

<i>Welding Inspection Services</i>		
Prepared By: Gerald Austin	Welder Qualification Testing Quality Assurance Manual	Informational Copy for public view.

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Welding Inspection Services Welder Qualification Testing Quality Assurance Manual

AWS Accredited Test Facility # 20241202

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1. **Introduction-** Welding Inspection Services (WIS) provides welding training and testing services. WIS does not provide engineering services or provide opinions related to the suitability of welding or welders for specific products or companies. Welding Inspection Services is a sole proprietorship business owned and operated by Gerald Austin in Greeneville TN.
2. **Purpose -** The purpose of this quality system is to provide a documented and auditable system for providing welder performance qualification testing. Compliance with this system is intended to provide code compliant, consistent, and repeatable services related to welder testing and certification. This system supports the quality policy as stated in [para 4.0](#).
3. **Scope-** The system applies to welder performance qualification testing and related services performed by Welding inspection Services, 305 Linda Street, Greeneville, TN 37743 at their shop located at 1541 Industrial Rd., Greeneville TN 37745 and outside locations in which the provisions for off-site testing are met and the administration and supervision of the testing is performed by an individual meeting the requirements of this system. This system is designed to comply with the requirements of AWS QC4-89 Standard for Accreditation of Test Facilities and AWS B5.4 Specification for the Qualification of Test Facilities. This system additionally supports categories of testing as indicated below.
 - 3.1. **Code Specific Welder Qualification-** Welder Qualification testing that meets the requirements of industry codes and standards but may or may not be transferable from employer to employer and does not result receiving an "AWS Certified Welder" status as described in AWS QC7-2005.

NOTE : This system does not replace an individual organizations responsibilities to perform work in accordance with documented welding requirements specific to their organization. In some cases, codes of construction/fabrication may require that organization representatives be present during welder performance qualification testing. In addition, testing, qualification, and certification of welders is only a small part of an organization's requirements for compliance with industry codes and standards.
 - 3.2. **AWS Certified Welders.** Individuals wishing to comply with the requirements of the American Welding Society (AWS), QC7 Standard for Certified welders or QC7 Supplements.
 - 3.3. **AWS Sense Performance Qualification** testing may be performed in accordance with this system and the AWS SENSE system allowing individuals completing performance tests that meet the requirements of both the SENSE program and the AWS Certified Welder program.
 - 3.3.1. Note: Instructors may not perform duties as the test supervisor if SENSE testing and AWS Certified Welder testing is performed concurrently.

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4. Quality Policy

POLICY STATEMENT

This policy statement for Welding Inspection Services (WIS) relates to all welder performance qualification testing services performed under this system.

It is the policy of Welding Inspection Services to perform all activities related to welder performance qualification testing in accordance with the requirements of all applicable codes, specifications or contract documents. These include but are not limited to the following:

- **AWS QC4-89** *Standard for Accreditation of Test Facilities for AWS Certified Welder Programs and the AWS.*
- **AWS QC7-93** *and supplements.*
- *Current Editions at time of testing of Industry Recognized codes and standards including but not limited to **AWS D1.1, AWS D1.2, AWS D1.3, ASME Sec IX, and AWS B2.1***
- **AWS SENSE** Program
- **Customer Specific** requirements that stand alone or augment any of the above requirements.
- **ANSI Z49.1** *Safety in Welding, Cutting, and Allied Processes*

The above policy is supported by the following.

- *Written procedures contained in or referenced by this system.*
- *Training of individuals responsible for tasks associated with this system and verification that the requirements of AWS QC4-89 are met for individual qualifications.*
- *Control of materials and equipment in a manner such that quality of testing is not affected by either.*
- *Providing a system for feedback related to the quality of the services provided by this system for both customers and anyone employed or contracted by Welding Inspection Services.*
- *An open-door policy to any individual when there is a reason to believe the policies and procedures within this system are not complied with.*
- *The ability to contact The American Welding Society, accreditation department regarding any concerns related to the operation of this program.*

Welding Inspection Services management bears the final responsibility for setting of organizational standards and of communicating these standards to the entire staff. In recognition of this, management directs that all individuals involved with certified welder testing be familiar with the importance of understanding and complying with this quality assurance program.

This quality manual and its related policies and procedures are approved and supported by the undersigned.

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Policy Statement (Continued)

I the undersigned have read, approved, and support the policy statement for the Welder Qualification Testing system as contained above.

X

Gerald Austin
Owner DBA, Welding Inspection Services

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5. Organization- The Welding Inspection Services organization consists of the following positions and applicable responsibilities. All positions listed are fulfilled by The Owner, Gerald Austin, AWS CWI 07010011. The Owner, who shall be considered the Management Representative and Facility Manager has the authority to make legally binding commitments and statements on behalf of the facility. The Owner, acting as the Facility Manager may designate additional individuals who are technically competent for the positions assigned based upon the requirements of AWS QC4-89 and the requirements stated within this written quality system. The owner will perform the duties for multiple positions to support facility as required by this system and AWS QC4.

5.1. Facility Representative The Owner shall act as the Facility Representative and be responsible for all managerial and technical operations, including direct oversight of testing processes. The Owner will authorize purchases, review and revise documents, and act as the point of contact for AWS and customers."

5.1.1. Specific Duties and Responsibilities – The Facility Representative shall have the authority and responsibility to:

- 5.1.1.1. Direct and implement the requirements of this written quality system, referenced documents, customer requirements, and AWS QC4-89.
- 5.1.1.2. Authorize purchases and designate individual responsibilities for preparation, review, and revision of all purchasing documents.
- 5.1.1.3. Send required documentation to the AWS Qualification and Certification Department when required.
- 5.1.1.4. Act as a liaison between customers and WIS if needed.
- 5.1.1.5. Attend to all technical complaints, comments, and suggestions and
- 5.1.1.6. Approve all quality procedures and the Quality Assurance Manual.
- 5.1.1.7. Assign individual tasks as needed to comply with this system.
- 5.1.1.8. Review and Approve resolutions to Non-Conformance issues.
- 5.1.1.9. Report all complaints and Non-Conformance reports to the Facility Manager.
- 5.1.1.10. Assure that all Test Supervisors/Qualifiers can perform activities as detailed within this written system.
- 5.1.1.11. Designate an individual or individuals to act on their behalf for the above listed duties as needed to maintain operation of the testing facility.

5.2. Quality Manager- The Owner will also act as the Quality Manager, overseeing the quality assurance system, maintaining documentation, and ensuring compliance with AWS QC4-89. The Owner will handle all audits, corrective actions, and revisions to maintain accreditation."

5.2.1. Qualifications- The Quality Manager shall

- 5.2.1.1. Be familiar with the daily operations of the facility.
- 5.2.1.2. Have the capabilities to audit and monitor the implementation of this system.
- 5.2.1.3. Have the resources necessary to edit and control all documents associated with this system based upon input from individuals involved with Welder Qualification Testing.

5.2.2. Duties and Responsibilities – The Quality Manager (QM) shall have the authority and responsibility to:

- 5.2.2.1. Maintain control of all quality system documents including all documents referenced by this system.

