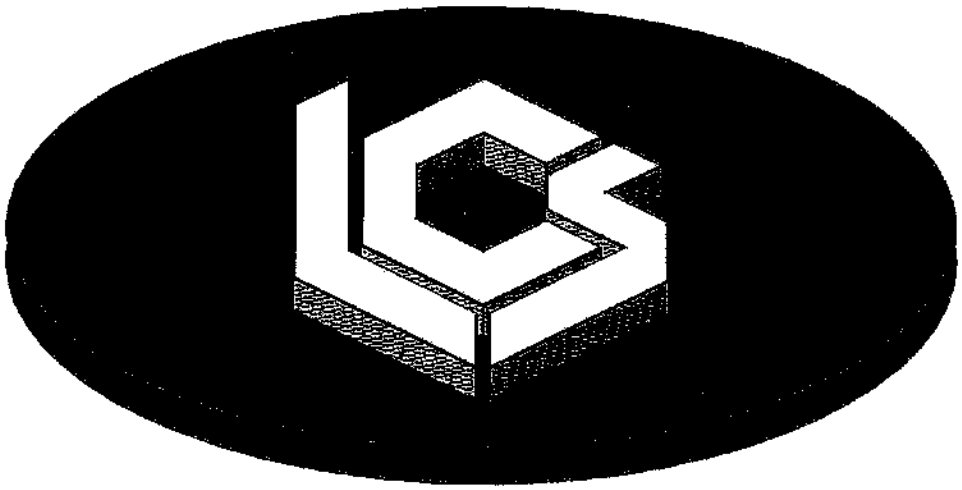
Quality System Manual



LCS Company

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Lamination Stamping – Metal Stamping
Long & Short Runs – EDM – 4-Slides – Welding

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LCS Company

Quality System Manual

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Introduction:

Established in 1959, the ***LCS Company*** has earned its reputation as a single source supplier of high quality precision parts with on-time deliveries

We are located one half mile from the Minneapolis/St. Paul airport in a 56,000 square foot facility.

Our press capabilities range from 1 ton to 300 tons with automatic coil feeding. In addition, we offer numerous services including design and engineering assistance, a complete tool and die shop, wire/EDM, statistical process control, just-in-time delivery, Kanban, bar coding, mechanical assembly, prototype development, automatic riveting and much more.

1.0 Scope

The LCS Company is a single source supplier for precision metal stampings that serves multiple global companies.
The quality system documented in this manual describes the processes that the ***LCS Company*** uses to maintain its recognized high standard of quality and service.

2.0 Normative reference

The quality system used by the ***LCS Company*** is based upon the requirements of *ISO 9001:2015*. LCS is *ISO 9001:2015, AS9100 Rev. D, and AS9003* compliant.

3.0 Terms and definitions

For the purposes of this manual, the term "organization" refers to the ***LCS Company***. The term "supplier" refers to LCS approved vendors and the term "product" applies to product intended for or required by a customer. Other terms and definitions contained in ISO 9000 apply.

4.0 Context of the Organization

4.1 Understanding the organization and its context

The LCS company management is responsible for determining external and internal issues that affect the quality management system. The organization shall monitor the risks at appropriate intervals or review during the yearly management meeting at minimum.

4.2 Understanding the needs and expectations of interested parties

Management is also responsible for determining the interested parties that are relevant to the quality management system and monitor their relevant requirements. The results are to be discussed during the management meeting.

4.3 Determining the scope of the quality management system

The quality system manual is used as a means for detailing the processes and procedures in effect to ensure that product and services conform to the requirements of *ISO 9001:2015*, *AS 9100* Rev.D. and *AS 9003 Rev. B*. The manual also incorporates the understanding of Internal, External, and Interested parties and how they may affect the quality management system.

LCS Company is a contract supplier that manufactures precision metal stampings for the Aerospace, Automotive, Nuclear, Defense and Commercial industries in the United States and markets throughout the world.

Process flow = Sales/Administration/Purchasing/Production/Quality/Shipping

Internal copies of the LCS Quality System Manual are issued, controlled and distributed to the following departments:

Department	**Personnel**
Administration	President/Chief Executive Officer Vice President
Quality	Quality Manager
Sales	Sales Manager
Purchasing	Purchasing Department
Engineering	Engineering Manager Tool Room Foreman
Production	Production Manager Shipping/Receiving Plant Maintenance

The Vice President is responsible for the distribution of the latest version of this manual (Controlled copies only) to designated departments. Obsolete copies of the quality system manual are returned to the Vice President before issuance of a new version.

