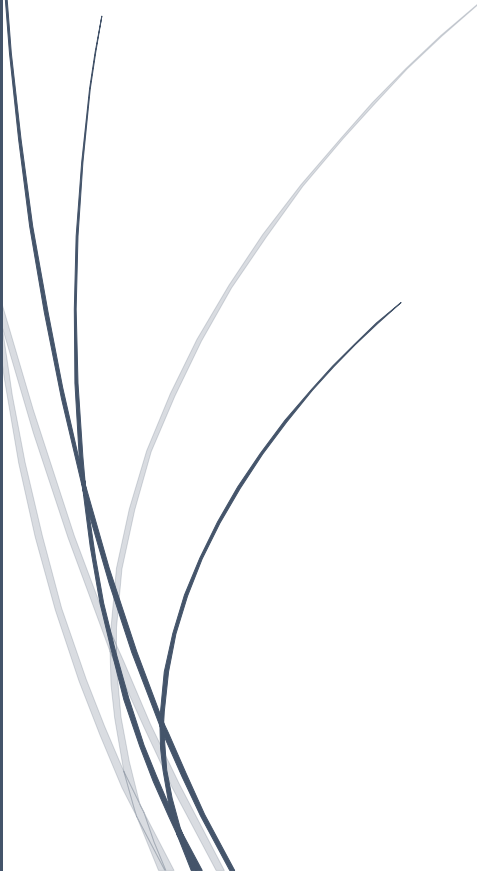


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E&S Precision Machine, Inc. Quality Manual





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1 E&S Precision Machine, Inc. Introduction

E&S Precision Machine Inc. was established in 1989.

As a true precision machine shop we provide the finest work possible on state of the art equipment by talented craftsmen.

We discovered from the beginning that in order to continue to build and retain our clients, customer service was essential. We have the most responsive customer service department possible, our customer service representatives are empowered to help you with your particular need.

E&S Precision Machine provides full machining services to a broad spectrum of clientele.

E & S Precision Machine, Inc. is committed to manufacturing a quality product at a reasonable price. We will fulfill our customer's needs, exceed their expectations, and provide them with the highest quality products and services in a timely manner. E&S Precision Machine is dedicated to being a leader in the Machining Industry in California. The true measure of quality at E&S Precision Machine, Inc. is customer satisfaction. Because customer Satisfaction and the quality of our products are and will continue to be the keys to our competitiveness for years to come. It is increasingly vital for us at E&S Precision Machine, Inc. to understand and use our quality management system to do the best job, the first time, every time. To ensure that our quality management system will continue to provide a solid foundation for success, it is essential that we continually improve our quality management system and related processes.

2 E&S Precision Approach in adoption of ISO 9001

1. Meet customer requirements. The most important perused goal of being ISO 9001 certified is being able to meet the increasing demands of customers. E&S Precision Machine by adopting the ISO 9001 is determined to assure the customers of existence of quality through documented procedures and by continually improving management system

2. Achieve competitive advantage. E&S Precision Machine believes an efficient and effective management system is the foundation of a successful market strategy. A management system that is well-defined and documented, and benefits from merely of a shared understanding of how things are done.

The effective ISO 9001 certification expands the market accessibility and provides the upper hand position in customer evaluations.

3. Improve company and service quality. By adopting the ISO 9001, E&S precision Machine increases the quality of products and improves the processes across the entire organization.

4. Describe, understand, and communicate the company's processes. By attaining ISO 9001 certification E&S precision Machine identifies, manages, and monitors and continually improves the business processes

5. Create a professional business culture. E&S precision Machine has adopted the ISO 9001 to motivate and empower employee. This goal realizes by providing employees with everything they need to perform well, i.e. clear expectations and the tools they need to perform the tasks expected of them, and quick, and timely feedback on their performance.

