



UNIVERSAL STAINLESS
& ALLOY PRODUCTS, INC.

QUALITY POLICY MANUAL

Title: Universal Stainless & Alloy Products Quality Manual

Document #: QP

Date Issued: 4/02/05

Rev: K Date: 2/19/10

1 SCOPE

The quality system described within this manual establishes the total Universal Stainless & Alloy Products quality policy. The manual as written addresses the requirements of ISO 9001, ISO-17025, NCA-3800, and AS-9100 except for the exclusions shown, with justification, in the table below:

EXCLUSION TABLE

Clause or Sub-clause	Exclusion	Justification
7.3	Design & Development	Not performed @ USAP
7.5.1	Servicing (SPP 19.1)	Not performed @ USAP

Bridgeville Facility Scope:

“Manufacture of stainless, alloy, and tool steel as ingots, blooms, billets, slabs, plates and bars; melting, rolling and re-melt processes.”

Titusville Facility Scope:

“Manufacture and supply of precision rolled metal shapes and vacuum arc re-melted steel ingots for the power generation, nuclear, linear motion, and aerospace industry.”

2 RELATED DOCUMENTS

Documents related to this policy document include:

- all procedures with the prefix "SPP" and other procedures referenced within the pages of this document.
- all work instructions that directly or indirectly have impact on product or process. The Director of Technology maintains an index of all tier III instructions in a restricted database.
- all forms used in conjunction within this policy and the procedures and work instructions described in both of the above.

NOTE: Refer to the master list of SPP's to review all of the areas covered by Universal Stainless & Alloys Products SPP's.

3 TERMINOLOGY

3.1 Quality Policy

The Corporation's requirements on issues affecting quality. (SPP 1.1)

3.2 Quality Procedure

The directions for implementing a Quality Policy.

3.3 Work Instruction

The generic name for detailed descriptions of work to be done in the manufacture and inspection of acceptable product. Work instructions are also used for related tasks such as calibrations and preventive maintenance.

3.4 Quality Management System

A structured approach to:

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

4 QUALITY MANAGEMENT SYSTEM

4.1 General requirements

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 and additional applicable standards.

The Organizational Flowchart, located in this document shows the order and interaction of Universal Stainless & Alloy Products quality management system general processes. The order and interaction of specific departmental quality management system processes can be found in SPP's associated with them. The criteria and methods for effective control of processes are found in internal audit procedures and work instructions. The Contract Review procedure (SPP 3.1) enables the availability of necessary resources. The information necessary for effective operation and monitoring of these processes is found within available controlled documents throughout Universal Stainless & Alloy Products. 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, and AS-9100 (as applicable).

Outsourced processes, having impact on the achievement of product or service requirements, are controlled in accordance with Evaluation and Selection of Suppliers procedure, SPP 6.2. Additional details can be found in the Quality System Description & Procedures procedure, SPP 2.1.

Out-Sourced Processes

Bridgeville

The following is a list of possible out-sourced processes and their means of control.

<u>Process</u>	<u>Means of Control</u>
NDT	Certification
Grinding	USAP inspection
Straightening/Peeling	USAP inspection
Sawing	USAP inspection
Rolling	Inspection Report
Heat Treat	Certification

Titusville

The following is a list of possible out-sourced processes and their means of control.

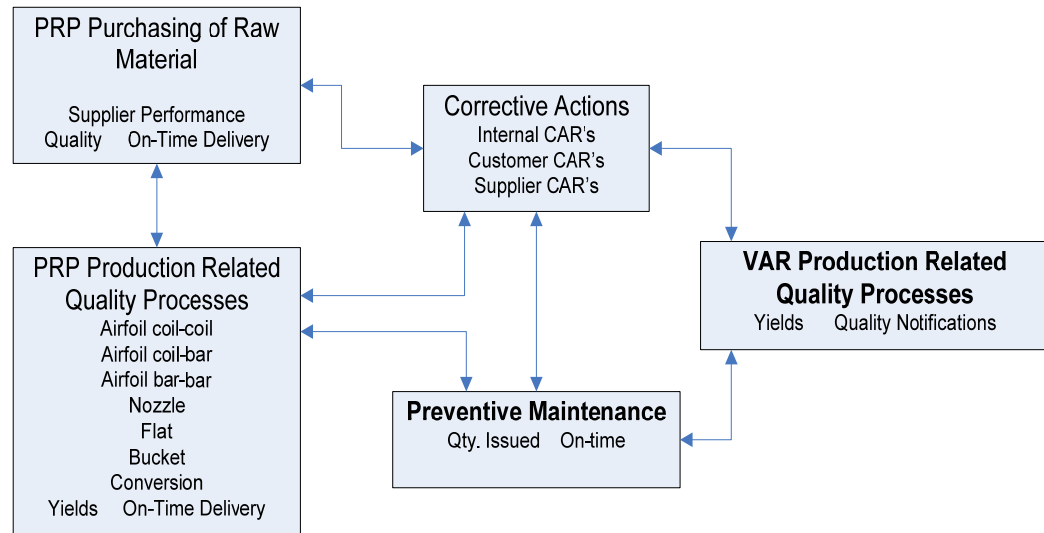
<u>Process</u>	<u>Means of Control</u>
Slitting	Receiving Inspection
Surface Conditioning	Receiving Inspection
Heat Treat	Certifications & Charts
NDT	Report
Calibration	Certification

Process Interactions

Bridgeville

Process	Interacts With	Metric
Melt	VAR/ESR, Anneal, Bloomer, Conditioning, Production Control, Technology, Purchasing	Melt Schedule, Daily Unit Production
VAR/ESR	Melt, Production Control, Conditioning, Technology, Anneal	Melt Schedule, Daily Unit Production
Bloomer	Melt, Production Control, Anneal, Conditioning, Bar Mill	Bloomer Schedule, Daily Unit Production
Anneal	Production Control, Bloomer, Long & Flat Product Conditioning, Bar Mill, VAR/ESR	Daily Unit Production
Long Prod.	Bloomer, Anneal, Production Control, Conditioning, Lab	Daily Unit Production
Flat Product	Bloomer, Anneal, Production Control, Conditioning, Lab	Daily Unit Production
Bar Mill	Bloomer, Anneal, Production Control, Conditioning	Bar Mill Schedule, Daily Unit Production
Sales	Technology, Production Control, Configuration Management	Order Backlog
Conditioning	Bloomer, Anneal, Long Product, Flat Product, Bar Mill, Technology, Production Control, VAR/ESR	Daily Unit Production
Conf. Mgmt.	Sales, Technology	Order accuracy
Production Control	All processes	Daily Unit Production, Sales Lead Sheet, Melt & Order Backlog
Purchasing	All processes	Supplier Performance
Technology	All processes	Daily Production, Order Backlog

Titusville



4.2 Documentation requirements

4.2.1 General

Universal Stainless & Alloy Products has elected to include the following documents in its quality management system:

- statements of quality policies
- statements of quality objectives
- this quality policy manual
- the documents referred to in this quality policy manual
- any documents required to avoid varied implementation of the processes needed to deliver our products and services including those with requirements imposed by applicable regulatory authorities.
- the records described in SPP 16.1, (Quality Records).
- The following is an excerpt from the USAP Confidentiality statement that is maintained in full by the Human Resources department in the 'Code of Business Conduct and Ethics' document.