All change recommendations to the quality system manual must be submitted to the Vice President. The quality system manual is reviewed annually and updated as required.

Holders of controlled copies of the quality system manual are responsible for assuring that all employees assigned to their department have ready access to the manual and are knowledgeable of its contents.

4.4 Quality management system and its processes.
The ***LCS Company*** executive management is responsible for defining and documenting policy concerning objectives and commitment to quality and safety at all levels. Management monitors and analyzes continuous quality and productivity improvement through planning, measurement of activities and internal audits. This includes control of outsourced processes and product.

4.4.2 See 7.5.3

5.0 Leadership

5.1 Leadership and commitment
LCS Company executive management is responsible for defining and documenting policy concerning objectives and commitment to quality and safety at all levels. Management monitors continuous quality and productivity improvement through planning, measurement of activities and internal audits.

5.1.2 Customer focus
The Vice President monitors the organizations performance to ensure that customer needs and expectations are correctly determined, converted into requirements, and fulfilled with the aim of achieving customer satisfaction.
Customer right of access will be granted to review all facilities, supporting records and data (specific to requesting customer or customer auditor) as requested.

5.2 Quality Policy
5.2.1 Establishing the Quality Policy
The LCS Company will provide the highest quality products and service to meet or exceed our customer's expectations through continuous improvement of all processes while focusing on customer satisfaction, universal participation, employee creativity and organizational learning while meeting applicable statutory and regulatory requirements.

We are dedicated to providing the highest quality products and customer service through programs that emphasize attention to detail, simplification of procedures, continuous improvement, employee empowerment, adaptability, integrity and sound leadership

5.2.2 Communicating the Quality policy
An overview of the quality system is discussed during new employee indoctrination and during annual employee safety training. Uncontrolled copies may be requested by interested parties upon request.

5.3 Organizational roles, Responsibility, and authority
By direction of the Chief Executive Officer, the Vice President is responsible for the development and implementation of the quality management system and continually improving its effectiveness.

The Vice President is responsible for ensuring that processes needed for the quality management system are established, implemented and maintained. He or she reports to the CEO on the performance of the quality management system and any need for improvement and promotes the awareness of customer requirements throughout the organization.

The Vice President is responsible for ensuring that the requirements of the quality system as it pertains to product, is maintained. In addition, he or she is authorized to:

a. Initiate action to prevent the occurrence or recurrence of product non-conformity.

b. Authorize rework, rejection, scrap, or acceptance with or without concession of a nonconformance.

c. Identify and record any product, process, or service quality problems.

d. Initiate, recommend or implement problem solutions in all areas.

e. Control further processing or delivery of any non-conforming product or service until the deficiency or unsatisfactory condition has been corrected.

The Quality Manager ensures that defined processes and operating procedures relating to the quality of product are complied with and correctly documented.

The Sales Manager is responsible for ensuring that all requirements specified for new tooling and piece parts are clearly defined and reviewed prior to quoting and that LCS is capable of meeting the requirements of the contract. He or she also ensures that legible drawings and all related specifications are provided to the purchasing and engineering departments when the job is accepted.

The Purchasing Manager is responsible for the procurement of materials from approved suppliers and that purchase order information is complete and accurate.

The Engineering Manager is responsible for reviewing, scheduling, and monitoring all tooling requirements in accordance with the applicable standard operating procedure. He or she, in conjunction with the Vice President, Design/programmer, Tool Room Foreman, Quality Manager and Production Manager are responsible for reviewing all new tooling designs, development of manufacturing processes and definition of inspection requirements for each new job.

The Production Manager is responsible for the productive effort of the set-up/operators, plant/equipment maintenance and shipping/receiving personnel. In addition, he or she ensures that all jobs are scheduled to begin and complete the required processes for shipment on the date they are due, and that all applicable documentation is submitted and filed as required.

6 Planning

6.1 Actions to address risk and opportunities (SOP 020, SOP 021)

The Quality System Manual and Standard Operating Procedures define the requirements and methods employed by the ***LCS Company*** to identify and address risks, evaluate and document potential nonconformities and review, prevent, or reduce undesirable effects.