3 Terms and Definitions

Document Control	Ensuring that the most current version is in use by issuing a document with a reference and issue number so that the correct version of the document is used at all times.
Record Control	A record is a completed document. Record control is the method by which a company makes finding individual records efficient. It can also refer to how it files, removes and dispositions individual records.
Procedure	A procedure is a set way of doing something and is driven by the completion of a task with a focus on satisfying the rules.
Requirement	Need or expectation that is stated, generally implied or obligatory
Capability	Ability of company, system or process to realize a product that will fulfill the requirements for that product
Supplier	The company that provides material or service to E&S Precision Machine
Active supplier	A supplier, who has been evaluated and approved to provide quality service or product
Inactive supplier	Suppliers that show an unsatisfactory quality and poor performance.
Conformity	To conform means to meet or comply to requirements.
Correction	A correction is any action that is taken to eliminate a nonconformity
Corrective action	Corrective actions are steps that are taken to eliminate the causes of existing nonconformities in order to prevent recurrence.
Preventive action	Preventive actions are steps that are taken to remove the causes of potential nonconformities or potential situations that are undesirable. The preventive action process is designed to prevent the occurrence of nonconformities or situations that do not yet exist. It tries to prevent occurrence by eliminating causes.
Difference between Corrective Action and Preventive Action	Corrective action is a reaction to a problem that has already occurred but, preventive action is initiated to stop a potential problem from occurring
Inspection	Inspection use observation, measurement, testing and judgment to evaluate conformity of product characteristics regarding to product requirements.
Nonconforming product	When one or more characteristics of a product fail to meet specified requirements, it is referred to as a nonconforming product. Nonconforming products must be identified and controlled to prevent unintended use or delivery.
Outside processing	An outside processing is any process that is part of E&S production, but is performed by a party that is external to E&S.
Customer Property	Property owned by the customer and provided for use in meeting the requirements of the contract. Customer property can include intellectual property.
Calibration	A set of operations that establish, under specified conditions, the relationship between the values of quantities indicated by measuring instrument or measuring system and the corresponding values realized by standards.
Accuracy	The closeness of agreement between a test result and the accepted reference value
Precision	Precision is a measure of the repeatability of a measuring system
Calibration Interval or Frequency	The period of time or series of measurements during which calibration can be expected to remain stable within specified and documented limits.
Calibration Service Provider	An external organization demonstrating appropriate technical scope and competency of calibration by accreditation to ISO / IEC 17025 through authorized signatories of an international accreditation body.
Measuring and Test Equipment	All devices used to gauge, measure, test, inspect, or otherwise determine compliance with prescribed technical requirements.
Management review	The overall purpose of a management review is to evaluate the suitability, adequacy, and effectiveness of an organization's quality management system, and to look for improvement opportunities. Management reviews are also used to identify and assess opportunities to change an organization's quality policy and quality objectives, to address resource needs, and to look for opportunities to improve its products.
KPI	A key performance indicator (KPI) is a metric or measure. KPIs are used to quantify and evaluate organizational success.
Special Process	The process, which the resulting output cannot be verified by subsequent monitoring or measurement and, as a consequence, deficiencies become apparent only after the product is in use.
TIG Welding	Also called Gas Tungsten Arc Welding, GTAW. Involves striking an arc between a non-consumable tungsten electrode

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Quality Manual

	and the work piece.
MIG Welding	Gas metal arc welding (GMAW) can also be referred to as MIG (metal inert gas) if the shielding gas is inert as for example argon or MAG (metal active gas) if the gas has a content of an active gas such as CO ₂ .
Product identification	Knowing the identity of (yours or customer supplied) product from - incoming receipt of materials; raw material storage; use in production; work in progress; finished product storage; and delivery of product to the customer. Product identification can be controlled using physical and electronic methods.
Product status	Knowing the quality status (good or bad) of materials and product through each of the above stages. Product status can be controlled using physical and electronic methods.
Unique Product Identification	Production Order Number assigned to every job
Asset Register	A list of all the Assets in a particular workplace, together with information about those assets, such as manufacturer, vendor, make, model, specifications etc.
Machine Breakdown	A specific type of failure, where an item of plant or equipment is completely unable to function.
Corrective Maintenance Or Repair	Any maintenance activity which is required to correct a failure that has occurred or is in the process of occurring. This activity may consist of repair, restoration or replacement of components.
Preventive Maintenance Or PM	An equipment maintenance strategy based on replacing, overhauling or remanufacturing an item at a fixed interval, regardless of its condition at the time. Scheduled Restoration tasks and Scheduled Discard tasks are both examples of Preventive Maintenance tasks.
Product Characteristic	Distinguishing feature. <ol style="list-style-type: none"> 1. Characteristic can be inherent or assigned. 2. Characteristic can be qualitative or quantitative. 3. There are various classes of characteristic, such as the following: <ul style="list-style-type: none"> • Physical (e.g. mechanical, electrical, chemical or biological characteristics);
Inspection Test	Conformity evaluation by observation and judgment accompanied as appropriate by measurement, testing or gaging.
Defect	Determination of one or more characteristics according to a procedure.
Audit	Non-fulfilment of a requirement, related to an intended or specified use
Auditor	An audit is a systematic, independent, and documented process for: <ol style="list-style-type: none"> 1- Obtaining evidence and 2- Evaluating it objectively to determine the extent to which audit criteria are fulfilled.
Audit criteria	Person with the competence to conduct an audit
Audit Evidence	Set of policies, procedures or requirements used as a reference
Audit Findings	Records, statements of fact or other information which are relevant to the audit criteria and verifiable
Qualified Employee Training Need	Audit Findings are the results of the evaluation of the collected audit Evidence against audit Criteria which are: <ul style="list-style-type: none"> • Conformity: Fulfillment of a requirement • Nonconformity: None-fulfillment of a requirement
Training Survey	Who can demonstrate ability to apply knowledge and skills.
Training Needs Analysis	The difference between what the employee can do now and what they are required to do in order to carry out their job effectively and efficiently
Training Effectiveness Evaluation	A process of gathering information to determine whether or not there is a training need.
Job Shop Production System	A training needs analysis is the method of determining if a training need exists and if it does, what training is required to fill the gap
Job Routing	To confirm that both organizational and training objectives have been met, i.e. training has been effective.
	A job shop is a type of manufacturing process in which small batches of a variety of custom products are made. In the job shop process flow, most of the products require a unique set-up and sequencing of process steps.
	When an order arrives in the job shop, the part being worked on travels throughout the various areas according to a sequence of operations. Not all jobs will use every machine in the plant. Jobs often travel in a jumbled routing and may return to the same machine for processing several times