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- 5.2.2.2. Act as a point of contact for any complaint related to the operations of this system and report such complaints in a manner that facilitates review by internal and external parties.
- 5.2.2.3. Maintain a log of all NCR's in a manner that allows all test applicants to review NCR's if desired.
- 5.2.2.4. Assure that the Quality Policy as contained within this system is fully supported using procedures contained in or referenced by this system.
- 5.2.2.5. Stop any activities that do not comply with the requirements of this system or referenced by this system.
- 5.2.2.6. Implement modifications and revisions to this system as deemed necessary to support the Quality Policy.
- 5.2.2.7. Assign, schedule and supervise audits as required by this system or as deemed necessary.
- 5.2.2.8. Perform and/or supervise annual audits of this system.
- 5.2.2.9. Maintain all documents and supporting activities as needed to maintain the American Welding Society accreditation as an AWS Accredited Test Facility.

5.3. Technical Manager- The Owner shall perform all duties of the Technical Manager, including maintaining equipment, supervising materials, preparing Welding Procedure Specifications (WPS), and ensuring that testing materials are compliant with industry standards."

5.3.1. Qualifications- The Technical Manager shall:

- 5.3.1.1. Have the qualifications listed in AWS QC4-89 Para. 3.3.
- 5.3.1.2. Have the capabilities to monitor the application of this system during use to assure that all requirements of this system and referenced code or standards are complied with.

5.3.2. Duties and Responsibilities- The Technical Manager (TM) shall have the authority and responsibility to:

- 5.3.2.1. Maintain equipment in a condition that allows for welder qualification testing in accordance with this system.
- 5.3.2.2. Maintain a library with supporting documentation for welder performance qualification testing including industry codes and standards, welding procedure specifications, and related documentation.
- 5.3.2.3. Assist with procurement, receipt inspection, storage, and distribution of base metals, filler metals, gases used for testing.
- 5.3.2.4. Assure that all materials designated as test materials are clearly identified and controlled in accordance with this system
- 5.3.2.5. Review welder testing requirements with potential test candidates to assure that the capabilities, procedures, materials, and equipment exist within the organization to perform the required test.
- 5.3.2.6. Prepare and Qualify Welding Procedure Specifications in accordance with applicable codes and standards as required for testing activities.
- 5.3.2.7. Assist with destructive testing of test specimens in accordance with this system.
- 5.3.2.8. Document any observed or reported conditions that do not comply with this system.
- 5.3.2.9. Provide technical support to other test supervisors as needed to assure all testing is performed in accordance with this system and any referenced code or standard.

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5.4. Test Supervisor/Qualifier- Supervision of all welder performance qualification tests within the scope of this system will be performed by an individual designated as a “Test Supervisor” or Qualifier who also meets the requirements of AWS QC1 as an AWS Certified Welding Inspector. Test supervisors may be the owner or Independent Qualifiers (Subcontractors). The test supervisor(s) shall report to the Technical Manager unless that individual is already assigned as the Technical Manager. The test supervisor may perform all other functions within this system.

5.4.1. Qualifications- All Test Supervisors shall

5.4.1.1. Meet the qualification requirements contained in AWS QC4-89

5.4.1.2. Have the ability to perform testing in accordance with the requirements of this system.

5.4.1.3. Understand the need to perform each test based upon the requirements for that specific test.

5.4.1.4. Perform all duties as a representative of Welding Inspection Services and shall make aware to all parties, any possible conflicts of interest.

5.4.1.5. Demonstrate the ability to read, understand, and apply the requirements of any applicable code or standard utilized during testing.

5.4.1.6. Unless modified by future revisions to AWS QC4, the test supervisor must not be a prior teacher or instructor of the individual being tested.

5.4.2. Duties and Responsibilities- The Test Supervisor(s) shall have the authority and responsibility to:

5.4.2.1. Revise, review, and approve the Welder Testing Application and AWS Certified Welder Applications. This includes verification of the identity of individuals being tested. This may be performed utilizing the AWS Online System and/or paper documentation as required by the situation.

5.4.2.2. Assure that no material shortages exist that may reduce the capability of the facility to perform testing.

5.4.2.3. Assure that no test is administered without the applicable industry code or standard being on hand and available for reference.

5.4.2.4. Assist with procuring materials and services needed to support welder testing.

5.4.2.5. Verify prior to testing that all equipment being used during testing meets the requirements of this system including welding equipment, inspection tools, and test fixtures.

5.4.2.6. Verify that all tests under his/her supervision are performed in a professional manner and in accordance with this system and all referenced codes/standards and customer specifications.

5.4.2.7. Assure that all materials (Base Metals, Filler Metals, and Gases) used during testing meet the requirements of this system including material type, identification, and supporting documentation.

5.4.2.8. Perform visual inspection of in-process and completed welds.

5.4.2.9. Assure that positive identification of all materials is maintained throughout all testing and inspection as required by this system.

5.4.2.10. Maintain their status with the American Welding Society as an AWS CWI including fees, eye exams, and all requirements of AWS QC1.

5.4.2.11. Prepare written reports and maintain records associated with welder performance qualification testing including but not limited to:

5.4.2.11.1. Welder Performance Qualification Records (WPQR)

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- 5.4.2.11.2. Visual inspection reports for tests provided by other sources.
- 5.4.2.11.3. Welder Performance Qualification Test Instructions (WPQTI) or Routing Sheet (When Applicable)
- 5.4.2.12. Evaluate Material Test Reports when required and assign the appropriate Material I.D. Number if not performed prior to testing.
- 5.4.2.13. Inform the Quality Manager of any observed deviations from this system.
- 5.4.3. **Subcontracted Test Supervisors (Independent Qualifiers)** shall meet all requirements stated for "Test Supervisors" and shall perform all tasks in a manner representative of requirements set forth by Welding Inspection Services
- 5.5. **Organizational Chart**

OWNER, Facility Manager/
Management
Representative, Quality
Assurance Manager,
Technical Manager duties
are all performed by
Gerald Austin.

Test
Supervisors/Qualifiers
Gerald Austin CWI#
07010011
Jason Waddell
CWI#15020441
David Porter
CWI#20082521
or Other Independent
Qualifiers Meeting the
Requirements of this
System

5.6. **Training Requirements-** All individuals referred to above shall review this manual, any referenced procedures, and any revisions distributed.

5.7. **Independent Qualifiers** shall receive formal training covering the requirements set forth in this written system. This requirement may be waived for any current CWI with a written endorsement from an organization that has verified by testing, the ability to properly administer welder performance qualification tests. This training shall be conducted by the Owner.

