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QUALITY SYSTEM MANUAL

QM-1 REVISION 10
Dated 8/17/15

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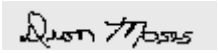
SECTION I	TABLE OF CONTENTS	Current Revision #: 10 Current Rev. Date: 8/17/15

SECTION **DESCRIPTION** **PAGE**

This manual has been reviewed and approved for release, circulation, and use by the following persons:

Title	Signature	Date
President		8/17/15
Director of Operations	Kelli Dean	8/17/15
Quality Manager	Ruby Buckley	8/17/15

SECTION Iii	CHANGE CONTROL HISTORY	Current Revision #: 10 Current Rev. Date: 8/17/15

The Quality Assurance (QA) Department controls this manual for disposition and issue. If the manual is revised, all applicable sections and/or paragraphs shall reflect the latest revision level. The portions that are changed are described in the Table below. Manuals may be assigned their own control number upon issue as controlled copies. Controlled copies of this manual shall be indicated by the designation of "Controlled Copy" on the cover page. The signatures and final approval for release shall indicate the approval of this manual by the executive management team.

Date	*Section*	*Reason*	*Approved By*
4/30/02	*All sections of DSS quality manual with control # QM -1 revision date 12/1/00*	*The quality system manual was completely revised to comply with the requirements of ISO-9002: 94 and AS9000: 98 for certification.*	*RB*
5/16/03	*4.11 & 4.14*	*This document was reviewed and revised to comply with the requirements of ISO-9002: 94 and AS9000: 98 and to NASA Audit*	*RB*
6/15/04	*All sections of DSS quality manual*	*The quality system manual was reviewed and revised to comply with the requirements of ISO 9001.2000 and AS9100A*	*CTB*
11/01/05	*Quality Manual Cover Sheet.*	*To reflect new address, with no content change.*	*CTB*
1/2/08	*Quality manual Review and Approval sheet*	*To reflect Current Approval Signatures*	*RB*
1/15/09	*All sections of DSS Quality Manual*	*The quality system manual was reviewed and revised to comply with the requirements of ISO 9001.2008 and AS9100B*	*RB*
6/7/10	*All sections of DSS Quality Manual*	*The Quality System Manual was reviewed and revised to comply with requirement from ISO 9001.2008 and AS9100B Audit*	*RB*
04/01/12	*All sections of DSS Quality Manual*	*The Quality System Manual was reviewed and revised to comply with requirements from ISO 9001.2008 and AS9100C*	*RB*
7/23/14	*Section 1 Mission and Quality Policy Statement*	*To reflect the Observation from Third Party Audit*	*RB*
10/13/14	All sections of DSS Quality Manual	*Revised the document to comply with the AS9120 Audit*	*RB*
8/17/15	All sections of DSS Quality Manual	*Revised the document to comply with the ISO9001&AS9100 Audit*	*RB*

This is to certify that this is the most recent revision of this manual as noted _10__ Dated 8/17/15

1.1 **MISSION STATEMENT**

Our mission is to conduct this business using two guiding principles. One is to provide quality products and services at the most cost competitive price that meets our customer's and applicable statutory and regulatory requirements. The other is to continually strive to reduce our costs and increase our level of quality through continuous review and improvement of our business processes.

1.1.1 Our mission shall be achieved through a DSS established quality policy and management system, implemented to enhance its capabilities and cost competitiveness to meet our customer's and applicable statutory and regulatory requirements.

1.1.2 Our employees will benefit with a stable, personally enriched and safe work environment where everyone is recognized as an integral component of the organization. Ultimately the company will benefit by continued growth and balanced prosperity for its ongoing operations.

1.2 **QUALITY POLICY**

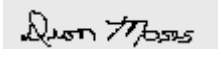
DSS is committed to constantly supplying its customers and the aviation, space and defense industry with high quality products that meet and/or exceed the standards expected by our customers and applicable statutory and regulatory requirements at a reasonable price. We plan to accomplish the elements of our set mission and policy through the objectives set below and our guiding principle of continuous improvement with the active participation of each employee, vendor, and customer.

1.2.1 **QUALITY OBJECTIVES:**

In order to achieve our mission and quality policy, it is our goal to pursue the following objectives:

1. Our customer returns/nonconformance will be less than 2% of sales/shipments.
2. Our customer delivery rating will be 95% or higher on time delivery.
3. Our vendor's quality rating will be no more than 2 rejected lots/shipments in a twelve month period.

1.2.1.1 All employees whose work affects the quality of DSS products shall comply with all the elements of this manual. They shall be competent and responsible for the quality of their work and empowered to be free from any pressure that might affect the quality of their work.

1.2.1.2 It shall be the responsibility of the Quality Manager, with support of the President of DSS and all management to ensure that this policy is understood, implemented, and maintained at all levels of the organization.  President

SECTION 2	INTRODUCTION AND SCOPE OF DSS QUALITY SYSTEM	Current Revision #: 10 Current Rev. Date: 8/17/15

2.1 **INTRODUCTION**

Defense Support Services, Inc. (DSS) is engaged in the business of purchasing and selling quality certified aviation, space and defense fasteners and products. DSS is currently qualified and approved by the following customers and government/DOD agencies: The Boeing Company, Lockheed Martin, Raytheon, NASA, DLA, NADEP, ALC, TACOM, etc.

2.1.1 **PRODUCT LINE**

DSS product line includes but is not limited to: Bolts, Blind Bolts, Specialty Bolts, Eye Bolts, Screws, Solid Rivets, Blind Rivets, Washers, Hi Loks, Hi Tigues, Collars, Hex Nuts, Locking Nuts, Nut-plates, Channel Nuts, Fittings, O-Rings, Packing, Grommets, Bushing, Bearings, Spacers and many more.

2.1.2 **DSS CAGE CODE: 1L3U4:** We are a single site address 3212 Bishop Drive Arlington Texas 76010.

2.1.3 **DSS VENDORS**

DSS procures and sells products from qualified and approved vendors and as a policy does not authorize or allow its personnel to alter any of its procured product. (See Approved Vendor List)

2.2 **SCOPE OF DSS QUALITY SYSTEM**

This quality manual complies with the quality system requirements of *Defense Logistics Agency's QSLD Quality System Criteria, Fastener Quality Act (FQA), ISO9001 International standards for Design, Development, and Production of Products, AS9100 Quality Management Systems Requirements for Aviation, Space and Defense Organization and AS9120 Quality Management System Requirements for Aviation, Space and Defense Distributors.*

2.2.1 The purpose of this manual is to describe the policies, requirements, and processes, including their interactions within DSS. This manual enables the company to define the responsibilities, authorities, and interactions/interrelationships of the key operating management elements, and to provide the direction for each of the functional activities, including controls that ensure that the requirements for quality will be met. This manual and its supporting procedures are structured along a process model approach and also enable DSS to continuously maintain product lot traceability, identity, control, and prevent commingling.

2.2.1.1 The manual is divided into 8 sections that correlate directly to the applicable elements (4 through 8) of the *ANSI/ISO/ASQ ISO9001, AS9100* and *AS9120* standards. Each section of this manual references the relevant operational procedures. DSS operating procedures are also listed in ***CP 201***. The relationship and interaction of the standards within the system are documented in ***CP 203.***

2.3 **EXCLUSIONS**

The Table below lists the exclusions (including reasons) that currently apply to DSS operations:

#	Description	Reason for Exclusion	Affected Section /Paragraph(s)	Affected Standards
1	Design and Development	DSS does not currently design its own products. It works to customer and industry specified drawings.	7.3 & all its sub-paragraphs	*AS9100* *ISO9001* *AS9120*

SECTION 3	DEFINITIONS	Current Revision # 10 Current Rev. Date: 8/17/15

The definitions below are in direct correlation to the ANSI/ISO/ASQ ISO9001 Quality Management Systems Vocabulary:

Audit: Systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled

Capability: Ability of an organization, system, or process to realize a product that fulfills the requirements for that product.

Conformity: Fulfillment of a requirement.

Corrective Action: Action taken to eliminate the cause of a detected nonconformity or other undesirable situation.

Counterfeit Part: A product produced or altered to imitate or resemble a product without authority or right to do so, with the intent to mislead or defraud by passing the imitation as original or genuine.

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

Customer Satisfaction: Customer perception of the degree to which their requirements have been met.

Design and Development: Set of processes that transform requirements into specified characteristics or into the specification of the product, process, or system.

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

Management System: System to establish policy and objectives, and to achieve those objectives.

Nonconformity: No fulfillment of a requirement.

Organizational Structure: Arrangement of responsibilities, authorities, and relationships between people.

Preventive Action: Action taken to eliminate the cause of a potential nonconformity or other undesirable potential situation.

Procedure: Specified way to carry out an activity or process.

Process: The set of interrelated or interacting activities that transforms inputs into outputs.

