

MEDFORD FABRICATION
CSC, INC

Quality System Manual

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1.0 Introduction

The primary purpose of this Quality System Manual is to describe the Quality System currently in practice at Medford Fabrication.

This manual is intended to be in compliance with ANSI/ASQC Standard Q9002 – 1994, Quality System – Model for Quality Assurance in Production and Installation.

The distribution of this manual is controlled through the Quality Manager.

Uncontrolled copies may be obtained at the discretion of the Quality Manager. These uncontrolled copies will be current at the date of issue and will not be subject to amendment procedures. These copies will be stamped, in red, "Uncontrolled Copy."

This Quality System Manual is the property of Medford Fabrication and is to be treated as confidential. It is intended to be used only to represent Medford Fabrication’s identified quality system and may not be copied or re-printed without the express written permission of Medford Fabrication.

Wherever ‘Company’ is used within this manual it shall mean Medford Fabrication.

President, Medford Fabrication, CSC, Inc.

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General Manager, Medford Fabrication, CSC, Inc.

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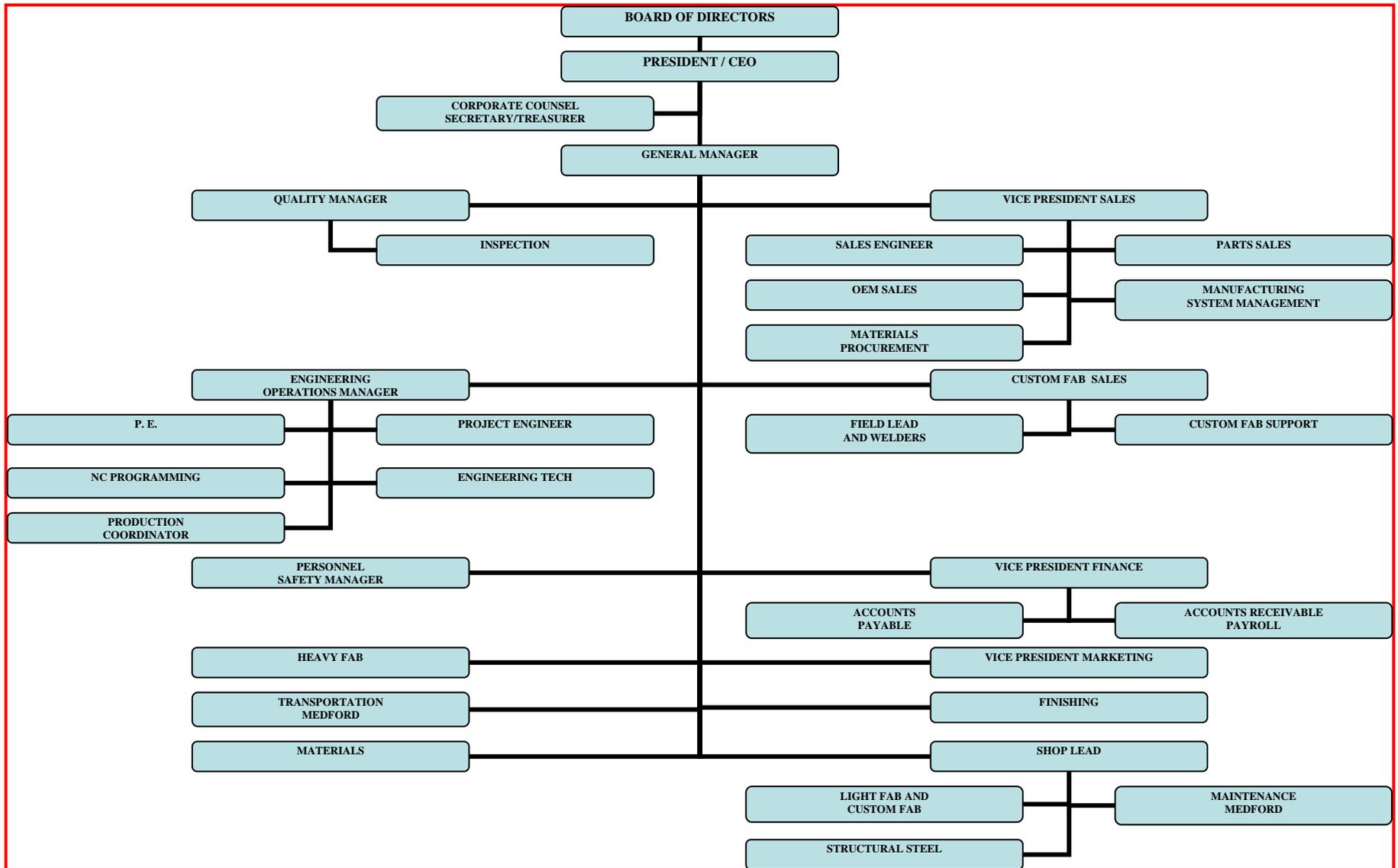
2.0 Company Quality Policy