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6. **Document Control-Policy.** All documents related to welder performance qualification testing meet the requirements of any referenced codes/standards, this system, and any customer supplied specification. Records will be maintained in a manner that ensures all details related to a specific welder performance qualification test are available for review for up to 5 years.
- 6.1. **General Requirements-** The documentation required for welder performance qualification testing shall include the following:
- 6.1.1. **Welder Testing Application** - A Welder Testing Application (WTA) application form must be completed prior to commencement of all testing. This application may be in any format that documents information for the individual to be tested and contains the information related to the desired test qualification range requested. The Technical Manager or Test Supervisor shall review the application to ensure that the test requested can be administered using the materials, equipment, and procedures in place at the testing facility. A WTA shall be prepared in accordance with QCP 6.1 and if required, the AWS Certified Welder Application must also be completed. The Test Supervisor shall verify the identification of the individual prior to testing by verifying identity by picture ID. A unique ID number for the welder shall be generated upon completion of the application and shall consist of the welders initials followed by the last four digits of their Social Security Number or Government ID.
- 6.1.1.1. **For AWS Certified Welders** The AWS Welder Application must be completed and submitted to AWS. This application may be completed prior to or immediately after the test. This document may be completed electronically on the AWS Certification Portal.
- 6.1.2. **Welder Performance Qualification Test Instruction (WPQTI)** – For each test to be conducted in accordance with this system, a WPQTI must be prepared by the Technical Manager or Test Supervisor. The WPQTI will be used as a traveler/checklist that provides instructions to both the welder and test supervisor for completing the applicable qualification test assembly. All information needed for each test shall be included in or referenced by the WPQTI. Results shall be recorded within the WPQTI. The WPQTI shall be prepared in accordance with QCP 6.2.
- 6.1.3. **Welder Performance Qualification Records (WPQR)-** For each completed Welder Performance Qualification Test, a WPQR shall be prepared in accordance with the requirements of the applicable code or standard. This document shall only be certified by the actual test supervisor for the specific test. For tests that do not meet the applicable acceptance criteria, a WPQR is not required to be completed. For tests performed in accordance with the AWS Certified Welder Program, the form shall be in accordance with the current AWS Certified Welder program. For other tests, the WPQR shall be in accordance with the applicable code or standard. The WPQR shall document results of any inspection and testing performed (Destructive or Non-Destructive). For AWS Certified Welder Tests, the WPQR may be prepared on the AWS Certification Portal.
- 6.1.4. **Welding Procedure Specifications (WPS)-** All welder performance qualification tests shall require a qualified Welding Procedure Specification (WPS) to be available to the welder. The WPS shall be reviewed for compliance with the variables to be used during testing. This verification is required to be performed by the Test Supervisor. A copy of the WPS shall be submitted with each AWS Certified Welder Application if the WPS has not been previously submitted to AWS. A copy of all WPS's shall be maintained by the Technical Manager and

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may be electronic or paper. WPS's supplied by the welder or a company requesting testing shall be reviewed for applicability to the test variables only.

6.1.5. **Welder Test File-** For each individual person who has tested within the scope of this system, a Welder File will be generated. This file shall contain as a minimum:

- 6.1.5.1. A **Welder Testing Application (WTA) / AWS Certified Welder Application** (if applicable),
- 6.1.5.2. A completed **WPQTI** for each test administered.
- 6.1.5.3. A signed **WPQR** for each test that meets the requirements of the applicable code or standard. This may be the electronic version submitted on the AWS Certification Portal.
- 6.1.5.4. Any **NDE reports** from Subcontractors shall be stored in the welders file when applicable.
- 6.1.5.5. A copy of the WPS used if not provided by Welding Inspection Services
- 6.1.5.6. Any Supplemental information reviewed by the Welder prior to testing that is related to technical or quality aspects of the test. This could include clarifying instructions from employers, written acceptance criteria, or similar information.

This Welder Test File may be electronic or paper and shall be under the control of the Facility Representative.

6.1.6. **Submittals to AWS-** All tests performed for AWS Certified Welder Test shall require the following documentation to be sent to the American Welding Society. This documentation may be submitted using the AWS Certification Portal or as paper documents in accordance with AWS current policies.

6.1.6.1. **AWS Certified Welder Application**

6.1.6.2. **Signed Welder Performance Qualification Record**

6.1.6.3. A copy of the **WPS** unless the WPS has either already been submitted to AWS or is an AWS SWPS.

6.1.6.4. Applicable fees as required by The American Welding Society.

6.1.7. **Supplemental Information-** Additional information may be provided to the candidate as deemed necessary by the Technical Manager or Test Supervisor. This information may be provided verbally but may be provided as a written document. If a written document is included, it shall be included in the Welder Test File.

6.2. **Reference Materials/Library-** The following documents shall be available at the facility and any off-site testing locations. These documents may be printed or electronic.

6.2.1. Welder Qualification Testing Program Quality Assurance Manual and Quality Control Procedures.

6.2.1.1. The Master copy shall be Controlled and stored as an electronic version and be password protected. Any printed copies shall be considered un-controlled copies.

6.2.2. AWS Certified Welder Application

6.2.3. AWS ATF WPQR Form

6.2.4. AWS Maint Form.

6.2.5. AWS QC1, AWS QC-4, AWS QC-7, AWS Supplements

6.2.6. Index of WPS's and supporting PQR's (if applicable)

6.2.7. The applicable code or standard being referenced for the test being performed.

6.3. **Record Retention-** All documents prepared by or completed by WIS will be retained for a period of 5 years and may be stored as paper or electronically. Maintenance and control of documents

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shall be the responsibility of the Facility Representative. Blank forms and documents prepared by other organizations need only be available during testing. Records must be secured during storage to prevent loss.

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7. Material Control- Policy. All materials used for welder performance qualification testing shall be verified to meet the requirements of any referenced codes/standards by review of packaging, marking and/or supporting documentation upon receipt inspection. All materials designated as test materials should be clearly identified as such and controlled in a manner that assures the material type, grade, classification and applicable testing requirements have been met. Once an item has been consumed in a test, traceability is maintained on the WPQTI.

7.1. General Requirements- The Technical Manager, QA Manager or the Test Supervisor shall prepare a Material Requisition Form for base metals and filler metals. The MRF may be of any format provided the information required by this section is documented and provided to the supplier. See [Sample MRF](#).

7.1.1. Each MRF line item will have a unique ID number referred to as a material identification control number (MIC). This number will be used to identify any testing materials as suitable for testing. Like items with different heat/lot numbers that are supplied under the same line item may be referred to by the same MIC number. If applicable, each MTR must be documented as related to the applicable MIC number.

7.1.2. The MRF will be submitted to the Facility Representative or their designee for approval and preparation of a purchase order.

7.1.3. All information specified on the MRF shall be contained in or referenced by the Purchasing documentation.

7.1.4. The MRF will be used as the document for recording receipt inspection of all materials.

7.1.5. After receipt inspection of all materials, the MIC number should be transferred to the material or containing packaging. The MIC numbers will be documented on all WPQTI's prior to start of testing for both filler metals and base metals.

7.1.6. MIC numbers must be written with some type of permanent marker such as a paint marker, sharpie, steel stamp, or etching. Soapstone or chalk is not a suitable for marking or identifying of materials.

7.1.7. Items may be received and stored in bulk without the MIC number included on each item provided they are

7.1.7.1. Stored in a manner that prevents materials not meeting the requirements of this system from being mistaken for part of a conforming group of materials.