Product: The result of a process (There are four generic product categories: services, software, hardware, and processed materials)

Quality: The degree to which a set of inherent characteristics (i.e.: of a product, system, or process) fulfills requirements.

Quality Characteristic: Inherent characteristic of a product, process, or system related to a requirement. **Quality Improvement:** Part of quality management focused on increasing the ability to fulfill quality requirements.

Quality Management: Coordinated activities to direct and control an organization with regard to quality.

Quality Management System: System to direct and control an organization with regard to quality.

Quality Planning: Part of quality management focused on setting quality objectives and specifying necessary operational processes and related resources to fulfill the quality objectives.

Quality Policy: Overall intentions and direction of an organization related to quality as formally expressed by top management.

Risk: An undesirable situation or circumstance that has both a likelihood of occurring and a potentially negative consequence.

Special Requirements: Those requirements identified by the customer, or determined by the organization, which have high risk to being achieved, thus requiring their inclusion in the risk management process. Factors used in the determination of special requirements include product or process complexity, past experience and product or process maturity. Examples of special requirements include performance requirements imposed by the customer that are at the limit of the industry's capability, or requirements determined by the organization to be at the limit of its technical or process capabilities.

Splitting: The separation of components/items belonging to the same production batch.

Suspect Part: A part in which there is an indication by visual inspection, testing, or other information indicating the item may have been misrepresented by the Supplier or Manufacturer and may in turn meet the definition of a Counterfeit Part.

Work Environment: The set of conditions under which work is performed.

4.1 **GENERAL REQUIREMENTS**

DSS has established this manual, ***QM-1 Rev. 10*** as its documented quality management system, which is designed, maintained, and implemented to fulfill the *ISO9001, AS9100, AS9120*, QSLD criteria and other customer and applicable statutory and regulatory quality system requirements (see paragraph 4.3 for details) with the focus to continually improve the system's effectiveness. This document creates a framework for clearly defining control of materials, processes, and verification activities, thus ensuring that DSS procured products are processed in a well-defined and controlled manner.

4.1.1 **DSS shall:**

a. Determine the processes needed for the implementation of the established quality system throughout DSS (see ***CP 201*** for details);
b. Determine the sequence and interaction of these processes (see ***CP 901***);
c. Determine the criteria and methods required to ensure that both the operation and control of these processes are effective (see ***CP 901, Figures 3-6***) ;
d. Ensure that resources and information necessary to support the operation and monitoring of these processes are available;
e. Monitor, measure where applicable, and analyze these processes (***CP 2005***); and
f. Implement the necessary actions to achieve planned results and continual improvement of these processes (***CP 103, CP 1701***).

4.1.2 DSS management shall ensure that the system established in this manual and its procedures and processes are implemented, maintained, managed and applied consistently at all levels throughout DSS in accordance with the requirements of *ISO 9001, AS9100, AS9120,* QSLD/QSLM criteria and other customer and applicable statutory and regulatory quality management system requirements.

4.1.3 When DSS chooses to outsource any process that affects product conformity to specified requirements, established procedures within the quality system shall be used to control such processes (see ***CP 601, CP 602, CP 604,*** and ***CP 1001*** for details).

4.1.3.1 **Responsibility and Authority;**

Each department management is responsible for having the required work instructions and procedures used in their areas of responsibility.

4.2 **DOCUMENTATION REQUIREMENTS**

Documented procedures that define the processes used to implement the elements of DSS quality system are defined and identified in this manual and listed in ***CP 201***. The documents ensure the effective planning, operation and control of the quality system processes, with supporting records (***CP 202***).

4.2.1 **General:**

DSS quality system documentation includes:

a. Documented statements of DSS quality policy and objectives (see Section 1 of this manual);
b. This quality manual (***QM-1 Rev. 10***), which shall be the level 1 document;
c. Documented procedures and records required by *ISO 9001, AS9100*, and *AS9120* standards (***CP 201***);
d. Documents, including records, determined by DSS to be necessary to ensure the effective planning, operation, and control of its processes (***CP 202*** and ***CP 1601***).

4.2.1.1 DSS personnel have access to, and are aware of, relevant quality management system documentation and changes.

4.2.1.2 The degree, range, and detail of documentation of the DSS's quality system shall be commensurate to the complexities of the processes, methods used, available resources, and experienced/trained DSS personnel that implement the system.

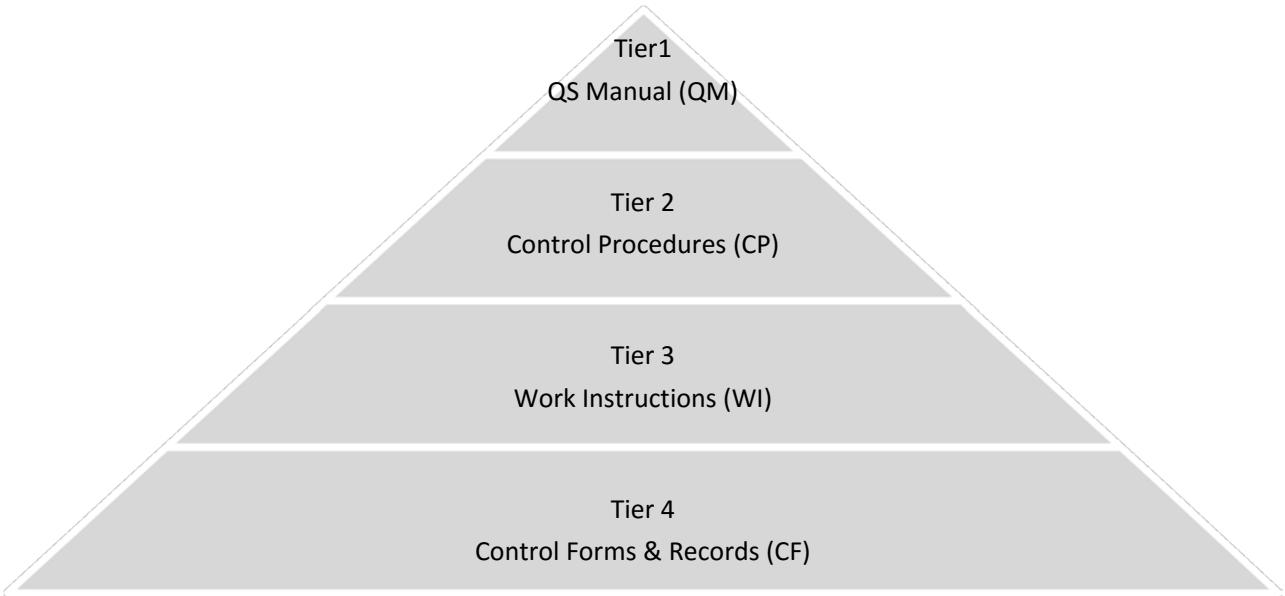
4.2.1.3 The documents can be in any form or type of medium.

4.2.2 **Quality Manual/Program:**
This document (with control number ***QM-1 Rev. 10*** forms the DSS documented quality system manual/program and it covers:

a. The scope of the quality management system implemented at DSS, including details of and justification for any applicable exclusions (see section 2 of this manual for details);
b. The documented procedures/work instructions established for implementing the DSS quality system, documented in this manual and ***CP 201***; and
c. The description of the interaction between the processes of the quality system as documented in ***CF 203*** (see the end of this section for a copy of ***CF 203***).
d. Determine the sequence and interaction of these processes (see ***CP 901***);

4.2.2.1 **Documentation Configuration Management/Structure:**
The quality system documentation structure reflects a four-tier approach.

a. The Tier 1 documentation is the quality manual (***QM-1 Rev. 10)*** which defines the company policies, philosophy, and the requirements that are established within the system. The quality manual references the Tier 2 procedures as applicable.
b. Tier 2 documents are the DSS control procedures (see ***CP 201*** for details). These documents form DSS operating procedures and they are the principal documents that are used to implement the requirement stated in the Tier 1 document. Each procedure defines a process, the inputs to the process, and the outputs of the process.
c. Tier 3 documents are the work instructions (see ***CP 201*** for details). This level of documentation describes step by step how to carry out a specific task. They support the implementation of Tier 2 procedures.
d. ***CP 202*** is used to list and document DSS Tier 4 documents. These documents are the records that validate the effective implementation of the DSS quality system.



4.2.3 **Control of Documents**:
All the documents required by the quality system are controlled in accordance with the applicable requirements of this manual, ***CP 501***, ***CP 502***, ***CP 1601***, and other applicable procedures listed in ***CP 201***.

