

**Quality Policy Manual**

**Dunkirk Specialty Steel, LLC**

**Dunkirk, New York**

**Revision 4**

**Effective: June 15, 2009**

# Dunkirk Specialty Steel, LLC

## Quality Policy Manual

### Revision 4

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## **1.0 Scope**

### 1.1 General:

The purpose of the Dunkirk Specialty Steel LLC Quality Policy Manual is to document the DSS Quality Management System and policies and to inform our customers of the controls implemented to assure product quality. The Dunkirk Specialty Steel Quality Policy Manual provides the basis for analyzing customer requirements and defining the processes that contribute to the achievement of a product that is acceptable to our customers and that meet all statutory and regulatory requirements. This Quality Policy Manual considers the process approach and is written to comply with the requirements of ISO9001 and AS9100. The requirements of this Quality Policy Manual are implemented through Quality System Procedures (QSP's).

### 1.2 Application:

Dunkirk Specialty Steel's Quality Policy Manual defines quality system requirements for all product processed. Aerospace customers/products are subject to AS9100 requirements to the extent stated herein. Non-aerospace product/customers are subject to ISO9001 requirements. Requirements of both ISO9001 and AS9100 that are irrelevant and do not apply to Dunkirk Specialty Steel are excluded from the scope of our quality management system. Exclusions to AS9100 are taken in *7.3 Design and Development* and *7.5.1 Service Provision*. Exclusions taken do not affect applicable statutory or regulatory requirements.

## **2.0 Normative Reference**

The following normative references constitute a part of this manual to the extent specifically set forth herein. Unless otherwise specified, the latest edition of the document applies.

ISO9001      Quality Management Systems – Requirements

AS9100      Quality Management Systems – Aerospace – Requirements

ASME Boiler & Pressure Vessel Code Section III NCA3800 – Responsibilities & Duties

Code of Federal Regulations, Title 10, Part 50, Appendix B (10cfr50 App B)

### **3.0 Terms and Definitions**

DSS

Dunkirk Specialty Steel LLC

USAP

Universal Stainless and Alloy Products, Inc.

Top Management or Senior Management,  
Executive Officer, General Manager

QMS

Quality Management System

QSP

Quality System Procedure

WI

Work Instruction

Organization/Company

Dunkirk Specialty Steel LLC

Customer

The Recipient of a product produced by Dunkirk Specialty Steel LLC

Supplier

An organization that provides a product or service to Dunkirk Specialty Steel LLC

### **4.0 General Requirements**

Dunkirk Specialty Steel is a Material Organization that has established and maintains a documented, implemented and controlled Quality Management System that satisfies the requirements of ISO9001, AS9100, ASME B&PVC Section III NCA3800 and Federal 10cfr50 App. B. The DSS QMS takes a process approach and provides guidance for continual improvement of the quality of Dunkirk Specialty Steel products and processes.

