Dunkirk Specialty Steel (USAP)
Dunkirk, New York
Quality Policy Manual

Revision 13

Effective: 12-19-17

Conforms to AS9100 Rev. D and ISO 9001:2015

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Wendel Crosby Date: 12-19-2017

Director of Quality Assurance:

Brian Stanton Date: 19 Dec 2017

Quality Assurance Manager:

Barry Rafan Date: 12/19/2017

Barry Rafan

QUALITY POLICY REVISIONS RECORD

Revision	Issue Date	Description of Change
Original	7/01/2002	Original Issue
1	8/18/2003	Update
2	2/25/2005	Update
3	12/01/2008	Transition to ISO9001:2000/AS9100 Format
4	6/15/2009	Revised to latest ISO/AS Requirements
5	7/01/2011	Revised to AS9100C Requirements
6	1/06/2012	Minor changes to enhance scope and process flow
7	11/05/2012	Revised for ISO/IEC 17025 Requirements
8	9/04/2013	Revised exclusions / Added list of outsourced processes and their means of control
9	2/13/2014	Revised to GE S-1000 Requirements / Revised Quality Policy
10	3/11/2015	Revised sections 4.1 and 4.2.3.3
11	2/02/2016	Revised section 4.1
12	4/1/2016	Revised sections 5.5 and 6.2.2
13	12/19/2017	Complete rewrite to AS9100D Requirements

1.0 Welcome to Dunkirk Specialty Steel – A Universal Stainless and Alloy Products Company

Universal Stainless and Alloy Products headquartered in Bridgeville, PA purchased and began operations at Dunkirk Specialty Steel (DSS) in 2002. Some functions such as Purchasing are headquartered at the Bridgeville facility.

The quality management system requirements specified in this Quality Manual are complementary to those imposed by purchase order, customer/industry specifications and formal supplier quality program requirements formally accepted by DSS.

This Quality Policy Manual can be used by internal and external parties, including certification bodies, to assess Dunkirk Specialty Steel ability to meet customer, regulatory and the company's own requirements.

2.0 About the DSS Quality Manual

The quality system described within this manual establishes the total Dunkirk Specialty Steel quality policy. The manual as written addresses the requirements of ISO 9001, ISO-17025, Nadcap, NCA-3800, AS-9100, General Electric Procedure S-1000, S-400 and other customer, statutory and regulatory requirements. Dunkirk Specialty Steel (DSS) will strive to consistently provide products and services that meet or exceed all applicable statutory and regulatory requirements while focusing on customer satisfaction through the effective application of the system. Continuous improvement will be one of the factors that drive these efforts at DSS.

3.0 TERMS and DEFINITIONS

General Terminology

USAP - Universal Stainless and Alloy Products, Bridgeville
DSS – Dunkirk Specialty Steel (A Universal Stainless and Alloy Products Company)
Document – Written information describing how an activity is done
Record – Captured evidence of an activity having been done
Quality Documentation - Dunkirk Specialty Steel requirements on issues affecting quality pertaining to DSS.
Quality Manual Tier I **-** DSS requirements on issues affecting quality.
Quality System Procedure (QSP) Tier II - Directions for implementing a Quality Policy.

Work Instruction (WI) Tier III - Generic name for detailed descriptions of work to be done in the manufacture and inspection of product.

Quality Management System - A structured approach to:

- reduce variation to reduce or eliminate defects.
- disallow occurring defects from reaching the customer.

Risk-Based Thinking Terminology

Risk – Negative effect of uncertainty.
Opportunity – Positive effect of uncertainty
Uncertainty – A deficiency of information related to understanding or knowledge of an event, its consequence, or likelihood. (Not to be confused with measurement uncertainty.)

Nonconforming Product Terminology

Rework - Efforts to bring nonconforming product into conformance through additional operations that *do not* alter the original design of the product.

Scrap - The discard of nonconforming product in lieu of rework.

3.1 Risk

The assessment of a situation or circumstance occurring with a potentially negative consequence. Risk is assessed via contract review addressed in this document.

3.2 Special Requirements

Requirements identified by the customer or by DSS which may have high risks of achievement are included in the contract review process addressed in this document. DSS has no special requirements as defined by AS9100. However, DSS performs the following processes that have been internally classified as 'special'

- Heat Treat – to customer our national specifications determined during order review
- NDT - to customer our national specifications determined during order review
- Materials Testing Laboratory (MTL) – certified testing specified during contract review.

3.3 Critical Items

Critical items are those items having a significant effect on the product realization

process and the use of the product. Critical items may include issues in regard to safety, form, fit, function, and producibility and may require specific actions to assure adequate management. This is addressed in the contract review process documented in this document.

3.4 Key Characteristics

A key characteristic is defined as an attribute or feature whose variation has a significant effect on product, fit, form, function, performance, service life or producibility that requires specific actions for the purpose of controlling variation. This is addressed in the contract review process documented in this document.

4.0 CONTEXT OF THE ORGANIZATION

4.1 Understanding the Organization and its Context

DSS has determined all issues both internal and external that are relevant and applied applicable processes with strategic application to achieve meeting customer and market requirements. These issues may be unique to each order and are reviewed during contract review. Applicable actions are applied as necessary.