7.1.7.2. Positively bundled together and identified with the Lot/Heat Number and MIC number attached to the bundle. All pieces removed for test purposes will be marked with the MIC number upon removal from the bundle/lot/pallet/container.

7.1.8. Base Metals not ordered under this system that are supplied with clearly identified heat numbers/lot numbers and manufacturers material test reports may be assigned a MIC number after review of all supporting documentation.

7.1.9. Filler metals not ordered under this system may be assigned a MIC number if they are contained in unopened packages that meet the requirements of the applicable AWS A5.X specification.

7.2. Base Metals- All materials will be ordered in accordance with the applicable material specification and this system. All MRF's and related purchasing documentation shall require the following.

7.2.1. Reference to the applicable material specification and type/grade.

7.2.2. Any supplemental information or testing required for the material (i.e. Impact Properties, Rolling Direction marking, Surface Finish Etc..)

7.2.3. Qty, Size, and packaging requirements.

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7.2.4. A statement requiring the materials to be supplied with visible heat number identification supported by written MTR's to be available for review upon delivery.

7.2.5. All base metals will have their MIC number recorded on the WPQTI prior to tacking together. MIC numbers on base metals do not have to remain visible after the test is started.

7.3. **Filler Metals-** All filler materials will be ordered in accordance with the applicable material specification and this system.

7.3.1. **Purchasing Information-** All MRF's and subsequent purchase documentation shall contain statements requiring the following as a minimum:

7.3.1.1. "All filler metals shall be packaged in accordance with the listed AWS/ASTM Specification and have supporting manufacturer's certification available upon request in accordance with AWS A5.01, Class F"

7.3.1.2. AWS Classification and Specification

7.3.1.3. Quantity, Size, Length, Weight, Spool Type (As applicable), Package Type, Supplemental Designators (if required)

7.3.2. **Filler Metals not purchased under this system-** See Para 7.6.2

7.4. **Test Assemblies-** Test assemblies consist of materials joined together into one assembly. The following requirements apply:

7.4.1. The MIC's for each material used for a specific test shall be recorded on the applicable WPQTI and shall not be required to remain visible after tacking any assembly together.

7.4.2. The test assembly shall be required to be clearly identified with a unique WPQTI number that corresponds to the supporting WPQTI. This number must remain visible after the test assembly has been tacked together and throughout welding until the assembly has been completely inspected.

7.4.2.1. The WPQTI numbers will be applied by steel stamping with 1/8" min. tall letters/numbers in at least 2 locations and no closer than 1" to the weld area. The preferred location should correspond to the location of bend specimen removal if possible as the WPQTI number is required to be stamped on all bend specimens prior to removal.

7.4.2.1.1. NOTE: Permanent Marker may be used for tests in which coupons from only one welder are being processed and remain in the possession of the test supervisor at all times.

7.4.2.2. The WPQTI number must be unique for each assembly and shall be suffixed with a position indicator or unique number that is associated with the applicable WPTI form.

7.5. **Destructive Test Specimens-** All destructive test specimens shall be identified prior to removal by the unique WPQTI number as required below and para 10.2.3. This shall be performed by steel stamping using letters/numbers at least 1/8" tall except as noted below. Test specimens shall be in control of the person performing the tests from cutting until testing and inspection. Marking shall be the responsibility of the Test Supervisor.

7.5.1. All completed destructive test specimens that meet the requirements for the test performed shall be disposed of in an environmentally friendly manner.

7.5.2. All Completed destructive test specimens that do not meet the requirements for the test performed shall be maintained by the facility for a period of at least 30 days and then disposed of in accordance with the above requirements in Para 7.5.1.

7.6. **Offsite Testing Material Control-** For offsite testing, it shall be the responsibility of the Test Supervisor to verify that the base metals and filler metals are in accordance with the applicable requirements for the test being performed. For material supplied by the customer, the requirements for purchasing/specifying

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contained in this system do not apply. MIC numbers may be applied to offsite materials after approval. The following requirements apply.

7.6.1. **Base Metals** that are clearly identified with material specification, type/grade, and heat number may be used for any welder qualification testing providing the required supporting material test reports can be obtained.

7.6.2. **Filler metals** must be packaged in accordance with the applicable AWS A5.X specification, identified with a heat/lot number on the packaging and the packaging must be un-opened unless the organizations has a quality program in place that documents material control procedures for filler metals.

7.7. **Receipt Inspection Requirements-** All base metals and filler metals ordered shall be receipt inspected for the following.

7.7.1. Proper Quantity, Type, size, condition, and identification

7.7.2. Verification of Heat/Lot numbers marked on materials match provided Material Test Reports except as allowed by [7.3.1.1](#)

7.7.3. Proper Marking/Identification in accordance with the applicable material specification.

7.8. **Non-Conforming materials-** All materials that do not meet the requirements of this system shall be considered Non-Conforming and shall not be identified as suitable for use as test materials. Materials that are not identified with a MIC number shall not be used for welder qualification testing in accordance with this system.

7.9. Material Storage-

7.9.1. All materials will be stored in a manner that will prevent damage or deterioration that could affect the usability of materials.

7.9.2. Materials designated for testing should be controlled and monitored in a manner that prevents them being used as "Training Materials".

7.9.3. Base Metals shall be stored in a manner that prevents contamination from other materials that may be deemed as detrimental.

7.9.4. Shielded Metal Arc Filler metals designated as "Low Hydrogen" shall be:

7.9.4.1. stored in unopened hermetically sealed containers until ready for use or moved to an electrode storage oven maintained from 250 Deg. F to 350 Deg. F. The oven temperature may be verified with Temp Sticks, or temperature measuring device that has been verified as accurate by calibration or boiling water bath. For verification of temperature indicating devices using the boiling water method, the device must read 208 Deg F. +/- 5%. 208 is corrected for Greeneville Tn Altitude.

7.9.4.2. Oven Measure Temperature should be observed at each use.

7.9.4.3. Issued for the weld tests in quantities sufficient for the test and shall not be returned to the electrode storage if exposed to the atmosphere for more than 3 hours. Electrodes stored in portable rod ovens may be returned to storage ovens after use. No partially used electrodes shall be stored in any oven.

7.9.4.4. SMAW Filler metals that are not designated as "Low Hydrogen" shall be stored in accordance with the manufacturer's recommendations.

7.10. **Documentation Requirements-** All Material Requisition forms and supporting material test reports shall be maintained in a file controlled by the Technical Manager for a period of 5 years after those materials are consumed. This file may be electronic or paper.

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Welder Testing Program Material Requisition Form (MRF)

MRF ID

1

Date of Requisition	Requisition Type	Prepared by	Requested Delivery
10/7/2016	Filler Metal	Gerald Austin	

Preferred Vendor

Lincoln Electric

Material Certification Requirements

Statement must appear on Purchase Order/Requisition

All filler metals shall be packaged in accordance with the listed AWS/ASTM Specification and shall be shipped with manufacturer's certification in accordance with AWS A5.01, Class F.