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4 Context of the organization

4.1

•Understanding the organization and its context

E&S Precision Machine, Inc. has determined internal and external issues that are relevant to the mission and purpose of the organization, whereby the mission and purpose has defined as follows:

“Manufacturing Metal and Plastic Parts to Customer Specification”

In compliance with ISO 9001:2015, clause 4.1, E&S precision Machine has established The **Company’s Strategic Plan (QMSD-1011)** and reviews as important input of management review process at least once a year. The company’s Strategic Plan shall include the internal and external positive and negative factors (strength, weakness, threads, and opportunities according to SWOT methodology) effecting the business environment.

Internal issues may include subjects that can affect the customer satisfaction and delivery of quality product such as contractual relationships with customers, and its interested parties, culture, beliefs, values, or principles inside the organization, complexity of processes and organizational structure.

External issues may include, subjects arising from its social, technological, environmental, ethical, political, legal, and economic environment.

4.2

•Understanding the needs and expectations of interested parties

In compliance with ISO 9001:2015, clause 4.2, E&S precision Machine identifies the interested parties with respect to their effect or potential effect on the E&S Precision Machine’s ability to consistently provide products that meet customer and applicable statutory and regulatory requirements according to the **E&S Precision Machine Inc. Strategic Plan (QMSD-1011)**., where interested parties and their relevant requirements are monitored and reviewed at least once a year as an important input of management review process.

Interested parties may include direct customers, end users, suppliers and partners, regulators, people in the organization, owners. Shareholders

4.3

•Determining the scope of the quality management system

E&S precision Machine has determined and documented the boundaries and applicability of the quality management system according to:

1. The external and internal issues (See 4.1)
2. The requirements of relevant interested parties (See 4.2)
3. The products and services of the E&S Precision has determined as:
“Manufacturing Metal and Plastic Parts to Customer Specification”
4. E&S precision believes the clause 8.3 (Design and development of products and services) of ISO 9001:20015 does not apply to the scope of E&S’s quality management system due to :
 1. E&S Precision Machine does not supply engineering and design service to its customers.
 2. This inapplicability does not affect the company’s ability or responsibility to ensure the conformity of its products and the enhancement of customer satisfaction.

4.4

•Quality management system and its processes

4.4.1. E&S precision Machine established, implemented, maintain and continually improve a quality management system, including the processes needed and their interactions, in accordance with the requirements of the ISO 9001:20015.

E&S Precision Machine has determined the processes needed for the quality management system and their application throughout the organization including:

1. Inputs required and the outputs expected from these processes according to **QMS Process Map (QMSD-1003) and QMS Process Diagram (QMSD-1009)**.
2. Sequence and interaction of these processes according to **QMS Process Map (QMSD-1003) and QMS Process Diagram (QMSD-1009)**.
3. Criteria needed to ensure the effectiveness of operation and control of these processes according to **Monitoring and Measurement Criteria (QMSD-1010)**
4. Resources needed for these processes and ensure their availability;
5. Responsibilities and authorities for QMS processes according to **Organization Chart (QMSD-1002)**
6. Risks and opportunities According to **E&S Precision Machine Inc. Strategic Plan (QMSD-1011)**.
7. Evaluate the processes and implement any changes needed to ensure that these processes achieve their intended results according to **Management Review Procedure (QMSP-1037)**.
8. Improve the processes and the quality management system.