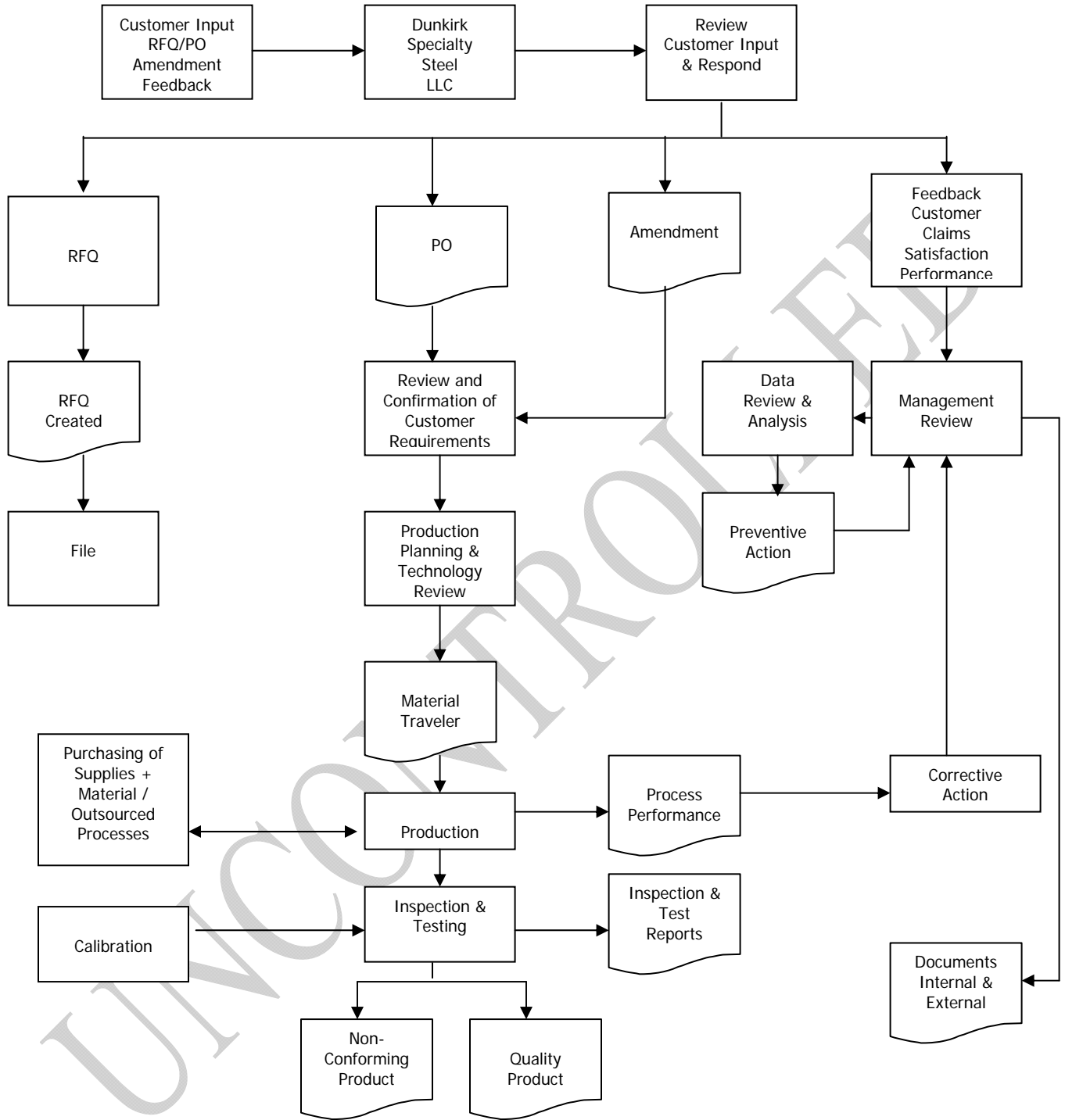
Specific authority is given to those responsible for product, process, or system quality to:

- Determine the processes necessary for the Quality Management System.
- Determine the sequence and interaction of processes needed to maintain the management of quality.
- Determine criteria and methods needed to ensure that both the operation and control of the processes are effective.
- Ensure that resources are available to support the operation and monitoring of processes.
- Monitor, measure (where applicable) and analyze these processes and implement the necessary actions to meet objectives and drive continual improvement.
- Initiate actions to prevent nonconformance.
- Initiate action to identify, record and correct problems.
- Initiate, recommend or provide solutions.
- Verify implementation and effectiveness of solutions.
- Control processing, including processes that may be outsourced.
- Prevent shipment of nonconforming product.

The performance approach links sequence and interaction of processes within the DSS Quality Management System. Dunkirk Specialty Steel LLC maintains control and responsibility for all processes that affect product quality, regardless of whether the process is performed internally at DSS, or externally by an approved supplier.

Process Management is detailed in *QSP01.04: Process Management*. The interaction of processes and the process sequence are described in the following flowchart.

## Process Management



## 4.2 Documentation Requirements

This Quality Policy Manual contains reference to the Quality Policy and Quality Objectives.

### 4.2.1 General

Dunkirk Specialty Steel LLC has established, implemented, and maintains a documented Quality Management System as a means of ensuring product conformity to customer, statutory, regulatory and/or industry specified requirements.

### 4.2.2 Quality Policy Manual

This documented system includes this Quality Policy Manual supported by detailed Quality System Procedures (QSP). This manual provides a guide for marketing, planning and manufacturing Dunkirk Specialty Steel products. It represents official company policy and shall be used as a standard by all employees of Dunkirk Specialty Steel in developing and administering systems for continual improvement, meeting quality objectives, and for the control of the quality and reliability of Dunkirk Specialty Steel LLC products.

