

Contractor On-Site Welding Program Checklist (Construction)

(The following requirements will apply as specified by the design documents)

(1) Quality Manual/Plan

- Control of Special Processes, such as welding, are addressed in the quality manual/plan.

(2) Welding Related Personnel Requirements

Adequate separation for personnel with reporting responsibilities exist for welding program oversight

QC inspector(s) possess the following attributes to identify weld quality problems, including subcontracted activities.

- Independent authority
- Responsibility
- Documented qualifications
- Eye examination records on file
- The necessary weld inspection gauges
- Adequate knowledge of acceptance criteria and inspection techniques
- Correctly certified/qualified for NDE activities
 - Through SNT-TC-1A for ASME including VT
 - Through SNT-TC-1A for AWS for all NDE other than VT

(3) Quality Documents and Procedure Control

Document control tracking system in place

(4) Quality Records

Quality related documents stored and maintained in accordance with written procedures

(5) Weld Inspection

Weld inspections documented for verification

Inspection criteria identified in the inspection reports

(6) Nondestructive Examinations

NDE (VT for ASME, UT, RT, MT, PT, etc.) activities are performed as required

- Nondestructive Examination Reports

(7) Heat Treat

Heat Treat activities performed as required

- Heat Treat procedures
- Heat Treat records

(8) Non-Conformances

Non-Conformance activities are performed as required

- Non-Conformance procedures
- Non-Conformance records

(9) Material Control

Written procedure is in place for receiving and inspection of materials

Written procedure for material control/tracking is in place to assure that the correct material is used for its intended application

Material Test Report (MTR)/Certificates of Conformance (C of C) are available for review

(10) Welding Procedures

Appropriate welding procedure specifications (WPS) are in place for the work to be performed

Appropriate procedure qualification records (PQR) supporting the WPS are in place

A system is in place to ensure welding procedures are implemented

WPSs (pre-qualified or qualified) include all necessary variables

(11) Filler Material

Receiving and inspection is performed on filler material to assure the ordered filler material agrees with purchase order

There is controlled access to filler material storage and/or disbursement area

Qualifications of the welder(s) for using a particular filler material is verified before issuance

Filler materials are stored in accordance with the manufacturer/code recommendations

Welder/welding operator(s) control their filler material

Filler materials can be tracked by heat/lot number to a particular weldment

(12) Welders Qualifications

Welders are appropriately qualified as follows:

- Welders and welding operators are qualified to the appropriate code using an appropriate WPS
- Performance records are available for review
- Welder performance qualification records are approved by appropriate personnel
- Continued performance records of each welder are documented
- Each welder/welding operator has a unique identification symbol and can be tracked to a particular weldment

(13) Calibration

A schedule for calibration of each piece of test equipment for verifying welding equipment is in place, as applicable

The functionality of welding equipment is periodically verified

(14) Quality Audits

Periodic assessments are performed on subcontractors, as applicable

(15) Availability and Use of Welding Codes/Requirements

The necessary welding codes/requirements are readily available to and understood by inspection personnel

- Examples include:
 - AWS D1.1; Structural Welding Code—Steel
 - AWS D1.2; Structural Welding Code—Aluminum
 - AWS D1.6; Structural Welding Code—Stainless Steel
 - ASME IX Welding & Brazing Qualifications
 - ASME B31 Codes
- There is a process in place to ensure the correct welding code(s) are being implemented