4.2 Understanding the Needs and Expectations of Interested Parties

Customers, employees, stakeholders, registrars and regulatory agencies are considered interested parties, these entities may impose requirements through product orders, standard requirements or local/state/federal regulations. Items associated with providing a product that complies with these authorities are reviewed and monitored on a basis commiserate with the group requirements. Employees are monitored and reviewed on an annual basis, the results of these evaluations are based on the function performed by the employee. DSS strives to provide an open and friendly relationship with their community and reviews any/all complaints/inquiries that it receives.

4.3 Determining the Scope of the Quality Management System

Based on an analysis of the above issues of concern, interests of stakeholders, and in consideration of its products and services, DSS has determined the scope of the management system as follows:
"Dunkirk Specialty Steel is a manufacturer of stainless, alloy and tool steels bar, wire, rod products to the requirements set forth by our customers".

The quality system applies to all processes, activities and employees within the company. The USAP facility – Dunkirk Specialty Steel LLC is located at:

830 Brigham Road
Dunkirk, NY 14048
Phone: (716) 366-1000
Fax: (716) 366-0478
Web: www.univstainless.com

The following clauses of AS9100 were determined to be not applicable to DSS.

- Paragraph 8.3 – Design and Development of Products and services. DSS produces goods based on our customers' and general industry specifications

EXCLUSION TABLE

Clause or Sub-clause	Exclusion	Justification
8.3	Design & Development	Not performed @ DSS

4.4 Quality Management Systems and It's Processes

This quality management system has been created, is being maintained, is implemented and its effectiveness will be continually improved to be compliant with ISO 9001, AS-9100, ISO-17025, NCA-3800, Nadcap, S1000 and additional applicable standards. Applicable customer and statutory/regulatory requirements will also be addressed within the quality management system.

The Process Sequence and Interactions (section 8.5), located in this document shows the order and interaction of DSS quality management system general processes. The order and interaction of specific departmental quality management system processes can be found in QSP's associated with them and in the table in section 8.5 of this manual. The criteria and methods for effective control of processes are found in internal audit procedures and work instructions. The procedure *QSP 03.01- Contract Review* enables the availability of necessary resources and the review of any associated risks. The information necessary for effective operation and monitoring of these processes is found within available controlled documents throughout DSS. Upon the completion of measurement and monitoring of the processes and analysis of the data, appropriate action is taken to assure intentions are achieved and opportunities for improvement are acted on.

Management of these processes is accomplished in accordance with the requirements of ISO 9001, ISO/IEC 17025, AS-9100, S1000 and Nadcap (as applicable). Resources to accomplish the proper implementation of the quality system and its programs will be provided through constant management oversite of selected metrics by executive management.

5.0 LEADERSHIP

5.1 Leadership Commitment

5.1.1 General

Top management has responsibility for quality leadership, including ensuring the availability of resources, establishment and review of the Quality Policy and quality objectives, and implementation and continual improvement of the quality management system. Top management also has the responsibility to communicate the importance of meeting customer, safety, environmental, and regulatory requirements. Management Responsibility is defined in *QSP01.02 Management Responsibility.*
Top management is committed to the development and implementation of the QMS as well as the drive to continually improve its effectiveness by communicating to the organization the importance of meeting customer, statutory and regulatory requirements and expectations of product satisfaction. This communication can take the That communication happens through the use of (as applicable):

- General and product specific training
- Retraining when and where shortfalls appear
- Displays and/or postings in high traffic areas of the facilities
- Periodic communication meetings
- Specific emphasis in provided documentation
- The quality policy
- The quality objectives
- The management review records
- Few, if any, incidents of resource shortfalls as root causes of occurring nonconformities
- Top management ensures that the integrity of the management system is maintained when changes to the management system are planned and implemented.
- Management Responsibility is defined in *QSP01.02 Management responsibility*.

5.1.2 Customer focus

The highest level of management assures that all customer requirements will be uncovered through the processes described in this quality manual. Through all of the policies, objectives and processes described in this quality manual, the highest level of management assures the needed environment to consistently fulfill the customer requirements. By routinely assessing customer satisfaction, the highest level of management optimizes the likelihood of moving customer satisfaction closer and closer to customer delight.

Top management also ensures that product conformity and on-time delivery performance is measured and monitored and that appropriate actions are taken if the planned results are not or will not be achieved.
Information used to monitor these will include, but not be limited to:

- CAR's
- Claims/complaints
- On-time delivery performance
- Product conformity

5.2 Quality Policy

Having given due consideration to the following:

- the purpose of Dunkirk Specialty Steel.
- the need to include an explicit commitment for compliance to requirements
- the need to include an explicit commitment to continual improvement of effectiveness of the quality management system
- the required continual compatibility with quality objectives

5.2.1 Establishing the Quality Policy

A quality policy statement that has been formulated by the highest level of management and can be found within this manual. It is also displayed in *QSP 01.01 Quality Policy.*

The quality policy reads as follows:

"It is the quality policy of Dunkirk Specialty Steel LLC a Universal Stainless Company to provide products that meet all customers, statutory and regulatory requirements. Dunkirk Specialty Steel is committed to continual improvement of our Quality Management System in accordance with the requirements of IS09001, AS9100, NADCAP, ISO 10725 and customer specific approvals".

5.2.2 Communicating the Quality Policy

The Quality Policy is available on the company website for review and can be downloaded for retention purposes. After communication of the quality policy to the employee population, employees at all levels of the organization are expected to fulfill the requirements of this policy in all of their work-related efforts and decisions.

