklist)
- FORM 4.C.10.- (Audit Nonconformance Report)
- FORM 4.C.11.- (Audit Summary Report)
- FORM 4.C.12.- (L3 Harris Document Submission)
- FORM 4.C.13.2 (Starn Sampling Plan)
- FORM 4.C.14.- (FOD Policy)

### 3.0 Process Approach

This manual is prepared for the purpose of defining Starn Tool's interpretations of the AS9100 REV D/ISO9001:2015 international standard, as well as to outline policies and requirements of the quality management system. This outline includes reference to the procedure and/or work instruction that supports the policies and requirements, as applicable.

Any changes, updates, additions, etc. to the quality manual will be addressed to all employees of the company at a general meeting.

## 4.0 Process Approach

### 4.1 Context-Strategic direction

Starn Tool Management Team evaluates issues, including issues that affect our ability to achieve the intended result of our quality management system (external or internal), that are relevant to the strategic direction of the company.

These evaluations may include reviewing information such as:

- a. Positive and/or negative factors that need given consideration (externally or internally)
- b. Information pertaining to technology and market as well as competitive, social, and economic environments (external)
- c. Performance, knowledge, and culture of the company (internal)

### 4.2 Interested parties

Management Team also considers the needs and expectations of interested parties.

The Management Team has identified “interested parties” (Appendix 1) (FORM4.C.5.-) and their needs as:

- a. Customers—Ensuring we are meeting their expectations of- quality, price and delivery.
- b. Suppliers-providing accurate information, keeping current with invoices
- c. Regulatory/Government- i.e. ITAR, OSHA etc. and maintaining compliance with applicable requirements.
- d. Employees- providing a comfortable and safe work environment, job security, and training.
- e. Management team-authority, support, resources
- f. Owners/Shareholders -profitability, return on investments, sales, efficiency, and effectiveness of operations
- g. Community/Schools -considering graduates for school to work programs, hiring graduates, providing intern and apprenticeship opportunities

### 4.3 Scope

Manufacturer of build to print precision components, tooling, fixtures, gages, and short run production of precision machined parts.

### **Facilities within the scope:**

The quality management system applies to processes, activities, and employees at the following locations within the company:

20524 Blooming Valley Rd., Meadville, PA 16335 – sales/quoting/contract review, purchasing, manufacturing, inspection and shipping

1057 French Street, Meadville, PA 16335- Wire EDM (within 3 miles of main location, NO shipping from this location, NO final inspection from this location)

### **Non-Applicable Requirements from the AS9100 REV D/ISO9001:2015 Standard:**

8.3 Design and development of products and services is not applicable because Starn Tool does not do design and development. Starn Tool is a build to print manufacturer.

***Note: Business processes such as accounting, benefits management and legal activities are not included in the scope of the quality management system.***

#### 4.4 Quality Management System and its Processes

**4.4.1** Starn tool has adopted a process approach for its quality management system. We have established processes which are leadership, core, and supportive in nature throughout the organization.

Our company process map (Appendix 2)(FORM 4.C.3.-) demonstrates:

- a. Core process
- b. Secondary processes
- c. Support processes
- d. Leadership processes
- e. Interaction of processes
- f. Inputs (customer requirements)
- g. Outputs (customer satisfaction)

These processes are assigned responsibility and authority through the Starn RACI Matrix (Appendix 3)(FORM 4.C.2.-)

**4.4.2** Management Review Meetings provide documented information which includes, but is not limited to, other process related topics such as:

- a. Key Performance Indicator (KPI)
- b. Resources; needed or available



- c. Changes needed to achieve intended results
- d. Risks and opportunities as applicable
- e. Continuous Improvement activities

Supporting documentation, management review meeting agenda/minutes, and current/historical key performance indicators are maintained electronically.