Employees, officers and directors must maintain the confidentiality of confidential information entrusted to them by the Company or other companies, including our suppliers and customers, except when disclosure is authorized by a supervisor or is legally mandated. Unauthorized disclosure of any confidential information is prohibited.

- USAP ensures that appropriate personnel have access to, and are aware of relevant quality management system documentation and changes.

4.2.2 Quality Manual

This quality manual contains:

- a scope statement with exclusions (see section [5.3](#)).
- reference to the quality management system procedures.
- reference to the Organizational Chart, which provides a description of the interaction within the quality management system.
- Continual Improvement Diagram

4.2.3 Control of documents

All documents within Universal Stainless & Alloy Products quality system are controlled by procedures as indicated below:

<u>Documents</u>	<u>Procedure</u>
quality policy (this document)	<u>SPP 5.1, Document & Data Control</u>
quality procedures	<u>SPP 5.1, Document & Data Control</u>
work instructions: includes manufacturing instructions, travelers, inspection instructions, audit instructions, calibration instructions, and preventive maintenance instructions.	<u>SPP 5.1, Document & Data Control</u>
external standards, customer drawings, corporate documents (from outside of the registered site), etc.	<u>SPP 5.1, Document & Data Control</u>
records	<u>SPP 16.1 Quality Records</u>

Quality system documents will be reviewed annually thru internal audits, external audits, and continuous improvement.

4.2.4 Control of records

The requirements for control of records are found within the Quality Records procedure, SPP 16.1. Specific Universal Stainless & Alloy Products relevant records have been identified and their requirements are shown in a matrix within that procedure. All data supporting the achievement of requirements and effectiveness of the quality system are included as records.

All controlled records are protected (binders, sleeves, etc.) to ensure that they remain legible and readily identifiable and retrievable.

Supplier Records

Per the Purchase Order requirements, the supplier forwards copies of all tests/processes/calibrations to Universal Stainless and Alloy Products. Any additional records will be retained by the supplier in accordance with the supplier's quality system requirements.

Customer and/or regulatory authority representatives shall have access to quality management system documentation with approval by designated representatives

4.3 Configuration Management

Bridgeville

The process of Configuration Management primarily applies to the Melt process. Melting is accomplished by transforming solid metal to liquid by the use of the electric arc furnace (EAF). Once a liquid state is achieved, the material is transferred to the argon/oxygen decarburization (AOD) furnace for refining. When the correct chemistry is verified via testing, the material is teemed into ingots through the bottom-pour method.

In addition, the process of Configuration Management is related to producing a semi-finished product in order to meet a customer-specified product. Control of Configuration Management is achieved through complete product traceability, unique ordering system, control of process routers and controlled verification steps to achieve the desired output. See SPP 3.2 (Configuration Management) for additional information.

Titusville

The process of Configuration Management is related to producing a semi-finished product in order to meet a customer-specified product. Control of Configuration Management is achieved through complete product traceability, unique ordering system, control of process routers and controlled verification steps to achieve the desired output.

5 MANAGEMENT RESPONSIBILITY

5.1 Management commitment

The following are expressions of Universal Stainless & Alloy Products management commitment to develop, implement, and improve the effectiveness of the quality management system:

Communication about the importance of fulfilling customer, legal, and regulatory requirements occurs throughout the company. 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 (see [5.3](#))
- The quality objectives (see [5.4.1](#))
- The management review records
- Few, if any, incidents of resource shortfalls as root causes of occurring nonconformities

5.2 Customer focus

The highest level of management assures that all customer requirements will be uncovered through the processes described in section [7.2](#) 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.

5.3 Quality Policy

Having given due consideration to the following:

- the purpose of Universal Stainless & Alloy Products.
- 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

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 all SPP manuals (SPP 1.1).

The quality policy reads as follows:

It is the policy of Universal Stainless & Alloy Products, Inc. to consistently provide products that meet all of the customer and applicable regulatory requirements.

Also, top management ensures the following items:

- The Quality Policy is appropriate for our business.
- Is committed to comply with requirements and continually improve the effectiveness of the quality management system.
- Provide a framework for establishing and reviewing quality objectives.
- The Quality Policy is communicated and understood.
- The Quality Policy is reviewed for continuing suitability

D. Oates
President/CEO

Date

P.A. McGrath
VP Administrations/General Counsel

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 Quality Policy procedure (SPP 1.1)

5.4 Planning

5.4.1 Quality objectives

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

Bridgeville

Reduction of Scrap Safety Statistics. On-Time Delivery / Reduced Late Pounds.

Titusville

Yields On-Time Delivery Safety Statistics

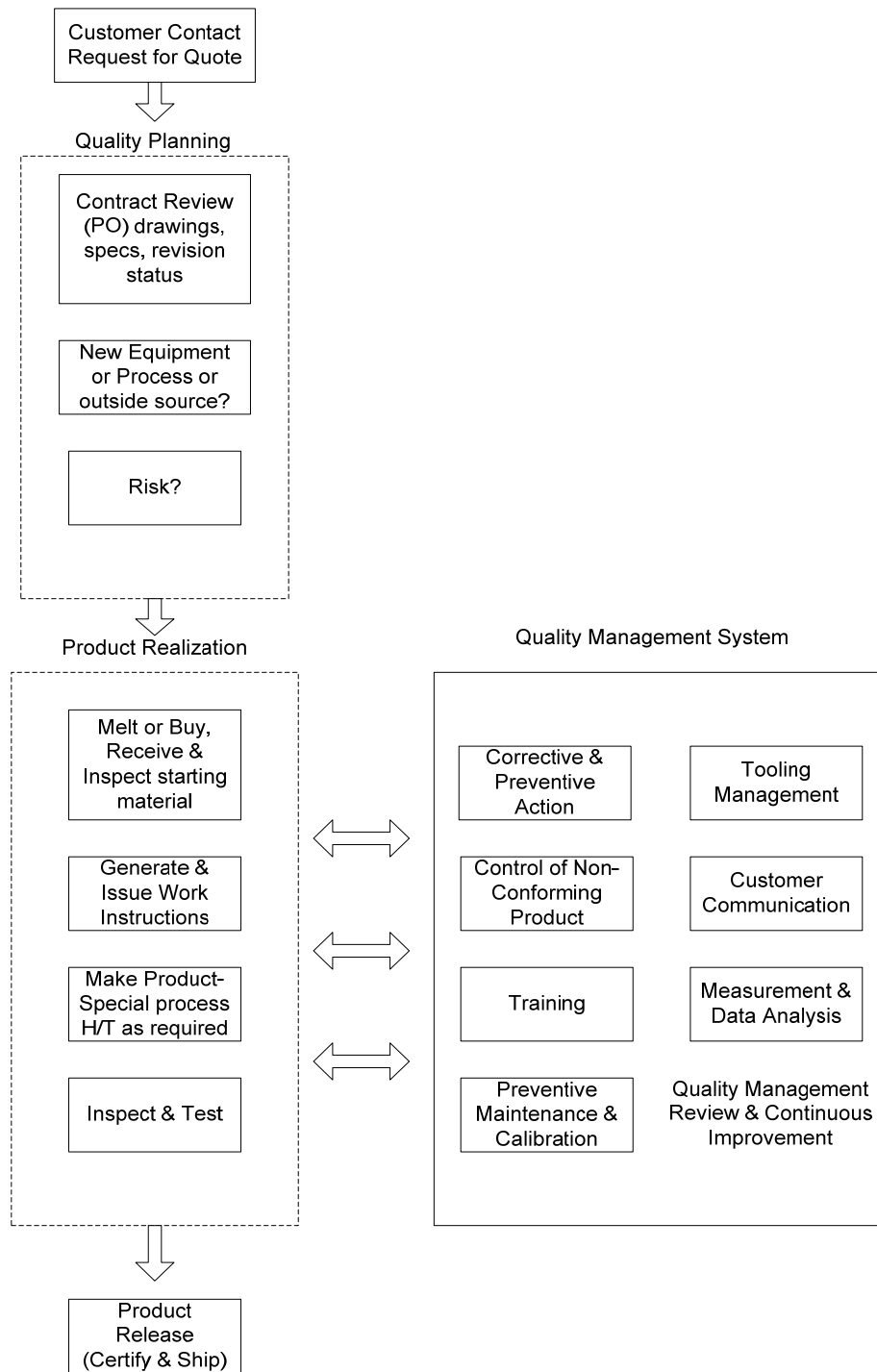
These stated quality objectives are rolled down to managers at subsequent levels who in turn convert them into objectives at their level and likewise roll them down to the next lower level. The waterfall continues until product and service specific objectives have been created. All measurable quality objectives created at each subsequent level are submitted to their next higher levels via weekly Production/Scheduling meetings.