Lastly, the quality policy is reviewed at least annually for suitability. Its distribution is controlled because of the possibility that it might change.
Additional details can be found in procedure *QSP 01.01 Quality Policy*

5.3 Organizational Roles, Responsibilities and Authority

- The Organizational Flowchart illustrates functions, their interrelations, responsibilities, and authorities relevant to the quality management system. More specific quality management system responsibilities and authorities can be found on job descriptions (PQR's), travelers, procedures, work instructions etc. associated with machines utilized, and products manufactured. Appropriate distribution of these documents and associated training assures clear communication of this information.

- **Management representative/Technical Management**

The Quality Assurance Manager has been appointed by the Corporate Quality Assurance Director and the DSS General Manager to serve as management representative. The assigned duties include:

- overseeing the implementation and maintenance of the quality system in accordance with ISO-9001, AS-9100, ISO/IEC 17025, NCA 3800, Nadcap (as applicable), S1000 and other customer specified quality assurance systems along with any applicable regulatory authorized standards.
- reporting on the performance of the quality management system to the highest level of management.
- reporting on the need and/or opportunities for improvement of the quality management system to the highest level of management.
- encouraging and assisting in extending the understanding of customer requirements to the degree necessary throughout the organization.
- The organizational freedom to resolve matters pertaining to quality. Activities affecting quality are defined and documented in applicable procedures, instructions, drawings, specifications, and similar documents.

5.3.1 The DSS Technical Manager reports to the General Manager.

The Technical Manager shall maintain a quality system in the lab that complies with the requirements of ISO/IEC 17025, S-400, Nadcap and customers. The Technical Manager has sufficient authority and organizational freedom to also:

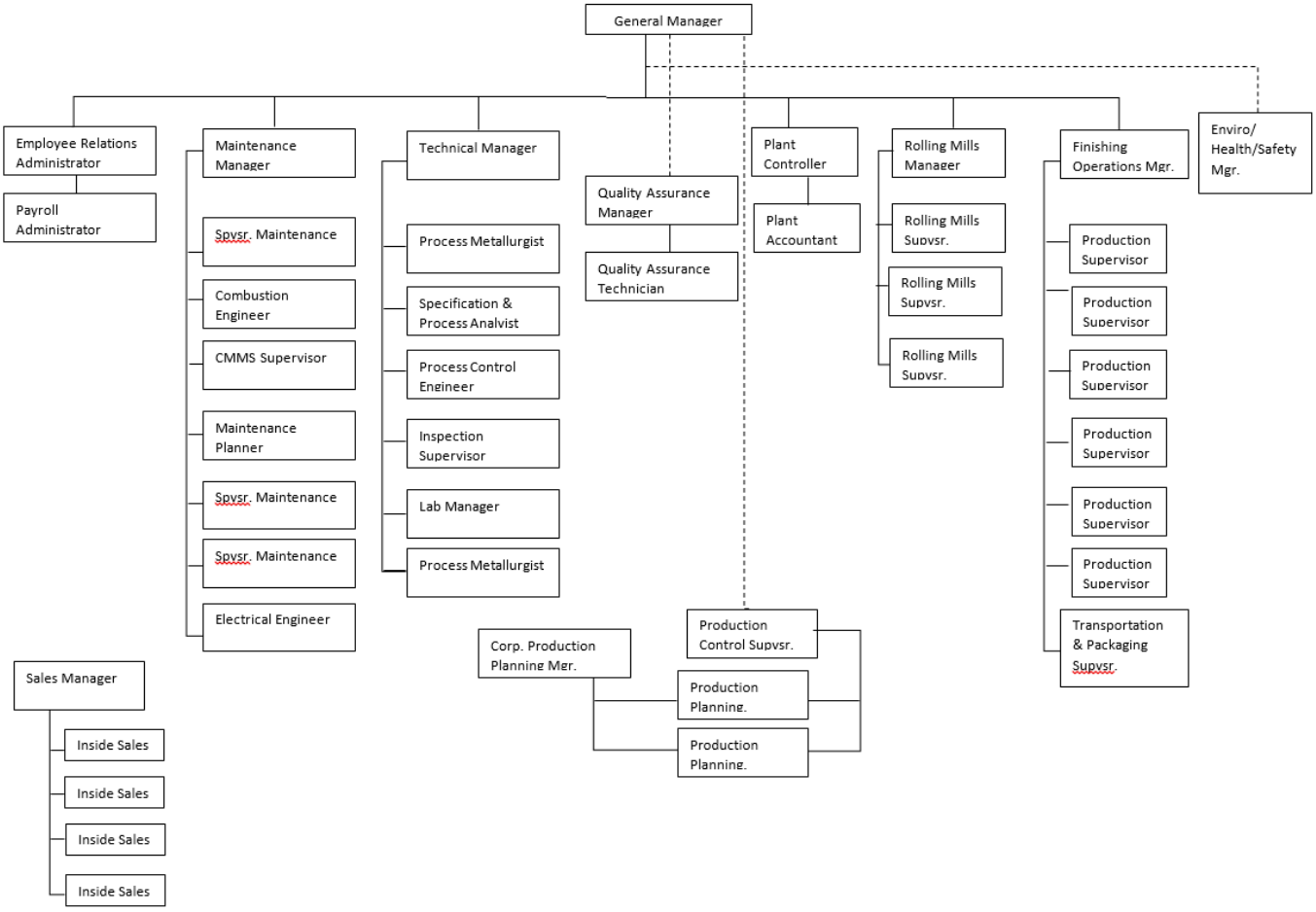
- Verify that lab managerial/supervision and technical personnel have the authority to carry out their duties and to identify the occurrence of departures from the quality system or from procedures for performing

test/calibration, and to initiate actions to prevent or minimize such departures.