## 5.0 Leadership

### 5.1 Leadership and Commitment

Starn Tool management is committed to leading the effectiveness and continuous improvement of the quality management system. They provide evidence of this by:

- a. Being accountable for the quality management system
- b. Ensuring that the quality policy and objectives are managed and compatible with the strategic direction and context of the organization
- c. Ensuring the integration of the quality management system requirements into the business processes.
- d. Promoting lean manufacturing and risk-based thinking
- e. Ensuring necessary resources are available
- f. Communicating the importance of the quality management system. Communicating the quality policy and making sure it is understood and applied.
- g. Monitoring intended results
- h. Guiding and supporting employees to contribute to the effectiveness of the quality management system
- i. Promoting continuous improvement
- j. Supporting other management roles in their areas of responsibility

With respect to customer focus, management places a strong emphasis on customer satisfaction, ensuring that customer expectations and requirements are met with the focus on enhancing customer satisfaction.

They accomplish this by:

- a. Ensuring customer requirements, and applicable statutory and regulatory requirements, are understood and met
- b. Evaluating risks and opportunities that can affect conformity of products and customer satisfaction
- c. Continually improving customer satisfaction
- d. Monitoring on time delivery performance and product and service conformity; with necessary actions taken as appropriate

## 5.2 Policy

### 5.2.1 Quality Policy Objectives: Market Leadership, Continuous Improvement & Customer Satisfaction

**Quality Policy Statement:** We at Starn Tool & Manufacturing Company will sustain or exceed market leadership through high quality, delivery and service. Our company will maintain this high standard of growth, continuous improvement and efficient streamlining of our methods and facility. Working as a team, we will answer our customers' needs in the most expedient manner at the least possible price.

Management team has developed, communicated, and implemented a quality policy. The quality policy provides framework for setting objectives and governing day to day operations to ensure both quality and a commitment to continuous improvement of our quality management system.

**5.2.2** The quality policy is maintained within the quality manual in electronic form, as well as through hardcopy cards that are distributed to employees upon hire. The electronic quality manual can be accessed via the company website and is available to all relevant interested parties as applicable.

### 5.3 Organizational roles, responsibilities and authorities

Management team has assigned authority for the leadership roles within the company. Responsibilities are assigned for procedures to ensure conformance of the quality management system to the AS9100D Standard. This is communicated through our Process Map (Appendix 2)(FORM 4.C.3.-), RACI Matrix (Appendix 3)(FORM 4.C.2.-), and Organization Chart (Appendix 4)(FORM 4.C.1.-)

## 6.0 Planning

### 6.1 Risk and opportunity

Starn Tool considers risks and opportunities when taking actions within the management system and when making improvements to the processes, services, and products that are manufactured.

Risks are managed to minimize their likelihood and impact. Opportunities are managed to improve their likelihood and benefit. (Reference FORM 4.C.6.-)

The Quality Management System assures that Starn Tool achieves the intended results, reduces negative effects of risk, enhances positive effects of opportunities, and continually improves the processes to ensure the satisfaction of our interested parties.

## 6.2 Objectives and planning to achieve them

**6.2.1** Management team has established objectives needed to monitor and ensure the success of the Quality Management System.

Objectives are:

- a. Consistent with our policy statement
- b. Measured and monitored through Starn Metrics and vendor performance
- c. Relevant to customer/standard requirements and conformity of products
- d. Communicated through management review meetings and general meetings
- e. Updated as needed

Review and communication of our objectives occurs monthly and are documented through our Starn Metrics and meeting minutes.

**6.2.2** When planning the achievement of established objectives, management team determines:

- a. Accomplishment of the objectives
- b. The resources needed to accomplish them
- c. Who is responsible for reporting data
- d. Completion/verification occurrence
- e. The evaluation of the data

## 6.3 Planning of Changes

When changes are necessary to the quality management system, consideration is given to:

- a. Potential consequences of the change
- b. Integrity of aspects relative to changes made
- c. Available resources
- d. Allocation or reallocation of responsibilities/authorities if applicable

# 7.0 Support

## 7.1 Resources

**7.1.1** Management team determines and provides the resources needed to implement and maintain the management system and continually improve its effectiveness, while enhancing customer satisfaction by exceeding customer requirements.