4.4.2. E&S precision Machine maintain documented information and retain the records to support its operation and have confidence that the processes are being carried out as planned, according to **Control of documents and records procedure (QMSP-1001)**.

5 Leadership

5.1 •Leadership and commitment

5.1.1. General

Top management is fully accountable for effectiveness of the quality management system and ensures that the QMS quality policy and objectives are established for the quality management system and are compatible with the context and strategic direction of the E&S Precious Machine according to **E&S Precision Machine Inc. Strategic Plan (QMSD-1011)**.

5.1.1. Customer Focus

Top management at E&S Precision Machine, Inc. ensures through Management Reviews and communication with employees that customer needs and expectations are determined, converted to requirements and met with the aim of enhancing customer satisfaction, according to the following policies:

- Determination, understating, and compliance with customer requirement and applicable statutory and regulatory requirements according to Requirement Review procedure (QMSP-1003);
- Determination and addressing the risks and opportunities that can affect conformity of products according to **E&S Precision Machine Inc. Strategic Plan (QMSD-1011)**.
- Maintain the focus on customer satisfaction by measurement and monitoring according to Management Review Procedure (QMSP-1037).

5.2 •Policy

E&S Precision Machine, Inc.'s "Quality policy and Objectives (QMSD-1007)" are displayed openly as a sign of our pride and commitment and as a clear reminder of our focus and direction. Because the success of our Quality Management System is essential for our competitiveness, it is vital that the employees of E&S Precision Machine, Inc. understand and adhere to our Quality Policy.

5.3

•Organizational roles, responsibilities and authorities

The organizational structure shown in “Organization Chart (QMSD-1002)”. Organization chart illustrates the responsibilities and authorities of personnel who manage, perform, and verify work affecting the quality of products and services at E&S Precision Machine, Inc.

- The President is the leader of the quality efforts at E&S Precision Machine, Inc. and is responsible for the delegation of the various responsibilities for quality, and for the efficient operation of the company.
- The Managers/Foremen/Supervisors are responsible for ensuring that E&S Precision Machine, Inc.’s quality policies are being carried out on a daily basis and ensuring that the processes are delivering their intended outputs.
- Managers/Foremen/Supervisors may delegate the authority for implementation of the quality functions within their departments, but shall retain the responsibility for its function.
- Quality is the responsibility of each E&S Precision Machine, Inc. Employee. Their responsibilities for activities affecting quality are specified further in E&S Precision Machine, Inc.’s Quality Manual and Procedures.

The responsibility and authority for the quality management system is communicated to all employees through “Job Descriptions (QMSF-1068)”

Also Responsibilities are clarified in section 4 of each Quality Management System procedure

6

Planning

6.1

•Actions to address risks and opportunities

E&S Precision Machine has determined the risks and opportunities required by ISO 9001:20015 as a proactive approach in quality management system planning and implementation to achieve improvement and prevent, or reduce, undesired effects. The **E&S Precision Machine Inc. Strategic Plan (QMSD-1011)** Presents further information regarding actions to address these risks and opportunities and how to integrate and implement the actions into its quality management system processes and also evaluate the effectiveness of these actions.

Also, internal and external risk of quality is evaluated according to the customer requirement procedure, where following risk are evaluated and appropriate preventive measures are determined.

1. Risk of failure in acquisition of timely raw material
2. Risk of failure in acquisition of tooling and production supplements
3. Risk of supplier failure
4. Risk of failure in programming phase

5. Risk of failure in machining phase
6. Risk of failure in inspection phase
7. Risk of failure in handling and packaging
8. Risk of late delivery

6.2

•Quality objectives and planning to achieve them

It is the responsibility of top management to ensure that quality objectives are established and they are consistent with the quality policy. The measurement of quality objectives provides a consistent basis for the monitoring of continual improvement. Measurable quality objectives are determined through the objective planning Process, and are reviewed at regular intervals at management review, staff, and company-wide meetings. E&S Precision Machine Quality objectives are:

1. Increase the overall on-time delivery
2. Decrease Nonconformance (Customer, Internal, Vendor)

The **E&S Precision Machine Inc. Strategic Plan (QMSD-1011)** demonstrates the measurement results of quality objective and relevant action plan(s) to achieve them. The following determinations is required for plan(s) driven from quality objectives”:

- 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

For the changes that affect the QMS, E&S Precision Machine manages the change process in a planned manner according to Change Management Worksheet (QMSF-1076), where the following considerations are determined:

- 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

E&S precision Machine has determined and provided the **Internal** and **External** resources needed for the establishment, implementation, maintenance and continual improvement of the quality management system.