### 4.2.3 Control of Documents

The purpose and scope of quality system documents is stated in each applicable Quality System Procedure (QSP). All documents are reviewed in a timely manner and approved prior to use. Quality System Procedures are reviewed and approved by the General Manager. Documents are available to all employees, as applicable. Obsolete documents are removed from use. Control of documentation is detailed in *QSP05.01 Document and Data Control*.

Quality system documentation includes the following types of documents in any type of media, including hard copy and electronic media:

- Quality Policy Manual
- Quality System Procedures
- Work Instructions and Specifications
- Quality Forms and Quality Documents/Records

Documents of external origin that are pertinent to the DSS QMS are identified. The distribution of such documentation is controlled and records are maintained.

The Quality Management System structure is detailed in *QSP02.01: Quality Management System Structure*.

The purpose, scope, content, format, responsibility, and control of documents are defined in *QSP05.01: Document and Data Control*.

#### 4.2.3.1 Document Approval and Issue

All Quality Management System documentation (Tier 1,2 & 3) is issued and controlled by Quality Assurance. Tier 1 (Quality Policy Manual) and Tier 2 (Quality System Procedures) are reviewed for adequacy and approved by the General Manager. Tier 3 (Work Instructions) are approved and issued by Quality Assurance in conjunction with Departmental Managers/Supervisors.

Each document is maintained on a master list identifying the current revision status to preclude the use of obsolete documents.

#### 4.2.3.2 Document Distribution

Document distribution is controlled by Quality Assurance utilizing document control software that is available only to QA. All documents are controlled via a computer server (Q: drive) available only to QA. The Q: drive is backed up daily, with the exception of Sundays.

Obsolete documents are removed from all points of use.

Obsolete documents or superseded documents (primarily specifications) that are retained for historic or legal purposes are clearly identified as being obsolete.

#### 4.2.3.3 Document Changes

Changes to controlled documents are made in accordance with applicable procedures and are reviewed and approved by the same authority that performed the original unless specifically designated otherwise.

Dunkirk Specialty Steel coordinates document changes with customer or regulatory authorities, as applicable, in accordance with contract and/or statutory and regulatory requirements.

Revised documents (Tier 1 – 3) are distributed with a revision description. Obsolete documents are removed at time of issue.

#### 4.2.4 Control of Quality Records

Quality records are identified, collected, maintained and stored. Records remain legible, identifiable and retrievable. DSS quality records provide evidence of conformity to requirements. Quality Records also reflect the effectiveness of the DSS Quality Management System.

Control of records, including those created by and/or retained by DSS approved suppliers is defined in *QSP 16.01: Quality Records*.

DSS ensures that records are available for review by customer and/or regulatory authorities in accordance with contract and/or statutory and regulatory requirements.

#### 4.3 Configuration Management

When required, the Dunkirk Specialty Steel configuration management process consists of the management and control of all documentation pertaining to a product – drawings, specifications, travelers, sales orders, inspection and testing records, purchase orders, test certificates and calibration records that affect material configuration. Configuration Management is detailed in *QSP02.02: Quality Planning and Configuration Management*, *QSP03.01: Contract Review* and *QSP16.01: Quality Records*.

### 5.0 Management Responsibilities

#### 5.1 Management Commitment

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 form of plant wide meetings, departmental meetings, postings, memorandums, newsletters, as well as everyday, informal interactions with DSS employees.

## 5.2 Customer Focus

Dunkirk Specialty Steel ensures that customer requirements are determined, see (7.2.1) and met, see (7.5). The aim is to provide customers with complete satisfaction, see (8.2). DSS welcomes the opportunity to meet with customer representatives.

## 5.3 Quality Policy

Top management of Dunkirk Specialty Steel ensures that the company Quality Policy is appropriately communicated and understood within the organization and is reviewed for continual suitability during the Management Review process. The DSS Quality Policy is detailed in *QSP01.01: Quality Policy*.