Resource allocation is done with consideration to the capabilities and constraints on existing internal resources, as well as the needs related to the expectations for suppliers. Resources and allocation of resources are assessed during management review meetings.

**7.1.2** Management team ensures that it provides sufficient staffing for the effective operation of the management system and its identified processes. Employees performing work affecting product quality are competent on the basis of appropriate education, training, skills and experience. Training and communication ensure that employees are aware of the quality policy, relevant quality objectives, their contribution to the effectiveness of our quality management system (including the benefits of improved performance), as well as the consequence of not conforming to the requirements of our QMS. (Reference FORM 1.B.3.-)

**7.1.3** Management team provides and maintains the infrastructure needed to achieve conformity to product requirements. Infrastructure includes buildings, workspace, equipment, hardware, software, and information.

Machine equipment is maintained through preventive maintenance activities.

Inspection equipment used to record final dimensions is maintained in the calibration database in Job Shop Manager.

***Note: Calibration is not implemented for employee-owned inspection equipment, UNLESS the employee is performing final inspection***

**7.1.4** To achieve conformity of products and services, leadership strives to provide a superior work environment which includes good working conditions, competitive compensation, job security, advancement based on performance, and a cooperative spirit to ensure every employee fair and equitable treatment. It is the intent that all employees work in a climate of integrity where respect is given to each individual and an environment free from any form of harassment or inappropriate conduct. Starn Tool & Manufacturing Company does not discriminate against a job applicant or an employee because of the person's race, color, religious creed, sex (including pregnancy), national origin, age, disability, veteran status, genetic information, or any other characteristic protected by law.

**7.1.5** Management has determined the resources needed to ensure valid and reliable results when monitoring and measuring is used to verify conformity of products and services to requirements. (Reference FORM 4.B.4.-)

## 7.2 Competence

Management has determined the necessary competence of employees doing work that affects the performance and effectiveness of the quality management system.

We ensure the competency of our employees through education, training, and/or utilizing their experience.

Competency evaluations are periodically performed and documented. When necessary, action is taken to improve competency. (Reference FORM 1.B.3.-)

### 7.3 Awareness

Management ensures that employees know and understand the quality policy, relevant quality objectives, their contribution to the QMS, and implications for not conforming, relevant QMS changes, employee contribution to product/service conformity and safety, and the importance of ethical behavior.

### 7.4 Communication

In addition to promoting awareness, management ensures internal communications take place regarding the QMS. Monthly meetings within the organization include, but are not limited to, the topics covered in Management Review Meetings. (Reference FORM 1.C.14.-)

Internally, these meetings also provide the opportunity to address employee input for opportunities for improvement, corrective actions, and discussion of department specific issues/needs. Applicable information will be communicated to employees through additional meetings, general meetings, or the most effective, efficient manner. (Reference FORM 1.B.1.-)

Externally, when deemed necessary, management will communicate through email, phone, and any other means appropriate.

### 7.5 Documented Information

Starn Tool's quality management system includes documentation as required by the AS9100 REV D/ISO9001:2015 standard, as well as documented information deemed necessary to maintain the effectiveness of the QMS.

(Reference FORM 1.B.2.-)

## 8.0 Operation

### 8.1 Operational planning and control

Starn Tool plans the processes needed for product realization. This planning considers the information related to the context of the organization, current internal and external resources and capabilities, as well as product and customer requirements.

During the planning process, consideration is given to:

- a. Personal and product safety
- b. Producibility and ease of inspection
- c. Reliability, availability, and maintainability
- d. Conforming materials
- e. Applicable software requirements
- f. Product obsolescence
- g. Prevention, detection, removal of foreign objects (Reference FORM 4.C.14.-)
- h. Handling, packing, preservation (Reference FORM 5.B.1.-)
- i. Final disposition

Operational documentation demonstrates the process for part creation, as well as the conformity. The associated documentation is dependent on customer requirements.