These resources are included but not limited to:

1. **People:** Necessary persons are determined and provided for the effective implementation of QMS and for the operation and control of processes.
2. **Infrastructure:** The necessary infrastructure for the operation of processes and to achieve conformity of products and services has been determined and provided.
3. **Environment for the operation of processes:** A suitable environment, a combination of human and physical factors is determined and provided to QMS processes.
4. **Monitoring and measuring resources:** E&S Precision Machine has determined and provide the measurement and test equipment to ensure valid and reliable results when monitoring or measuring to verify the conformity of products according to Calibration Procedure (QMSP-1026).

The Measurement and test equipment are

- A. Calibrated or verified
 - B. Identified and determined by according to their status
 - C. Safeguarded from adjustment, damage, or deterioration.
5. **Organizational knowledge:**
 - A. **Product Knowledge:** Product knowledge is developed by customers and E&S precision machine has no role in product knowledge development process. Technical Drawing and 3D models are archived and protected according to customer requirements procedure (QMSP-1003).
 - B. **Process knowledge:** Products are produced according to the common manufacturing methods and industry practices. For each product, the process knowledge is established according to the related CNC programs and maintained and made available to the extent necessary.
 - C. **QMS Knowledge:** E&S Precision Machine has captured the knowledge within the company through work instructions, databases, checklists, and training packages.

7.2

•Competence

E&S Precision Machine has determined the necessary competence of person(s) doing work according to the job descriptions and during the hire process ensures that these persons are competent on the basis of appropriate education, training, or experience by evaluating the competency of each new hire. In result of performed pre-evaluation and extended on the job evaluation internal/external training may conducted according to the **Training procedure (QMSP-1057)**, to cover the recognized competency gap. Records of competency such as resume and certificates are acquired during the hire process and retained in employee's file.

It is E&S Precision Machine, Inc.'s policy that any employee may request training at any time if the employee feels that training is essential to receive the knowledge and skills required to maintain the requirements of the Standard and E&S Precision Machine, Inc.'s quality management system.

7.3

•Awareness

With reference to Training procedure(QMSP-1057), E&S Precision Machine ensures that persons doing work under the organization's control are aware of the quality policy, relevant quality objectives, and their contribution to the effectiveness of the quality management system, including the benefits of improved performance, and the implications of not conforming with the quality management system requirements.

7.4

•Communication

E&S Precision Machine had determined the downward and upward internal communication according to the company's organization chart (QMSD-1002).

Downward communication includes quality policy and objectives, employee handbook, set of procedures for routine tasks, job description, regularly hold management meetings, staff meetings, employee's performance reviews, and posting on Bulletin board.

Also, upward communication such as reports to supervisors, one-on-one meetings, Grapevine, and suggestions.

Communications with customers and suppliers are determined and managed according to customer requirements procedure (QMSP-1003) and Suppliers Pre-Qualification and Performance monitoring Procedure QMSP-1004" respectively.

7.5

• Documented information

E&S Precision Machine, Inc. maintains a documented quality management system as a means to ensure that products and services conform to the specified requirements.

Quality System documents are available to all employees through the E2 System> Quality Module.

Documents are uncontrolled when printed unless stamp indicated.

For more information, see “Control of documents and records procedure (QMSP-1001)”

Records at E&S Precision Machine, Inc. are controlled to ensure they Remain legible, readily identifiable and retrievable. This procedure defines the controls needed for the proper identification, storage, protection, retrieval, retention time and disposition of records. For more information, please see “Control of documents and records procedure (QMSP-1001)” and “Quality Record Matrix (QMSF-1064)”

8

Measurement, Analysis and Improvement

8.1

• Operational planning and control

E&S Precision Machine has planned, implemented and controlled the processes needed to meet the requirements for the provision of products according to QMS Process Map (QMSD-1003). The requirements for products are dictated by customers through technical drawings, models, and purchase request. The indicators for process measurement and monitoring are indicated by Monitoring and Measurement Criteria (QMSD-1010) and, needed resources to achieve conformity to the product are determined and provided by support processes including maintenance, Calibration, training and document and record control.