4.2.3.1 Through the above mentioned procedures, DSS has established and defined the controls needed:

a. To review and approve documents for adequacy prior to use;
b. To review, update, recall and re-approve documents when necessary and/or when performed in a timely fashion during internal audits per ***CP 1701*** and covered by management review;
c. To ensure that changes and the current revision status of documents are identified;
d. To ensure that current and relevant versions of applicable documents such as drawings, quality plans, electronic data, procedures, specifications, etc. are made available at points of use;
e. To ensure that documents remain legible, readily identifiable, and retrievable;
f. To ensure that documents of external origin determined by DSS to be necessary for the planning and operation of the quality management system are identified and their distribution controlled;
g. To prevent the unintended use of obsolete documents and ensure that suitable identification is applied to them when they are retained for any purpose.

4.2.3.2 Upon the periodic review (at minimum annually) of the company's quality system/program, any substantive revisions in the policies, procedures or processes or changes in the quality manual/program shall be documented, reviewed, approved and implemented per established procedures (***CP 101***, ***CP 501*** and ***CP 502***). The changes shall be sent and coordinated with customers and/or statutory and regulatory authorities as required by the established procedures listed in ***CP 201***.

4.2.4 **Control of Quality Records**:
Records required for implementing the DSS quality system are controlled per ***CP 1601***. Such records established to provide evidence of conformity to specified requirements and of the effective operation of the quality system shall be controlled.

4.2.4.1 All completed quality records shall remain legible, readily identifiable and retrievable.

4.2.4.2 ***CP1601*** is the documented procedure established for the identification, storage, easy retrieval, protection, retention, processing, and disposition of quality records at DSS. (Also see ***CP903***)

4.2.4.3 The above mentioned procedure covers the method for controlling records created by and/or retained by suppliers.

4.3 **REFERENCED AND APPLICABLE DOCUMENTS:**

ISO9001	*Quality Management Systems Requirements*
ISO9000	*Quality Management Systems Fundamentals and Vocabulary*
ISO9004	*Quality Management Systems Guidelines for Performance Improvements*
ISO10007	*Configuration Management*
AS9100	*Quality Management Systems Requirements for Aviation, Space and Defense Organizations*
AS9120	*Quality Management Systems Requirements for Aviation, Space and Defense Distributors*
FQA	*Fastener Quality Act*
MIL-I-45208	*Inspection System Requirements*
QSLD	*DLA Criteria and Provisions for Class 3 Threaded Fasteners*

CP 101	*Management Review*
CP 102	*Potential Growth Quality Plan*
CP 201	*Quality System Procedures & Work Instructions*
CP 202	*Quality System Forms*
CP 203	*Interactions/Relationship of Standards to DSS QMS*
CP 501	*Document & Data Control*
CP 502	*Written Documentation System*
CP 601	*Purchasing Data and Processing*
CP 602	*Vendor Control/Survey*
CP 604	*Vendor Quality Requirements*
CP 901	*Daily Process Flow*
CP 903	*Infrastructure and Preventive Maintenance*
CP 1001	*Inspection and Test System Requirement*
CP 1601	*Quality Records*
CP 1701	*Internal Audits*
CP 2005	*Measurement, Analysis and Improvement Process*

5.1 **MANAGEMENT COMMITMENT**

Top management of DSS provides evidence of their commitment to the development and implementation of the established quality system and continually improving its effectiveness by:

a. Communicating through established procedures/quality plans *(**CP 201**)*, training, and/or meetings with all employees within the company the importance of meeting customer as well as statutory and regulatory requirements;
b. Establishing the quality policy (see Section 1 of this manual for details);
c. Ensuring that quality objectives are established (see Section 1 of this manual for details);
d. Conducting management reviews per ***CP 101****;* and
e. Ensuring the availability of needed resources.

5.2 **CUSTOMER FOCUS**

The top management team ensures through established procedures, work instructions and quality plans (***CP 201***) that customer requirements, needs, and expectations are determined and are met with the aim of achieving customer satisfaction.

5.2.1 Top management ensures that product conformity and on-time delivery performance are measured and that appropriate action is taken if planned results are not, or will not, be achieved (***CP 2004***).

5.3 **QUALITY POLICY**

DSS quality policy is as stated in Section 1 of this manual. Through training, DSS management ensures that the policy is communicated to and implemented at all levels of the DSS organization. Records of the quality policy training shall be maintained as specified in this manual, ***CP 1601*** and ***CP 1801***.

5.3.1 The top management team of DSS uses the elements of this manual, established processes and documented procedures to ensure that the quality policy established:

a. Is appropriate to the purpose of the organization;
b. Includes a commitment by all employees to comply with all applicable requirements and continually improve the effectiveness of the quality system;
c. Provides a framework for establishing and reviewing the company's quality objectives in order to ensure their effectiveness and continuity;
d. Is communicated through training to all DSS organizational levels and/or personnel to ensure that it is understood; and
e. Is reviewed for continuing suitability and continuous improvement at least annually

5.4 **PLANNING**

5.4.1 **Quality Objectives:**

DSS quality objectives are as stated in Section 1 of this manual. Through training, DSS management shall ensure that the objectives are communicated and implemented at relevant functions and for all levels within DSS.

5.4.1.1 The quality objectives established are measurable and consistent with the quality policy including the commitment to continuous improvement *(*see Section 1 of this manual and ***CP 2005*** for details*).*

5.4.1.2 The objectives include those needed to meet product requirements. The system may be adjusted as necessary to continually meet the established or revised quality objectives.

5.4.2 **Quality Management System Planning:**
The top management team of DSS ensures, through the QA department, that the planning of the quality system is documented *(see **CP 201**)* and its output includes:

a. That the planning of the system is carried out in order to meet the requirements given in 4.1 of this manual, as well as the quality objectives; and
b. That changes be conducted in a controlled manner and in a way that protects and maintains the integrity of the system *(**CP 501** and **CP 502**).*

5.5 **RESPONSIBILITY, AUTHORITY & COMMUNICATION**

5.5.1 **Responsibility and Authority:**
The DSS top management ensures that the responsibilities and authorities are defined and communicated within the organization to facilitate effective implementation of the quality system per the elements of this manual, ***CP 103**,* and ***CP 203**.*

5.5.1.1 **Organization:**
The interrelation of personnel and functions that manage, perform, and verify work affecting the quality of product is as documented in this manual and in ***CP 103***. The QA department shall be operated independently from all the other operating departments such as Sales, Warehouse, Accounting and Operations (see ***CP 103*** for details). The organizational chart is documented in ***CP 103*** and enclosed at the end of this section.

5.5.1.2 The President is ultimately responsible for the quality of the company's products and services. He is the executive responsible for this business unit and has authority over all functions required within the company. He is the head of the top management team of the company, and the team is responsible for Management Review of both the quality system and operations that take place. From him, the authorities and responsibilities are further defined and delegated as indicated in this manual and in ***CP 103**.*

5.5.1.3 Managers and Supervisors (management personnel) at DSS shall have the required qualifications and/or experience and shall be familiar with their areas of function and processes. These personnel are appointed by the President and/or members of management and they, as well as all employees of DSS, are responsible for the quality of the processes under their control in order to always meet customer requirements.

5.5.2 **Management Representative:**
The Manager of Quality Assurance has been appointed by the President to be the company's Management Representative and shall be a member of the organization. The responsibilities and authority of the representative include:

a. Ensuring that processes needed for the quality system and its elements are established, implemented and maintained throughout the organization;
b. Reporting on the performance of the system, including needs for improvement, to top management;
c. Ensuring the promotion of awareness of customer requirements throughout the organization;
d. The organizational freedom and unrestricted access to top management to resolve quality management issues; and
e. Acting as liaison with external parties on issues relating to the quality management system.

5.5.2.1 Management Representative Notification:
DSS customers shall be notified in writing promptly in the event of any changes in the management representative's assignment or when required by customer specification.

5.5.3 **Internal Communication:**
DSS top management ensures communication between the various levels and functions of the organization regarding the processes of the quality system and their effectiveness. Communication is achieved through training, periodic meetings, established procedures *(**CP 201**)*, written notices, and/or posted data.

5.6 MANAGEMENT REVIEW

5.6.1 General:

DSS top management team reviews the quality management system at minimum yearly to ensure its continuing suitability, adequacy, and effectiveness. These reviews also evaluate the need for changes to the quality management system, including quality policy and objectives. The reviews are conducted in accordance with the requirements set in ***CP 101***.