- Ensure that its management and personnel are free from any undue internal and external commercial, financial, and other pressures and/or influences that may adversely affect the quality of work.
- Implement policies and procedures to ensure that the protection of client's confidential information and proprietary rights, including procedures for protecting the electronic storage and transmission of results.
- Implement policies and procedures to avoid involvement in any activities that would diminish confidence in its competence, impartiality, judgment, or operational integrity.
- Specify the responsibility, authority, and interrelationships of all personnel who manage, perform, or verify work affecting the quality of the test/calibrations.
- Provide adequate supervision of the testing/calibration staff, including trainees, by persons familiar with the methods and procedures, the purpose of each test/calibration, and with the assessment of the test/calibration results.
- Provide technical management which has overall responsibility for the technical operations and the provision of resources needed to ensure the required quality of laboratory operations
- Appoint deputies for key personnel.
- Organize/implement internal and external Proficiency Testing
- Monitor backlog and daily performance
- Ensure risk are assessed through round robin testing (as applicable)

For additional detail see *QSP 10.04- Supplemental Laboratory Requirements and QSP 22.01 Laboratory Quality Policy Revision*

DSS Organizational Chart



6.0 Planning

6.1 Actions to Address Risk and Opportunities

In order to avoid the occurrence of potential problems, appropriate preventive actions/ continuous improvements are taken. Dunkirk Specialty Steel Preventive Action procedures, *QSP 14.02 Preventive Actions* provides a systematic approach to preventive action problems that includes:

- the determination of potential nonconformities
- the determination of causes of potential nonconformities
- the determination of preventive actions needed
- the implementation of determined preventive actions

- making records of the outcomes from actions taken (See *QSP 16.01 Quality Records* and *QSP 14.02 Preventive Action* procedures)
- reviewing preventive actions taken.

Continuous improvements (opportunities) can occur outside of the Preventive Action system. These actions can take the form of projects, trials, management reviews, internal/external audits, corrective actions and their verification or any number of activities that address improving product or process.

The Corporate Director of Quality Assurance oversees the entire quality program and is directly involved in the quality management review process. The Corporate Director of Quality Assurance is also responsible for the following:

- Communicating the importance of meeting customer, statutory and regulatory requirements.
- Establishing the Quality Policy and Quality Objectives. This is accomplished by approving the reviews of the tier I and tier II documents. Quality objectives shall be reviewed and reported at least annually to applicable members of the organization.
- Additional details can be found in *QSP 02.02-Quality Planning and Configuration Management*.

6.2 Quality Objectives and Planning to Achieve them

The following, measurable quality objectives, have been formulated by the highest level of management:

On-Time Performance, Rejection Rate, Yields

The top management ensures that quality objectives are set; including those needed to meet product requirements and that they are established at relevant functions and levels within the organization. The Quality Objectives are measured, reported and reviewed. Appropriate action is taken when objectives are not met. Should customer/market requirements change, these objectives will be reviewed and revised as needed.

6.3 Planning of Changes

Should it be determined that changes to the quality management system are needed/required, the following items will be considered

- The purpose of the change and their potential consequences
- The integrity of the of the quality management system
- Resources and their availability
- The allocation/reallocation of responsibilities and authority.

7.0 SUPPORT

7.1 Resources

7.1.1 General

DSS determines and provides the resources needed:

- to implement and maintain the quality management system and continually improve its effectiveness
- to enhance customer satisfaction by meeting requirements.

Resource allocation is done with consideration of the capability and constraints on existing internal resources, as well as needs related to supplier expectations. Resources and resource allocation are assessed during management reviews.

7.1.2 People

DSS has determined and provides the personnel necessary for the effective implementation of its quality management system and for the operation and control of processes.

7.1.3 Infrastructure

The Quality, Operations, and Technology departments jointly determine the infrastructure needs for each new product and/or service or significant change to existing product and/or service. Consideration is given to the following (as appropriate):

- building workspace and associated facilities
- process equipment, hardware and software
- services for support
- information and communication technology

When all the needs have been identified, it is the responsibility of the highest level of management to approve those necessary for the achievement of product requirements.

7.1.4 Environment for Operation of Processes

DSS provides a clean, safe and well-lit working environment. The Management Team of DSS manages the work environment needed to achieve conformity to product requirements. Specific environmental requirements for products are determined during quality planning and are documented in subordinate procedures, work instructions, or job documentation. Where special work environments have been implemented, these shall also be maintained per 6.3 above.

Human factors are considered to the extent that they directly impact on the quality of products.

7.1.5 Monitoring and Measuring Resources

Where equipment is used for critical measurement activities, such as inspection and testing, these shall be subject to control and either calibration or verification; see the procedure *(QSP 19.01 Calibration Control and QSP 11.01 Control of Monitoring and Measuring Equipment)*

7.1.6 Organizational Knowledge

DSS also determines the knowledge necessary for the operation of its processes and to achieve conformity of products and services. This may include knowledge and information obtained from:

a) internal sources, such as lessons learned, feedback from subject matter experts, and/or intellectual property;

b) external sources such as standards, academia, conferences, and/or information gathered from customers or suppliers.

This knowledge shall be maintained, and made available to the extent necessary.
When addressing changing needs and trends, DSS shall consider its current knowledge and determine how to acquire or access the necessary additional knowledge.