Variation exists in any manufacturing process and it is important to measure and control that variation.

Process control methods employed by operators during each sequence are designed to detect potential problems before they affect the product.

Improvements in the process to facilitate these variations are discussed with the Operator, Quality Manager, Production Manager and Tool Room Foreman for recommended solutions and are documented on LCS Form SOP.020-4.

The Vice President must approve any deviation from the defined manufacturing process. If the deviation is to be a permanent change, the shop traveler and computer database are updated accordingly.

6.2 Quality objectives and planning to achieve them.

Computer generated activity reports are reviewed by all levels of management to ensure that quality objectives are met, monitored, and updated as necessary.

Through continuous measurement, evaluation of processes and procedures, and charting customer rejections and or on-time shipments, executive management identifies risks that may require improvement and plans for changes in resources, including personnel, equipment, and training.

6.3 Planning of changes

The quality system is reviewed annually to ensure its effectiveness and verify evidence of continuous improvement in the areas of quality, productivity, facilities, training, equipment and human resources

7.0 Support

7.1 Resources

7.1.1 General

Executive management determines and provides the resources needed to implement and improve quality management system processes and enhance customer satisfaction.

7.1.2 People

Executive management determines, provides, and trains the persons necessary for the effective implementation of the quality management system and for the operation and control of its processes.

7.1.3 Infrastructure

Executive management identifies, provides, and maintains the facilities required to achieve product conformity, including plant facilities, workspace, equipment and supporting services (such as transport, communication, and information systems).

7.1.4 Environment for the operation of processes

All employees understand and are involved in management of the human, social, psychological and physical factors required to achieve product conformity, on time delivery and customer satisfaction in a safe, unified environment.

7.1.5 Monitoring and measuring resources

7.1.5.1 General

A formal system is in effect to verify the accuracy of measuring and test equipment used to determine product conformance in compliance.
The Quality Control Manager is assigned the overall responsibility for maintenance and surveillance of the calibration program.

7.1.5.2 Measurement traceability (SOP 006)

All measuring and test equipment used to perform final inspection of any parts or equipment that requires specific parameters shall be calibrated and traceable to the National Institute of Standards and Technology.

Calibration history records are maintained on all inspection, measuring and test equipment used for in-process and final inspection, including employee owned equipment. These records are held in the inspection office.

Inspection, measuring and test equipment subject to the calibration program are labeled with a sticker indicating the date the equipment was calibrated and the calibration recall date.

New equipment and equipment found to be out of calibration is "red tagged" and shall be repaired, replaced, or removed from the plant. If an out of tolerance condition exists, The quality manager may review inspection results to ensure product conformance to customer specifications.

Detailed information concerning the calibration program is contained in the Standard Operating Procedure.

7.1.6 Organizational Knowledge

Employee job knowledge is documented in the training matrix or the employee personnel file. This information is made available to the employee or executive management when requested. Database information is approved and updated by the Vice President when process changes are required and are made available to employees via job routing or work instructions.
Individual job knowledge may be documented and made available to others for the purpose of ensuring organizational knowledge when requested.

7.2 Competence,
The organization thoroughly reviews employee competence to perform assigned tasks, provides training and guidance, when required, evaluates their effectiveness and records their accomplishments, training and acquired skills.

Department managers and supervisors are responsible to review personnel under their authority to verify that they are properly trained and are aware of the quality and safety requirements affecting their position.

7.3 Awareness
The individual importance of each ***LCS Company*** employee is reinforced from the date of hire through out the term of their employment.

It is our goal to ensure that each employee experience personal and professional growth through daily exposure to strong leadership and pride in their accomplishments.

Job and safety training is provided to each employee. Each employee's qualifications are monitored and documented. Records of training and qualifications are maintained by the Vice President. Yearly training is conducted per State and Federal regulations. At a minimum the following are discussed. Right to Know, SDS, AWAIR, Hazard Communication, Safety Manual, and FOD 412.

7.4 Communication
Communication of requirements and expectations within our organization is the foundation for improvement and success. Various media is used, such as manuals, operating procedures, memorandums and meetings to convey and disseminate information to employees at all levels.