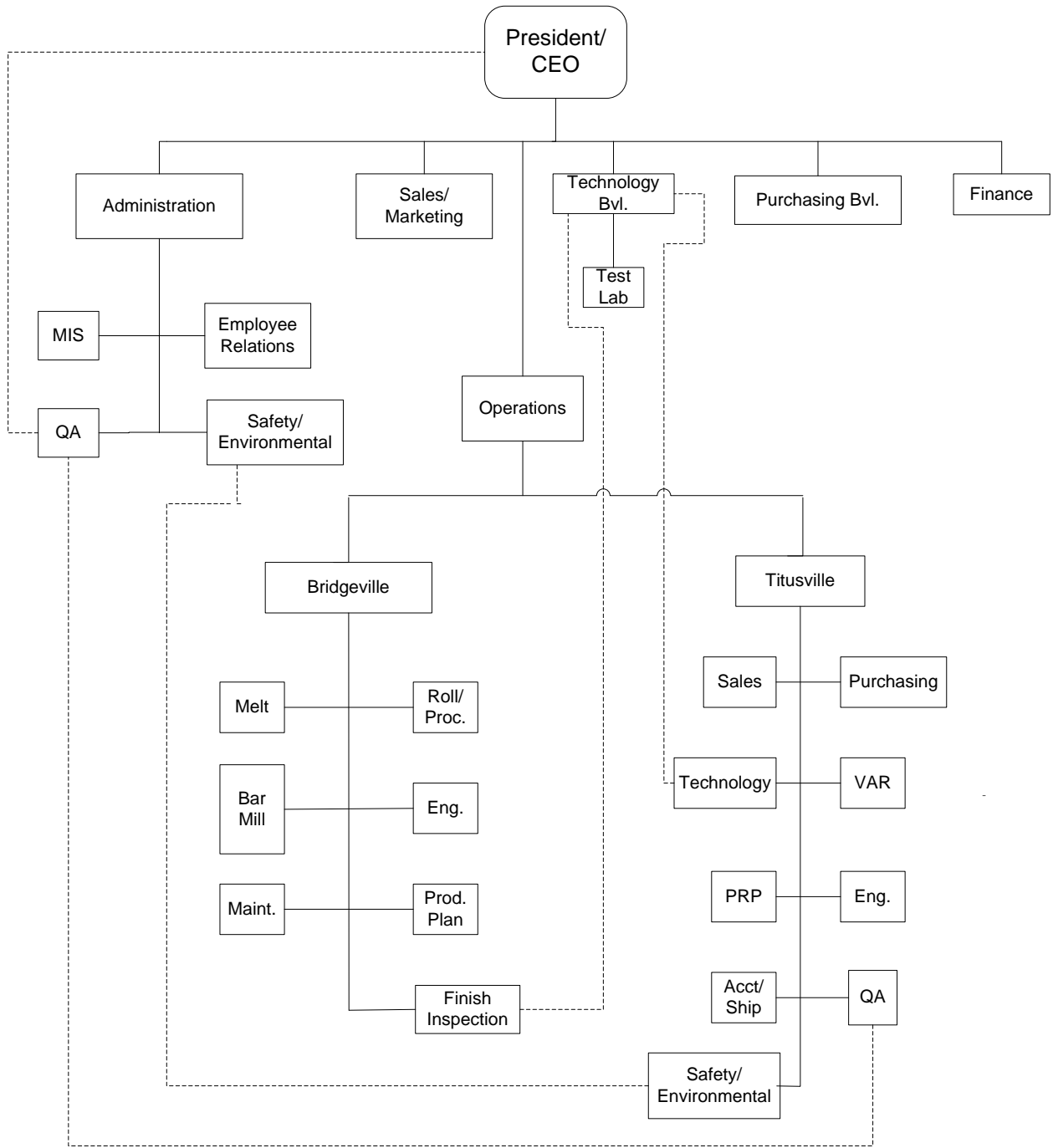
5.4.2 Quality management system planning

The Vice-President of Administration oversees the entire quality program and is directly involved in the quality management review process. The Vice-President is also responsible for the following:

- Communicating the importance of meeting customer, statutory and regulatory requirements. This is accomplished by meeting at least semi-annually with all members of the organization.
- Establishing the Quality Policy and Quality Objectives. This is accomplished by approving the annual reviews of the tier I and tier II documents. Quality objectives shall be reviewed and reported at least annually to all members of the organization.
- Additional details can be found in the Quality Planning procedure (SPP 2.2).

Continuous Improvement Process





5.5 Responsibility, authority and communication

5.5.1 Responsibility 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, 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.

5.5.2 Management representative

The Quality Assurance Manager has been appointed by the CEO 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, CAN 2299.3 (as applicable) 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 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.

5.5.3 Internal communication

The highest level of management shares data indicating the performance of the quality management system throughout Universal Stainless & Alloy Products through the reporting of internal and external audit results as appropriate. They also share data through quarterly meetings with all Universal Stainless & Alloy Products employees and through Production meetings.

5.5.4 Deliberate Malpractice, Fraud and Falsification (10 CFR21)

Universal Stainless & Alloy Products does not condone deliberate malpractice, fraud, or falsification. All employees have been notified by postings that willful violators are subject to company discipline and possible prosecution under Federal criminal statutes. All newly hired employees are required to acknowledge by signature and date on a form letter that they are aware of the deliberate malpractice law. Federal Law and Regulations regarding defects and noncompliance per 10CFR Part 21 have been posted as required by the U.S. Nuclear Regulatory Commission (NRC). We have not been cited for deliberate malpractice. The following statement appears on those forms such as test reports and material certifications: *“The recording or false, fictitious or fraudulent statements or entries on this document may be punished as a Felony under Federal Statutes including Federal Law Title Chapter 47.”*

SPP 21.1, (Deliberate Malpractice, Fraud, Falsification & Reporting) has been issued to provide additional details regarding this requirement.