8.2

• Requirements for products and services

Customer communication is planned and maintained according to customer requirements procedure (QMSP-1003), where frameworks for product information, changes, inquiries, feedback, complaints, customer properties, contract requirement determination and review are provided.

8.3

•Design and development of products and services

This requirement of ISO 9001:2005 does not apply to E&S Precision Machine products and processes. The Products are made to customer's requirements E&S has no role in design and development of products.

8.4

•Control of externally provided processes, products and services

E&S Precision Machine has ensured that externally provided processes, products and services conform to requirements establish, implement, and maintaining the Suppliers Pre-Qualification and Performance Monitoring Procedure (QMSP-1004) procedure, where the potential impact of the externally provided processes will determine the type and extend of the controls.

The adequacy of requirements is ensured according to the Purchasing Procedure (QMSP-1055), where the communication, methods, processes, equipment, competency, and standards are clarified. E&S Precision Machine, Inc. ensures that purchasing documents are reviewed and approved for adequacy of specified requirements prior to release.

Purchasing Manager is responsible for ensuring that "Purchasing Order" contains data clearly describing the product ordered, including the following, where applicable:

- Supplier name/Address/Phone/Fax;
- Purchase Order Number;
- Order Number;
- Relevant Jon Number;
- Date of Order;
- Goods, material or service required;
- Any appropriate specification or part or drawing numbers;
- Agreed fee or price;
- Delivery date and address: mode of transport where appropriate;
- Quantity;
- Inspection, certification or special requirements;
- Packing, Identification or special shipping method if required.
- Authorized contacts

Note: If Customer has made a specification on raw material or Service, this becomes the minimum required of any Purchase Order.

Verification activities are defined according to Quality Control Procedure (QMSP-1053), to ensure that the externally provided processes, products and services meet requirements.

8.5

•Production and service provision

➤ 8.5.1- Control of Production and Service Provision

General manufacturing and service operations are controlled and tracked in E&S Precision Machine, Inc.'s information system, the E2 shop System.

Managers/Foremen/Supervisors involved in processes that directly affect quality of intermediate and end products are responsible for ensuring that these processes are identified, planned and executed under controlled conditions.

Controlled Conditions are defined to include the following requirements:

- Availability of information describing product characteristics according Correspondent “Job Traveler” and drawing.
- Availability of the necessary procedures and forms according to “Production Procedure (QMSP-1059)”
- Use and maintenance of suitable equipment for production and service operations
- Availability and use of monitoring and measuring devices.
- Implementation of monitoring and measurement activities.
- The implementation of product release, delivery and post-delivery activities according to “Receiving–Shipping Procedure (QMSP-1054)”

➤ 8.5.2-Identification and traceability

E&S Precision Machine, Inc. maintains a database for identifying, where appropriate, raw materials and supplies, component parts, subassemblies, and finished products by means of applicable drawings, specifications, and other documents from receipt and throughout the stages of production, delivery, and installation. Each product that is identified will include unique identification, the status of required monitoring and measurement activities. Where Traceability is a requirement, traceability data is controlled and recorded. Product identification and traceability are maintained and controlled through E&S Precision Machine, Inc.'s E2 Shop System software.

For more information, see “Product Identification and traceability Procedure (QMSP-1045)”

➤ 8.5.3 - Property belonging to customers or external providers

E&S Precision Machine, Inc. exercises care with customer/External Providers property and ensures that the property is identified, verified against specified requirements, protected, and safeguarded until required for use or incorporated into our products. Customer property may also include intellectual property. For more information, see Customer Property Procedure (QMSP-1024)



➤ 8.5.4-Preservation

Employees and the Foremen/Supervisors are responsible for identification, handling, packaging, storage, protection, and delivery of materials and products. They are also responsible for establishing, documenting, and maintaining methods appropriate to preserve conformity of product and constituent parts during internal processing and delivery.