5.6.1.1 Records from management reviews are maintained per ***CP 101*** and ***CP 1601***.

5.6.2 Review Input:

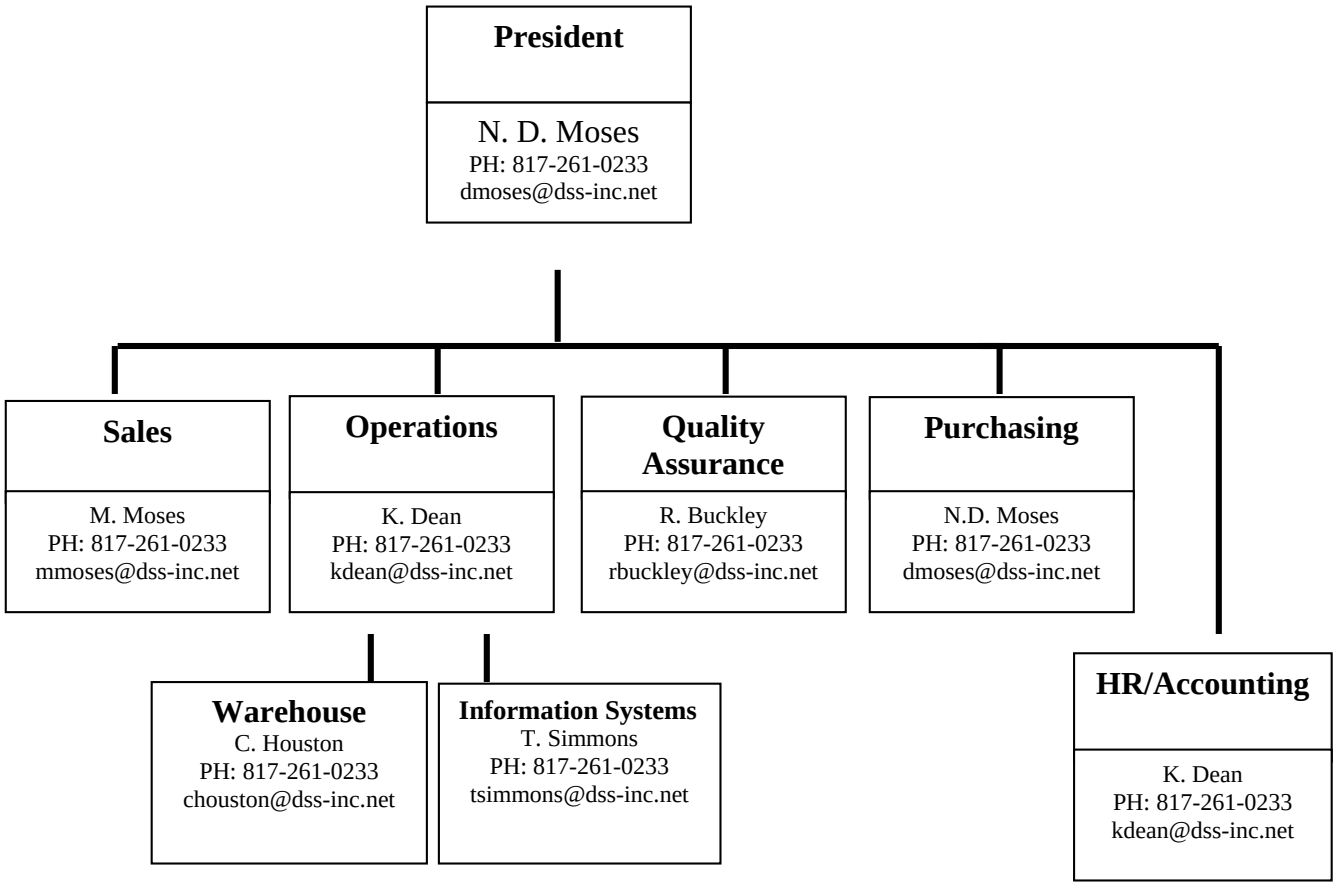
Input to DSS management review process includes: matters arising and follow-up actions from last meeting; results from audits/surveys; reports from customer/third party; reports from internal audits; reports from Vendor Control surveys; customer satisfaction feedback; process performance and product conformity; rejection reports and analysis; report on customer returns; status of preventive and corrective action; training report/adequacy of resources available; changes that could affect the Quality System; overall system, process and product improvements efforts, recommendation for improvement, Risk Assessment Review (review PFMEA for adequacy), and quality objective/mission statement review (at least annually), *(*See ***CP 101*** for details*)*

5.6.3 Review Output:

The output from the management review may include decisions, revised quality objectives and actions related to improvement of the effectiveness of the quality management system and its processes, improvement of product related to customer requirements, and resources needed.

5.7 REFERENCED AND APPLICABLE DOCUMENTS

ISO9001	*Quality Management Systems Requirements*
AS9100	*Quality Management Systems Requirements for Aviation, Space and Defense Organizations*
AS9120	*Quality Management Systems Requirements for Aviation, Space and Defense Distributors*
FQA	*Fastener Quality Act*
MIL-I-45208	*Inspection System Requirements.*
QSLD	*DLA Criteria and Provisions for Class 3 Threaded Fasteners*
CP 101	*Management Review*
CP 103	*Management Responsibility*
CP 201	*Quality System Procedures & Work Instructions*
CP 202	*Quality System Forms*
CP 501	*Document & Data Control*
CP 502	*Written Documentation System*
CP 1601	*Quality Records*
CP 1801	*Training and Qualification Program*



President & CEO	*N. D. Moses*
Quality Manager	*R. Buckley*
Director of Operations	*K. Dean*
Sales Manager	*M. Moses*

6.1 **PROVISION OF RESOURCES**

Through the President, DSS shall determine and provide resources needed to:

a. Implement and maintain the quality management system and continually improve its effectiveness; and

b. Enhance customer satisfaction by meeting customer and applicable statutory and regulatory requirements.

6.2 **HUMAN RESOURCES**

6.2.1 **General:**

All DSS personnel performing tasks within the quality management system affecting conformity to product requirements shall be competent on the basis of education, training, skills, and experience in accordance with the applicable elements of this manual, established procedures, and ***CP 1801***.

6.2.2 **Competence, Training and Awareness:**

Through the applicable requirements of this manual and the requirements specified in ***CP 1801***, DSS management shall:

a. Determine the necessary competence for personnel performing work affecting conformity to product requirements;

b. Where applicable, provide required training, work instruction, procedures and/or necessary steps/actions to achieve this competence;

c. Evaluate the effectiveness of the training or other activities designed to meet skill requirements (***CP 1801***);

d. Ensure that the company's personnel are aware of the relevance and importance of their work/activities and how they contribute to the achievement of the quality objectives (see Section 1 of this manual); and

e. Ensure that all applicable records of personnel education, training, skills, and experience are maintained (***CP 1601***, ***CP 1801***).

6.3 **INFRASTRUCTURE**

DSS management shall determine, provide and maintain the needs of the company's infrastructure in accordance with the requirements set in ***CP 903.***

6.3.1 The procedure(s) developed and implemented shall address:

a. Workspace and associated facilities;

b. Process equipment (both hardware and software); and

c. Supporting services such as information system/software used for production planning, tracking, etc.

6.4 **WORK ENVIRONMENT**

The identification and management of the work environment needed to achieve conformity to product requirements is defined in ***CP 902***, the DSS documented procedure for work environment factors. The factors include temperature, humidity, cleanliness, etc.

6.5 **REFERENCED AND APPLICABLE DOCUMENTS**

CP 902	*Safety and Work Environment*
CP 903	*Infrastructure and Preventive Maintenance*
CP 1601	*Quality Records*
CP 1801	*Training and Qualification Program*

7.1 **PLANNING OF PRODUCT REALIZATION**

DSS has planned and developed the processes needed for product realization. The processes are consistent and documented *(see **CP 201**)* in a way that suits the company's method of operation.

During planning of product realization, DSS:

a. Determines and establishes quality objectives/requirements for the product, service, project or contract such as:
   - Product or personal safety
   - Reliability, availability and maintainability
   - Productibility and inspect ability
   - Suitability of parts and materials used in the product;

b. Establishes processes, provides resources, and documents the processes to the extent that they affect the quality of DSS purchased products*;*

c. Determines and establishes the required verification, validation, monitoring, measurement, inspection and test activities specific to the product and the criteria for product acceptance*;*

d. Establishes and maintains the required records needed to provide evidence that the product realization processes and the resulting product meet specified requirements (*see **4.2.4***)*;*

e. Determines the configuration management appropriate to the product; and

f. Ensures that the required resources needed to support DSS operations and products are identified and maintained with established procedures*.*

The outcome of planning is evidenced and documented in the form of operating procedures, work instructions, quality plans, sales orders, pick tickets and approved vendor issued purchase/work orders, or as applicable to meet DSS established quality and customer requirements.

7.1.1 **Project Management:**

DSS plans and manages product realization in a structured and controlled manner to meet requirements at acceptable risk, within resource and schedule constraints, in accordance with ***CP 901*****.**

7.1.2 **Risk Management**:

DSS has established, implemented and maintains a process for managing risk to the achievement of applicable requirements. DSS President is responsible for risk management and assigns responsibilities for risk management to personnel, as appropriate. Utilization of risk management tools, such as Process Failure Modes and Effects Analysis (PFMEA),CF 101-3 are implemented within the organization to identify and assess risk throughout the product realization cycle. DSS will review risks which have high consequence, high likelihood of occurrence or a combination of both to determine which risks require mitigating actions. Those risks which do not meet these criteria will be monitored for changes. Any remaining risks after mitigating actions have been implemented will be dealt with via the DSS quality management system procedures. Communication of identified risks and associated risk mitigation actions will be communicated to the affected departments.