Receipt Inspection Requirements

Inspect as detailed in QCP 10.2. Initial Each Line Item as accepted. Transfer MIC number to Test Reports and Each Container prior to storage.

Comments

Items:

QTY	UOM	MIC #	Description	Spec.	Type/Class	Mfg Part#	Other
50	Lbs	1-1	1/8" E7018 in 10 LB Hermitically Sealed containers	A5.1	E7018	123456	

I certify that all materials have been receipt inspected in accordance with the Quality Assurance Manual requirements for material control.

Sign and Date: _____

This form shall be stored as a paper form and shall serve as a record of receipt inspection of materials

Form-MRF

See Section 7 of the Quality Assurance Manual

Form MRF

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8. **Welder Qualification Testing Policy** – All welder performance qualification testing shall comply with the referenced code/standard, the AWS Certified Welder program (When Applicable) and this system. All steps to be performed during testing shall be documented on the Welder Performance Qualification Test Instruction (WPQTI) in a manner that assures both the welder and test supervisor are aware of all applicable requirements. See [Para 6.1.2](#). The following minimum requirements apply to all tests.
- 8.1. **Review of testing requirements**- The Test Supervisor shall assure that the Welder Testing Application (WTA) has been prepared in accordance with Para 6.1.1. and shall be responsible for assuring he/she has reviewed all requirements for the applicable test including:
- 8.1.1. **Required Qualification Range**. This shall be documented on the welder testing application and supplied by the welder or company requesting testing.
- 8.1.2. **Required Test to achieve qualification range** including
- 8.1.2.1. Base metals including type/grade, dimensions, joint prep, thickness
 - 8.1.2.2. Process and if applicable transfer mode
 - 8.1.2.3. Shielding/Purging requirements
 - 8.1.2.4. Backing
 - 8.1.2.5. Position and progression
 - 8.1.2.6. Filler Metal Requirements
 - 8.1.2.7. Any additional essential variables in the applicable code of construction.
- 8.1.3. **Suitability of WPS** for performing the Welder Performance Qualification Test (NOTE: The WPS does not have to meet the requirements for the desired range of qualification)
- 8.1.4. **Acceptance Criteria** of applicable code/standard.
- 8.1.5. **Any Additional requirements** implemented outside of this system and the applicable code. This includes but is not limited to modified acceptance criteria, positioning requirements, power tool usage and time limits.
- 8.1.6. **Testing Requirements Destructive or Non-Destructive**.
- 8.2. **Review of Safety Rules with the Welder**- All shop safety rules will be reviewed prior to start of the test and the test supervisor shall verify that the weld has all required safety equipment. This may be done verbally or with written rules.
- 8.3. **Review of testing process with the welder**- The welder shall be informed verbally or in writing of all requirements for testing including use of WPS parameters, removing coupon from position, hold/inspection points, inspectors right to stop the test, time limits, use of power tools, acceptance criteria and any other information related to activities controlled by the welder during testing.
- 8.4. **Required Documents prior to starting**-For all welder performance qualification tests the following documents are required to be on hand before commencing the test,
- 8.4.1. Welder testing application, WPS and WPQTI as detailed in section 6.
 - 8.4.2. Any customer supplied supplemental requirements.
 - 8.4.3. Photo Identification of the individual being tested.
- 8.5. **Required Materials** – For all tests, materials meeting the requirements of section 7 must be available and suitable for use.
- 8.6. **Test Assembly Details**- For each test, the test supervisor shall assure that the joint dimensions for the test are available for the welder and meet the requirement of the applicable code/standard. The information may be provided verbally or in writing. A joint that is incorrectly fit-up does not constitute a “failed” test. The test supervisor is responsible for assuring the joint design meets the requirements of the code/standard and WPS.

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- 8.7. Required Inspections-** All tests will have the following inspection points or tasks performed as a minimum and shall be documented on the WPQTI:
- 8.7.1. Proper materials including type/grade, thickness, and diameter for base metals and AWS Classification and Diameter for filler metals.
 - 8.7.2. MIC number for base metals and filler metals recorded on WPQTI.
 - 8.7.3. equipment condition and suitability for use (Calibration)
 - 8.7.4. proper joint details in accordance with the code/standard and WPS
 - 8.7.5. Marking of test assembly with the WPQTI number related to that specific test.
 - 8.7.6. Verification of the test assembly is oriented in the required position.
 - 8.7.7. Root pass inspection including internal surface if accessible.
 - 8.7.8. In-process observation of welding for compliance with WPS requirements. Intermediate passes are not required to be inspected but may be at the discretion of the test supervisor.
 - 8.7.9. Visual inspection of final pass/layer.
 - 8.7.10. Marking and Removal of test assembly from the test position.
 - 8.7.11. If destructive testing is performed see below and para 10.2
 - 8.7.11.1. Verification of review of destructive testing requirements and specimen marking prior to layout and removal of specimens by reference to the applicable code.
 - 8.7.11.2. Visual Inspection of destructive testing samples including verification of WPQTI number.
 - 8.7.12. If NDE is required see below and para. 10.4
 - 8.7.12.1. Verification of NDE requirements clearly identified to the contractor as required by section 9 of this manual.
 - 8.7.12.2. Review of NDE results for compliance with the applicable code.
- 8.8. Off-Site Testing-** Off-site testing may be performed in accordance with this system. The Test supervisor shall be responsible for assuring all requirements of this system are adhered to. All requirements of this system apply except that materials and equipment used shall comply with para 7.6 (Materials) and 11.4 (Equipment).
- 8.9. Documentation-**
- 8.9.1. **Failed Tests-** All tests which do not meet the requirements of the applicable code/standard shall be documented as failed on the WPQTI. No WPQR is required however a welders file shall be generated with all other documents as required.
 - 8.9.2. **Passed Tests-** All tests that meet the requirements of the applicable code/standard shall be documented as passed on the WPQTI. A WPQR will be completed and signed by the test supervisor and if required, an AWS Certified Welder Application shall be completed, signed, and stamped by the test supervisor. A welders file will be generated as described in section 6.
- 8.10. Complaints-** The welder shall be informed that they have a right to file a complaint with the facility management and/or the American Welding Society if they feel any requirement of this system has been violated. Complaints made to facility management shall be recorded on a Non-Conformance Report. Complaints shall be documented and addressed by the Owner.