E&S Precision Machine, Inc. ensures the preservation of product in the following ways:

- Identification: Specific details on the identification of product at E&S Precision Machine, Inc. are described in Section 8.5.2 (Identification and Traceability).
- Handling: E&S Precision Machine, Inc.'s policy is to use methods and means appropriate for the handling and transporting of product in a manner that prevents loss of product value and ensures employee safety.
- Packaging: Products are appropriately packed and identified on the packaging in a manner that allows for ready identification through the stages of processing and prevents the loss of product value.
- Storage: E&S Precision Machine, Inc. maintains facilities, equipment, and designated areas to store material in a manner that prevents loss of product value (see Section 6.3).
- Methods and means appropriate for ensuring proper receipt of material, and proper dispatch to and from the pertinent areas are required and used. Foreman/Supervisor's having jurisdiction over departments where product is stored are responsible for assessing the condition of those materials at intervals sufficient to guarantee the prevention of their damage or deterioration.
- Protection: Products are protected during internal processing and delivery to maintain product quality and value when the product is under the company's control.
- Delivery: The quality of the final product is protected after final inspection. Where contractually specified, E&S Precision Machine, Inc. is responsible for packaging and preservation during transit, including delivery to destination.

➤ 8.5.5- Post-delivery activities

E&S precision machine has determined the post-delivery activities associated with the products and services according to the Control of Nonconforming Product (QMSP-1005) where, the potential undesired consequences associated with its products and services are anticipated and determined.

➤ 8.5.6- Control of Changes

Production and service provision changes are under control to ensure continuing conformity with requirements according to Requirement Review Procedure (QMSP 1003), where results of the review of changes, the person(s) authorizing the change, and any necessary actions arising from the review are described.

8.6

•Release of products and services

The product release process including arrangements and appropriate stages to verify that the product and service requirements have been met, are planned and implemented according to the Quality Control Procedure (QMSP-1053), Part Checklist (QMSF-1003) and Job Traveler.

The release of products to the customer won't be proceed until the planned steps are satisfactory performed and completed, unless otherwise approved by a relevant authority and, as applicable, by the customer.

8.7

•Control of nonconforming outputs

The Production Manager/Shop Foreman are responsible for implementing and maintaining "Control of Nonconforming Product (QMSP-1005)" to ensure that:

- Product not conforming to specified requirements is clearly identified and controlled to prevent unintended use or delivery until the product is reviewed and disposition is determined.
- Responsibilities and authorities for the identification, control and disposition of nonconforming product are defined, communicated and understood.

Nonconforming product is dealt with in one of the following way:

- By taking action to eliminate the detected nonconformity (rework or repair).
- By authorizing its use, release or acceptance under concession by a relevant authority and, where applicable, by the customer (use as-is).
- By taking action to preclude its use or application (reject or scrap).

Reworked and repaired product is re-inspected or re-verified to demonstrate conformity to the requirements.

9

Performance evaluation

9.1

•Monitoring, measurement, analysis and evaluation

1- Monitoring and Measurement of Processes

Monitoring, and where applicable, measurement activities are performed on the quality management system processes necessary to meet customer requirements, track quality objectives, and on additional processes where the potential benefit is identified. The responsibility to identify and apply suitable methods for monitoring and measurement of processes is assumed by Department



Managers/Foreman/Supervisors and is performed according to Monitoring and Measurement Criteria (QMSF-1073).

Monitoring and measurement of processes demonstrate the ability of the processes to achieve planned results. When planned results are not achieved, action is taken to correct the immediate problem.

2- Monitoring and Measurement of Product

E&S Precision Machine, Inc. establishes and maintains documented procedures according to Quality Control Procedure (QMSP-1053), to define the required monitoring and measurement activities and related records used to verify that product characteristics and requirements are met prior to product release, processing, or use.

The Shop Foreman/Machinist are responsible for ensuring that in-process product is held and not used or processed further until it has been inspected, tested or otherwise verified as conforming to specified requirements.

If in-process product is found to be nonconforming, the Production Manager/Shop Foreman is responsible for ensuring that the nonconforming product is identified, Segregated and properly disposed according to Control of Nonconforming Product (QMSP-1005). Before it is used or processed further, or that the nonconforming product is removed from the production process.

Inspection and testing of in-process materials are performed according to the "Correspondent Job Traveler and PCL (QMSF-1003), which addresses Inspection and testing of receiving raw material/Outside-Processed, In-process parts and finished products.

3- Customer Satisfaction

Sales and Marketing Manager is responsible for ensuring that customer communication is maintained and that customer satisfaction data is collected, analyzed and used at the management review meeting based on the results of the annual customer survey, (Web Base Customer Satisfaction Survey). The following methodologies are used for monitoring and measuring customer satisfaction:

- Customer Requirements
- Customer Feedback and Complaints
- Surveys
- Customer Returns
- Lost Customers
- Direct Communication with Customers

Sales and Marketing Manager is responsible for ensuring that the collected customer satisfaction data is appropriately tracked and maintained. Customer satisfaction data serves as a means to assess the overall performance and continual improvement of the quality management system.