7.5 Documented information,
7.5.1 General (also see 4.3/4.4)
The documented quality management system consists of the following components:
Quality system manual
Standard operating procedures
Computer generated operation and process instructions
Quality inspection and production process records
Internal audits
Tooling records and CAD data
Customer drawings and specifications
Contract review documentation
Training records
Plant equipment maintenance records

7.5.2 Creating and updating (Control of documents)
Whenever practical, all documents follow the same control format as the Quality System Manual. Exceptions would include documentation where a simplified control procedure has been adapted or is computer generated on a repetitive basis after initial approval.

Section 4.3 outlines the document control procedures covering the Quality System Manual.

Distribution of Standard Operating Procedures is the same as listed in section 4.3 These procedures are available for all employees to review.

The Vice President maintains the original copy of the Quality System Manual and Standard Operating Procedures, revises and updates the procedures and notifies holders of any changes.

7.5.3 Control of documented information

Copies of the quality system manual may be issued to customers and visitors with the understanding that these are uncontrolled copies and are not on the distribution list for revisions or changes.

Customer provided documentation pertaining to defense related articles and military related technologies are maintained and controlled under International Traffic in Arms Regulations (ITAR).

Copies of standard operating procedures, operation, and process instructions or other proprietary information may not be issued to anyone outside of the organization without prior approval of the Vice President or Chief Executive Officer.

Unless otherwise specified by the contract, quality management system records are maintained as listed:

a) The Vice President holds internal Audits/Quality System Review records for a minimum of three years.

b) The following records/data are stored as long as the project is active (plus one year). Digital archived data storage is indefinite.

Records/Data	Location	Maintained by:
**Customer Purchase Order/Contract*	*Master file/Laserfiche*	*Admin.*
Tool and Die Design Records/CAD Files	*Engineering*	*Engineering*
Plant Equipment Maintenance Records	*Maintenance*	*Maintenance*
**Packing Slips*	*Admin./Laserfiche*	*Admin.*
Quality Control DCC Programs	*Portable Hard Drives*	*Quality Control*
**First Article Inspection Reports*	*Qual. Cont./Laserfiche*	*Quality Control*
**PPAP Documents*	*Qual. Cont./Laserfiche*	*Quality Control*
**Vendor Purchase Orders*	*Run Folder/Laserfiche*	*Prod. Control*
**Raw material certifications*	*Run Folder/Laserfiche*	*Prod.Control*
**Process Results and Certifications*	*Run Folder/Laserfiche*	*Prod.Control*
**In-process and Final Inspection Records*	*Run Folder/Laserfiche*	*Prod.Control*

c) Documents marked with an asterisk are transferred to laserfiche

d) Aerospace, Nuclear and Automotive project records are stored for the life of the program plus one year. Digital archived data storage is indefinite.

e) Documents requested for customer review are retrievable within 24 hours.

8.0 Operation

8.1 Operational planning and control (SOP 016)

The engineering, production and quality departments are involved in determining the Requirements for new products. They develop plans that describe the tooling, source of supply, production, inspection, handling, special packaging, and shipping procedures for each new product.

If during purchase order review, processing, or manufacturing, an approved source of supply has changed due to customer requirement, LCS Sales or Quality Manager will initiate a desktop audit to the proposed vendor and after approval by the Vice President, have them added to LCS Companies Approved Vendor List per 8.4.1.

If LCS deems it necessary to change a source of supply, LCS will notify and request approval from that customer prior to proceeding with the effected purchase order.

Computer generated work instructions, defining specific production or installation techniques and the current copy of drawings and specifications are routed through each process or operation and are attached to the shop traveler.

Each employee who uses the work instructions and drawings verifies that he or she is using the latest revision.

Equipment and materials records are assessed by production control for condition, quantity and compatibility with the requirements prior to starting production or assembly.

Workmanship criteria is based on specifications contained in customer provided drawings and purchase order requirements.

The Quality Manager in conjunction with the Vice President, initiates and maintains quality planning information including PPAP documentation

8.2 Requirements for products and services

8.2.1 Customer communication

The Sales Manager shall serve as the liaison in any contract review dispute.

Discrepancies are to be addressed to the purchaser's organization prior to any further processing. These may include contract changes, products and services or customer property.