7.1.3 **Configuration Management:**

DSS has established, implemented and maintains a configuration management process that includes, as appropriate to the product:

a. Configuration management planning thru the Pentagon System

b. Configuration identification (***CP 301*****,** ***CP 801*****,** ***CP 901***);

c. Change control (***CP 302*****,** ***CP 501***);

d. Configuration status accounting thru the Pentagon System
e. Configuration audit (CP601 & CP604)

7.1.3.1 DSS uses applicable customer, industry, and/or nationally established standards/specifications to specify its products and has established the required documentation needed by DSS to ensure the effective planning, operation and control of its processes (***CP 201***). All standards and established procedures are controlled and verified prior to their usage for relevance/currency, completeness and accuracy.

7.1.3.2 As part of DSS configuration management system, DSS shall establish a quality plan for each of its customer orders per the requirements set in ***CP 901***. Each order/documentation shall show that all required processes, inspection/testing and controls were completed as necessary for ensuring that the required products meet customer specification.

7.1.4 **Control of Work Transfer**:
All work transfers will be flowed down thru the requirements of purchasing.

7.2 **CUSTOMER RELATED PROCESSES**
The determination of customer requirements is initiated during the order taking process and/or the contract/order review process (see ***CP 301*** and ***CP 901***).

7.2.1 **Determination of Requirements Related to DSS Product:**
DSS uses established procedures *(**CP 301** and **CP 302**)* to review and determine the requirements for its product including:

a. The requirements specified by its customers which may include delivery and post delivery activities;
b. Product requirements not stated by the customer but necessary for the intended use that shall be identified and clarified with the customer;
c. Statutory and regulatory requirements applicable to the product, and;
d. Any additional requirements considered necessary by DSS.

7.2.2 **Review of Requirements Related to DSS Product:**
DSS conducts a review of requirements prior to commitment to supply the customer a product per ***CP 301*** and ***CP 302***.

7.2.2.1 Through the above-mentioned procedures, the review shall ensure that:
a. Product requirements are defined;
b. Contract or order requirements differing from those previously expressed are resolved;
c. DSS has the ability to meet the defined requirements;
d. Special requirements of the product are determined; and
e. Related risks (e.g. the need for new equipment, technology, short delivery time, etc.) have been identified (***see 7.1.2***).

7.2.2.2 DSS shall maintain records of the results of the review and actions arising from the review per the requirement set in ***CP 301, CP 302*** *and* ***CP 1601****.*

7.2.2.3 Where the customer provides no documented statement of requirement, the product requirements developed shall be confirmed with the customer before acceptance *(**CP 301**).*

7.2.2.4 When product requirements are changed, the requirements set in ***CP 302*** shall be used to ensure that relevant documents are amended and that relevant personnel are made aware of the changed requirements.

7.2.2.5 In cases where a formal review is impractical for an order, the review may cover customer approved relevant product information such as catalogues or advertising materials.

7.2.3 Customer communication:

DSS has determined and implemented effective arrangements for communicating with customers in relation to:

a. Product information;
b. Inquiries, contracts, or order handling, including amendments, and;
c. Customer feedback, including customer complaints/returns, contract review, and amendment to contracts (see ***CP 1301, CP 1302*** and ***CP 2004***).

7.3 DESIGN AND DEVELOPMENT

This section is not applicable to DSS operations. DSS does not currently design its own products but works to customer and industry specified requirements.

7.4 PURCHASING

One of the ways that DSS meets its customer requirements is through the maintenance of verified inventory assets or inspected products in stock, while new items are procured through qualified and/or approved suppliers or a customer designated/qualified source.

7.4.1 Purchasing Process:

DSS ensures, through established procedures ***(CP 201),*** that purchased/procured products conform to specified purchasing requirements. The type and extent of control applied to the supplier and the purchased product is dependent upon the effect of the purchased product or services on subsequent product realization or the final product.

7.4.1.1 Supplier Control System:

DSS shall be responsible for the conformity of all products purchased from suppliers, including customer designated sources, by ensuring that they meet customer/specified requirements.

7.4.1.2 DSS evaluates, approves, and selects suppliers based on their ability to supply product in accordance with the requirements set in ***CP 602,,*** and ***CP 604.*** The procedures mentioned define the criteria for supplier selection and their periodic evaluation, including regular verification of customer qualified sources such as the QSLM/QSLD. Records of evaluations and follow-up actions taken are documented and maintained per the requirements of this manual, ***CP 602*** and ***CP 1601.***

7.4.1.3 As part of our supplier control system, DSS:

a. Maintains a list of DSS suppliers, including their approval status and the scope of the approval thru the data base.
b. Periodically reviews its supplier's performance per the requirements set in ***CP 602.*** Results of these reviews are recorded and maintained per ***CP 1601*** and shall be used as the basis for establishing the level of controls to be implemented;
c. Uses the requirements set in ***CP 602*** to define and take needed actions against suppliers that do not meet DSS vendor quality requirements per ***CP 604;***
d. Ensures that both DSS and its suppliers use customer approved sources when required by the customer and that the sources are verified regularly;
e. Defines the process, responsibilities and authority for the approval status decision, changes of the approval status and conditions for a controlled use of suppliers depending on the supplier's approval status (see ***CP 602***);
f. Determines and manages the risk when selecting and using suppliers (see ***7.1.2 or CP 601, CP 602,***).
g. Defines the controls implemented to prevent the purchase of counterfeit/suspect unapproved parts (see ***CP 1001)***.

7.4.2 **Purchasing Information:**

The requirements set in this manual, ***CP 601***, ***CP 602***, **and** ***CP 604*** shall be used to process purchasing information and ensure that all purchasing documents contain information describing the product to be purchased, including:

a. Requirements for approval or qualification of products, procedures, processes, and equipment;
b. Requirements for qualification of personnel;
c. Quality management system requirements;
d. Identification and revision status of specifications, drawings, process requirements, inspection/verification instructions and other relevant technical data;
e. Requirements, when applicable, for design, test, inspection, verification (including production process verification), use of statistical techniques for product acceptance, and related instructions for acceptance by the organization, and, as applicable, critical items including key characteristics;
f. Requirements for test specimens, when applicable, for inspection/verification, investigation or auditing;
g. Requirements regarding the need for the supplier to:
   - Notify DSS of nonconforming product,
   - Obtain DSS approval for nonconforming product disposition,
   - Notify DSS of changes in product and/or process, changes of suppliers, changes of manufacturing facility location and, where required, obtain DSS approval, and
   - Flow down to the supply chain the applicable requirements including customer requirements;
h. Records retention requirements;
i. Right of access by DSS, its customers, and regulatory authorities to applicable areas of all facilities, at any level of the supply chain, involved in the order and to all applicable records;
j. Request on the purchase orders to vendor, at a minimum, for a copy of the original Product Certificate of Conformance, and/or material Mill Cert. when required; and
k. That all PO requirements shall be met and shown in the traceability documents.

7.4.2.1 Purchasing documents are reviewed by QA or designee and approved prior to their release per ***CP 601*** in order to ensure that the specified requirements contained within are adequate.

7.4.3 **Verification of Purchased Product:**

DSS shall verify purchased products and accompanying traceability documentation per the requirements set in ***CP 1001*** *a*nd as stated below in order to ensure that all contract/customer specified requirements are met.

7.4.3.1 DSS verification activities can include the following:

a. Obtaining objective evidence of the conformity of the product from suppliers, such as accompanying documentation, certificates of conformity, test records, Mill cert., statistical records, process control records, etc.;
b. Performing inspection and/or audit activities at the suppliers' premises when required;
c. The review of required documentation;
d. The inspection of products upon receipt; and
e. The delegation of verification activities to suppliers and/or the development of a delegated supplier certification program when required by customer or contract.

7.4.3.2 Where purchased product is released for production use pending completion of all required verification activities, it shall be identified and recorded to allow recall and replacement if it is subsequently found that the product does not meet requirements per ***CP 1001****.*

7.4.3.2.1 Purchased product may be released for urgent production purposes provided it is at the customer's request and/or per ***CP 1001***. All urgent released incoming products must be inspected at the subsequent operations to preclude and limit further processing without verification.

7.4.3.3 When DSS delegates verification of product to a supplier, such delegation shall be defined through a procedure, with a list of the delegation maintained (see ***CP 1001***).

7.4.3.4.1 DSS has made provisions for and specified the right of entry of DSS customers and regulatory agencies to vendor facilities when required - see ***CP 604*** for details.