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9. **Control of Subcontracted Services**-Policy- All individuals or organizations that are subcontracted with performing any tasks within this system shall be informed of all requirements related to the services they are providing and attest to the same. They shall meet the requirements listed below.
- 9.1. **Subcontracted Test Supervision**-All subcontracted Test Supervisors/Qualifiers shall review AWS QC4-89 and Quality Manual. Subcontracted Test Supervisors may also be referred to as Independent Qualifiers.
- 9.1.1. Independent Qualifiers must meet all of the requirements for Test Supervisors as documented in Para. 5.4 and:
- 9.1.1.1. Have a minimum of 5 years of experience related to welder qualification and testing unless
- 9.1.1.1.1. they are working in the presence of a test supervisor that is a full time employee
- 9.1.1.1.2. they are working in the presence of the technical manager.
- 9.1.1.1.3. They can present evidence of having met the requirements for the AWS Welder Performance Qualifier endorsement.
- 9.2. **Subcontracted NDE**- All subcontracted NDE be performed by organizations or individuals working under a documented program meeting the requirements of ASNT TC1A and all inspections shall be performed by individuals that are certified as Level II examiners in the method being performed. All suppliers shall be approved by the Technical Manager.
- 9.2.1. **All subcontracted NDE organizations shall be provided with the following information** for each test assembly to be inspected
- 9.2.1.1. WPQTI Number
- 9.2.1.2. Material Type
- 9.2.1.3. NDE Method to be performed and applicable code/standard
- 9.2.1.4. Requirement stating that all inspections shall be performed or supervised by individuals meeting the requirements for Level II examiners per ASNT TC1A for the method being used and utilizing written procedures that have been approved by an ASNT Level III.
- 9.2.1.5. Required Acceptance Criteria (Code/Standard and Customer Requirements).
- 9.2.1.6. Statement Requiring that the WPQTI number be referenced on all reports and shown on all RT film.

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10. **Testing and Inspection Control-** All testing and inspection of in process and completed welds shall be performed in accordance with the applicable code/standard by individuals who are familiar with the requirements of this system and the applicable code/standard. All inspection and testing will be under the control of the Technical Manager.
- 10.1. **Visual Inspection of Welding-** The Test Supervisor shall review all testing and inspection requirements with the welder prior to starting. The Test Supervisor shall supervise all tests. After the start of the test, Visual inspection shall be performed on all base metal preparations, fitup joints, root passes, and finished welds. All visual inspection shall be performed by the Test Supervisor. Acceptance criteria shall be in accordance with the applicable code/standard however the inspector may stop a test if he/she observes workmanship that does not exhibit the required skills to complete the test. Any test removed from the applicable position without approval of the test supervisor shall be considered failed.
- 10.2. **Destructive Testing-** All destructive testing shall be performed in accordance with the applicable code/standard. Removal, Preparation, and testing may be performed by the Technical Manager, Test Supervisor, or Subcontractor. The individual shall review the applicable requirements prior to removing specimens. The requirements include specimen location, dimensions, testing requirements, and acceptance criteria. **The following general procedure shall be followed.**
- 10.2.1. **Verify** that the test assembly is marked with the WPQTI number noted on the supporting WPQTI.
- 10.2.2. **Review** the applicable code/standard for the following requirements.
- 10.2.2.1. Specimen Location and Type.
 - 10.2.2.2. Specimen Dimensions including allowances for flame cutting edge removal if applicable.
 - 10.2.2.3. Test fixture requirements for the material thickness and type.
 - 10.2.2.4. If applicable, requirements for polishing, etching or mounting.
 - 10.2.2.5. Acceptance Criteria for specimens.
- 10.2.3. **Steel Stamp** the WPQTI number at the locations in which the test specimens will be removed in a manner that assures they are visible and legible throughout the process. Assure Face and Root specimens are identified with F or R in addition to the WPQTI number. Stamps shall be a minimum of 1/8" tall.
- 10.2.3.1. **NOTE:** Permanent Marker may be used for tests in which coupons from only one welder are being processed and remain in the possession of the test supervisor at all times.
- 10.2.4. **Remove specimens** using a cutting method approved by the applicable code.
- 10.2.5. **Prepare Specimens** as allowed by the applicable code or standard.
- 10.2.5.1. **NOTE:** If thermal cutting is performed, some codes may require metal to be removed from areas to be examined prior to bending. Review the applicable code or standard.
- 10.2.6. **Verify Test requirements** stated in the code for bending, break testing or macros as applicable and that the equipment is suitable for testing.
- 10.2.7. **Perform Testing** and document on the WPQTI.
- 10.2.8. **Perform Visual Inspection** as detailed by 10.3
- 10.3. **Visual Inspection of Destructive Test Specimens-** Visual inspection of destructive test specimens shall be performed by the Test Supervisor. All specimens must have the WPQTI number visible. The dimensions of discontinuities will be measured with either a steel scale with

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or without magnification under lighting that is sufficient to resolve 1/32" graduations on a steel scale. If magnification is required by the applicable code, suitable magnification and lighting shall be utilized.

10.4. **NDE Inspection-** All NDE inspection shall be performed by subcontractors as required in section 9. All NDE Results must be signed by an ASNT Level II Examiner to be considered valid. NDE documentation shall be reviewed by the Test Supervisor for content that meets the requirements of the applicable code or standard. This shall include as a minimum:

10.4.1. WPQTI Number identified on the report.

10.4.2. Applicable code/standard referenced for Inspection and Acceptance Criteria

10.4.3. Any additional acceptance criteria other than referenced code/standard.

10.4.4. Reference to NDE contractors NDE procedure.

10.4.5. Name and signature of the ASNT Level II individual performing the inspections.

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11. Welding Equipment Control- All welding equipment under the control of WIS and used for welder qualification testing shall be in a condition suitable for the activities being performed. This shall require validation of the machines abilities and verification or calibration of controls used to verify amperage, voltage and wire feed speed settings. The Technical Manager shall be responsible for assuring all maintenance tasks are performed and shall maintain a record of any repairs, modifications, calibrations, and validations. Machines located at locations other than WIS controlled locations are addressed in Para. 11.4

11.1. Welding Power Supplies shall have the ability to weld within the ranges to be used during testing.

11.1.1. Welding equipment should be validated every 12 mos. by performing welds using high and low ranges in both CC and CV modes. This information should be documented and stored for the life of the equipment. Satisfactory performance of welder qualification testing within the past 6 months shall be considered suitable for validation of welding power sources regardless of ranges used. Validation does not replace the requirements for verification of settings or calibration of gauges when applicable.

11.1.2. Calibration of gauges shall not be used to verify welding equipment is suitable for welding. It will only verify that the gauges or displays are accurate. Machines that do not have calibrated controls or displays may be used provided the parameters set for the weld can be verified using a calibrated ammeter/voltmeter prior to starting welding.

11.1.3. For machines under the control of Welding Inspection Services, they shall be clearly identified as suitable for welding using a label, sticker, or other method. Machines that are not suitable for welder qualification testing shall have all identification related to validation and calibration removed.

11.1.4. All welding machines shall be maintained in accordance with manufacturer's recommendations Maintenance of Welding Equipment- All Welding Equipment shall be maintained in accordance with the manufacturer's suggestions and the following as a minimum.

11.1.4.1. Annually and before each use- Each welding machine shall have the following actions completed annually and recorded on the Welding Equipment Validation Record

11.1.4.2. Inspect all primary and secondary cables for proper insulation, connections and conditions.

11.1.4.3. Using compressed air, clean machine internals of dust and debris.

11.1.4.4. Replace any worn drive rolls, liners, contact tips, electrode holders or other process specific part

11.1.4.5. Perform any manufacturer required maintenance inspections or tasks.

11.2. Welding Equipment Gauges for voltage and amperage shall be verified to be accurate on an annual basis or immediately prior to use and must meet the following requirements. Accuracy and calibration of gauges and displays shall not be considered suitable for verifying the usability of a power source.

