

QCP 10.4

Control of Welder Qualification Test Assemblies

Rev: 0

- 1.0 Purpose. The purpose of this procedure is to provide requirements for maintaining positive identification and control of Welder Qualification Test Assemblies to assure all requirements of the WSCC-WTP Quality System are met.
- 2.0 **Scope** All requirements contained within this procedure will apply to all test assemblies from the time two or more pieces are tacked together, during actual welding, and until the assembly is completed and either mechanical testing performed or the assembly is sent to another organization for inspection (NDE). Test Assemblies returned from other organizations after testing shall also be controlled as outlined in this procedure.

3.0 Definitions

- 3.1 <u>WSCC-WTP Database</u> is a database application used for recording information related to individuals tested within the scope of the WSCC-WTP.
- 3.2 <u>WPQTI(Welder Performance Qualification Test Instruction)</u>. The WPQTI provides the individual with a step by step procedure detailing all operations related to the Welder Performance Qualification Test (WPQT) in accordance with the applicable code, this system, and the Welder Testing Order.
- 3.3 <u>WPQTI/WTO Number</u>-The WPQTI number is a unique number that is generated for each specific Welder Testing Order (WTO). That numbershall be the index for all documents related to that specific WTO and WPQT. The VPQTI numbers shall serve as the method for identifying the relationship of a specific person to a specific WPQT. All documentation shall be identified by the WPQTI/WTO Number. All Test assemblies shall be marked with the applicable WPQTI number.
- 3.4 <u>Test Assembly</u>- The Test Assembly consists of 2 or more pieces tacked together to be welded for the purpose of Welder Performance Qualification Testing. The Test Assembly shall not be confused with the term Test Specimens.
- 3.5 <u>Test Specimens</u>- Test Specimens are individual samples removed from a Test Assembly after completion of welding. These specimens are removed to allow for additional testing and inspection to be performed.

4.0 Responsibilities

4.1 General The Test Supervisor shall be responsible for implementing the requirements of this

procedure. 2 **Specific .**

4.2.1 The **Administrative Assistant** shall be responsible for:

4.2.1.1 storing the completed documentation in accordance with this system

- 4.2.2 The Technical Manager and/or Test Supervisor shall be responsible for
 - 4.2.2.1 monitoring compliance with this procedure on a daily basis.
 - 4.2.2.2 assuring that no testing is performed on assemblies not clearly identified with WPQTI numbers.

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Control of Welder Qualification Test Assemblies Rev: 0 4.2.2.3 assuring that no test assemblies are transferred to NDE contractors without instructions for handling of assemblies and documentation NT2e requirements. 4.2.2.4 assuring that no test assemblies are removed from the test location/position during testing without the observation and direct supervision of the test supervisor. 4.2.3 The **Test Supervisor** shall be responsible for: 4.2.3.1 assuring that all tests performed under his/her supervision an controlled in accordance with this system. 4.2.3.2 verifying that all test assemblies are marked and controlled in accordance with this system. 4.2.3.3 performing any tasks associated with this system as needed to assure compliance. 4.2.3.4 identifying any test assembly removed from the test position without his/her knowledge being identified as an invalid test. 4.2.3.5 performing receipt inspection of all returned test assemblies and supporting documentation from NDE contractors. 4.2.3.6 maintaining control of a completed test assemblies after completion of welding and up to removal of test specimens. The Quality Assurance Manager shall be responsible for reviewing the 4.2.4 effectiveness of this procedure for supporting the policies stated within the WSCC-WTP Quality System Manual. 5.0 Procedure- The following procedure shall be followed for identifying and handling all Test Assemblies 5.1 All test assemblies will be tacked in accordance with the WPQTI and supporting WPS. After

- tacking is completed and found satisfactory, the test assembly shall be marked with WPQTI number.
- 5.2 All assemblies shall be marked in accordance with appendix 1
- 5.3 The test assembly shall be attached to the test fixture by tack welding and the orientation ventied to be in accordance with the WPQTI. The test fixture shall be marked to indicate the position. Unless specified on the WPQTI, there is no restriction for relocating the test assembly in the vertical or horizontal position by moving the test jig however the orientation of the weld shall not be changed.

5.4 The test supervisor shall randomly monitor the in-progress welding to verify the test assembly is not removed from the proper orientation. If the test assembly is observed being removed, the test shall be considered invalid.



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- 5.5 upon completion of welding and inspection , the test supervisor shall verify that all identification is visible and legible.
- 5.6 if the test assembly is to be tested destructively, then no further action is required. The WPQTI number shall be used as a reference to that specific test assembly for all future handling.
- 5.7 if the test assembly is non-destructively tested in-house or by another organization after testing it shall be altered in a manner that prevents it from being used again as a completed weld. This can be accomplished by any of the following methods.
 - 5.7.1 Removing the completed weld by sawing or thermal cutting
 - 5.7.2 Cutting the assembly transverse to the weld.
 - 5.7.3 cutting a hole within 1" of the weld centerline
- 6.0 **Document Storage-** All Forms and Documents shall be stored and maintained as indicated below.
 - 6.1 All Completed WPQTI's shall be stored as required by QCP 9.

7.0 References-None

- 8.0 Non-Conformances
 - 8.1 Practices that are not in accordance with this procedure shall be documented as Non-Conforming in accordance with QCP 14.5.

9.0 Audit Requirements

- 9.1 This procedure shall be audited annually by the WSCC-WTP Quality Manager and his/her designees.
- 9.2 This procedure shall be audited adminibility by the Industry Advisory Board. This audit shall be performed separate and apart from the audits required by para 9.1.



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- Appendix 1- Marking Requirements. All Test assemblies shall be marked with the WPQTI 10.0 number as indicated below.
 - 10.1 Acceptable Methods of marking WPQTI numbers are Steel Stamping or Mechanical Etching. Soapstone/Chalk/Paint marking is not an acceptable method for marking Weld **Qualifiction Test Assemblies.**
 - All marks shall be legible and a minimum of ½" in height and located no closer the 10.2 the weld joint.
- All WPQTI numbers shall be prefixed with the "#"character as a prefix to the WP 10.3 n coupon inples shown in the sh number.

 - WPQTI Numbers shall be located similar to the samples shown below



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10.5.1 Butt Joint Plate Assemblies

All WPQTI numbers shall be located on each side of butt joints and shall be on each plate. Numbers shall be located on at least one end of each coupon (plate) and shall be no farther than ³/₄" from the plate edge.





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10.5.2 Tee Joint Plate Assemblies

All WPQTI numbers shall be located on the side opposite the fillet weld and oriented to allow the entire to number to be visible on each fillet weld Macro and fillet Weld Break Specimen.





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10.5.3 *Pipe Assemblies*

AUTHORIZED All WPQTI numbers shall be located at the end of each coupon. If possible, the number shall be perpendicular to the pipe centerline. For Smaller diameter pipes ($<2^{"}$ OD), the numbers may be oriented as required.