7.4.3.5 When DSS or its customer proposes that product verification is to take place at vendors' facility, the purchasing data shall specify verification arrangements and method of product release (***CP 601, CP 604, and CP 1001)***

7.4.3.6 When specified by contract, the customer's representative shall have the right to verify the conformance of the purchased product or service to specified requirements at the approved supplier's facility or at DSS *(**CP 604**).*

7.4.3.7 The verification of purchased products by DSS or its vendor shall not eliminate the responsibility to provide DSS or its customers with acceptable quality products nor shall it preclude subsequent rejection if required.

7.4.3.7.1 When a customer or a third party representative elects to carry out verification at a supplier's facility or approves the supplier to their quality system, such verification or approval may not be used by DSS as evidence of effective control of the supplier's quality system.

7.5 **PRODUCTION AND SERVICE PROVISION**

It is the responsibility of all DSS personnel whose work affects the quality of DSS products to make sure that products and services meet all applicable specifications and quality requirements.

7.5.1 **Control of Production and Service Provision:**

DSS plans and carry out production and service provisions under controlled conditions. The control conditions established at DSS and/or flowed down to its approved vendors shall include:

a. The availability of information that describes the characteristics of the product, such as drawings, parts lists, materials and process specifications (***CP 601, CP 604***, ***CP 901)***
b. The availability of procedures and work instructions to include process flow charts, production documents and inspection documents (***CP 201***);
c. The use of suitable equipment (***CP 903***);
d. The availability and use of monitoring and measuring equipment (***CP 1101***);
e. The implementation of monitoring and measurement (***CP 1001, CP1201, CP 2001, CP2005);***
f. The implementation of product release, delivery, and post-delivery activities *(**CP 1501, CP1502**);*
g. Accountability for all products during production. This shall include, but not be limited to, part quantities and/or weights, split orders (when applicable per vendor or customer requirement) and nonconforming product documentation *(**CP 801, CP 901, CP 1301**)*;
h. Evidence that all production and inspection/verification operations have been completed as planned, or as otherwise documented and authorized; *(**CP 604, CP 901, CP 1001, CP 1201**);*
i. Provision for the prevention, detection and removal of foreign objects (***CP 1004);***
j. Monitoring and control of utilities and supplies such as water, compressed air, electricity, and chemical products to the extent they affect conformity to product requirements (***CP 902, CP 903, CP 1501***);
k. Criteria for workmanship, specified in the clearest practical way as documented in ***CP 901*** and ***CP 1001***, with due reference to all applicable specifications and industry standards when necessary for clarity.

Planning shall consider, as appropriate:

a. Establishing, implementing and maintaining appropriate processes to manage critical items, including process controls where key characteristics have been identified (see **CP *601, CP 604*** and ***CP 1001***);

b. Identifying in-process inspection/verification points when adequate verification of conformance cannot be performed at later states of realization;

c. Special processes.(see 7.5.2)

7.5.1.1 **Production Process Verification:**
It is DSS policy that first article inspection shall be performed on all production runs by its vendors (*See **CP 604** for details).*

7.5.1.2 **Control of Production and Process Change:**
Personnel authorized to approve changes to production process shall be identified by requirements set in ***CP 502.*** ***CP 901*** shall be used to process changes to daily processing of orders within DSS as applicable.

7.5.1.2.2 DSS shall control and document changes affecting processes, equipment, major tools, or software programs per the requirements set in ***CP 502, CP 604 and CP 901*** as applicable. All applicable procedures shall be readily available and used to control the changes.

7.5.1.2.3 The results of changes to production processes shall be assessed to confirm that the desired effect has been achieved without adverse effects to product conformity per Internal audits (***CP1701***).

7.5.1.3 **Control of Production Equipment, Tools, and Software Programs:**
Production equipment, tools, and software programs used to automate and control/monitor product realization processes are validated prior to release for production and are maintained *(**CP 604, CP 1001**).*

When applicable, storage requirements, including periodic preservation/condition checks, shall be defined for production equipment or tooling in storage.

7.5.1.4 **Post-Delivery Support:**
Post-Delivery support is provided per the requirements of AS9120.

7.5.2 **Validation of Processes for Production and Service Provision:**
When applicable or required by contract, DSS shall validate processes that affect its purchased products at the affected vendor facility or ensure control per the requirements set in ***CP 602*** *and* ***CP 604*****.**

7.5.2.1 The validation may entail the establishment of control points within the vendor's processes in order to demonstrate the ability of the processes to achieve the planned results.

7.5.2.2 When required, arrangements for validation shall be defined within DSS established process procedures *(**CP 201**), Purchase/Work orders (**CP 601**)* or per customer specification to include the following as applicable:

a. The definition of the criteria for review and approval of the processes;
b. The approval of equipment and qualification of personnel if required;
c. The use of specific methods and procedures;
d. The use of the elements set in this manual, ***CP 202, CP 601, CP 604*** and ***CP 1601*** to process all quality records generated; and
e. Re-validation of the processes, when required, including evaluations through audits and surveys per the requirements set in ***CP 602*** *and* ***CP 1701****.*

7.5.3 Identification and Traceability:

7.5.3.1 DSS products shall be identified, traced and maintained throughout product realization by suitable means such as the manufacturers identification symbol or logo, lot/batch control number, purchase orders issued to vendors, customer PO and as may be specified by customer. The requirements set in ***CP 801*** shall be used to ensure that all required identification and traceability within DSS and customer/contract requirements are met.

7.5.3.2 The company's Sales order package, copy of unaltered material mill certification test report from the original mill that produced the material for the product (when required by customer), inspection/test reports, and/or customer contract/product specifications are used to maintain the identification of the configuration of the product and to identify differences between the actual configuration and the required configuration *per* ***CP 901****.*

7.5.3.3 The status of the product with respect to measurement and monitoring requirements are identified on the sales orders *per* ***CP 901*** and ***CP 1201****.*

7.5.3.4 The acceptance authority media used at DSS is maintained and controlled per the requirement set in ***CP 1201****.*

7.5.3.5 Quality records and documentation trail are maintained by material type, size, mill cert heat lot number, product manufacturers lot/batch control number, company PO to vendors, customer PO and/or other assigned identification control numbers per ***CP 801*** and ***CP 1601****.*

7.5.3.6 DSS has established and maintains a documented procedure for product identification and traceability by suitable means from receipt, during splitting, storage, and packaging and preservation operations and until delivery (see ***CP 801***).

7.5.3.7 Depending on the level of traceability required by customer, contract or regulatory authority, the company's system at minimum provides:

a. The identification of products is maintained throughout product life and reflects an unbroken chain of documentation from the mill that produced the raw material of the product to the company's customer when required by customer;
b. That products manufactured from the same batch of raw material or from the same manufacturing lot are traceable, as well as the destination of all products of the same batch/lot *(**CP 801**)*;
c. For an assembly, the identity of its components and those of the next higher assembly are traced through manufacturer's certifications;
d. The use of only customer approved or qualified sources for procurement and that the products shall be able to be traceable to the sources when required (e.g. QSLD/QSLM sources).

7.5.4 Customer Property:

DSS shall exercise care with customer property while under its control or being used by DSS. Customer property includes, but is not limited to, supplied tooling, material, equipment, intellectual property and personal data. DSS shall identify, verify, protect, and safeguard customer property provided for use or incorporation into the product. If any customer property is lost, damaged or otherwise found to be unsuitable for use, DSS shall report this to the customer and maintain records. The requirement set in ***CP701*** and ***CP 2006*** shall be used to process Customer/Government supplied products at DSS.

7.5.5 Preservation of Product:

7.5.5.1 DSS preserves the conformity of the product during internal processing and delivery to the intended destination per the requirements set in ***CP1501***. This preservation includes identification, handling, packaging, storage and protection. This also applies to the constituent parts of a product.

7.5.5.2 Preservation of product includes, where applicable in accordance with product specifications and applicable statutory and regulatory requirements, provisions for:

a. Cleaning;
b. Prevention, detection, and the removal of foreign objects;
c. Special handling for sensitive products;
d. Marking and labeling including safety warnings;
e. Shelf life control and stock rotation when applicable;
f. Special handling for hazardous materials;
g. Environmental controls.

7.6 **CONTROL OF MONITORING AND MEASURING EQUIPMENT**

The requirements set in ***CP 601,*** ***CP 604*** *and* ***CP 1101*** shall be used to process the maintenance and control of measuring and monitoring equipment at DSS and related subcontracted services. The procedures shall identify the measurements to be made and the measuring and monitoring equipment required to assure conformity of product to specified requirements.

7.6.1 The company's sales order *(**CP 901**)* and contract specifications shall be used with applicable procedures to determine the processing stage and thus determine the measurement to be made.

7.6.2 The register of monitoring and measuring equipment used by DSS is documented in ***CP 1101*** and maintained on the computer database.

7.6.3 The equipment is controlled per the requirements set in ***CP 1101*** to ensure that measurement capability is consistent with the measurement requirements established.

7.6.3.1 DSS monitoring and measuring equipment includes but is not limited to (depending on availability): test hardware, test software when applicable, and automated equipment used to produce inspection data and provide evidence of product conformity.