The Dunkirk Specialty Steel company Quality Policy is as follows:

**“It is the quality policy of Dunkirk Specialty Steel LLC to provide products that meet all customer, statutory and regulatory requirements. DSS is committed to continual improvement of our Quality Management System in accordance with the requirements of ISO9001 and AS9100”.**

## 5.4 Quality Planning

The QMS along with sustained processes support the company Quality Policy and the company goal of providing DSS customers with a quality product in a timely manner. The QMS provides for timely corrective action and provides a basis for continual improvement and defect prevention.

Quality planning at DSS consists of implementation, updating and maintenance of the Quality Policy Manual and its supporting documentation. Quality Planning is defined in *QSP02.02 Quality Planning and Configuration Management*.

### 5.4.1 Quality Objectives

The top management of DSS 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 following measurable Quality Objectives have been set by the Top Management of Dunkirk Specialty Steel:

- Increase yields
- On-Time delivery
- Reduce rejections

The Quality Objectives are measured, reported and reviewed. Appropriate action is taken when objectives are not met.

## 5.5 Responsibility and Authority

The responsibility, authority, and interrelationship of key personnel and functions that affect product, quality, processes, preventive and corrective action, or the QMS are defined through the DSS organizational chart, job descriptions and other functional responsibilities.

All levels of personnel at Dunkirk Specialty Steel have the authority to halt nonconforming processes and initiate, recommend, or provide corrective/preventive solutions through *QSP14.01: Corrective Action* or *QSP14.02 Preventive Action*.

The General Manager of Dunkirk Specialty Steel is responsible for all functions of the company. The GM is responsible for the company's products and services and for the support of the Quality Management System. The General Manager is responsible for assuring that the manufacturing, maintenance and technical activities of DSS are carried out by adequately trained personnel in compliance with the requirements of this Quality Policy Manual and the company Quality Policy. The GM establishes DSS quality objectives by reviewing and approving the quality management system during the Management Review process. The GM reviews and approves all tier 1 and tier 2 quality documentation.

The Quality Assurance Manager, reporting to the General Manager, is responsible for the Quality Assurance function. The Quality Assurance Manager has been appointed, by top management, as the Management Representative and assures that the ISO9001/AS9100 QMS is established, implemented, maintained and continuously improved in accordance with the requirements of the quality standards and policies to which DSS is committed.

The Management Representative has the authority, the organizational freedom and the access to top management to address and resolve all matters pertaining to quality. The Management Representative promotes the awareness of customer requirements throughout the organization and ensures that DSS personnel are aware that their activities are relevant in the achievement of Dunkirk Specialty Steel quality objectives.

Top Management, along with the management team promotes awareness of the Quality Policy and ensures that appropriate communication processes take place regarding the effectiveness of the QMS. This may include activities such as meetings of key personnel, management review meetings, various reports, training programs, daily interactions, department meetings and customer contact.

## 5.6 Management Review

The DSS Quality Management System is reviewed with members of DSS management quarterly in accordance with *QSP01.03: Management Review*. The review assesses the adequacy and effectiveness of the QMS. The review consists of a documented review of quality-related activities, including but not limited to; quality objectives, internal audits, customer satisfaction/claims, corrective actions, inspection data, yields, sales, resource needs, equipment calibration, suppliers and training. Any changes in the QMS since the last review are covered. Output from the Management Review process includes improved effectiveness of the QMS, its processes and the resultant products. Output from the Management Review also includes actions related to resource needs. Records of Management Reviews are retained.

## 6.0 Resource Management

Dunkirk Specialty Steel provides the resources necessary to maintain the QMS and its effective implementation. Resources focus on customer requirements and satisfaction as well as continual improvement of the QMS. Resources may be actual production related resources, supportive resources and human resources.

### 6.2.1 General

Personnel performing work affecting product quality are competent on the basis of appropriate education, training, skills and experience per *QSP18.01: Training*.

### 6.2.2 Competence, Awareness and Training

Management, supervisory and professional personnel are qualified on the basis of their knowledge, experience and education as related to the responsibilities of their positions.

Department Supervisors provide training for all new personnel. The need for training can be identified through a comparison of published qualifications for job competence for each job position.

Personnel performing inspection or testing that require certification due to customer requirements or specification are trained, examined and certified. Those individuals performing non-destructive testing (NDT) are trained, qualified and tested to the appropriate standard.