All changes to these plans are reviewed, approved, and controlled. (Reference FORM 2.A.2.-)

**8.1.1** A risk analysis focuses on risks associated to processes. (Reference FORM 4.C.6.-) Process risks are established on the process matrix. (Reference FORM 4.C.4.-)

Starn Tool also performs SWOT analysis to assist in monitoring risks associated with daily operations, based on employee input.

Risk analysis and SWOT are reviewed by responsible personnel, as defined in process procedures.

**8.1.2** Throughout the product lifecycle, configuration management is implemented when applicable to control product identity and traceability, and ensure documented information is accurate. Reference FORM 2.B.1.- (Quoting/Contract Review/Job SetUp)

**8.1.3** Product safety is implemented from the beginning of the product life cycle. Product travels with necessary documentation to applicable operations.

**8.1.4** Starn Tool has implemented a procedure for the control of suspect and counterfeit product containment. Reference FORM 2.A.3.2 (Suspect and Counterfeit Product Containment)

## 8.2 Requirements for Products and Services

**8.2.1** Starn Tool has implemented effective communication with our customers. This includes:

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

**8.2.2** When determining the requirements for product realization during our quoting process Starn Tool ensures:

- a. the review of statutory and regulatory requirements
- b. customer expectations will be met
- c. determination of special requirements of products/services
- d. identification of operation risks

**8.2.3** When determining the requirements for product realization Starn Tool ensures:

- a. Customer requirements are understood
- b. Requirements not stated by customer but necessary for product realization are obtained/understood
- c. Internal requirements are understood
- d. Applicable statutory and/or regulatory requirements are understood
- e. Updated customer revisions are understood

In the realization that some customer requirements are unable to be met, Starn Tool will negotiate a mutually acceptable requirement with the customer.

Record of completion of contract review can be found in Job Shop Manager. Document retention can be reviewed in FORM 1.B.2.- (Document Control).

**8.2.4** Where requirements for the product change post contract review, reevaluation of capabilities to meet the new requirements and relevant people are made aware. Reference FORM 2.B.1.- (Quoting/Contract Review/Job Setup)

## 8.3 Design and Development

Design and development of products and services is not applicable because Starn Tool does not do design and development. Starn Tool is a build to print manufacturer.

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

Starn Tool ensures that purchased products, processes, and services conform to the applicable customer/statutory/regulatory requirements.

Upon receipt of product, Starn Tool assumes responsibility for conformity.

Starn Tool is responsible for the use of customer approved external providers when applicable.

Providers are required to perform in accordance with Starn Tool and/or customer requirements. Reference FORM 2.B.2.- (Purchasing)

## 8.5 Production and Service Provision

**8.5.1** To control production provision, Starn Tool considers, as applicable, the following:

- a. The availability of documents or records that define 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 measuring resources
- d. The use of suitable infrastructure and environment
- e. The appointment of competent persons, including any required qualification
- f. The implementation of internal audits to validate planned results
- g. The implementation of actions to prevent human error
- h. The implementation of release, delivery, and post-delivery activities
- i. Workmanship criteria
- j. Product accountability
- k. Control of key characteristics/critical items
- l. Measurement methods
- m. Applicable in process inspection stages
- n. Verification of manufacturing/inspection operations
- o. Provisions to FOD Policy
- p. Control of utilities/supplies
- q. Identification and tagging of parts being released for subsequent operations

Equipment, tools and programs used to control production processes are validated prior to manufacturing. Supporting documents include FORM 4.A.1.4 (Naming Documents), department work instructions, set up sheets, and program files.

At this time Starn Tool does not utilize any in-house “special processes” where the result of the process cannot be verified by monitoring or measurement. Special processes (i.e. heat treat, coating operations, nondestructive testing, etc.) are subcontracted/outsourced and controlled as described in 8.4 Control of externally provided processes, products and services.



Starn Tool implements production process verification activities when applicable based on customer requirements. These activities would include First Article Inspection and In Process Inspections which are used when applicable to new parts or stated in customer requirements.