5.6 Management review

5.6.1 General

In order to assure the continuing suitability, adequacy and effectiveness, the highest level of management will conduct quarterly reviews of the quality management system. The reviews can address the quality management system entirely or in parts, as long as the entire quality management system is reviewed at least annually. An expected outcome of that review is the determination of the need for any changes or to reveal opportunities for improvement to the quality management system, including adjustments to the quality policy and quality objectives. Management Review records are maintained in accordance with Quality Records procedure, (SPP 16.1).

Additional details can be found in the Management Review procedure (SPP 1.3).

5.6.2 Review input

Quarterly performance and opportunities for improvement are determined by reviewing the following:

- Audit Results
- Customer Feedback/Satisfaction
- Returned Product Analysis
- CAR (internal & external) & PAR review
- Customer Complaint>Returns
- Follow-up actions from previous management reviews
- Changes in work volume/material type
- Quality System/Document Review
- Lab Proficiency Testing results (Bridgeville)
- Shop Observations/Opportunities for Improvement
- Resource Needs
- System Effectiveness
- Analysis of the quality objective measurements

5.6.3 Review output

Actions associated with the following are included in the output from management review:

- improvement of effectiveness of the processes of the quality management system
- overall improvement of the quality management system effectiveness
- improvements upon product associated with customer requirements
- maintenance of appropriate resources

Management Review records are maintained. See the Quality Records procedure (SPP 16.1).

6 RESOURCE MANAGEMENT

6.1 Provision of Resources

Resources for the following purpose are provided:

- to implement and maintain the quality management system
- to continually improve upon the quality management system effectiveness
- to ensure customer satisfaction through consistent achievement of customer requirements.

6.2 Human Resources

6.2.1 General

Anyone at Universal Stainless & Alloy Products, having an assignment that can affect product quality, must be competent through education, skills, training and experience as necessary. Requirements for education, skills, training and experience can be found on the Personnel Qualification Record maintained by the Human Resource department. Competency is determined by pre-testing where possible and by competency evaluations and/or assignments

6.2.2 Competence, awareness and training

Managers and supervisors are jointly responsible for the determination of competence needed as new quality management system processes evolve and existing ones change. When training is required to aid achievement of the required competence, one or more of the following may occur:

- Classroom training (internal or external) may be scheduled and coordinated by the Human Resource department.
- On-the-job training will be coordinated by the department supervisor

When and where it is necessary, actions other than training will be used to achieve the needed competence and appropriate measures of effectiveness applied.

One or more of the following will be used to evaluate effectiveness of the training and other actions taken:

- testing on the material presented in the classroom
- operator certification
- certificates of completion for externally provided training
- measuring process outcomes before and after training

- performance monitoring and reviews on new hires

A more detailed explanation of Universal Stainless & Alloy Products training can be referenced in the Training procedure, SPP 18.1.

The Human Resource department is responsible for keeping records of education, training, skills and experience. See Quality Records, SPP 16.1

Approvals and Delegation of Authority

Only authorized individuals as approved by management to perform activities involving release, acceptance, disposition, and other matters related to product and process conformance. See Management Responsibility, SPP 1.2.

6.3 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
 - size
 - location
 - etc.
- Workspace
 - size
 - layout
 - etc.
- Facilities associated with building or workspace
 - HVAC
 - water
 - lighting
 - electricity
 - telephone systems
 - data lines
 - compressed air lines
 - machine specific requirements
 - etc.
- Equipment – hardware
 - furniture
 - workbenches
 - storage racks
 - tools
 - gages
 - machines

- equipment
- test equipment
- vehicles
- computers
- other office equipment
- etc.
- Equipment – software
 - process control
 - test
 - calibration
 - data collection
 - SPC
 - etc.
- Services for support
 - preventive maintenance
 - calibration
 - transportation
 - emergency
 - etc.

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.

6.4 Work environment

Universal Stainless & Alloy Products considers and addresses many different aspects of the work environment. Most significant among them and the departments assigned to manage them are listed below:

- Facilities – managed by the Operations department
- Health and safety – managed by the Human Resource department
- Housekeeping – managed by the Operations department
- Work ethics – managed by the Human Resource department

Environmental controls related to product and process requirements will be defined in the appropriate quality system documents.

7 PRODUCT REALIZATION

7.1 Planning of product realization

As Universal Stainless & Alloy Products prepares for a new product, the following are determined:

- specific quality objectives
- specific processes required (see [5.4.1](#) .)
- 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 (see Status of Inspection & Tests, SPP 12.1)
- records to demonstrate achievement of requirements (see Quality Records, SPP 16.1)
- The identification of resources to support operations and maintenance of the product.

7.2 Customer-related processes

7.2.1 Determination of requirements related to the product

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:
 - ASM
 - ASME

- NIST
- DEP
- EPA
- other federal
- state
- local
- etc.
- determination of relevant environmental requirements if any:
 - customer imposed (for example, a customer requirement to be ISO 14000 compliant)
- determination of any other relevant requirements:
 - ISO
 - NCA
 - NADCAP
 - unique requirements for end use customers in targeted countries
 - any additional requirements considered necessary by Universal Stainless and Alloy Products
 - etc.

Processes that are out-sourced by Universal Stainless & Alloy Products include but are not limited to Non-destructive testing, Calibration, Lab testing and Conversion services. These processes are controlled by the Evaluation & Selection of Suppliers procedure, SPP 6.2.

7.2.2 Review of requirements related to the product

Universal Stainless & Alloy Products will review all identified customer product requirements and other identified product requirements for new business acceptance in accordance with the Contract Review and Order Entry procedure, SPP 3.1. 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 Universal Stainless & Alloy Product's ability to meet the requirements.
- Risks associated with personnel, equipment, scheduling, etc.

Records of requirements reviews and follow-on actions are maintained (see Quality Records procedure, SPP 16.1)

Specification, contract, or customer purchase order changes are managed in accordance with the Contract Review and Order Entry procedure, SPP 3.1

7.2.3 Customer communication

There are several scenarios where communication occurs between Universal Stainless & Alloy Products and its customers. The first contact often occurs through some form of communication provided by the Sales department. Enquiring potential customers are provided with any further information by the Sales department. Contact required by the customer with other functions, is coordinated by the Sales department. Order taking occurs within the Sales department. Changes to existing orders are coordinated through the Sales department. The Quality and Technology department coordinate responses to customer complaints through the use of the Customer Generated Corrective Actions procedure, SPP 14.1 (when applicable). The customer's confidential information and propriety rights are held in strictest confidence. Statements of confidentiality are included with e-mails that transmit confidential data/information.

7.3 Design and development

Universal Stainless & Alloy Products states an exclusion to the design requirements of ISO-9001. Universal Stainless & Alloy Products produces product to conform to customer and national specifications and appropriate regulatory requirements.