DSS:

- Determines the necessary competence for personnel performing work affecting conformity to product requirements.
- Provides training or takes actions to satisfy these needs.
- Evaluates the effectiveness of the actions taken.
- Maintains appropriate records of education, training, skills and experience.

### 6.3 Infrastructure

DSS top management, along with the management team, defines, provides, and maintains the infrastructure necessary to ensure that product conforms to established requirements. Infrastructure includes:

- Buildings, workspaces and associated utilities.
- Process and testing equipment, both hardware and software.
- Supporting services (transportation, communication, information systems and security).

### 6.4 Work Environment

Facilities, including work centers and associated equipment are maintained in a state of order, cleanliness, and repair appropriate to the product manufactured or the service provided. Conditions under consideration include; noise, temperature, humidity, lighting and weather. All work areas comply with established safety, regulatory and environmental standards and codes.

## 7.0 Product Realization

### 7.1 Planning of Product Realization

Planning for product realization considers the following as appropriate. They are documented in a suitable form:

- Quality objectives and requirements for product.
- Establishment of processes, documents and provided resources specific to the product.
- Required verification, validation, monitoring, measurement, inspection, test and acceptance criteria for the product, including records.
- Resources for the support and operation of product, if required.

### 7.2 Customer Related Processes

Prior to the acceptance of a contractual obligation, Dunkirk Specialty Steel reviews and approves the contract/purchase order to ensure that all requirements can be achieved, including those related to product and delivery activities. Reviews are documented and identify any differences between the contract and the original quotation. These differences are resolved before acceptance and acknowledgment of the contract. Consideration is given to implied customer requirements. All statutory and/or regulatory requirements are addressed. Upon acceptance of contract terms and conditions, customer requirements are implemented through quality planning.

DSS contract review considers the abilities of DSS to meet contractual requirements and evaluates the associated risks. The Sales Manager has the responsibility for risk management. Contract Review is detailed in *QSP03.01: Contract Review*.

#### 7.2.1 Determination of Requirements Related to Product

Dunkirk Specialty Steel utilizes a quality planning system that identifies the configuration, process, and inspection requirements for complete conformance with customer terms and conditions. Planning includes the implementation of customer, statutory and regulatory requirements through drawings, specifications, standards and other appropriate documentation.

#### 7.2.2 Review of Requirements Related to Product

Changes and amendments to the contract are communicated, and all relevant documents are modified.

Dunkirk Specialty Steel has determined and implemented effective arrangements for communicating with the customer on issues related to:

- Product information through our website and brochures.
- Inquiries, contracts or purchase orders, including amendments by personal contact with the customer
- Customer feedback, including customer claims, by contact in person, email, or by telephone.

### 7.3 Design and Development

Dunkirk Specialty Steel LLC does not engage in design work, nor is design work a requirement of our customers. This paragraph is included for justification of exclusion and for alignment with the AS9100 specification.

### 7.4 Purchasing

#### 7.4.1 Purchasing Process

Purchasing of all Quality-Related products and services (with the exception of raw material) is performed by DSS' parent company, Universal Stainless & Alloy Products of Bridgeville, PA. Raw material is purchased by DSS Production Control from Universal Stainless & Alloy Products and other approved suppliers. Purchasing is defined in *QSP06.01: Purchasing of Key Materials and Services*.

DSS maintains an Approved Supplier List (ASL) as well as all records and documentation regarding each approved supplier. Dunkirk Quality Assurance is responsible for assessment of Approved Suppliers utilized by DSS.

Dunkirk Specialty Steel assesses supplier quality management systems triennially, at minimum. Sources that provide calibration services on site at DSS are audited onsite. As an alternative to survey and audit of suppliers of subcontracted services, DSS requires and accepts accreditation by National Voluntary Laboratory Accreditation Program (NVLAP), American Association for Laboratory Accreditation (A2LA), or other accrediting bodies that meet the general requirements for competence of testing and calibration laboratories in accordance with ISO/IEC 17025..

Dunkirk Specialty Steel ensures that all customer requirements and all quality requirements are included in the procurement purchase order.

Control of suppliers is detailed in *QSP06.02: Selection, Approval & Evaluation of Vendors*.