7.6.3.2 The process employed for their calibration/verification is documented in ***CP 1101***, which includes details of equipment type, unique identification, location, frequency of checks, check method and acceptance criteria.

7.6.4 DSS management ensures that monitoring and measurement can be carried out and is carried out in a manner consistent with the monitoring and measurement requirements. DSS management also ensures that environmental conditions are suitable for the calibration, inspection, measurements and testing being carried out.

7.6.5 When necessary to ensure valid results, measuring equipment is (per ***CP 1101***):

a. Calibrated or verified or both at specified intervals, or prior to use against measurement standards traceable to international or national measurement standards; where no such standards exist, the basis used for calibration shall be recorded;
b. Adjusted or re-adjusted as necessary;
c. Identified in order to determine its calibration status;
d. Safeguarded from adjustments that would invalidate the measurement result;
e. Protected from damage and deterioration during handling, maintenance, and storage;
f. Recalled to a defined process *(**CP 1101**)* when requiring calibration or verification.

7.6.6 In addition, DSS Quality Assurance assesses and records the validity of the previous measuring results when the equipment is found not to conform to requirements. QA takes appropriate action on the equipment and any product affected. The situation is documented and corrective action taken as appropriate by the QA department per ***CP 1301*** and ***CP 1401***.

7.6.7 In the event software is used for measuring and monitoring of specified requirements, the ability of the software to satisfy the intended application shall be confirmed prior to initial use, and reconfirmed as necessary.

7.6.8 Records of the results of calibration and verification are maintained per the requirement set in this manual and in ***CP 1601***.

7.7 **REFERENCED AND APPLICABLE DOCUMENTS:**

CP 201	*Quality System Procedures & Work Instructions*
CP 202	*Quality System Forms*
CP 301	*Contract Review*
CP 302	*Amendments to Contracts*
CP 501	*Document and Data Control*
CP 502	*Written Documentation System*
CP 604	*Vendor Quality Requirements*
CP 601	*Purchasing Data and Processing*
CP 701	*Customer Property*
CP 801	*Product Identification and Traceability*
CP 901	*Daily Process Flow*
CP 903	*Infrastructure and Preventive Maintenance*
CP 1001	*Inspection and Test System Requirement*
CP 1101	*Calibration System Requirements*
CP 1201	*Indication of Inspection and Test Status*
CP 1301	*Control of Nonconforming Products*
CP 1302	*Customer Complaint/Material Return*
CP 1401	*Corrective and Preventive Action*
CP 1501	*Handling, Storage, Preservation, Packaging and Shipping*
CP 1502	*Releasing Inventory*
CP 1601	*Quality Records*
CP 1701	*Internal Audits*
CP 1801	*Training and Qualification Program*
CP 2001	*Sampling Inspection*
CP 2004	*Customer Satisfaction Measurement*
CP 2005	*Measurement, Analysis & Improvement Process*
CP 2006	*Control of Government Furnished Property*

8.1 **GENERAL:**

The procedures established in ***CP 2005*** and the applicable elements of this manual shall be used to plan and implement the monitoring, measurement, analysis and improvement processes needed to:

a. Demonstrate conformity to product requirements (***CP 1001****);*
b. Ensure conformity of the company's quality management system; and
c. Continually improve the effectiveness of the overall system.

8.1.1 ***CP 2005*** includes determination of applicable methods, including statistical techniques, and the extent of their use. Since DSS procures its products to specified customer/contract, industry, and/or government regulations or requirements, statistical techniques can be used to support the following when needed or applicable:

a. Drawing/Contract verification *(**CP 501**, **CP 901** and **CP 301**);*
b. Process Control: When applicable, process control techniques at DSS may include the selection and use of key characteristics, process capability measurements, Variability reduction plans, etc., with established procedures (*see **CP 604**, **CP 901**, **CP 2001** for details);*
c. Inspection *(**CP 1001***); and
d. Failure mode effect analysis (PFMEA) shall be performed as applicable or per customer requirements (**see *Sec 7.1.2 and CP 2005***).

8.2 **MONITORING AND MEASUREMENT**

8.2.1 **Customer Satisfaction:**

DSS uses the requirement set in ***CP 2004*** as a means to monitor information relating to customer perception with focus on determining whether their requirements are being met. The information obtained from the process may also be used to evaluate the activities implemented to ensure continual improvement and the effectiveness of the quality system. ***CP 2005*** is the documented procedure used to define how this information is obtained and used.

Information to be monitored and used for the evaluation of customer satisfaction shall include, but is not limited to, product conformity, on-time delivery performance, customer complaints and corrective action requests. DSS develops and implements plans for customer satisfaction improvement that address deficiencies identified by these evaluations, and assesses the effectiveness of the results. (*see **CP 1301**, **CP 1302**, **CP 1401***, ***CP 2004***).

8.2.2 **Internal Audits:**

DSS shall conduct internal audits at planned intervals per the requirements set in this manual and ***CP 1701*** in order determine whether the quality system:

a. Conforms to the planned arrangements, to include both the product realization process and customer contractual and regulatory requirements of this manual, *ISO 9001, AS9100, AS9120;* and
b. Is effectively implemented and maintained (***CP 1701****)*.

8.2.2.1 The requirement set in this manual and ***CP 1701*** forms DSS audit program, taking into consideration the status and importance of the processes and areas to be audited, as well

as the results of previous audits. The audit criteria, scope, frequency and methods are defined in ***CP 1701***. The selection of auditors and conduct of audits ensure the objectivity and impartiality of the audit process. Auditors do not audit their own work.

8.2.2.2 ***CP 1701*** defines the responsibilities and requirements for planning and conducting audits, establishing records and reporting results.

8.2.2.3 Records of the audits and their results are maintained (per ***CP 1601***).

8.2.2.4 DSS management responsible for the area being audited ensures that any necessary corrections and corrective actions are taken without undue delay to eliminate detected nonconformities and the causes. Follow-up activities include the verification of the actions taken and the reporting of verification results (***CP 1401***).

8.2.3 **Monitoring and Measurement of Processes:**
Established procedures shall be used to apply suitable methods for monitoring and, where applicable, measurement of the quality management system processes. These methods shall demonstrate the ability of the processes to achieve planned results. When the planned results are not achieved, corrective action shall be taken as appropriate.

8.2.3.1 In the case of process nonconformity, DSS shall use the established procedures in ***CP 1301, CP 1302, CP 1401****, and* ***Section 8.3*** of this manual as applicable to:

a. Take appropriate action to correct the nonconforming process;
b. Evaluate whether the process nonconformity resulted in product nonconformity;
c. Determine if the process nonconformity is limited to a specific case or whether it could have affected other processes or products, and
c. Identify and control any nonconformity product in accordance with ***Section 8.3***.

8.2.4 **Monitoring and Measurement of Product:**
DSS shall ensure that product characteristics are measured, monitored, and controlled to verify that product requirements are met. This shall be carried out at appropriate stages of the product realization process per the requirements set in this manual (see ***7.1***), ***CP 901*** and ***CP 1001*** as applicable. Evidence of conformity with the acceptance criteria is maintained (***CP 901*****, CP 1001, CP 1201, and*** ***CP 1601).***

8.2.4.1 Measurement requirements for product or service acceptance are planned and documented on the DSS Sales Order (***CP 901****)*, part drawing, applicable process control procedures *(****CP 201****),* and/or per customer specification. These documents include:

a. Criteria for acceptance and/or rejection;
b. Where in the sequence measurement and testing operations are performed;
c. Required records of the measurement results (at a minimum, indication of acceptance or rejection), and
d. Any specific measurement instruments required and any specific instructions associated with their use.

8.2.4.2 When critical items, including key characteristics, have been identified, they shall be monitored and controlled in accordance with the established processes (see ***CP 604***).

8.2.4.3 Sampling inspection methods/plans used to accept product at DSS are justified on the basis of recognized statistical principles and are appropriate for use (see ***CP 2001***). The plan precludes the acceptance of lots whose samples have known defects. When required, the plan shall be submitted to the customer for approval;

8.2.4.4 Where product is released for production use pending completion of all required measurement and monitoring activities, it shall be identified and recorded to allow recall and

replacement if it is subsequently found that the product does not meet requirements (see ***CP 1001***).

8.2.4.5 Records shall indicate the person(s) authorizing the release of product for delivery to the customer (see ***4.2.4, CP 901, CP 1001, CP 1201, and CP1601).***

8.2.4.6 When required to demonstrate product qualification, DSS ensures that records provide evidence that the product meets the defined requirements (see ***CP 1601).***

8.2.4.7 The release of product and delivery of service to the customer shall not proceed until the planned arrangements (***see 7.1***) have been satisfactorily completed, unless otherwise approved by a relevant authority and, where applicable, by the customer.