7.2 Competence

Staff members performing work affecting product quality are competent on the basis of appropriate education, training, skills and experience. The documented procedure *QSP 18.01 Training* defines these activities in detail.

7.3 Awareness

Training and subsequent communication ensure that staff are aware of:

a) the quality policy;

b) relevant quality objectives;

c) their contribution to the effectiveness of the management system, including the benefits of improved performance;

d) the implications of not conforming with the management system requirements,

e) relevant quality management system documented information and changes thereto;

f) their contribution to product or service conformity;

g) their contribution to product safety;

h) the importance of ethical behavior.

7.4 Communication

The Management Team of DSS ensures internal communication takes place regarding the effectiveness of the management system. Internal communication methods include:

a) use of corrective and preventive action processes to report nonconformities or suggestions for improvement

b) use of the results of analysis of data including daily performance metrics

c) meetings (periodic, scheduled and/or unscheduled) to discuss aspects of the QMS and other pertinent topics

d) use of the results of the internal audit process

e) internal emails

f) memos to employees including board postings

g) DSS "open door" policy which allows any employee access to The Management Team for discussions on improving the quality system

7.5 Documented Information

The management system documentation includes both documents and records. Documents required for the management system are controlled in accordance with procedures *QSP 05.01 Document Control and Data Control.* The purpose of document control is to ensure that staff have access to the latest, approved information, and to restrict the use of obsolete information. All documented procedures are established, documented, implemented and maintained.

A documented procedure *QSP 16.01 Quality Records* has been established to define the controls needed for the identification, storage, retrieval, protection, retention time, and disposition of quality records. This procedure also defines the methods for controlling records that are created by and/or retained by suppliers.

Configuration documents are subject to additional controls per section 8.1.2 below.

These controls are applicable to those records which provide evidence of conformance to requirements; this may be evidence of product requirements, contractual requirements, procedural requirements, or statutory/regulatory compliance. In addition,

quality records include any records which provide evidence of the effective operation of the management system.

All documents within Dunkirk Specialty Steel quality system are controlled by procedures as indicated below:

Documents	***Procedure***
quality policy (this document)	*QSP 05.01, Document & Data Control*
quality procedures	*QSP 05.01, Document & Data Control*
work instructions: includes manufacturing instructions, travelers, inspection instructions, audit instructions, calibration instructions, and preventive maintenance instructions.	*QSP 05.01, Document & Data Control*
external standards, customer drawings, documents (from outside of the registered site), etc.	*QSP 05.01, Document & Data Control*
records	*QSP 16.01 Quality Records*

Quality system documents will be reviewed at least annually thru internal audits, revisions, external audits, corrective actions and continuous improvement.

8.0 OPERATION

8.1 Operational Planning and Control

As Dunkirk Specialty Steel prepares for a new product, the following are determined:

- specific quality objectives
- specific processes required
- specific documentation required
- specific resources required
- specific infrastructure required
- verification activities and criteria required
- validation activities and criteria required
- monitoring activities and criteria required
- inspection, measurement, and test activities and criteria (*QSP 12.01 Inspection & Tests Status*)
- records to demonstrate achievement of requirements (*QSP 16.01 Quality Records*)
- The identification of resources to support operations and maintenance of the product.

DSS shall plan and manage product realization in a structured and controlled manner to meet requirements and acceptable risk, within resource and schedule constraints.

Changes to operational processes are done in accordance with the *QSP 01.04 Process Management.* Personnel authorized to approve changes to production processes include the General Manager, Technology Management, Quality Assurance Manager, Operation Manager and Department Supervisors. DSS identifies and accepts changes that require customer and/or regulatory approval in accordance with contract or regulatory requirements.
Outsourced processes and the means by which DSS controls them are defined in the documented procedure *QSP 06.01 Purchasing of Key Material & Services and QSP 06.02 Selection, Approval and Evaluation of Suppliers.*

8.1.1 Operational Risk Management

DSS has established, implemented and maintains a process for managing risk to the achievement of applicable requirements that include as appropriate to DSS and its products:

- Assignments of responsibilities for risk management
- Definition of risk criteria
- Identification, assessment and communication of risks throughout product realization
- Identification, implementation and management of actions to mitigate risks that exceed the defined risk acceptance criteria
- Acceptance of risks remaining after implementation of mitigating actions

QSP 03.01 Contract Review provides details as to how risk is assessed and documented.
Outsourced processes, having impact on the achievement of product or service requirements, are controlled in accordance with procedure, *QSP 06.02 Selection, Approval & Evaluation of Suppliers,* Additional details can be found in the procedure, *QSP 02.01 Quality Management System Structure*, *QSP 03.02 Risk Management.*

8.1.2 Configuration Management

DSS plans, implements, and controls configuration management activities as appropriate to its products in order to ensure the identification and control of physical and functional attributes throughout the product lifecycle. This is defined in the documented procedure *QSP 02.02 Quality Planning and Configuration Management***.** This includes document control for configuration documents, and change control for configured items

8.1.3 Product Safety

Operational controls shall be implemented to assure product safety during the entire product life cycle, where this is appropriate relative to DSS's Products. These activities may include:
a) assessment of hazards and management of associated risks;

b) management of safety critical items;

c) analysis and reporting of occurred events affecting safety;

d) communication of these events and training of persons.