Customer feedback (including customer satisfaction measurement data and customer complaints) is utilized in the Management Review Process.

Note: 1- Document available electronically in Share Drive G:\ISO 9001\

2- This document is Uncontrolled when printed, unless stamp indicated.

9.2

•Internal Audit

E&S Precision Machine, Inc. plans and conducts internal audits at planned intervals according to Internal Audit Procedure (QMSP-1056) for the following purposes:

- To verify whether quality activities and related results comply with planned arrangements, to the requirements of this International Standard, and quality management system requirements established by E&S Precision Machine, Inc.
- To determine the overall effectiveness of the quality management system as implemented and maintained.

QMR plans the annual audit program according to Audit plan (QMSPF-1007), which identifies when each element or process of the quality management system will be audited. Every element or process of the quality management system is audited at a minimum of **once per year**.

An individual element or process may be audited additionally, based upon the importance and status of the element or process and the results of previous audits.

The QMR is responsible for organizing and coordinating the internal audit to ensure that the audit criteria, scope, frequency and methods are defined, and that the following requirements are met:

- Definition of audit responsibilities
- Definition of requirements for planning and conducting the audit.
- Assurance of auditor independence.
- Recording of audit results
- Communication of audit results to management

QMR is responsible for ensuring the selection of auditors and that their conduct during audits ensures objectivity and impartiality of the audit process. Auditors do not Audit their own work.

Only qualified personnel may perform internal auditing activities. These qualified personnel are classified as **Internal Auditors** and have been trained. This training may be performed by a certified lead auditor or by previously trained internal auditors.

In the case of a nonconformance (in either the quality management system and procedures, or the performance and adherence to those systems and procedures), QMR, or designee, will initiate a nonconformance and corrective or preventative action report in the E2 Shop System.

Department Managers/Foreman/Supervisors responsible for the area audited ensures that the nonconformance are resolved in a timely manner in order to eliminate detected problems and their causes through corrective or preventive actions. Follow-up audits are used to verify the implementation and effectiveness of the corrective and preventive actions. The verification results are recorded and reported to the appropriate personnel.

9.3

•Management review

Top Management conducts a review of the quality management system through “Management Review Meetings” a minimum of **once a year** according to Management Review Procedure (QMSP-1037). The following will be reviewed and documented:

- Assess the suitability, adequacy, and effectiveness of the quality management system in achieving the quality policy and quality objectives, in meeting customer needs, and in satisfying the requirements of ISO 9001.
- Evaluate opportunities for improvement and the need for changes to the quality management system, including the quality policy and quality objectives, to improve effectiveness and to better meet the needs and expectations of our customers.

10 Improvement

1. Nonconformity and Corrective Action

E&S Precision Machine has established, implemented, and maintained the Corrective Action Procedure (QMSP-1006) to clarify the company’s policy toward nonconformities and corrective actions. This document explains when a nonconformity occurs, including any arising from complaints, E&S Precision reacts to it including:

1. react to the nonconformity and, as applicable:
2. take action to control and correct it;
3. deal with the consequences;
4. evaluate the need for action to eliminate the cause(s) of the nonconformity, in order that it does not recur or occur elsewhere, by:
 5. reviewing and analyzing the nonconformity;
 6. determining the causes of the nonconformity;
 7. determining if similar nonconformities exist, or could potentially occur;
 8. implement any action needed;
 9. review the effectiveness of any corrective action taken;
 10. update risks and opportunities determined during planning, if necessary;
 11. Make changes to the quality management system, if necessary.

It is required that corrective actions to be appropriate to the effects of the nonconformities encountered. The Nonconformity and corrective action record are maintained within E2 system including the nature of the nonconformities and any subsequent actions taken and the results of any corrective action.

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2. Continual Improvement

Continual improvement of the quality management system at E&S Precision Machine, Inc. is facilitated through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review, wherein suitability, adequacy and effectiveness of the quality management system is reviewed through management review process and risk and opportunities that need to be addressed are determined as part of continual improvement.

It is the overall responsibility of top management to continually improve the effectiveness of the quality management system, as described throughout this manual. Each Manager/Foreman/Supervisor is responsible for the continual improvement of the quality management system in his or her respective areas. Effectiveness of continual improvement activity is assessed during the Management Review Process.