Medford Fabrication, CSC, Inc., is committed to have an on-going improvement in the quality and delivery of all fabricated products and services, at a competitive price, and to maintain Medford Fabrication's position as a supplier of choice.

3.0 Organization Chart

See next page.

Quality System Manual Section 3 – Medford Fabrication



4.0 Quality System Requirements

4.1 Management Responsibility

4.1.1 Responsibility and Authority

The ultimate responsibility and authority for the overall quality at Medford Fabrication lies with the President and the General Manager.

The responsibility and authority for the implementation of the Quality System defined in this manual is assigned to the Quality Manager.

The Personnel/Safety Manager is responsible for issuing a copy of the Company's Quality Policy to new employees, and all Managers and Lead personnel are responsible for ensuring that their employees are familiar with the Company's Quality Policy and its Quality Management System.

4.1.2 Management Review

The Quality System shall be reviewed annually by a review committee consisting of the President, General Manager and the Quality Manager. Other functional department managers may be included in this review as deemed necessary by the committee.

Quality System Procedure(s):

[SP 010](#) MANAGEMENT REVIEW

[SP 020](#) Procedure and Manual Controlled Copy Listing

4.2 Quality System

The Company will operate a Quality Management System based on documented procedures and work instructions.

The method of operation used by the Company is the preparation of quality plans that identify controls, procedures and any necessary test and quality records that are required.

4.3 Contract Review

The Company will identify potential markets and customers and their requirements.

The Company will review the customer's contract documentation while in tender. These contracts will be reviewed to ensure that the requirements are adequately defined and documented. The Company will identify and resolve any differences found in the contract documentation, and will determine the Company's ability to meet the specified requirements.

Quality System Procedure(s):

[SP 100](#) Contract Review

4.4 Design Control

Although it is not part of this Quality System, the Company maintains a Design Review of customer designs and related requirements.

Quality System Procedure(s):

[SP 110](#) - Design Reviews

[SP 120](#) - Drawing Document Release & Change Control

**[SP 415](#) – Structural Steel Detailing Standards, Checking Procedures
& Document Control**

4.5 Document and Data Control

The Company shall establish a system to control all applicable documents that pertain to this quality system. The system will identify the review and approval process and be identified by revision level.

Quality System Procedure(s):

[SP 130](#) - Control of Quality Records

[SP 000](#) – System Procedure Index

4.6

Purchasing

Requisitions and purchase orders will clearly describe all specification requirements including and limited to:

- The type, class, grade or other precise identification
- Any positive identification requirements and applicable issues of specifications, drawings or process requirements
- All purchasing documents shall be reviewed prior to release.

The Quality Manager or designee will determine the extent of the receiving inspection activity required and will coordinate the assessment of sub-suppliers as deemed necessary by the Quality Management Review Committee.

Quality System Procedure(s):

[SP 300](#) – Purchasing Procedure

[SP 320](#) - Approved Supplier List

4.7 Control of Customer Supplied Product

All customer supplied products will be examined upon receipt and shall be positively identified and stored in a designated area.

Once received into the Company's inventory, all customer-supplied products will be controlled and handled the same as Company inventory.

Quality System Procedure(s):

[SP 340](#) - Control of Customer Furnished Material

4.8 Product Identification and Traceability

Production identification numbers will identify all products throughout the manufacturing process cycle.

Finished products will be identified with either the production traceability number (assembly and serial number), or customer furnished numbering system.