8.1.4 Prevention of Counterfeit Parts

DSS is a manufacturer of semi-finished product. All material is identified and marked (so as not to degrade/damage the material) with a permanent identity traceable to the heat number. All billet stock material provided to DSS is accompanied by a certification of conformance (CofC). This C of C is reviewed/approved and retained as a quality record. See *QSP 10.01- Receipt Inspection*

8.2 Requirements for Products and Services

8.2.1 Customer Communication

DSS has implemented effective communication with customers in relation to:

a) providing information relating to Products;

b) handling enquiries, contracts or orders, including changes;

c) obtaining customer feedback relating to products and services, including customer complaints;

d) handling or controlling customer property;

e) establishing specific requirements for contingency actions, when relevant.

8.2.2 Determining the Requirements for Products and Services

In an effort to thoroughly identify all customer requirements, the following are considered by Sales, Technology, Operations, and Quality as they interface with the customer and as the product development takes place:

- product specifications provided by the customer
- product performance requirements provided by the customer
- customer stated availability requirements
- customer stated delivery requirements
- customer stated support needs
  - determination of application related requirements, if not provided by the customer
- determination of relevant legal requirements if any:
  - ASTM, ASM, ASME, NIST, DEP, EPA, other federal, state and local, etc.
- determination of relevant environmental requirements if any:
  - customer imposed

- determination of any other relevant requirements:
  - ISO, AS, NCA, Nadcap, ANAB, unique requirements considered necessary by DSS, etc.

8.2.3 Review of Requirements for Products and Services

8.2.3.1 Dunkirk Specialty Steel will review all identified customer product requirements and other identified product requirements for new business acceptance in accordance with the procedure, *QSP 03.01 Contract Review*. This procedure addresses:

- definition of requirements.
- situations where customer requirements have been provided verbally.
- requirements that change after the quote process have begun.
- the determination of DSS ability to meet the requirements.
- Risks associated with personnel, equipment, scheduling, etc.

8.2.3.2 Records of requirements reviews and follow-on actions are maintained (see *QSP 16.01 Records*) Specification, contract, or customer purchase order changes are managed in accordance with the *QSP 03.01 Contract Review.*

8.2.4 Changes to Requirements for Products and Services

Changes to existing orders are coordinated through the Sales department. *QSP 03.01 Contract Review.* Contract Review and Order Entry procedure provide the necessary details to perform this function.

8.3 Design and Development of Products and Services

This section is exempted

8.4 Control of Externally provided Processes, Products and Services

8.4.1 General

DSS ensures that purchased products conform to specified purchase requirements.

All quality critical purchasing for DSS is managed and controlled at the USAP facility through procedures *SPP 6.2 Evaluation and Selection of Suppliers, QSP 06.01-Purchasing of Key Material & Services and QSP 06.02-Selection, Approval & Evaluation of Suppliers.* The type and extent of control applied to the supplier and the purchased product are dependent upon the effect of the purchased product on subsequent product

realization or the final product. These processes are managed and controlled by the purchasing department at USAP.

USAP evaluates and selects suppliers based on their ability to supply product in accordance with the company's requirements. Criteria for selection, evaluation and re-evaluation are established in USAP procedure SPP 6.2
Records of the results of evaluations and any necessary actions arising from the evaluation are maintained per USAP procedure SPP 6.2 USAP is responsible for the quality of all products purchased from suppliers, including customer-designated sources (DSS is responsible for verification of received goods, however SCARS originate at USAP)

8.5 Production and Service Provision

Process/Dept.	Interacts With	Metric
Mills	Production Control, Anneal, Conditioning	Mill Schedule, Daily Unit Production
Anneal	Production Control, Mill, Conditioning, Lab	Daily Unit Production
Sales	Technology, Production Control, Configuration Management	Order Backlog
Conditioning	Mills, Anneal, Technology, Production Control, Lab	Daily Unit Production
Conf. Mgmt.	Sales, Technology	Order accuracy
Production Control	All processes	Daily Unit Production, Sales Lead Sheet, Billet stock & Order Backlog
Purchasing (USAP)	All processes	Supplier Performance
Technology	All processes	Daily Production, Order Backlog
Outside Processes	Purchasing (USAP), Production Control, Technology	OTD, Quality

8.5.1 Control of Production and Service Provision

To control its provision of products, DSS considers, as applicable, the following:

a) the availability of documents or records that define the characteristics of the products as well as the results to be achieved;

b) the availability and use of suitable monitoring and measuring resources;

c) the implementation of monitoring and measurement activities;

d) the use of suitable infrastructure and environment;

e) the appointment of competent persons, including any required qualifications;

f) the validation and revalidation of special processes if applicable (see below);

g) the implementation of actions to prevent human error;

h) the implementation of release, delivery and post-delivery activities.

Where special requirements, key characteristics and/or critical items are identified or deemed appropriate, the processes will be planned and controlled to manage these aspects.

Where appropriate, special statistical techniques may be used to control or monitor operational processes. In such cases, the techniques selected shall be based on known standards or otherwise justified as statistically valid. This includes sampling plans when sampling is used for inspection, testing or other purposes.

DSS utilizes some "special processes" where the result of the process cannot be verified by subsequent monitoring or measurement. The special processes in use and the methods of validation of each are defined in the document *QSP 09.01 Process Control*

8.5.1.1 Control of Equipment, Tools and Software Programs

Production equipment, tools and programs are validated prior to use and maintained and inspected periodically according to documented procedures. Validation prior to production use includes verification of each article produced to the design data/specification. Storage requirements, including periodic preservation/condition checks, have been be established for production equipment or tooling in storage. See *QSP 11.01 Control of Monitoring and Measuring Equipment.*

8.5.1.2 Validation and Control of Special Processes

Per *QSP 09.01 Process Control, QSP 24.01- Pyrometry Testing, QSP 06.01-Purchasing of Key Material & Services, QSP 06.02-Selection, Approval & Evaluation of Suppliers, QSP 05 01 - Document and Data Control, and QSP 16.01-Quality Records,* DSS (along with purchasing support from USAP) validates any processes for production and service provision where the resulting output cannot be verified by subsequent monitoring or measurement. This includes any processes where deficiencies become apparent only after the product is in use or the service has been delivered.