7.4 Purchasing

7.4.1 Purchasing process

Significant waste is avoided by controlling the purchasing process at Universal Stainless & Alloy Products. After a potential supplier is determined to be

technically suitable by Purchasing, approval is based on the Evaluation and Selection of Suppliers procedure, SPP 6.2. This procedure offers:

- a structured method and a scoring approach for supplier selection that considers relevant capability, quality system and quality assurance requirements.
- criteria for initial approval and performance requirements for maintaining the approved status.
- the direction to maintain an approved supplier list and their current performance.

The application of the above process is tempered by impact of the purchased material on the product realization process.

Quarterly, the Purchasing department meets to evaluate supplier status. Minutes from that meeting are forwarded to the Quality department for review and follow-up to all actions taken regarding the Approved Suppliers List (ASL).

Universal Stainless and Alloy Products is responsible for verifying the quality of all products purchased from suppliers including customer-designated sources.

When required, Universal Stainless and Alloy Products and all suppliers use customer approved special process sources. Also, Universal Stainless and Alloy Products ensures that the internal functions having responsibility for approving supplier quality systems have the authority to dis-approve those sources.

Testing service suppliers are audited on a triennial (36-month) basis, either at their facility or while they perform services at a USAP facility. Appropriate audit records are maintained. As an alternative to survey and audit of suppliers of contracted services, USAP may accept accreditation by National Voluntary Laboratory Accreditation Program (NVLAP), American Association for Laboratory Accreditation (A2LA) or accrediting body recognized by NVLAP through the International Laboratory Accreditation Corporation (ILAC) Mutual Recognition Arrangement (MRA) based on the requirements stated in NCA 3855.3 (Bridgeville).

7.4.2 Purchasing information

Universal Stainless & Alloy Products purchase documents require that the originator include where applicable:

- approval requirements including as appropriate:
 - precise identification of product or service ordered
 - positively identified specifications, drawings, pertinent standards and codes or other technical documents required to establish full acceptability
 - specialized equipment
 - uniquely qualified personnel
- quality management system requirements (ISO-9001, AS9100, NADCAP, ISO-17025, etc)

All Universal Stainless & Alloy Products purchasing documents must be originated in the purchasing department. Each originator of purchasing documents must assure that specifications contained in the purchasing documents are adequate before an order is placed.

Special processes performed outside of Universal Stainless and Alloy Products may be considered frozen practices. These practices cannot be altered without written approval of the Director of Technology or his designee. This is communicated via purchasing documents to the suppliers.

7.4.3 Verification of purchased product

The processes for verification of purchased product or service are found in the specific quality plans for those products or services. The process selected and included in the quality plans depends on the criticality of the purchased product and the performance history of the supplier. The processes for incoming material acceptance may include:

- acceptance based on certification of conformance
- acceptance based on the review of data from a certificate of analysis
- acceptance based on incoming inspection
- acceptance based on inspection at the source by Universal Stainless & Alloy Products or Universal Stainless & Alloy Product's customer.

When Universal Stainless & Alloy Products stipulates in any contract that purchased product or service is subject to source inspection by Universal Stainless & Alloy Products or Universal Stainless & Alloy Product's customer, the details for such an inspection and subsequent release of accepted material will be stated in the purchase agreement.

Out-sourced material and services are procured per the Purchasing of Materials and Services procedure, SPP 6.1. These same suppliers are evaluated per the Evaluation and Selection of Suppliers, SPP 6.2. Re-evaluation is performed by means of annual surveys, which are sent, received and evaluated by the Quality department. Audits of these suppliers may be performed per the Evaluation and Selection of Suppliers, SPP 6.2.

Test Reports are reviewed/approved to verify that performance requirements are met.

All laboratory subcontracted testing is performed by an ISO/IEC 17025 approved supplier. (Bridgeville facility only)

The laboratory is responsible to the client for the subcontractors, except in the case where the client or a regulatory authority specifies which subcontractor is to be used.

USAP reserves the right to verify purchased material at supplier's facility. Should this option be exercised, verification method(s) and material acceptance/release criteria will be mutually agreed upon, and be included in the Purchase Order.

Annually (Bridgeville) or every new heat (Titusville) , raw material is sent for testing to validate the suppliers certification.

Right of Entry is also provided for customers, customer's agents, and regulatory agencies (as required), to verify the quality of work, records, and material at suppliers facilities and/or at Universal Stainless and Alloy Products.

Universal Stainless and Alloy Products (Bridgeville) delegate's verification activities to the supplier as described in Purchasing documents. No material is authorized for release from these facilities to be sent to the customer without approval from USAP (Bridgeville). Select materials are returned to USAP Bridgeville along with documentation that provides evidence of performance and

acceptance. These documents are reviewed and maintained as described in the Receiving Inspection procedure (SPP 10.1). Product release is granted by the approval of the Director of Technology.

Universal Stainless and Alloy Products (Titusville) does delegate verification of tests/processes. This is documented in a 3rd tier work instruction maintained at the Titusville facility.

7.5 Production and service provision

7.5.1 Control of production and service provision

The control of Universal Stainless & Alloy Product's production and service provision activities is assured by:

- the easy access of drawings and specifications for product and/or service
- the easy access to necessary work instructions
- the suitability of the equipment as determined by the Contract Review and Order Entry procedure SPP 3.1 (When and where suitability is a function of appropriate maintenance and/or calibration, the Process Control procedure(s) SPP 9.1, 9.2 and 9.3 and/or Calibration Control procedure SPP 11.1 are applied.)
- the availability of specified measuring and monitoring equipment as verified in Process Control procedures, SPP 9.1, 9.2 and 9.3.
- the implementation of monitoring and measurement activities, as planned, through the use of specific product or quality plans.
- The release of product according to specific product (SPP 10.1,10.2, 10.3 or 10.4) or service quality plans or Control of Nonconforming Material procedures, SPP 13.1, 13.2 , 13.3 and 13.4.

The delivery of product in accordance with the Handling, Storage, Packaging, Preservation, and Delivery procedures.

- Only those in supervisory or management positions are authorized to make changes to the Production processes. These personnel are qualified to perform this function via their job training and product knowledge. Authorization is documented in the employees training file.

- Any process or procedure temporarily transferred outside Universal Stainless and Alloy Products will be defined to the extent that the quality of the work can be controlled as necessary.
- validation of first piece(s). See SPP 10.1, 10.2, 10.3 and 10.4.
- measurement of product characteristics
- destructive/non-destructive testing
- qualification testing
- Equipment approval through first piece approval, calibration status or preventive maintenance status (See Process Control procedures, SPP 9.1, 9.2 and 9.3 and Calibration Control procedure, SPP 11.1)

7.5.2 Validation of processes for production and service provision

Processes within Universal Stainless & Alloy Products, whose outcomes are not verifiable at reasonable cost, must be validated to assure that requirements will be met. This also applies to processes used for products that may experience premature failure. The Process Control procedures, SPP 9.1, 9.2 and 9.3 address:

- process approval which may include:
 - measurement of process parameters
 - process capability (See Statistical Techniques, SPP 20.1)
- operator training / operator certification (See Training procedure, SPP 18.1)
- required documentation

Records of the above activities are maintained as indicated in Quality Records, SPP 16.1. Process revalidation is achieved in accordance with each product specific plan (travelers) along with operation procedures (SMP's and SAP's) Out-sourced processes and their means of control are listed in section 4.1 of this quality manual.