8.2.2 Requirements related to products and services (SOP 008)

Prior to commencing any manufacturing process, engineering drawings and specifications, as well as any referenced customer and government regulations are reviewed to ensure standards of quality are defined and understood.

The Sales Manager reviews specific packaging and delivery requirements with the customer during the initial quote review.

8.2.3 Review of requirements related to the product (SOP 016)

8.2.3.1

Each new contract or purchase order is reviewed by Order Entry personnel to ensure that:

a. All requirements are adequately defined and documented.
b. Any requirements differing in quantity, price, delivery, or source of supply are resolved.
c. LCS has the capability to meet contractual requirements.
d. Copies of the contract, purchase order or amendment are acknowledged and returned to the customer, when required.
e. The master copy of the contract, purchase order or amendment is stamped and marked to indicate that it has been reviewed.

8.2.3.2
The administrative department maintains records of contract and purchase order reviews in the open purchase order, master files and laserfiche for each part number, listed by customer.

8.2.4 Changes to requirements for products and services.
The Engineering Manager or the Vice President, when notified by the Production Manager, revises and updates detailed work instructions and notifies departments that are affected by changes.

8.3 Design and development of products and services (SOP 013)
8.3.1 General
The Engineering Manager is responsible for reviewing, scheduling, and monitoring all tooling requirements in accordance with the applicable standard operating procedure.

8.3.2 Design and development planning
The engineering manager, in conjunction with the Vice President, Design/programmer, Tool Room Foreman, Quality Manager and Production Manager are responsible for reviewing all new tooling designs, development of manufacturing processes and definition of inspection requirements for each new job.

The Engineering Manager reviews and authorizes the use of drawing changes and revisions

8.4 Control of externally provided processes, products and services (purchasing)
8.4.1 General (SOP 22)
Purchase orders clearly define the specified technical requirements to ensure the quality of the procured product or service.

Purchase order forms are computer generated based upon data approved by the Engineering and Sales Managers.

When specified by contract, only customer approved sources are used to perform special processes.

Suppliers shall periodically receive either a formal or an informal survey to verify their quality system and capabilities. The Quality Manager reviews and establishes the level of controls and risks prior to approval.

Purchasing maintains a list of approved sub-contractors and suppliers. Credit card purchases from a non-approved source must be approved by the vice president.

8.4.2 Type and Extent of control
Suppliers are selected based upon their ability to meet contract requirements utilizing quality processes and maintaining on time delivery. Demonstrated capabilities and performance are monitored on a continuing basis and are the major criteria for continued use. Failure to meet LCS Quality, Delivery, or Customer defined changes may require work source change approvals.

8.4.3 Information for external providers
Purchase orders contain data clearly describing the product ordered, including, where applicable, precise identification, drawings, quality standards, inspection instructions, and other relevant technical data.

8.5 Production and service provision

8.5.1 Control of production and service provision

Computer generated work instructions, defining specific production or installation techniques and the current copy of drawings and specifications are routed through each process or operation and are attached to the shop traveler.

Equipment and materials records are assessed by production control for condition, quantity and compatibility with the requirements prior to starting production or assembly.

A green ticket indicating the job/run number, quantity and operator accompanies the parts during all stages of production. Sequence cards indicating the same information including inspection status remains with the shop traveler. In Process Data Sheets are used to record in-process inspection data.

8.5.2 Identification and traceability (SOP 022)

Purchased products carry identification from the supplier and are accompanied by documentation regarding the source. The receiving clerk tags or marks incoming product and documentation with LCS's assigned job number and forwards it to inspection with the applicable shop traveler, drawings, specifications, and work instructions.

Upon completion of receipt inspection, all documentation is forwarded to production control. Original copies of receipt documents and certifications are filed in the appropriate job/run folder and copies of the packing slip and purchase order are forwarded to purchasing.

All incoming product is tracked by the job/run number and is entered into the computer inventory system after approval by qualified employees.

8.5.3 Property belonging to customers or external providers

Customer supplied product is any product, tooling or test equipment owned by the customer and furnished to the ***LCS Company*** to use in completing the requirements of the contract.

Customer supplied products are subject to the same receiving inspection, product identification, maintenance, storage and handling procedures as products owned by the ***LCS Company***.

If the customer-supplied product shows signs of nonconformance at any stage, the customer is notified immediately.