Validation of these "special processes" demonstrates the ability of these processes to achieve planned results. DSS has established arrangements for these processes including, as applicable
a) defined criteria for review and approval of the processes,
b) approval of equipment and qualification of personnel,
c) use of specific methods and procedures,
d) requirements for records, and
e) revalidation.

8.5.1.3 Production Process Verification

Production processes are verified through appropriate documentation and travelers. Where appropriate and/or required by customers, additional verification testing will be performed on the material (eg. Hardness, Tensile, Ultrasonic testing, etc.). This testing may be performed by DSS personnel, or subcontracted to approved vendors DSS produces materials to customer specification, and tests each piece as required by PO or specification. First article inspection requirements are satisfied because each material ID / heat is tested as required by customer PO.

8.5.2 Identification and Traceability

Where appropriate, DSS identifies its products or other critical process outputs by suitable means. Such identification includes the status of the product with respect to monitoring and measurement requirements. Unless otherwise indicated as nonconforming, pending inspection or disposition, or some other similar identifier, all products shall be considered conforming and suitable for use.
DSS maintains the identification of the configuration of the products and services in order to identify any differences between the actual configuration and the required configuration; see documented procedure *QSP 02.02-Quality Planning and Configuration Management* and Documented procedure *QSP 08.01-Identification and Traceability*, *QSP 08.02- Identification of Split Bundles* defines these methods in detail.

If unique traceability is required by contract, regulatory, or other established requirement, DSS controls and records the unique identification of our products. This shall include, as appropriate:

a) product identification to be maintained throughout the product life

b) the ability to trace all products manufactured from the same batch of raw material, or from the same manufacturing batch, to the destination (e.g., delivery, scrap)

c) for a product, a sequential record of its production

8.5.3 Property Belonging to Customers or External Providers

DSS exercises care with customer or supplier property while it is under the organization's control or being used by the organization. Upon receipt, such property is identified, verified, protected and safeguarded. If any such property is lost, damaged or otherwise found to be unsuitable for use, this is reported to the customer or supplier and records maintained.

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

This activity is defined in greater detail in the document *QSP 07.01- Control of Customer Supplied Material*

8.5.4 Preservation

Dunkirk Specialty Steel preserves the product during internal processing and shipment to the intended destination in order to maintain conformity to requirements. As applicable, this preservation includes; identification, handling, packaging, storage and protection. Dunkirk Specialty Steel is vigilant in its efforts to prevent, detect, control and remove foreign objects. DSS ensures that documentation required by contract/order accompanies the product at the time of shipment, unless other arrangements have been made. Preservation of Product is further defined in *QSP 15.01 Preservation of Product and QSP 15.02 Supplement to Packaging & Labeling.*

8.5.5 Post-Delivery Activities

Post-delivery activities are conducted in compliance with the management system defined herein. In determining the extent of post-delivery activities that are required, DSS considers:

a) statutory and regulatory requirements;
b) the potential undesired consequences associated with our products;
c) the nature, use and intended lifetime of its our products;
d) customer requirements;

e) customer feedback;
f) collection and analysis of in-service data (e.g., performance, reliability, lessons learned);
g) control, updating, and provision of technical documentation relating to product use, maintenance, repair, and overhaul;
h) controls required for work undertaken external to the organization (e.g., off-site work);
i) product/customer support (e.g., queries, training, warranties, maintenance, replacement parts, resources, obsolescence).

When problems are detected after delivery, DSS takes appropriate action including investigation and reporting; see section 10.2.

While DSS does not provide specific post-delivery support, we will provide advice within our sphere of knowledge to assist customers as requested.

If a customer detects a problem with a product after delivery, a Customer Complaint is opened (*QSP 14.01 Corrective Action,* SCAR's, and Customer Complaints). The complaint will document actions to be taken, including investigation and verification activities.

8.5.6 Control of Changes

DSS will control and review of changes for production and services via an organizational based computer program(s) which orchestrate the flow material throughout the organization.

8.6 Release of Products and Services

Products undergo inspection and/or testing to ensure they meet all requirements at critical stages throughout the various processes, and then prior to final delivery. Measurement requirements are documented; this documentation is part of the order documentation, and includes:

a) criteria for acceptance and / or rejection,
b) where in the sequence measurement and testing operations are performed,
c) a record of the measurement results, and
d) type of measurement instruments required and any specific instructions associated with their use

Test records will show actual test results data when required by specification or acceptance test plan.

Where required to demonstrate Product qualification DSS will ensure that records

provide evidence that the Product meets the defined requirements.
When key characteristics have been identified, they are monitored and controlled as required.
Product is not used until it has been inspected or otherwise verified as conforming to specified requirements, except when released under positive-recall procedures pending completion of all required measurement and monitoring activities See *QSP 13.01-Control of Nonconforming Product*
Evidence of conformity with the acceptance criteria is maintained. Records indicate the person(s) authorizing release of Products.