7.5.3 Identification and traceability

In order to prevent the misuse or misapplication and to maintain identity of purchased material, work-in-process, or completed product, Universal Stainless & Alloy Products utilizes the Identification and Traceability procedure SPP 8.1.

Monitoring and measurement status of product at Universal Stainless & Alloy Products is an integral part of the material control task and can be found in Identification and Traceability procedure, SPP 8.1.

Product Traceability is maintained through the use of procedure SPP 8.1 when required by the customer or a governing regulatory agency or when Universal Stainless & Alloy Products determines that the practice would be prudent for the product being manufactured. Records of product traceability will be maintained. At Bridgeville, product identification and traceability uses the ingot number and the heat number. Processing identification and traceability uses the mill order number. Reference for control of this activity is controlled by SPP 12.1 (Inspection and Test Status).

At Titusville PRP, identification and traceability for product and process uses the lift code and mill order number. These numbers are traceable to the heat number.

At Titusville VAR, product identification and traceability uses the ingot number and the heat number. Processing identification and traceability uses the furnace sequence number.

7.5.4 Customer property

Customer property is treated the same as purchased material. More specifically, it is:

- identified per the Identification and Traceability procedure, SPP 8.1.
- verified per product quality plans.
- protected per the Handling, Storage, Packaging, Preservation, and Delivery procedures SPP 15.1 & 15.2 or as specified by customer requirements.
- maintained using appropriate procedures such as Process Control procedures SPP 9.1, 9.2 and 9.3 and the Calibration Control procedure SPP 11.1.

Lost, damaged, or non-conforming purchaser supplied material is subject to the Control of Nonconforming Material procedures, SPP 13.1, 13.2 and 13.3.

Customer provided intellectual property would be treated as documents of external origin and distributed on a need-to-know basis. See the Document and

Data Control procedure, SPP 5.1. Customer product is processed per the Customer Supplied Products procedure (SPP 7.1)

7.5.5 Preservation of product

The Universal Stainless & Alloy Products procedures for handling, storage, packaging, and protection of product are thoroughly documented in the Handling, Storage, Packaging, Preservation and Delivery procedures, SPP 15.1 and 15.2. Product Identification is accomplished per the Identification and Traceability procedure, SPP 8.1.

The Handling, Storage, Packaging, Preservation and Delivery procedures, SPP 15.1 and 15.2, describes the general handling requirements. The travelers and work instructions detail the specific methods of handling required by Universal Stainless & Alloy Products. Training augments the documentation.

The Handling, Storage, Packaging, Preservation and Delivery procedures, SPP 15.1 and 15.2, describes the general packaging requirements. Specific packing, packaging, and marking processes are documented on the travelers and the work instructions for the individual products.

The Handling, Storage, Packaging, Preservation and Delivery procedures, SPP 15.1 and 15.2, address general storage requirements. Travelers and work instructions detail the specific methods of storage required by Universal Stainless & Alloy Products. Training augments the documentation.

When contractually agreed upon, Universal Stainless & Alloy Products takes on the responsibility for product delivery without degradation of product quality. Sub-contracted delivery services are selected based upon historical records of previous sub-contracts with Universal Stainless & Alloy Product's.

Bridgeville

Provisions for the prevention, detection, and removal of foreign objects are addressed via pre tapping analysis of the metal and current mold inspection work instructions.

Titusville

Provisions for the prevention, detection and removal of foreign objects are addressed via the tier III work instructions SPRP 9.3.6 (Packing, Packaging, and labeling), SVARP 9.3.3 (VAR Crucible Preparation) and tier II SPP 9.3 (Process Control – Titusville).

7.6 Control of monitoring and measuring devices/equipment

Product travelers identify what measurements are to be made and recorded. Inclusion of a monitoring and measurement device into a work instruction requires that there be sufficient confidence that the error of the measurement system (device, documentation and operator) will not alter the measurement to be made. Universal Stainless & Alloy Products accommodates this need by selecting measurement devices that can resolve one more decimal place than the number of decimal places in the tolerance of the measurement to be made (where applicable).

To assure that measurement capability remains consistent, Universal Stainless & Alloy Products requires that measuring and monitoring devices:

- be calibrated prior to use or periodically to NIST traceable standards.
- be properly identified as to their calibration status.
- utilize safeguards for inappropriate adjustment.
- be handled, maintained and stored properly.
- have records of calibration (See Calibration Control, SPP 11.1).

Calibration Control, SPP 11.1 has provisions to accomplish the above.

In the event that calibration reveals that measurement capability has been lost, a reaction plan as described in Calibration Control, SPP 11.1 must be employed and corrective action taken. A record of the action taken will be made and maintained as indicated in Corrective Action, SPP 14.2 and/or Calibration Control, SPP 11.1.

Universal Stainless & Alloy Products does not permit the use of personally owned inspection, measuring and test equipment to verify product.

When an instrument for calibration requires adjustment or repair, the calibration results before and after the adjustment/repair shall be reported if available.

When applicable, IMTE will be calibrated/re-calibrated in the environmental conditions in which the instrument is used.

8 MEASUREMENT, ANALYSIS AND IMPROVEMENT

8.1 General

Bridgeville

Universal Stainless & Alloy Products 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 quarterly Management Review Reports. The need for statistical techniques is considered as plans are being made (See section [7.1](#) and Statistical Techniques, SPP 20.1). Implementation occurs according to the defined plans, the resulting data is analyzed (See section [8.4](#)) and improvements are pursued (See section [8.5](#)).

Titusville

The quality planning process is detailed in SPP 2.3 (Quality Planning – PRP). The process for improvement is based on the results of internal and external audits and quarterly Management Review Reports. Statistical analysis is reviewed (See section [8.4](#)) and provided (See section [7.1](#)) based on customer requirements and/or SPP 20.1 (Statistical Techniques procedure).

8.2 Monitoring and measuring

8.2.1 Customer satisfaction

Customer satisfaction is based on customer complaints, repeat customer orders, customer audit results and customer evaluations. These items are distributed to management for review and comment upon arrival at Universal Stainless & Alloy Products. They are also reported in the quarterly Management Review Report. Corrective Action Requests (CAR's) may be issued as per the Corrective Action procedures, SPP 14.1 or 14.2.

8.2.2 Internal audit

Internal audits of the quality management system are conducted in accordance with the Internal Quality Audits procedure, SPP 17.1 using AS-9100 complaint checklists. Frequency of audits of specific areas and/or specific requirements will vary with the need. That variation will be reflected in the required audit plans along with the scope, the methods and the assigned auditors. The audits are seeking conformance with the requirements of AS-9100, ISO 9001, and/or ISO 17025, the requirements of this quality system and plans as indicated in section [7.1](#).

The criteria for auditor independence and clarification of auditor responsibilities are found in the Internal Quality Audits procedure, SPP 17.1. The results are recorded (See Quality Records, SPP 16.1) to enable management and others take

timely corrective action and to allow for proper verification of effectiveness in accordance with procedure Internal Quality Audits, SPP 17.1.