8.2.4.8 The QA department, in conjunction with the Shipping department, shall ensure that all documents required by contracts/purchase orders are present with the products at delivery and they shall be protected against loss and deterioration per the requirements set in ***CP 1001, CP 1501*** *and* ***CP 1601.***

8.2.4.9 **Evidence of Conformance:**

a. When required, DSS provides the customer with evidence of the product's conformity to its technical specifications. This may include the manufacturer's conformance documents, test analysis and/or test reports (see ***CP 1001***).
b. When splitting product, records are maintained of amounts delivered, purchase order, sales order, and customer/supplier details (see ***CP 1001***).
c. Where there is a formal agreement with the customer, DSS provides a certificate of conformance that references the original manufacturer's conformance documents that are retained and traceable by DSS (*see* ***CP 1001***).

8.3 **CONTROL OF NONCONFORMING PRODUCT**

CP 1301 is the documented procedure established and implemented to ensure that product that does not conform to specified requirements is identified and controlled to prevent unintended use or delivery. The responsibility and authority for review and disposition of nonconforming product, including the process for approving personnel making these decisions, is defined in ***CP 1301.***

8.3.1 Through the procedures established in ***CP1301*** and ***CP 1302,*** where applicable, DSS deals with nonconforming products in one or more of the following ways:

a. By taking action to eliminate the detected nonconformity;
b. By authorizing its use, release or acceptance under concession by a relevant authority and , where applicable, by the customer;
c. By taking action to preclude its original intended use or application**;**
d. By taking action appropriate to the effects, or potential effects, of the nonconformity when nonconforming product is detected after delivery or use has started. In addition to any contract or regulatory authority reporting requirements, DSS's nonconforming product control process provides for timely reporting of delivered nonconforming product that may affect reliability or safety. Notification shall include a clear description of the nonconformity, which includes, as necessary, parts affected, customer part numbers, quantity, and date(s) delivered ;
e. By taking actions necessary to contain the effect of the nonconformity on other processes or products.

8.3.2 Disposition such as "use-as-is" or "repair" shall not be used at DSS unless specifically authorized by customer in writing ***(CP 1301)***.

8.3.2.1 Since DSS does not have design authority over its procured products, it does not have any "MRB authority". *"Use-as-is"* may only be used when parts are verified to meet all specified requirements and authorized by the customer in writing.

8.3.2.2 Scrap materials shall be conspicuously identified and permanently marked, or positively controlled, until rendered unusable per the requirements set in ***CP 1301***.

8.3.4 Records of the nature of non-conformities and any subsequent actions taken, including concessions/waivers obtained from customers, shall be maintained per ***CP 1301*** *and* ***CP 1601***.

8.3.5 Nonconforming product that is corrected shall be subjected to re-verification/inspection after correction to demonstrate conformity per ***CP 1001*** *and* ***CP 1301***. If required, the proposed rectification of nonconforming product shall be reported to the customer, the end-user, regulatory body, or other applicable body for concession.

8.4 **ANALYSIS OF DATA**

DSS shall determine, collect, and analyze appropriate data to demonstrate the suitability and effectiveness of its quality management system and to evaluate where continual improvement of the effectiveness of the system can be made *(**CP 2005**)*. This includes the data generated by measuring and monitoring activities from relevant sources.

8.4.1 The analysis of data shall provide DSS management with information relating to:

a. Customer satisfaction and/or dissatisfaction *(**CP 2004**)*;
b. Conformance to product requirements *(see **8.2.4**, **CP 1001, CP 1201, CP 1301** and **CP 2001**)*;
c. Characteristics and trends of processes and products including opportunities for preventive action (see ***8.2.3***, ***8.2.4, CP 1401*** *and* ***CP 2005***)*;* and
d. Suppliers *(see **7.4**, **CP 602**).*

8.5, **IMPROVEMENT**

8.5.1 **Continual Improvement:**

DSS executive management is committed to improving the effectiveness of its quality system through the implementation of the established quality policy, quality objectives, established procedures (***CP 201***), ***CP 2005*** and elements stated below.

8.5.1.1 DSS management's commitment to continuous improvement can be seen in the company's established quality policy and objectives:

a. The policy as set in Section 1 of this manual encourages continuous improvement because of its focus on excellence and customer satisfaction; and
b. The established objectives are measurable, consistent with the company quality policy, and relate a strong commitment to continuous improvement (see Section 1.2.1 for details).

8.5.1.2 DSS maintains continuous process/product control as follows:

a. Procedures are established to enable product monitoring from receipt of contract to the shipment of product to customer*;*
b. Product key characteristics established by customers shall be monitored real time by vendor during production per requirements set in ***CP 604****,* issued purchase order and/or per customer requirement when specified; and
c. The use of statistical techniques shall be flowed down to DSS when specified by customers through issued purchase orders or per ***CP 604***.

8.5.1.3. Equipment/measurement process capability and variability studies shall be performed when specified by customer *(**CP 604**).*

8.5.1.4. Audit results and lessons learned from internal audits are used to enable continuous efforts per ***CP 1701.*** The results are included in the elements reviewed and acted upon during management review.

8.5.1.5. Process, department, and product analysis reports are generated through periodic analysis of rejection data *(**CP 2005***) and the result of the analysis form the basis for the company's continuous improvement drive.

8.5.1.6 Results and lessons learned from effective corrective and preventive action taken are documented and enable process change and continuous improvement ***(CP 1401***).

8.5.1.7 Results and lessons learned from customer returns, rating, surveys and approval enable continuous efforts and they are included in the elements reviewed during management review (***CP 1302***, ***CP 2004***).

8.5.1.8 DSS's employees are involved and kept motivated through the following efforts:

a. Top management has developed programs such as providing on the job training ***(CP 1801),*** encouraging formal education, and ensuring safety per established procedures, etc; and
b. Employee's performance/competence are quantitatively evaluated on a periodic basis (***CP 1801***).

8.5.1.9 Results from the management review process which include decisions, revised/new objectives, and actions related to the improvement and effectiveness of the quality management system are also used to support DSS continual improvement program.

8.5.1.10 Projects may be assigned to personnel by management on need basis to resolve recurring problems or improve an existing process, such as to increase customer satisfaction, reduce waste, improve on time delivery, etc.

8.5.2 **Corrective Action:**
CP 1401 is the established procedure implemented in order to take corrective action to eliminate the cause of nonconformities and prevent recurrence. Corrective actions taken shall be appropriate to the effects of the nonconformities encountered.

8.5.2.1 The procedure for corrective action *(**CP 1401**)* defines the requirements for:

a. Identifying and reviewing nonconformities (including customer complaints/returns per ***CP 1301*** *and* ***CP 1302**);*
b. Determining the causes of nonconformity;
c. Evaluating the need for actions to ensure that nonconformities do not recur;
d. Determining and implementing the corrective action needed;
e. Recording results of action taken;
f. Reviewing the effectiveness of the corrective action taken;
g. Flowing down corrective action requirements to suppliers when it is determined that the supplier is responsible for the nonconformity;
h. Specific actions taken where timely and/or effective corrective actions are not achieved; and
i. Determining if additional nonconforming product exists based on the causes of the nonconformities and taking further action when required.

8.5.3 **Preventive Action:**

CP 1401 is the established procedure implemented in order to determine preventive action to eliminate the causes of potential nonconformities and to prevent their occurrence. Preventive actions taken shall be appropriate to the impact of the potential problems.

8.5.3.1 The procedure for preventive action ***(CP 1401)*** defines the requirements for:

a. Determining potential nonconformities and their causes;
b. Evaluating the need for action to prevent occurrences of nonconformities;
c. Determining and implementing action needed;
d. Recording results of action taken;
e. Reviewing of effectiveness of the preventive action taken; and
f. The withdrawal of product(s) from stock that are suspected of a noncompliance, including notification of the actions taken to all customers who have purchased the product from the same lot.

8.6 **REFERENCED AND APPLICABLE DOCUMENTS:**

CP 201	*Quality System Procedures & Work Instructions*
CP 301	*Contract Review*
CP 302	*Amendment to Contracts*
CP 501	*Document and Data Control*
CP 602	*Vendor Control/Survey*
CP 604	*Vendor Quality Requirements*
CP 801	*Product Identification and Traceability*
CP 901	*Daily Process Flow*
CP 1001	*Inspection and Test System Requirement*
CP 1101	*Calibration System Requirement*
CP 1201	*Indication of Inspection and Test Status*
CP 1301	*Control of Nonconforming Products*
CP 1302	*Customer Complaint/Material Return*
CP 1401	*Corrective and Preventive Action*
CP 1501	*Handling, Storage, Preservation, Packaging and Shipping*
CP 1601	*Quality Records*
CP 1701	*Internal Audits*
CP 1801	*Training and Qualification Program*
CP 2001	*Sampling Inspection*
CP 2004	*Customer Satisfaction Measurement*
CP 2005	*Measurement, Analysis and Improvement Process*