**8.5.2** Whether traceability/identification is a requirement or not, Starn Tool controls the unique identification of the product being manufactured and maintains records of status throughout product realization.

If unique traceability (serialization) is required by customer, regulatory or other established requirements, the requirement will be followed. Records of serialization will be kept.

Reference FORM 2.A.2.- (Quoting/Contract Review)

**8.5.3** Property belonging to third parties (customers or external providers) will be handled with care while it is under Starn Tool's control or is being used by the organization. Upon receipt, such property is identified, verified, protected, and safeguarded. If any such property is lost, damaged, or otherwise found to be unsuitable for use this will be reported to the customer or supplier and records maintained.

Intellectual property, including customer furnished data used for production and/or inspection, is identified by customer and maintained and preserved to prevent accidental loss, damage, or inappropriate use.

**8.5.4** Preservation of product conformity is controlled during internal processing and delivery.

The following statutory and regulatory requirements for preservation are addressed as applicable to:

- a. Cleanliness
- b. FOD Policy
- c. Sensitive product handling/storage
- d. Marking/labeling
- e. Control of shelf life/stock rotation
- f. Hazardous material handling/storage

Preservation is implemented throughout all stages of manufacturing, traveling to outsourced operations, and delivery transit to our customer.

**8.5.5** All post-delivery requirements will be met as applicable with established customer requirements. Post-delivery activities currently performed regularly, include:

- a. Customer feedback analysis
- b. Customer support

c. Job Performance Review

When problems are detected post-delivery, Starn Tool will take appropriate actions. Reference FORM 4.B.1.- (DMR-NCR-Corrective Action).

**8.5.6** Both planned and unplanned changes are reviewed and controlled to the extent necessary to ensure continuing conformity with requirements. Reviews of changes, persons authorizing the change, and any necessary actions arising from the review will be documented and maintained as applicable. Reference FORM 2.B.1.- (Quoting-Contract Review-Job Setup)

### 8.6 Release of products

Starn Tool utilizes in-process inspections and final inspections to verify that the product requirements have been met. These inspections are conducted at appropriate stages to verify product conformity as well as product preservation.

The release of products to our customer does not occur until all requirements have been completed satisfactorily, unless otherwise approved by customer, as applicable.

Documented information is retained as evidence of conformity, traceable to the person who authorized the release of product. The level of documentation is established by the customer requirements in conjunction with our process requirements.

### 8.7 Control of Nonconforming Outputs

**8.7.1** Starn Tool ensures products that do not conform to the requirements are identified and controlled to prevent unintended use or delivery. The action taken is based on the nature of the nonconformance and its effect on the product throughout the manufacturing process.

Starn Tool ensures nonconforming products and services detected after delivery to customer are evaluated, and appropriate action is taken to prevent additional escapes.

Disposition of nonconforming output will be determined using one or more of the following actions:

- a. Repair/remake
- b. Segregate, return, or service suspension
- c. Customer communication
- d. Customer approval

After determination of appropriate action to be take, all applicable interested parties will be notified.

Reference FORM 4.B.1.- (DMR/NCR/Corrective Action) and FORM 2.A.3.2 (Suspect and Counterfeit Product Containment)

**8.7.2** Starn Tool will retain documented information of nonconformances that will include:

- a. Description of nonconformance
- b. Actions taken
- c. Concessions/customer approvals obtained
- d. Disposition authority

All documentation of nonconformances are retained within Starn Tool ERP system.

## 9.0 Performance evaluation

### 9.1 Monitoring, measurement, analysis, and evaluation

**9.1.1** The quality management system is used to improve processes, enhance customer satisfaction, minimize risks, and optimize opportunity. Such improvements aim to address the needs and expectations of the customers, as well as other interested parties, to the best extent possible.