8.2.3 Monitoring and measurement of processes

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 Control of Nonconforming Product, SPP 13.1, enable correction and corrective action where appropriate.

8.2.4 Monitoring and measurement of product

In order to assure conformity to customer requirements, specific product quality plans contain the monitoring and measurement processes to be applied to the characteristics of each product or service at the appropriate levels of realization.

The appropriate key characteristics are shown on the process traveler.

Evidence of compliance and conformity with the requirement(s) must be recorded as well as the authority allowing further progression or final release. See the Process Control procedures, SPP 9.1, 9.2 and 9.3. Evidence is also referenced in the Quality Records procedure, SPP 16.1. Product release must be preceded by successful completion of all required activities (see section [7.1](#)) unless approved by the customer. See the Control of Nonconforming Material procedures, SPP 13.1, 13.2, 13.3, and 13.4.

First Article Inspection (FAI) for Bridgeville applies to the Melt process and when new primary equipment or major upgrades in the production process occurs. (reference per AS-9102). See SPP 10.3 Final Inspections and Tests, Bridgeville.

First Article Inspection (FAI) for Titusville applies to Airfoil product at final inspection. (reference per AS-9102.) See SPP 10.4 (Final Inspection & Test, Titusville) See SPP SPP 10.4 (Final Inspections & Tests, Titusville).

Both facilities will retain documentation bearing unique identification with regards to the material/product.

8.3 Control of nonconforming product

Nonconforming material is identified using the Control of Nonconforming Materials procedures, SPP 13.1, 13.2, 13.3, and 13.4. Use of nonconforming material is disallowed by applying Control of Nonconforming Materials procedures, SPP 13.1, 13.2, 13.3, and 13.4. These procedures allow for:

- scrapping detected nonconformities.
- reworking nonconformities.
- accepting nonconformities (with appropriate approvals).
- approving nonconforming material for other use.

Records of nonconforming material are maintained as indicated in Quality Records procedure, SPP 16.1

Re-inspection is required on all reworked or repaired material. Rework material must meet original requirements.

Discovery of nonconforming material after delivery is immediately followed by the actions necessary to minimize its impact and preserve customer satisfaction to the highest level possible based on the circumstances. The Customer Generated Corrective Action procedure (SPP 14.1) and or the Preventive Action procedure (SPP 14.3) may be used for this purpose.

The Technology department has the final authority for the disposition of any nonconforming items, following appropriate input and evaluation.

8.4 Analysis of data

At Universal Stainless & Alloy Products, quality management system related data is recorded as indicated in the Quality Records procedure, (SPP 16.1) analyzed with the objectives below in mind and used to determine the suitability, effectiveness and opportunities for improvement of the quality management system. The data analysis objectives for Universal Stainless & Alloy Products are:

- to assess customer satisfaction levels
- to determine success rates in fulfilling customer requirements
- to gather knowledge on trends associated with products and processes in order to initiate appropriate preventive action.

- to maintain awareness of the performance of suppliers and request them to take action to correct or improve the performance.

Improvement

8.4.1 Continual improvement

Continual improvement will be accomplished through the use of the issuance of corrective actions as appropriate with the submission of the quarterly 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.

8.4.2 Corrective action

In order to avoid the recurrence of problems, appropriate corrective actions are taken. Universal Stainless & Alloy Products Corrective and Preventive Action procedures, SPP 14.1, 14.2 and 14.3 provides a systematic approach to corrective action problems that includes:

- reviewing nonconformities including customer complaints
- the determination of causes of nonconformities
- assessing the need for actions to avoid recurrence
- the determination of corrective actions needed
- the implementation of determined corrective actions
- making records of the outcomes from actions taken (See Quality Records, SPP 16.1 and the Corrective Action procedures SPP 14.1 and 14.2)
- verifying the effectiveness of corrective actions taken

When it has been determined that the supplier is responsible for the root cause of a problem, the process referenced in SPP 6.2 (Evaluation & Selection of

Suppliers) is utilized. All CAR's are reviewed on a regular basis and emphasis by management is placed on closing all CAR's by the stated due date.

8.4.3 Preventive action

In order to avoid the occurrence of potential problems, appropriate preventive actions are taken. Universal Stainless & Alloy Products Preventive Action procedure, SPP 14.3 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 Quality Records, SPP 16.1 and the Preventive Action procedure, SPP 14.3)
- reviewing preventive actions taken.

9.0 Supplemental Laboratory Requirement (Bridgeville)

9.1 Quality System

The USAP Quality System is structured to and complies with AS-9100.

USAP provisions to meet Fastener Quality Act (FQA) and ISO-17025 requirements use the AS-9100 Quality System as a base, and are supplemented by the commitments of this policy and the associated implemented SPP's and SOP's. The ISO-17025 Registrar is notified of any Chem Lab changes in status (test procedures, key personnel, etc.) which may affect continued FQA/ISO-17025 conformance. The USAF Chem Lab undergoes annual QA audits within the USAP AS-9100 Quality System.

See the Supplemental Laboratory Requirements procedure (SPP 22.1) for additional information.

9.2 Management

The USAP Chem Lab is directed by knowledgeable technical management, and is supported by quality management. Chem Lab management has clearly defined responsibilities and authorities.

The Director of Technology or his designee is responsible for approving the resumption of testing activities when a test that is performed is identified as nonconforming to the testing procedures. In addition, the Director of Technology or his designee has the authority to halt any or all related work when material is suspected of not meeting requirements.

9.3 Documentation

The USAP Chem Lab uses special documented lab procedures, which address test traceability; reference to procedures, equipment, standards and verifications, proficiency testing; and similar lab functions.

9.4 Personnel

USAP Chem Lab personnel are trained to specific test methods in accordance with a documented training program; personnel participate in continuing education to maintain proficiency. Chem Lab staff members are trained to FQA/ISO-17025 requirements. Records of training are kept. Outside testing personnel utilized by the Laboratory shall have their qualifications/certifications stated in the Purchase Order. The subject documents shall be maintained by the Director of Technology.

9.5 Environment, Facilities, & Equipment

USAP Chem Lab area, environment, and equipment are all appropriate to the accuracy of the tests performed. Chem Lab equipment is properly maintained to perform its functions. Detailed records are kept on Chem Lab equipment history, maintenance and calibrations.

9.6 Traceability of Measurements & Standards

All USAP Chem Lab equipment is under the calibration controls of the USAP Quality System. Chem Lab standards are traceable to national standards or have evidence of correlation of results by accepted industry methods. Chem Lab standards are controlled and have restricted use, per written procedures.

9.7 Test Methods & Handling of Test Items

All USAP Chem Lab tests are performed in accordance with documented procedures. Computerized or automated Chem Lab equipment have appropriate safeguards to protect integrity of data, software, and access. Chem Lab consumables are purchased and stored per documented procedures. Items to be tested are cut, identified, examined, handled, prepared, retained, and disposed in accordance with written procedures which assure validity of the test results.