#### 7.4.2 Purchasing Information

The Purchasing Department (USAP) describes the product/service to be purchased and includes, where appropriate:

- Requirements for approval, procedures, processes and equipment
- Requirements for qualifications for personnel.
- Quality Management requirements
- Positive identification, applicable specifications, drawings, process requirements, inspection requirements, and other technical data.
- Requirements for test, examination, inspection, test specimens, and related instruction for acceptance.
- Requirements for notification and approval of changes in product or process.
- Right of access to facilities and records by Dunkirk Specialty Steel and/or Universal Stainless & Alloy Products and its/their customers and regulatory authorities.
- Requirements for the flow down of applicable requirements and key characteristics.

#### 7.4.3 Verification of Purchased Product

Verification of supplied product is carried out by DSS at the time of receipt. Verification may include any or all of the following:

- Review of associated documentation
- Inspection or audit
- Receipt inspection

Products are not released without first being accepted by Dunkirk Specialty Steel. Data and reports submitted to DSS for raw material acceptance is subject to periodic verification by independent testing.

## **7.5 Production and Service Provision**

### **7.5.1 Control of Production Provision**

Production Planning considers, as applicable, the establishment of process controls and the development of control plans where key characteristics have been identified and the identification of in-process verification points when adequate verification of conformance cannot be performed at a later stage of realization.

Dunkirk Specialty Steel plans and carries out production under controlled conditions. Controlled conditions include, as applicable:

- Material Traveler/Production Order containing information that describes the characteristics of the product.
- The availability of work instructions, as necessary.
- The use of suitable equipment, tooling and utilities.
- The availability and use of monitoring and measurement equipment.
- The implementation of monitoring and measurement.
- Accountability for all products during manufacture (quantities, pieces, split orders, nonconforming product).
- Evidence that all manufacturing and inspection operations have been completed as planned, or otherwise documented and authorized prior to product release.
- Provision for the prevention, detection and removal of foreign objects.
- Criteria for workmanship are stipulated in the clearest practical manner (standards, tolerances, surface finish, etc).

#### **7.5.1.1 Production Documentation**

Production operations are carried out in accordance with approved data. This data may contain, as necessary; drawings, specifications, process charts, work instructions, production documents, inspection documents.

#### **7.5.1.2 Control of Production Process Changes**

Personnel authorized to approve changes to production processes include the General Manager, Technology Management, Quality Assurance and Department Supervisors.

Dunkirk Specialty Steel identifies and accepts changes that require customer and/or regulatory approval in accordance with contract or regulatory requirements.

Changes affecting processes, production equipment, tools and programs are implemented and documented.

The results of changes to production are assessed in order to confirm that the desired effect has been achieved.

#### 7.5.1.3 Control of Production Equipment

Production equipment, tools and programs are validated at the time the first article is produced, as necessary. Equipment and tools are maintained and stored in a manner that ensures maximum quality of product.

#### 7.5.1.4 Control of Work Transferred

When planning to temporarily transfer work to a location outside of Dunkirk Specialty Steel facilities, DSS defines the process to control based on customer, statutory and regulatory requirements and validates the quality of the work, as required.

#### 7.5.1.5 Control of Service Operations.

Dunkirk Specialty Steel does not provide servicing. Therefore, this manual does not include quality requirements for servicing. This paragraph is included to align sections of this manual with AS9100 elements.

### 7.5.2 Validation of Processes for Production and Service Provision

Dunkirk Specialty Steel validates any processes for production 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. Currently, validation is limited to special processes (annealing/heat treating of product and to nondestructive testing). For processes taking place outside of DSS a review is made of all certifications provided by the outside vendor. In the case of chemical analysis performed by USAP, over checks are performed periodically.

DSS establishes arrangements for these processes, as applicable:

- Defined criteria for review and approval of processes.
- Qualification and approval of special processes prior to use.
- Approval of equipment and qualification of personnel.
- Use of specific methods and procedures.
- Control of the significant operations and parameters of special processes in accordance with documented process specifications and changes thereto, requirements for records, and revalidation.

### 7.5.3 Identification and Traceability

A system for the positive identification for all products, throughout all stages of processing is maintained.