Starn Tool has defined process measurables and employ various methods of gathering data for evaluation. Documentation of process measurables, evaluations, and any actions taken where necessary to correct processes, are maintained. Reference FORM 1.B.1.- (Management Review)

**9.1.2** Customer Satisfaction is one of the measurements demonstrating performance of the overall management system. The methods for obtaining this information include but are not limited to:

- a. Customer satisfaction surveys
- b. Customer Feedback (email/visits/phone)
- c. Product/Service Conformity
- d. Customer provided scorecards (if applicable)
- e. On Time Delivery

**9.1.3.** Starn Tool analyzes documented process measurables and reviews monthly. These results are used to evaluate:

- a. Conformity
- b. Customer satisfaction
- c. Performance and effectiveness of the QMS
- d. Effectiveness of planning
- e. Effectiveness of actions taken to address risks and opportunities
- f. Performance of external providers
- g. Additional identified improvements

## 9.2 Internal Audit

**9.2.1** Starn Tool conducts internal audits at planned intervals to determine whether the quality management system conforms to Starn Tool's requirements, the requirements of AS9100 REV D/ISO9001:2015, customer requirements, and statutory/regulatory requirements.

**9.2.2** Internal audits ensure that the quality management system has been effectively implemented and is maintained by:

- a. Audit program implementation
- b. Defining audit criteria/scope
- c. Appropriate auditor selection
- d. Addressing audit results as applicable in management review
- e. Implementing appropriate improvement/corrective actions
- f. Retaining documented audit information/results

Reference FORM 4.B.3.- (Internal Audit)

## 9.3 Management Review

**9.3.1** Management reviews the quality management system at planned intervals to ensure its continuing suitability, adequacy, effectiveness, and alignment with the strategic direction of the company.

**9.3.2** Inputs of management review take into consideration:

- a. Action Items from previous management review meetings
- b. Changes in issues that are relevant to the QMS (internal and/or external)
- c. Information on the performance and effectiveness of the QMS, including:
  1. Customer satisfaction and feedback from interested parties
  2. Quality objectives
  3. Process performance and conformity of products/services (Monthly Metrics/KPI's)
  4. Nonconformities and Corrective Actions
  5. Monitoring and measurement results
  6. Audit Results
  7. Performance of External Providers
  8. On time delivery
- d. Adequacy of resources
- e. Actions taken to address risks and opportunities
- f. Opportunities for improvement

Reference FORM 1.B.1.- (Management Review)

**9.3.3** Outputs of management review include:

- a. Opportunities for improvement
- b. Any need for changes to the quality management system
- c. Resource needs
- d. Identified risks

Records of management review meetings and actions resulting from those meetings are retained.

## 10.0 Improvement

### 10.1 General

Starn Tool determines/selects opportunities for improvement and implements any necessary actions to meet customer requirements and enhance customer satisfaction.

This includes:

- a. Improving products and services to meet requirements
- b. Correcting, preventing, and/or reducing undesired effects
- c. Improving the performance and effectiveness of the quality management system.

### 10.2 Nonconformity and Corrective Action

**10.2.1** When nonconformity occurs, including those arising from complaints, Starn Tool reacts to the nonconformity by:

- a. Acting to control/correct
- b. Address and manage the outcome

Additionally, nonconformities and actions taken are evaluated to ensure similar nonconformities do not recur elsewhere by:

- a. Reviewing and analyzing the nonconformance
- b. Determining the root cause(s)
- c. Determining if similar nonconformances exist or could occur

Upon completion of nonconformities investigation, Starn Tool will implement appropriate action(s), review effectiveness of action(s), updated risks and opportunities and make changes to the QMS, if necessary, flow down appropriate action requirements to applicable third party suppliers, implement additional actions as necessary.