9.8 Quality Records

USAP Chem Lab test results, certifications, and reports are product quality records, and fall under the USAP Quality Records Controls and management. Unique FQA/ISO-17025-related quality records are retained by Technology.

9.9 Material Certifications

Results of USAP Chem Lab tests are reported on Material Certifications, in accordance with documented procedures. Each Material Certification includes all applicable information as required by the FQA/ISO-17025. USAP Material Certifications follow FQA/ISO-17025 controls on standard format, preparation, limited reproduction, applicability of results, protection of confidentiality, and amendments. Electronic transmissions of USAP Material Certifications follow documented safeguards.

9.10. Subcontracting of Testing

Universal Stainless & Alloy Products subcontracts materials testing using ISO 17025 accredited laboratories. These laboratories are part of USAP's Approved Suppliers List (ASL). Customers are notified in writing of the subcontracting of their tests, before the fact. Results of these subcontracted tests are noted on USAP's Material Test Reports, along with the name and address of the lab, and a copy of the lab's test report.

9.10 Suspect Test Results & Customer Complaints

When audit findings, defective equipment, customer feedback, or other such events cause the validity of previously-reported test results to be suspect, the Director of Technology takes applicable corrective action and notifies any customer whose work may have been affected, in writing. Involved areas of activity and responsibility are investigated promptly.

When a nonconformance indicates that the Laboratory is not following its procedures or not operating in accordance with ISO/IEC 17025 requirements, the Laboratory shall formally audit its operations within 10 business days to determine the degree of nonconformance.

10.0 Heat Treatment Supplement (Bridgeville)

10.1 Temperature Sensors

- 10.1.1 All thermocouples used by Universal Stainless & Alloy Products comply with and are certified to ASTM E230 and ASTM E220.
- 10.1.2 Correction factors for the thermocouples are attached to the applicable thermocouple.
- 10.1.3 Conversion from millivolts to degrees is in accordance with ASTM E230.
- 10.1.4 Thermocouples are calibrated in the temperature range in which they are used and are not re-used or recalibrated.
- 10.1.5 Thermocouples are only used in the ranges stated for the applicable thermocouple.
- 10.1.6 Thermocouple wire made from calibrated rolls is used for Nadcap surveys and then removed from service.
- 10.1.7 MGO thermocouples that are used for Nadcap surveys will be used for the interval stated in AMS 2750.
- 10.1.8 System Accuracy Tests (SAT's) will be performed at specified intervals and will comply with the requirements of AMS 2750.
- 10.1.9 Load thermocouples are periodically used during the heat treat process. When this occurs, the heat treat process is performed in accordance with AMS 2750.

10.2 Instrumentation

- 10.2.1 Outputs of thermocouples are converted to temperature by instruments of equal or greater accuracy. These instruments are traceable to NIST.
- 10.2.2 Test and recording instruments are digital and have a minimum readability of 1° F or 1° C.
- 10.2.3 All instruments will receive an unmodified signal from the sensors except where conversion occurs.
- 10.2.4 The utilization of offsets are documented and practiced per the requirements of AMS 2750.

10.3 Instrument Calibration

- 10.3.1 Calibration shall be performed on all applicable instruments in accordance with AMS 2750 as per SPP 11.1 (Calibration procedure).
- 10.3.2 Calibration accuracy and frequency shall be performed in accordance AMS 2750.
- 10.3.3 Calibration shall be performed to the manufacturer's instructions or per the requirements of AMS 2750.
- 10.3.4 Chart recorder speed shall be verified annually and shall be accurate within +/- 3 minutes per hour.
- 10.3.5 Calibration status shall be performed as per SPP 11.1 (Calibration procedure).
- 10.3.6 The documented results of the calibration shall meet the requirements of AMS 2750.

10.4 Electronic Records

10.4.1 Nadcap applicable electronic records are created, maintained, and retained per AMS 2750. Access to these records are password protected.

10.5 Thermal Processing Equipment

10.5.1 Universal Stainless and Alloy Products utilizes type 'D' instrumentation.

10.5.2 The quench system utilizes recording instrumentation that is calibrated and maintained within the USAP calibration and maintenance system.

10.6 System Accuracy Tests (SAT's)

10.6.1 SAT's shall be performed per the requirements of AMS 2750 based on the applicable furnace type.

10.6.2 SAT's shall be performed after any maintenance that could affect the SAT accuracy.

10.7 Furnace Modifications

10.7.1 An initial Temperature Uniformity Survey (TUS) shall also be performed after any modification or adjustment that could have altered the temperature uniformity characteristics of the furnace. These TUS's are performed per the requirements of AMS 2750 for the applicable furnace type.

10.8 Furnace Repairs

10.8.1 TUS's shall be repeated when repair/part replacement warrant such action. AMS 2750 shall be referenced to determine when these TUS's shall be performed.

10.9 Initial Thermal Uniformity Surveys (TUS's)

10.9.1 Initial TUS's shall be performed as specified and at the applicable frequencies as detailed in AMS 2750.

10.10 Thermal Uniformity Surveys (TUS's)

10.10.1 TUS's shall be performed as specified and at the applicable frequencies as detailed in AMS 2750.

10.11 Thermal Uniformity Surveys (TUS's) Data Collection

10.11.1 Data collection is accomplished using electronic data logging instruments connected to a company computer network with simm card back-up.

10.11.2 Gathered data is considered as a quality record and is maintained as per SPP 16.1 (Quality Records procedure)

10.11.3 Data is collected as detailed in AMS 2750 with regard to the applicable furnace/quench tank.

10.11.4 Monthly property surveys shall be performed as detailed in AMS 2750.

- 10.11.5 TUS sensor failures will be addressed per the requirements of AMS 2750 and will be documented per an internal CAR as per SPP 14.2 (Internal Corrective Action procedure).
- 10.11.6 TUS results will be reviewed by the Director of Technology or his designee using AMS 2750 as a reference to determine acceptance/rejection.
- 10.11.7 TUS instrumentation shall meet the requirements of AMS 2750.
- 10.11.8 TUS reports shall include all necessary information as stated in AMS 2750.

10.12 Laboratory Furnaces

- 10.12.1 Currently, laboratory furnaces employ the use of a load sensor and will adhere to the requirements of AMS 2750 with regards to SAT & TUS for these furnaces.

10.13 Records

- 10.13.1 All applicable calibration and test records will be available for inspection for not less than 5 years. Record retention shall be performed per SPP 16.1 (Quality Records procedure).

10.14 Inspection Responsibility

- 10.14.1 Universal Stainless and Alloy Products maintains responsibility for the performance of all required tests and conformance to the specified requirements. The Purchaser has right-of-entry to witness any tests or calibrations as long as such witnessing does not hamper production.
- 10.14.2 Any instrument/sensor/test failing to meet the requirements of AMS 2750 or that has exceeded its testing interval (including any applicable permissible extension period shall be taken out of service and an internal CAR will be generated per SPP 14.2 (Internal Corrective Action procedure).
- 10.14.3 In the event of any test failure or out-of-tolerance condition, a documented evaluation will be performed and appropriate corrective action shall be taken and a corresponding test should be performed as evidence of adequate corrective action.
- 10.14.5 When material processing conditions deviate from specification requirements, the affected Purchaser shall be notified.