8.6.2 Receiving Inspection and Testing

Incoming billet materials, processed products or other critical received goods undergo inspection and/or testing at receiving, prior to entry into the production processes. These activities are defined in the documented procedure *QSP 10.01- Receipt Inspection*

8.6.3 In-Process Inspection and Testing

At defined stages throughout Production, inspections and/or tests are conducted to ensure the products satisfy the requirements for that particular process or activity, prior to being released to the next process or activity. This order of production is defined in each specific traveler and/or job documentation specific to each order.

8.6.4 First Article Inspection

First Article Inspections shall be performed at the discretion of Management and/or when required by customer or contract requirements.
Such First Article Inspections are a complete inspection of a completed part, of all dimensions and criteria, to validate the production processes and equipment. The product used shall be a representative item from the first production run a new part or assembly to verify that the production processes, production documentation and tooling are capable of producing parts and assemblies that meet requirements. This process shall be repeated when changes occur that invalidate the original results (e.g., engineering changes, manufacturing process changes, tooling changes).
Note: DSS typically will analyze all required testing on each bundle/order produced. All testing is performed as the customer requires for each order.

8.6.5 Final Inspection and Testing

Final acceptance criteria for products are defined in appropriate subordinate documentation. Reviews, inspections and tests are conducted at appropriate stages to

verify that the product and service requirements have been met. This is done before products are released for shipping.
Each process utilizes different methods for measuring and releasing products. These methods are defined in test plans specific for each grade and customer.

8.7 Control of Nonconforming Outputs

DSS ensures that products or other process outputs that do not conform to their requirements are identified and controlled to prevent their unintended use or delivery. The controls for such non-conformances are defined *in QSP 13.01-Control of Nonconforming Product*

9.0 Performance Evaluation

9.1 Monitoring, Measurement, Analysis, and Evaluation

9.1.1 General

Quality management system processes are monitored and measured when required in accordance with specific product plans. See section 7.1. When departures from planned results occur, process specific reaction plans and *QSP 13.01-Control of Nonconforming Product* enable correction and corrective action where appropriate. DSS uses unique computer databases for planning the necessary monitoring and measurement processes and to demonstrate conformity to product requirements. The process for improvement is based on the results of internal and external audits and Management Review Reports. The need for statistical techniques is considered as plans are being made *(USAP SPP 20.1 Statistical Technique).* Implementation occurs according to the defined plans; the resulting data is analyzed and improvements are pursued. For further details on Quality planning see *QSP 02.02-Quality Planning and Configuration Management*

9.1.2 Customer Satisfaction

As one of the measurements of the performance of the management system, DSS monitors information relating to customer perception as to whether the organization has met customer requirements. The methods for obtaining and using this information include (but are not limited to):

- recording customer complaints
- product rejections or returns
- changing volume of orders for product
- trends in on-time delivery
- obtain customer scorecards from certain customers
- submittal of customer satisfaction surveys

The corrective and preventive action system shall be used to develop and implement plans for customer satisfaction improvement that address deficiencies identified by these evaluations, and assess the effectiveness of the results. For additional information see *QSP 11.02 Monitoring & Measuring Customer Satisfaction.*

9.1.3 Analysis and Evaluation

DSS analyzes and evaluates the data and information arising from monitoring and measurement in order to evaluate:

a) conformity of products;
b) the degree of customer satisfaction;
c) the performance and effectiveness of the quality management system;
d) if planning has been implemented effectively;
e) the effectiveness of actions taken to address risks and opportunities;
f) the performance of external providers;
g) the need for improvements to the quality management system.

Statistical techniques used may be defined in appropriate documented procedures; in all cases, the methods are based on established standards or are otherwise determined to be statistically valid.

9.2 Internal Audit

DSS conducts internal audits at planned intervals to determine whether the management system conforms to contractual and regulatory requirements, to the requirements of ISO 9001, and to management system requirements. Audits also seek to ensure that the management system has been effectively implemented and is maintained.
These activities are defined in procedure *QSP 17.01-Internal Audits*.

9.3 Management Review

The Management Team reviews the management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. The review includes assessing opportunities for improvement, and the need for changes to the management system, including the ***Quality Policy*** and quality objectives.
Management review frequency, agenda (inputs), outputs, required members, actions taken and other review requirements are defined in the documented procedure *QSP 01.03 - Management Review.*
Records from management reviews are maintained.

10.0 Improvement

10.1 General

Continual improvement will be accomplished through the use of several tools, one such tool is the issuance of corrective actions as appropriate with the submission of the Management Review reports. Management Reviews are performed to cover the quality system, process operations, production information and customer satisfaction.
Continual improvement will also be:

- a part of the quality policy.
- reflected in the quality objectives.
- a part of the actions taken upon audit results.
- driven by opportunities surfacing from data analysis.
- a result of corrective action when the action taken corrects a new problem.
- a required output from management review.
- a result of documented preventive actions

10.2 Nonconformity and Corrective Action

DSS takes corrective action to eliminate the cause of nonconformity in order to prevent recurrence. Likewise, the company takes preventive action to eliminate the causes of potential nonconformities in order to prevent their occurrence.
These activities are done through the use of the formal Corrective Action system, and are defined in procedure ***QSP 14.01*** - *Corrective Action*, SCARs, and Customer Complaints

10.3 Continual Improvement

Through the process effectiveness reviews, done as part of Management Review, DSS works to continually improve the suitability, adequacy and effectiveness of the quality management system. This includes seeking opportunities for improvement.