Quality System Procedure(s):

[SP 330](#) - Product Identification & Traceability

4.9

Process Control

The Company shall identify and plan the production and, where applicable, install processes that directly affect quality and will ensure that these processes are carried out under controlled conditions. Controlled conditions may include the following:

- Documented work instructions.
- Monitoring and control of suitable process and product characteristics during production and installation.
- The approval of processes and equipment, as appropriate.
- Criteria for workmanship shall be stipulated, to the greatest practicable extent, in written standards or by means of representative samples.

Quality System Procedure(s):

[SP - 150](#) Process Control Production

[SP - 195](#) Welding

[SP - 197](#) Surface Preparation and Coating Application

[SP - 200](#) Bolting Procedure

[SP - 205](#) Installation Procedure for High Strength Bolts

[SP - 207](#) Equipment Maintenance

4.10.1 Receiving Inspection and Testing:

The Company shall ensure that incoming product(s) is/are not used or processed, except as defined in the special note below, until inspected or otherwise verified as conforming to specified requirements, based on internal or customer requirements. Verification shall be in accordance with the quality plan or documented procedures.

Special Note: Where incoming product(s) may be released for urgent production purposes or authorized concessions, it shall be identified in order to permit immediate recall and replacement in the event of nonconformance to specified requirements. Authorization under this special note may only be obtained through the General Manager, Quality Manager or designee.

4.10.2 In-Process Inspection and Testing:

In the performance of in-process inspection the Company may perform the following:

- Inspect, test and identify product as required by the Quality Plan or documented procedure.
- Establish product conformance to specified requirements by use of process monitoring and control methods.
- Hold product until the required inspections and tests have been received and verified.

4.10.3 Final Inspection and Testing:

The Company shall carry out and document all final inspection and testing requirements in accordance with this Quality System Manual and customer documented procedures to complete the evidence of conformance of the finished product to the specified requirements.

Quality System Procedure(s):

[SP 280](#) - Receiving Inspection

[SP 160](#) - Inspection & Test Status

[SP 210](#) - Final Inspection

[SP 310](#) - Supplier Qualification & Review

4.11 Control of Inspection, Measuring and Test Equipment

The Company shall control, calibrate and maintain measuring and testing equipment, whether owned by the Company, on loan or provided by the customer, to demonstrate the conformance of product to the specified requirements.

Where test hardware, (e.g., jigs, fixtures, templates and/or patterns) is used as a suitable form of inspection, the hardware will be checked to prove that it is capable of verifying the acceptability of the product prior to release for use during production.

Measurement design data shall be made available, when required by the purchaser or by his/her representative, for verification of the design.

Quality System Procedure(s):

[SP 220](#) Control of Measuring & Test Equipment

[SP 280](#) Receiving Inspection

4.12 Inspection and Test Status

Inspection and test status of products shall be identified by using markings, authorized stamps, labels, routing cards, inspection records, test software, physical location, or other suitable means, which indicate the conformance or nonconformance of product with regard to inspection and test performed. The identification of inspection and test status shall be maintained, as necessary, throughout production and installation of the product that has passed the required inspection and test dispatch, used, or installed.

Associated documents may be used to identify the inspection authority and date.

See Special Note in section 4.10.1.

Quality System Procedure(s):

[SP 160](#) - Inspection & Test Status

[SP 170](#) – Control and Issuance of Welder Stamps

4.13 Control of Nonconforming Product

The Company shall establish and maintain procedures to ensure that product that does not conform to specified requirements is prevented from inadvertent use or installation. Control shall provide for identification, documentation, evaluation, segregation and when practical, disposition of nonconforming product as well as for modification to the functions concerned.

4.13.1 Non-Conforming Review and Disposition

The responsibility for the review and authority for the disposition of nonconforming product shall be with the Material Review Board (MRB).

When necessary for the MRB to disposition a nonconformance, the MRB will be called together. The MRB will be chaired by the Quality Manager, and will consist of the General Manager, Engineering Manager and any other person(s) deemed necessary by the Quality Manager to properly disposition the nonconformance.