11.2.1.1. The display or readout of any voltage or amperage meter must be within 5% of that measured with an instrument calibrated and traceable to an NIST Standard. A calibration sticker should be affixed to the power source with the date of calibration recorded on the sticker or tag if that power source is intended to be utilized for future tests.

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11.2.1.2. A calibrated AMP/Volt meter may be used during setup of testing parameters in all cases where one of the following conditions exist:

11.2.1.2.1. equipment displays do not display correctly or do not exist.

11.2.1.2.2. equipment has no record of having been calibrated.

11.2.1.2.3. the welder requests verification of the settings.

11.2.1.2.4. There is a reason to question the accuracy of the machine settings.

NOTE: Correction charts may be used if the above requirements are not met and must be referred to on the calibration tag or machine.

11.3. **Wire Feeders** that display actual WFS shall be verified annually by measuring the actual amount of wire moved over a fixed period of time of at least 15 seconds. Any deviations greater than 5% shall be noted and a correction chart made available at the wire feeder. A calibration sticker shall be affixed to the Wire Feeder with the date of calibration recorded on the sticker or tag. For wire feeders that do not display actual wire feed speed, verification shall be performed for each test to confirm settings are within WPS limits and calibration stickers/tags shall NOT be affixed. WFS may be measured at time of testing and is not needed if WPS shows setting for amperage and amperage display is found to be accurate.

11.4. **Off-Site Welding Equipment-** Off Site welding equipment that does not fall under the management control of this system shall be checked with a calibrated Amp/Volt meter prior to testing. Settings for making the weld shall be based upon the readings taken by the test supervisor using the calibrated amp/volt meter. WFS may be measured at time of testing and is not needed if WPS shows setting for amperage and amperage display is found to be accurate.

11.5. **Calibrated Amp/Volt Meter-** All portable Amp/Volt meters used for verification of welding equipment settings and displayed readings shall be calibrated annually and shall be traceable to an NIST Standard. Accuracy must be within +/- 5 %

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12. Measuring and Test Equipment Control-Policy- All measuring and test equipment used for final acceptance of welds and mechanical test specimens shall be inspected prior to use and shall be verified as accurate by use of a standard traceable to NIST. Welding Inspection Services controlled NIST Traceable standards used for verification/calibration shall be considered valid for a period of 10 years from the date placed in service. The measuring and test equipment under the scope of this section is limited to equipment used for measuring or inspecting welds and destructive test specimens. It does not apply to precision equipment needed for verification of dimensions requiring a precision of .015" or less. Records shall be as required by AWS QC4 Clause 3.5.3. The following requirements exist:

12.1. Dial or Digital Calipers may be used for any measurement provided the following requirements are met.

12.1.1. Dial Graduations or display resolution is .001" or less.

12.1.2. The caliper may be zeroed for each measurement.

12.1.3. After the caliper is zeroed, opening and closing the caliper 3x does not result in a deviation from 0 greater than .003".

12.1.4. No visible gap exists at the lower jaws when the caliper is in the closed position.

12.1.5. The caliper operates smoothly and has no visible damage. Any caliper that "hangs" during operation shall not be used within this system.

12.1.6. The caliper is verified as accurate by measuring an NIST traceable gage block of .050" and .100" and find to measure both blocks within .005" immediately prior to measurement or..

12.1.7. The Caliper has a unique identifier and is traceable to a calibration record traceable to an NIST standard.

NOTE: Calipers meeting the above requirements may be used to measure secondary standards used to verify other measuring instruments.

12.2. Micrometers- 0 to 1" may be used for any measurement provided the following requirements are met.

12.2.1. The micrometer operates smoothly and has no visible damage. Any micrometer that "hangs" during operation shall not be used within this system.

12.2.2. The faces at the anvil show no visible gap when closed.

12.2.3. There is no movement at the spindle independent of the thimble.

12.2.4. When opened, there is no movement in the axial direction of the spindle or thimble when attempted by hand.

12.2.5. The thimble shows or can be adjusted to show "0" when the anvil and spindle are closed together.

12.2.6. The micrometer is verified as accurate by measuring an NIST traceable gage block of .050" and .100" and find to measure both blocks within .005" immediately prior to measurement or..

12.2.7. The Micrometer has a unique identifier and is traceable to a calibration record traceable to an NIST standard.

12.3. Scales may be used for any measurement provided the following requirements are met.

12.3.1. Graduations must be 1/32" or less

12.3.2. All graduations must be visible

12.3.3. No apparent damage such as dents or deep gouges.

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- 12.3.4. The scale is verified as accurate by measuring against NIST traceable standards to verify dimensions of .125" and .250" or as required for the applicable inspection. The measurement shall be taken at the graduation to be used for the actual measurement. OR
- 12.3.5. The Scale has a unique identifier and is traceable to a calibration record traceable to an NIST standard.
- 12.4. **Tape Measures** may be used for any linear measurement of any dimension specified by codes or standards that are listed as fractional and do not specify tolerances tighter than $\pm 1/16"$ provided to following requirements are met.
- 12.4.1. Graduations must be $1/16"$ or less.
- 12.4.2. The hook end shall be verified by measuring a secondary standard or a suitable hardened steel scale and shall be within $1/32"$ of the known dimension.
- 12.4.3. Scales meeting the requirements of 12.3 may be used as a standard for verification of Tape Measures, Fillet Weld Gauges, undercut gauges, micrometers (0 to 1" Only, Dial or Vernier Calipers
- 12.5. **Weld Gauges** may be used provided they show no visible damage or wear and are verified by the user before use with an NIST traceable Gage Block or have been calibrated and documented using an NIST traceable standard. Gauges that have been verified as accurate with moveable scales shall be verified before use by verifying a reading of 0 with a visually flat surface. Any other weld gauge shall be verified with a flat surface and at least one NIST traceable standard with a dimension within .020" of the intended measurement.
- 12.6. **Guided Bend Test dies** may be used as is provided the dimension meet the requirements of the applicable code or standard. This shall be verified by measurement by the test supervisor using equipment allowed by this system using a measuring device that meets the requirements of this standard.
- 12.7. **Temperature Measurement** may be performed using commercially available temperature indicating crayons from Tempil or temperature measuring device traceable to an NIST standard.
- 12.7.1. **The Electrode Storage Oven** Temperature shall be verified in accordance with 7.9.4.1
- 12.8. **Manufactured Secondary Standards** must have dimensions verified and documented using equipment that has been calibrated and traceable to an NIST standard. Manufactured Secondary standards may be utilized to verify linear measurement devices, weld gauges, inspector capabilities, and as deemed necessary by the Technical Manager.
- 12.9. **Identification of Calibrated Items.** All items that are not verified prior to use shall have an affixed identification with a unique serial number, date verified, and date verification expires. This unique identifier shall be traceable to records that are linked to an NIST traceable standard.