Unique order numbers, heat numbers, material identification numbers and furnace tag numbers are utilized. These numbers enable recreation of the document trail when required.

DSS maintains the identification of the configuration of the product in order to identify any differences between the actual configuration and the agreed upon configuration.

DSS identifies the product status with respect to monitoring and measurement requirements. Acceptance authority media consists of inspection stamps and/or signatures and initials/employee clock number.

An alloy verification check is performed on all orders prior to shipment to ensure the shipment of the correct material.

Completed orders carry identification consistent with marking requirements of the material or customer specifications involved. Typically, the grade, heat number, size and shape are required.

Identification and Traceability are defined further in *QSP08.01: Identification and Traceability*.

### 7.5.4 Customer Property

Dunkirk Specialty Steel exercises care with all customer property (including intellectual property). DSS identifies, verifies, protects and safeguards all customer property in its care and control.

Control of customer-supplied property is detailed in *QSP07.01: Control of Customer Supplied Material*

### 7.5.5 Preservation of Product

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 detect and control 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 *QSP15.01: Preservation of Product*.

## **7.6 Control of Monitoring and Measuring Equipment**

All equipment used for inspection, measuring and testing is calibrated by equipment that is traceable to the National Institute of Standards and Technology (NIST). Records for calibration are maintained on file. If equipment is found to be out of calibration, the effect of that error on product is reviewed and appropriate corrective measures are taken.

DSS determines the monitoring and measurement to be undertaken and the monitoring and measuring equipment needed to provide evidence of conformity of product to determined requirements.

Dunkirk Specialty Steel maintains a master list of all monitoring and measuring equipment. Procedures have been established to assure the calibration of measurement equipment, testing equipment, tools, instrumentation and gauges, which are used for final product measurement and for special process parameter measurements. Frequency of calibration and required tolerances are detailed as well as the means of identification. For internally calibrated equipment, specific work instructions detail calibration techniques. All calibrated equipment is identified in order to determine the calibration status.

Calibration records are maintained. Records are reviewed periodically to determine if calibration frequency is appropriate.

Control of monitoring and measuring equipment is further detailed in *QSP11.01: Control of Monitoring and Measuring Equipment*.

## **8.0 Measurement, Analysis and Improvement**

Dunkirk Specialty Steel plans and implements the monitoring, measurement, analysis and improvement processes needed:

- To demonstrate conformity to product requirements.
- To ensure conformity of the quality management system.
- To continually improve the effectiveness of the quality management system.

## 8.2 Monitoring and Measurement

### 8.2.1 Customer Satisfaction:

Dunkirk Specialty Steel monitors information relating to customer perception as to whether DSS has met customer requirements, both stated and implied. Methods employed may include, surveying, analysis of lost business, analysis of customer complaints/compliments and comments made during customer visits.

Customer Satisfaction is detailed in *QSP11.02: Monitoring and Measurement of Customer Satisfaction*.

### 8.2.2 Internal Quality Audits

Quality audits are performed to ensure conformance with quality system documentation and ISO9001/AS9100 requirements. Qualified personnel, independent of areas being audited conduct internal audits according to a published schedule. All critical areas of DSS are audited at least annually.

Audits are performed utilizing audit checklists. Audit findings and observations are addressed through the corrective action/preventive action process.

The management responsible for the area being audited ensures that actions are taken without undue delay to eliminate the non-conformities and their causes.

All findings are followed-up in a timely manner to verify implementation and effectiveness of actions taken.

Records of internal audits are maintained. Internal audits are reviewed during the Management Review process.

The DSS Internal Audit system is defined in *QSP17.01: Internal Audits*.

### 8.2.3 Monitoring and Measurement of Processes

Dunkirk Specialty Steel applies suitable methods for monitoring and measurement of key quality management system processes. These methods demonstrate the ability of the process to achieve planned results and objectives. When applicable, or required by customer specification, statistical process control is implemented to measure process capability.

In the event of process nonconformity, DSS takes appropriate action to correct the nonconforming process and evaluates whether the process nonconformity has resulted in product nonconformity. Nonconforming product is identified and controlled.

## 8.2.4 Monitoring and Measurement of Product

Dunkirk Specialty Steel monitors and measures the characteristics of the product to verify that product requirements have been met. This is carried out at appropriate stages of the product realization process in accordance with planned arrangements.

