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| (1) Item ID | | | | | (2)Work Order/Job # | | | | | | | | (3)Date: | | | |  | | | | | | |
| (4)Code (Acceptance Criteria) | | | | | (5)Welding Procedure Specification (WPS) # | | | | | | | | | | (6)Base Material Specification/Type | | | | | | | | |
| (7)Location/Supplier | | (8)Welder’s Signature | | | | | | | | (9)Base Metal Heat # | | | | | | | | (10)Filler Metal Heat/Lot # | | | | | |
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| (11)Joint Identification | (12) Welder Identification | | (13) Initial Joint Inspection | (14) WPS Verification | | (15) Welder Qualification | (16) Material Control | (17) Final Weld Inspection | (17a) Weld Size/Profile | (17b) Weld Location | (17c) Cracks | (17d) Penetration | | (17e) Excess Porosity | | (17f) Excessive Under Cut | (17g) Weld Reinforcement | (17h) Root | (17i) Fusion | (17j) Arc Strikes | (17k) Weld Spacing | (17l) Undercut | (18) Accept |
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✓=Pre-Weld Attributes Verified (13-16)

X= Reject (17a—17l)

(20)Inspector Name/Signature Date

Qualification Former Certified Welding Inspector

Certified Welding Inspector

Senior Certified Welding Inspector

American Welding Society, Option 3

X= Accept (18)

(19)Additional Comments:

| **Instruction Sheet** | |
| --- | --- |
| **Block Number** | **Explanation** |
| 1 | Enter the drawing/piece/part/copy number. |
| 2 | Enter the Work Order or Job number. |
| 3 | Date of Inspection. If more than one date is required specify all dates. |
| 4 | Identify the acceptance criteria (e.g., code) to which inspection occurred. If more than one identify all applicable codes and specify which code applies to each joint in either block 11 or block 18. |
| 5 | Enter the WPS number. If more than one Welding Procedure Specifications (WPS) than identify all applicable WPS and specify which WPS applies to each joint in either block 11 or block 18. |
| 6 | Identify the base material type/grade/group number. Different base metals must be traceable to the weld joint in which it was used. |
| 7 | Enter company name. |
| 8 | All welders that perform welds on the product must sign. |
| 9 | Enter the base material heat number. Different base metal heat numbers must be traceable to the weld joint in which it was used. |
| 10 | Enter the filler material heat or lot number. Different filler material heat or lot numbers must be traceable to the weld joint in which it was used. If autogenously welded then “NA.” |
| 11 | Identify each joint being welded (piece numbers, view, sheet, etc.). If space is needed duplicate page 1 of this document. If only one welder then “All” may be placed in the block one time to represent all joints. |
| 12 | Enter the welder’s unique identification symbol for that weld joint (e.g., initials, symbol, etc.). |
| 13 | Check this block **if** an initial joint inspection occurs. (e.g., thickness, joint preparation, root opening, groove design, etc.). |
| 14 | Check this block **if** the welding equipment parameters have been verified to match the WPS. |
| 15 | Check this block **if** the welder’s qualifications were verified before welding begins. |
| 16 | Check this block **if** the work area has been verified to have been kept uncluttered so no foreign material (base metal or filler metal) could be introduced. |
| 17 | If any of the following inspection criteria (17a—17l) has an “X” placed in the attribute block the weld is rejected for that reason. If marked with “X” repair is needed. Repaired welds shall meet applicable code requirements. If a different weld process from the original is used for the repair, approval must be obtained from Pantex. Repaired weld must meet the original inspection criteria. |
| 17a | Refer to the design drawing for weld size and appropriate code for weld profile acceptance criteria. |
| 17b | The design drawing specifies weld location. |
| 17c | Cracks are never allowed. |
| 17d | The design drawing will specify the amount of penetration. If no number is present beside the weld symbol, it is assumed to be full penetration. (reference AWS A2.4) |
| 17e | Refer to the appropriate welding code for acceptance criteria. |
| 17f | Refer to the appropriate welding code for acceptance criteria. |
| 17g | (Groove welds) Refer to the appropriate welding code for acceptance criteria. |
| 17h | If possible, inspect the root pass of groove welds for fusion, reinforcement, penetration, etc. |
| 17i | There shall be a smooth transition from weld metal to base metal. There shall be no sharp transitions or overlapping weld metal. |
| 17j | Refer to the appropriate section of each applicable code to determine what is permissible. The code may require and describe arc strike repairs and therefore may not require engineering approval. |
| 17k | Weld spacing primarily refers to intermittent welds and shall agree with design requirements. AWS 2.4 implies that welding should start in the middle with the ends tied in; the ends may have different length of weld segments or shorter spacing. |
| 17l | Refer to the appropriate welding code for acceptance criteria. |
| 18 | Place an X in this block for all accepted welds |
| 19 | This space is provided for clarifying information if needed. |
| 20 | Inspector’s name, date, and qualification (1 of 4). |