**10.2.2** Records and results of nonconformities and corrective actions are retained electronically. Reference FORM 4.B.1.-(DMR-NCR-CA)

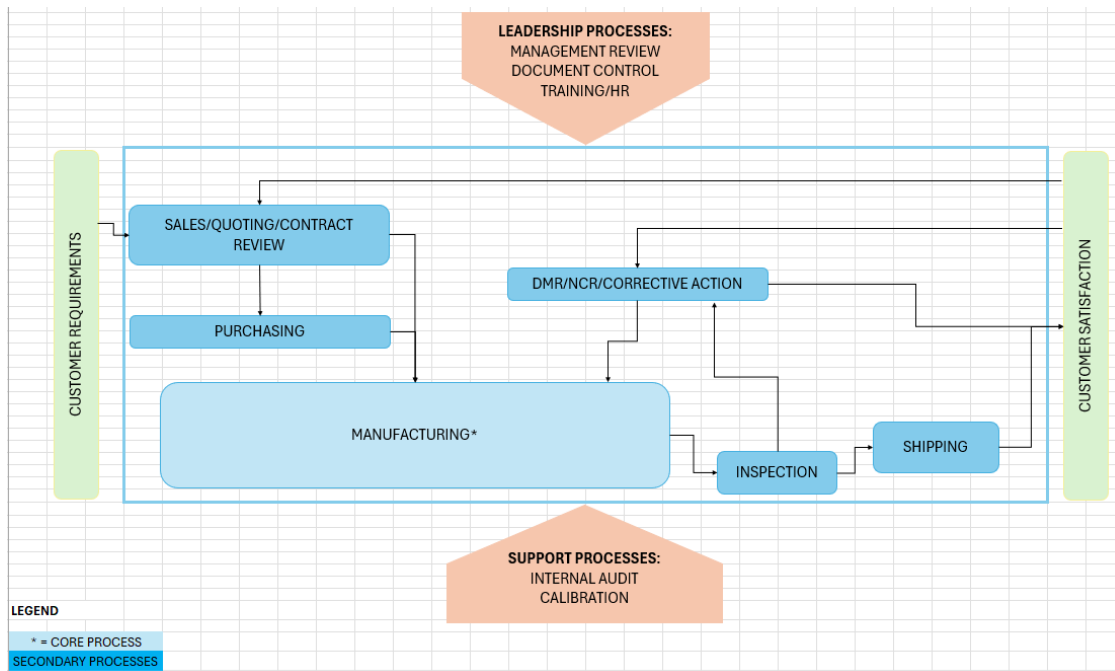
### 10.3 Continual Improvement

Starn Tool uses the quality management system to continually improve processes, methods, and customer satisfaction. Starn Tool considers the results of evaluations/analysis of data and the outputs of management review to determine if there are needs or opportunities that shall be addressed as part of the continuous improvement efforts.

## Appendix 1 (Interested Parties)

Interested Party	Requirements	Processes
Customers	Accuracy	Sales/quoting
	On time delivery	Contract review
	Quality products	Manufacturing
	Specifications	Inspection
Suppliers	Cost	Shipping
	Accuracy	Purchasing
	Payment terms	Accounting
Regulatory/Government	Maintaining Compliance	Management Commitment
Employees	Training	Training
	Resources	Human Resources
	Benefits	
Management Team	authority	Management Commitment
	support	Human Resources
	resources	
Owners/Shareholders	Current information for decision making	Management Review
Community/Schools	Consideration of graduates for employment	Human Resources
		Training