When key characteristics have been identified, they are monitored and controlled.

Product is not released until it has been inspected, tested, or otherwise verified as conforming to specified requirements. Evidence of conformity with acceptance criteria is maintained.

Written procedures are provided for receiving inspection, in-process inspection and final inspection activities. Receiving inspection is performed on all incoming raw material used in the manufacturing process to verify compliance to purchase order requirements.

All inspection and testing results are recorded on appropriate documentation as established by applicable inspection procedures and work instructions. Inspection records are reviewed on a monthly basis. Records of inspection and testing are maintained on file for traceability of acceptance.

Records are retained that indicate the person(s) authorizing release of product. Product release and shipment will not proceed until all planned arrangements have been satisfactorily completed. Product is released with the approval of Quality Assurance and/or Technology Management.

Monitoring and measuring of product is detailed in *QSP10.01: Receipt Inspection, QSP10.02: In-Process Inspection and QSP 10.03: Final Inspection & Testing*

### 8.2.4.1 Inspection Documentation

Measurement requirements for DSS products are documented. Records show actual inspection and test result data as required by specification or acceptance test plan.

When required to demonstrate product qualification Dunkirk Specialty Steel shall ensure that records provide evidence that the product meets the defined requirements.

### 8.2.4.2 First Article Inspection

Dunkirk Specialty Steel's QMS provides for the inspection, verification and documentation of a representative item from the first production run of a new product, or following any subsequent change that invalidates the previous first article inspection result. This inspection is performed on all product; however, only formally documented on aerospace product when required by the customer.

### **8.3 Control of Nonconforming Product**

Dunkirk Specialty Steel ensures that product that does not conform to product requirements is identified and controlled to prevent unintended use or shipment. The control and responsibilities and authorities for dealing with non-conforming product are defined in *QSP13.01: Control of Nonconforming Product*.

Material that does not conform to customer requirements or specifications is only supplied with the customer's prior knowledge and written consent.

Records of non-conformances are maintained and reviewed to establish trends and thereby determine the need for further preventive measures. Data is included in the Management Review process.

Material designated as scrap is placed in sorted bins for appropriate disposition.

For material produced under the U.S. Nuclear Regulatory Commission Rules and Regulations Title 10, Chapter 1, Code of Federal Regulations Energy, Part 21 (10cfr21), any non-compliant material detected after shipment will be reported as specified in accordance with the specification.

### **8.4 Analysis of Data**

Dunkirk Specialty Steel determines, collects, and analyzes appropriate data to demonstrate the suitability and effectiveness of the quality management system and to evaluate where continual improvement of the effectiveness of the quality management system can be made. Data is generated as a result of monitoring and measurement and from other relevant sources. The analysis of data provides information relating to:

- Customer satisfaction.
- Company quality objectives.
- Conformity to product requirements.
- Characteristics and trends of processes and products including opportunities for preventive action.
- Suppliers.

## 8.5 Improvement

### 8.5.1 Continual Improvement

Dunkirk Specialty Steel continually improves the effectiveness of the quality management system through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and the management review process.

### 8.5.2 Corrective Action

Conditions adverse to quality are identified, investigated and corrected, as appropriate to the effects of the non-conformities encountered.

A documented procedure has been established to define requirements for:

- Reviewing nonconformities.
- Determining causes of nonconformities.
- Evaluating the need for action to ensure that nonconformities do not occur.
- Determining and implementing action as needed.
- Records of the results of action taken.
- Flow down of the corrective action requirement to a supplier, when it is determined that the supplier is responsible for the root cause.
- Specific actions where timely and/or effective corrective actions are not achieved.

Corrective actions are reviewed for effectiveness during the Management Review process. A closed loop system is established to ensure that corrective are properly addressed. Corrective Action is defined in *QSP14.01: Corrective Action*.

### 8.5.3 Preventive Action

Dunkirk Specialty Steel determines the necessary actions to eliminate the cause(s) of potential non-conformities in order to prevent occurrence and their consequence. Preventive actions are appropriate to the effects of the potential problems.

Preventive action is reviewed for effectiveness during the Management Review process.

*Preventive Action is defined in QSP14.02: Preventive Action.*