8.5.4 Preservation (SOP 015)

Procedures for the proper handling of materials and parts to prevent damage or deterioration are contained in Standard Operating Procedures and individual process routing sheets.

Storage facilities, stock rooms and holding areas are maintained in a condition that prevents damage or deterioration.

A representative of the shipping department periodically assesses the condition of product contained in storage areas.

Fabricated products are packaged in accordance with specifications detailed by the customer when provided or using industry standards.
Under all circumstances, packaging will protect the contents from the elements of temperature, humidity and contamination to ensure receipt of parts and assemblies in good condition.

8.5.5 Post-delivery activities

The organization shall monitor customer feedback, customer requirements and report any desired changes to the Vice President for incorporation into the database or Quality Management System.

8.5.6 Control of Changes
The Engineering Manager or the Vice President reviews and authorizes the use of drawing changes and revisions. When notified by the Production Manager, revises and updates detailed work instructions and notifies departments that are affected by changes.

8.6 Release of products and services (SOP 011)
ANSI Z1.4 is used as a unit of measure for quality acceptance. Sampling plans are adjusted as required, based upon accumulated sampling data and previous manufacturing information.

First article inspections are performed and submitted to the customer on all new jobs and tooling modifications. Production orders are not manufactured until written approval has been received from the customer.

First piece inspections are performed on the set up of each process.

Either the Operator or Quality Control performs in-process inspection during each sequence. Operators have the authority to stop production during any operation when a process is in question or does not meet specifications.

Last piece inspections are conducted on all parts. Data accumulated through in-process inspection is reviewed and filed in the run folder. Records shall indicate the person(s) authorizing release of product for delivery to the customer.

First and last piece samples are retained for review on the current and previous runs.

8.7 Control of nonconforming outputs
Incoming, in-process and finished products that do not conform to specified requirements are tagged with a red "hold" card and placed in the holding area to prevent inadvertent use or assembly.

Incoming products that do not conform to specified requirements are not entered into the computer inventory and therefore cannot be issued for use.

Internal rejection forms are initiated by Quality Control for nonconforming products. Notification of the Non-Conformance will take place as soon as possible after realization.

Repaired and reworked products are re-inspected and re-tested in accordance with the applicable drawings and specifications.

LCS will notify the customer prior to the shipment if there may be a form, fit, function, usability or reliability problem with parts or assemblies if we are aware of such problems. If LCS discovers a problem after delivery, the customer shall be notified immediately.

As with any manufacturing process, customers may occasionally receive products that for various reasons fail to conform to acceptance criteria not detected during manufacturing and inspection. If a discrepancy is noted and the customer desires to return all or part of an order, the LCS Quality Manager must be notified. Replacement parts will be expedited to preclude further impact on the customer. Decisions concerning rework of discrepant parts can only be made after the rejected parts have been returned and re-inspected by LCS. If the customer deems the rejected product to be scrap, all parts will be disposed in a way to render them un-usable and placed in the appropriately marked Scrap tank. The Quality Manager will initiate a product rejection form upon receipt of rejected parts from the customer.

If a customer discovers a discrepancy but determines that the product function is not affected, notification is still desired.

If the customer desires to have rejected material received from LCS reworked by a different supplier, prior approval must be obtained from LCS or the account debit will not be honored.

9.0 Performance Evaluation (SOP 021)

9.1 Monitoring, measurement, analysis and evaluation (SOP 011)

9.1.1 General

The ***LCS Company*** provides a complete quality system controlling the acceptance of materials, set up of equipment, review of fabrication methods, in-process inspection, statistical techniques, finished component inspection and job performance reviews. *ANSI Z1.4* is utilized as a unit of measure in our quality acceptance procedures.

Inspection procedures for the manufacturing processes are defined during the planning meeting.

The quality department trains personnel to operate inspection equipment.

Process inspection data is filed in the run folder when the process or operation is completed.

Copies of inspection data are shipped with finished goods when defined on the purchase order or requested by the customer.

9.1.2 Customer satisfaction

The Vice President monitors the organizations performance to ensure that customer needs and expectations are correctly determined, converted into requirements, and fulfilled with the aim of achieving customer satisfaction.

Customer furnished "Supplier Quality and Delivery Performance Reports" are maintained for up to five years by the Quality Manager.