## Appendix 2 (Process Map)



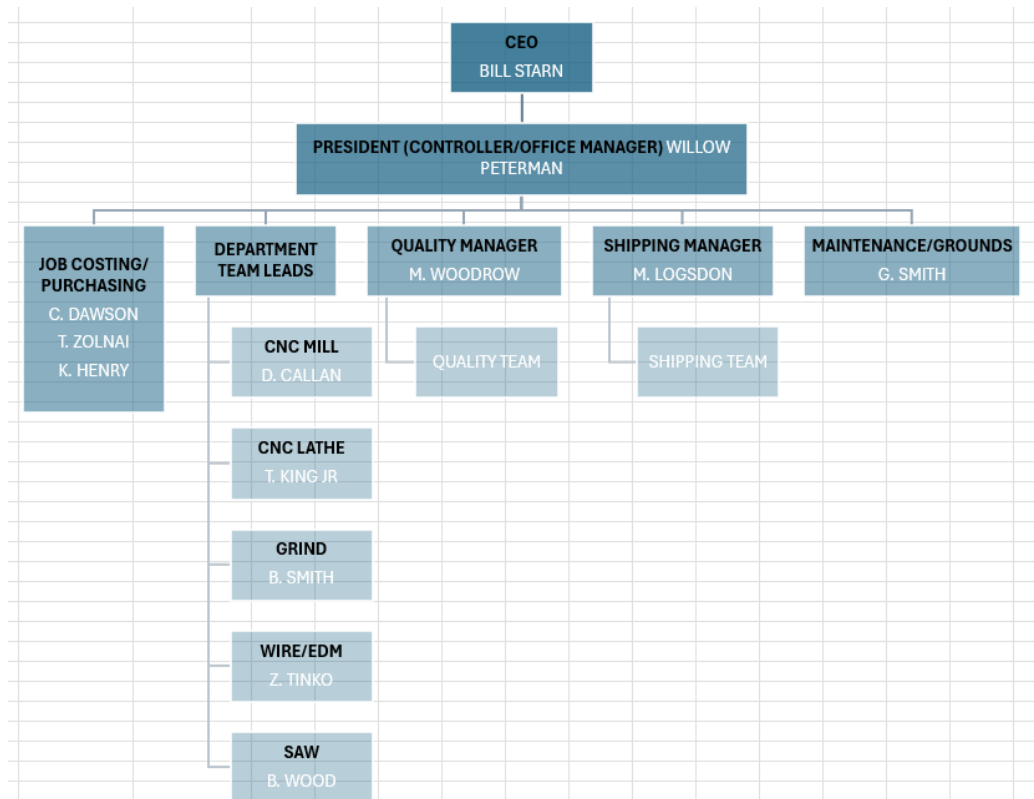
### Appendix 3 (RACI Matrix)

RACI Matrix										
ROLE	Management Team									
	CEO	PRESIDENT (CONTROLLER/OFFICE MANAGER)	JOB COSTING/PURCHASING	QUALITY MANAGER	QUALITY TEAM	DEPARTMENT TEAM LEADS	MANUFACTURING PERSONNEL	SHIPPING MANAGER	SHIPPING TEAM	MAINTENANCE/GROUNDS
<b>PROCESSES</b>										
MANAGEMENT REVIEW	I	A	R	R	C	C	C	C	C	C
DOCUMENT CONTROL	I	A	R	R	I	R	I	I	I	I
TRAINING/HR	I	A	R	R	C	R	C	R	C	C
DMR/NCR/CORRECTIVE ACTION	I	A	C	R	R	C	C	I	I	
SALES/QUOTING/CONTRACT REVIEW	I	A	R	C		C				
PURCHASING	I	A	R	R		R		R		C
MANUFACTURING *	I	A	C	C		R	R	C		C
INSPECTION	I	C		A	R		R			
SHIPPING	I	A	C	C				R	R	
INTERNAL AUDIT	I	A	R	R	C	C	C	C	C	C
CALIBRATION	I	C		A	R	C	C			

<b>Legend</b>	
R = Responsible	Those who do the work to achieve the process output.
A = Accountable	The one ultimately answerable for the process.
C = Consulted (Support)	Those whose opinions are sought or support the processes.
I = Informed	Those who are kept up-to-date on the process and with whom there is just one-way communication.
* = Core Process	

### Appendix 4 (Organization Chart)





<b>Revision History:</b>			
<b>Rev:</b>	<b>Changes:</b>	<b>Changed by/date:</b>	<b>Approved by/date:</b>
-	Creation of Quality manual	J. Flinn 1/5/07	J. Flinn 1/5/07
2	Rewrote to match the 2015 standard.	J. Flinn 2/16/18	T. Mullen 2/22/18
3	Grammar and spell checked and updated	S. Seeley 01/27/22	K. Gates 01/27/22
4	Creation of new Quality Manual to align with AS9100D Rev D/ISO9001:2015	W. Peterman 9/6/2024	W. Peterman 9/6/2024