Disposition shall be one of the following:

- Use-as-is
- Rework
 - Repair – At Company and at Company’s expense
 - Repair – At Company and at Other’s expense
 - Return – At Company’s expense
 - Return – At Other’s expense
 - Scrap – At Company, no charges pending
 - Scrap – At Company, charge Others for appropriate expenses

Quality System Procedure(s):

[SP 180](#) – Nonconforming Material

4.14 Corrective and Preventive Action

The Company will establish, document and maintain procedures for:

- Investigating the cause of non-conforming product and the corrective action needed to prevent recurrence.
- Initiating preventative actions to deal with problems to a level corresponding to the risks encountered.
- Applying controls, as deemed necessary by the Quality Manager or designee, to ensure that corrective actions are taken and that they are effective.
- When required, implementing and recording changes in the procedure resulting from corrective action.

Quality System Procedure(s):

[SP 190](#) - Corrective Action

4.15 Handling, Storage, Packaging, Preservation and Delivery

4.15.1 General:

The Company shall establish, document and maintain procedures for handling, storage, packaging, preservation and delivery of product.

Handling:

4.15.2 The Company shall provide methods and means of handling that will prevent damage or deterioration.

4.15.3 Storage:

The Company shall secure storage areas or stock rooms to prevent damage or deterioration of product, pending use or delivery. Appropriate methods for authorizing receipt and the dispatch to and from such areas shall be stipulated.

4.15.4 Packaging:

The Company shall control packing, preservation and marking processes to the extent necessary to ensure conformance to specified requirements and shall identify, preserve and segregate all product from the time of receipt until the Company's responsibility ceases.

4.15.5 Delivery:

The Company shall arrange for the protection of the quality of the product after inspection and test. Where contractually specified, this protection shall be extended to include delivery to the destination.

Quality System Procedure(s):

[SP 240](#) – Handling, Packaging and Shipping

4.16 Control of Quality Records

The Company shall establish and maintain procedures for identification, collection, indexing, filing, storage, maintenance and disposition of quality records.

Quality records shall be maintained to demonstrate achievement of the required quality and the effective operation of the quality system. Pertinent sub-contractor quality records shall be an element of these data.

All quality records shall be legible and identifiable to the product involved. Quality records shall be stored and maintained in such a way that they are readily retrievable, in a suitable environment to minimize deterioration or damage and to prevent loss. Records will be suitably stored and maintained preferably in the area of their origin to ensure their safe keeping and subsequent retrieval.

The retention periods and the authority for the disposal of records will be defined procedurally. Access to quality related records can be made available to the purchaser or their representative upon request.

Quality System Procedure(s):

[SP 130](#) - Control of Quality Records

4.17 Internal Quality Audits

The Company shall establish and maintain documented procedures for planning and implementing internal quality audits to verify whether quality activities and related results comply with planned requirements and to determine the effectiveness of the quality system.

Although internal audits are scheduled on an annual basis, additional audits may be assigned by the Quality Manager or General Manager to insure compliance.

Audits and follow-up actions shall be carried out in accordance with documented procedures. The Department Manager is responsible for investigating, planning and implementing any corrective action agreed upon as a result of the audit.

Internal audits shall be part of the management review process of the quality system effectiveness.

Quality System Procedure(s):

[SP 250](#) - Quality Audits

4.18 Training

The Company shall establish and maintain procedures for identifying the training needs and provide for the training of all personnel performing activities affecting quality or related to safety during fabrication and installation.

Personnel performing specific assigned tasks may require qualification on the basis of appropriate education, training and/or experience.

Appropriate records of training shall be maintained in their personnel file, and recorded in the Training Log.

Quality System Procedure(s):

[SP 270](#) - Training

4.19 Servicing

Where servicing is a specified contractual requirement, the Company shall establish and maintain, as necessary, documented procedures for performing, verifying and reporting that servicing meets the specified requirements.

Quality System Procedure(s):

[SP 400](#) – Return Material Authorization

[SP 410](#) – Servicing Field Related Complaints

4.20 Statistical Techniques

Where appropriate, the Company shall establish procedures for identifying adequate statistical techniques required for verifying the acceptability of process capability and product characteristics. The procedure will describe the way the technique is to be applied and the rules governing its use. Where used within the Company, the statistical techniques selected will be the most appropriate statistically valid technique for the application.

Quality System Procedure(s):