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13. **Audits and Management Review-Policy-** This system shall be audited annually by the Facility Representative or by an external individual or group. The review date shall be clearly indicated on each page of this manual.
- 13.1. **Annual Audit Reporting** shall consist of a summary of audit findings that affect the capabilities of this system to support meeting the requirements of the quality policy and any referenced codes or standards.
- 13.2. **Records of audit findings** shall be maintained by the quality manager for a period of 2 years or until completion of the next American Welding Society Reaccreditation Audit. (Whichever is greater).
- 13.3. **Other Audits may be performed as needed and under the following conditions**
- 13.3.1. Any documented customer complaint related to this system that indicates a violation of any requirements within this system or referenced codes and standards
- 13.3.2. Any revisions to the AWS QC-4 standard that affect the suitability of this system for testing welders as an AWS Accredited Test Facility.
- 13.3.3. As a prequalification for organizations desiring to implement this system into part of their quality system.

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14. **Nonconformance Documenting- Policy** Any condition or activity that does not conform with this system or referenced codes, standards or procedures shall be documented and addressed by the owner. The reported non-conformance (NCR) shall be reviewed and investigated with the desired outcome of implementing preventative measures to improve the quality system and preventing recurrence of any non-conformance items. The non-conformance shall be considered a tool for improvement and not a punitive measure.
- 14.1. **Responsibilities-** All individuals involved with this system shall have the responsibility to document and report any observed non-conformance issues. In addition, individuals being tested shall be informed of their option to report any conditions that they may consider a non-conformance.
- 14.1.1. **Quality Manager Responsibilities-** shall be responsible for modification of this system as deemed necessary after resolution of any non-conforming situation. The Quality Manager shall maintain an index of all NCR's.
- 14.1.2. **Facility and Technical Managers-** shall have the responsibility for modification of practices as deemed necessary after notification and/or resolution of any non-conforming situation.
- 14.1.3. **Test Supervisor-** shall be responsible for modification of practices as deemed necessary after notification and/or resolution of any non-conforming situation and shall be responsible for informing all individuals being tested of their rights to report a suspected non-conformance.
- 14.1.4. **Reporting Person-** shall have the responsibility to provide all information related to the observed condition and, if a WIS representative, shall sign for review of the NCR documented corrective action.
- 14.1.5. **Facility/Management Representative-** shall have overall approval authority for disposition of NCR's.
- 14.2. **Procedure-** The following steps shall be performed when a non-conformance is observed or suspected.
- 14.2.1. The individual observing the condition shall inform any involved parties of the possibility that requirements of this system are not being adhered to. If possible, a review of the requirements and correction of the activity in process shall be performed immediately.
- 14.2.2. A Non Conformance Report (NCR) shall be prepared to document the condition. This includes conditions that are immediately corrected.
- 14.2.3. The NCR may be of any format but must contain the following information.
- 14.2.3.1. A **Unique Identification number**. This number may be a sequentially generated number from an electronic source or a number of the format ddmmyyyyhh representing the day, month, year, and hour the report was started. A sequential number shall be assigned quality manager.
- 14.2.3.2. The **name of the individual** reporting the condition.
- 14.2.3.3. The **date** of the report
- 14.2.3.4. **NCR Type**
- 14.2.3.4.1. **System** (The system is observed to not be supporting the overall quality policy but all procedures are being followed.)
- 14.2.3.4.2. **Material**-Material is not controlled in accordance with the system

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- 14.2.3.4.3. **Test**-A specific Welder Performance qualification test is in accordance with this documented system.
- 14.2.3.4.4. **Procedure**-A specific procedure is not being followed and is not related to a specific test or material.
- 14.2.3.4.5. **Other**- A condition other than described above.
- 14.2.3.5. **WPQTI Number**-The WPQTI number is required if the NCR Type is "Test"
- 14.2.3.6. **Quality System Paragraph**- The applicable paragraph from this system or any referenced code or standard shall be recorded.
- 14.2.3.7. **MIC Number**- The MIC number shall be recorded if the NCR Type is "Material".
- 14.2.3.8. **Responsible Party**- The individual documented within this system to have responsibility for the referenced requirement(s).
- 14.2.3.9. **Description of Non-Conformance**- A description of the condition that exists and reference to the expected condition /requirement.
- 14.2.3.10. **Immediate Corrective Action**- A description of what was done immediately upon discovery or observation of the Non-Conformance.
- 14.2.3.11. **Facility Manager/Technical Manager Comments**- The Facility/Technical Manager shall review the condition and make comments based upon his/her recommendations
- 14.2.3.12. **Quality Manager Review Comments**- The Quality Manager shall review the condition and make comments based upon his/her recommendations.
- 14.2.3.13. **Permanent Corrective Action**- The Quality Manager, Facility Manager, Test Supervisor (if related to NCR Actions) shall discuss a corrective action and record it in writing. In situations where no actual non-conformance exists that affects the ability for the system to support the quality policy, the Facility Representative may identify the NCR as not requiring any action.
- 14.2.3.14. **Facility Representative/Management Representative Comments**- The Facility Manager/Management Representative shall record any comments with an emphasis on documenting any suggested follow up activities related to this NCR.
- 14.2.3.15. **Current Status**- The Quality Manager shall maintain a master copy of the original NCR and Record the applicable status on the master form. After the corrective action has been implemented, the status shall be recorded as COMPLETED.
- 14.2.4. **Signatures**- All parties involved with the NCR shall sign and record their name and position/title. These include but are not limited to all individuals referenced above.
- 14.3. **Format**- The form may be electronic or paper based but must contain the above content. A Sample format is shown below.

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Welder Qualification Testing Quality System Non-Conformance Report (NCR)

ID	Reported BY	Date of NCR	NCR Type (Sys,Mat,Test,Proc.)	Other Description
1	Who Reported it	10/8/16	What is the issue related to	Additional Info
WPQTI Number	Quality System Para	MICNumber	Responsible Party	
If related to specific test	Applicable Par.	If Material	Who was responsible for Compliance	
Description of Non Conformance				
A description of the condition that exists and reference to the expected condition /requirement .				
Immediate Corrective Action				
A description of what was done immediately upon discovery or observation of the Non-Conformance. This could include stopping a test, informing the individual, changing material or returning it to the vendor etc...				
Facility Manager/Technical Manager Review Comments				
The Facility Manager shall review the condition and make comments based upon his/her recommendations.				
Quality Manager Review Comments				
The Quality Manager shall review the condition and make comments based upon his/her recommendations.				
Permanent Corrective Action				
The corrective action that was taken to preven recurrence.				
Facility Representative/Managment Representative Comments				
The Facility Rep/Manager rep shall record any comments related to the disposition. This should refer to their approval or dissaproval				
Current Status				
Current Status/Disposition				

NCR Corrective Action Reviewed/Approved

Reported By _____ Date _____ Facility/Technical Manager _____ Date _____

Quality Mgr _____ Date _____ Management Representative _____ Date _____

Approval

See Quality Manual Section 14

Form NCR

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