9.1.3 Analysis and Evaluation

The success of the ***LCS Company*** is attributed to visionary leadership and the exceptional application of business principles and core values.

Through continuous measurement and evaluation of processes and procedures, we are able to identify areas that require improvement and plan for changes in resources, including personnel, equipment, and training.

9.2 Internal audit (SOP 020)

Internal audits and follow-up actions are conducted in accordance with *ISO 10011* Guidelines for Auditing Quality Systems.

The Vice President is responsible for the audit schedule, frequency of audits and the composition of the audit team.

As a minimum, each element of *ISO 9001* is audited annually, including verification of compliance with Government Safety and Environmental Regulations. Audits are scheduled based on the status and importance of the activity. The Vice President determines the importance of activities.

A corrective action form is prepared when nonconformances are encountered.

The responsible manager shall take corrective action within the time frame assigned by the lead auditor with consideration given to personnel and resources required to correct the deficiencies found during the audit.

Completed audits are forwarded from the affected manager(s) to the Vice President for review.

Corrective actions are followed up during future audits to verify effectiveness.

9.3 Management review
9.3.1 General
The quality system is reviewed annually at a meeting scheduled by the Chief Executive Officer, chaired by the Vice President with the Quality, Engineering, Production and Sales in attendance.

The meeting agenda includes a review of the quality system effectiveness and evidence of continuous improvement in the areas of quality, productivity, facilities, equipment, and training. The Vice President maintains records of management review meetings.

9.3.2 Management review input
The Vice President compiles information for presentation during the management review including but not limited to:
Follow-up actions from previous management reviews and internal audit findings
Changes that could affect the quality management system
Results of internal audits
Quality and delivery performance data
Product rejection information
Rejected product rework cost data
Sales information
Customer audit and feedback information
Record of improvements in productivity, equipment, facilities, and training
Recommendations for improvement
Management for inclusion in short term or long-range improvement planning.
Review of internal and external issues
Review of interested parties and their requirements.

9.3.3 Management Review output
Decisions for change based upon the information presented during the management review are carefully evaluated by executive management. These may include opportunities for improvement, resources, or changes to the Quality Management System.

10.0 Improvement
10.1 General
We are dedicated to improving the factors that provide our customers with the highest total value. Among these factors are quality, delivery, service, speed of response, technical expertise and continuous improvement in our processes and procedures

10.2 Nonconformity and Corrective/Preventive action (SOP 002, SOP 020)
The Quality System Manual and Standard Operating Procedures define the requirements and methods employed by the ***LCS Company*** to identify, evaluate, and document potential nonconformities and review the effectiveness of the preventative action.

Process control methods employed by operators during each sequence are designed to detect potential problems before they affect the product.

Corrective/Preventive action is taken to correct any situation found to conflict with the quality system.

The Vice President must approve any deviation from the defined manufacturing process. If the deviation is to be a permanent change, the shop traveler and computer database are updated.

Customer complaints and reports of product nonconformities are investigated to determine the root cause, the corrective action required and application of controls to ensure that corrective action is taken and is effective. When requested, this information is furnished to the customer.

Requests for corrective action are forwarded through the appropriate department supervisor and manager and should be resolved at the lowest possible level. In all cases, documentation of corrective action requests and the action taken will be reviewed with the person initiating the request and forwarded to the Vice President for review. Corrective actions taken will be followed up during internal audits to verify that actions were effective.

10.3 Continual improvement (SOP 021)
Variation exists in any manufacturing process and it is important to measure and control that Variation. Improvements in the process to facilitate these variations are discussed with the Operator, Quality Manager, Production Manager and Tool Room Foreman for recommended solutions and are documented on LCS Form SOP.020-4.

The following are some internal examples of continuous improvement areas.

Quality. Our programs emphasize attention to detail, simplification of procedures, process measurement, employee participation and empowerment.

Employees. The knowledge, experience, and commitment to excellence of our employees enables the company to achieve world-class performance.

Adaptability. Speed, intensity, and agility, coupled with a sense of importance generates superior performance and stimulates new levels of personal and group achievement amongst our employees.

Leadership. Alignment of goals, objectives and plans are in place to challenge and measure each function of the business to fully utilize our resources for long-term superior performance.

Integrity. All aspects of our organizational activities represent the highest standards in how we conduct business, provide service, interact with customers, vendors, our community and the environment.