

Welding Quality Checklist

Pre-Weld Preparation

Checks related to material preparation, joint design, and cleaning prior to welding.

Joint Type Verified (e.g., Butt, Lap, Fillet)

- Butt
- Lap
- Fillet
- T-Joint
- Corner
- Other

Material Cleanliness (e.g., Rust, Oil, Scale)

- Clean
- Slight Contamination
- Significant Contamination - Requires Cleaning


Joint Gap (mm)

Material Thickness (mm)

Notes on Joint Preparation

Write something...

Photo of Joint Before Welding (Optional)

 Upload File

Root Pass Preparation (if applicable)

- Backing Bar Used
- Hot Pass Used
- No Root Pass Prep Required

Welding Procedure Adherence

Verification of compliance with specified welding procedures (WPS).

WPS Number Verified?

- Yes
- No
- Not Applicable

Welding Process Verified (e.g., GMAW, GTAW, SMAW)?

- Yes, Matches WPS
- No, Deviation Required (Documented)
- Not Applicable

Welding Current (Amps) - Verified?

Enter a number...

Welding Voltage (Volts) - Verified?

Enter a number...

Travel Speed (inches/minute) - Verified?

Enter a number...

Shielding Gas Type Verified?

- Yes, Matches WPS
- No, Deviation Required (Documented)
- Not Applicable

Any Deviations from WPS? If Yes, Detail Below:

Write something...

Upload WPS Document (for reference)

 Upload File

Weld Appearance & Profile

Assessment of weld bead characteristics and surface quality.

Weld Bead Profile

- Convex
- Concave
- Flat
- Undercut
- Other (Specify in LONG_TEXT)

Details regarding profile (if 'Other' selected)

Write something...

Undercut Present?

- Yes
- No

Undercut Description (if Yes)

Write something...

Porosity Observed?

- Yes
- No

Porosity Description (if Yes)

Write something...

Slag Inclusion Present?

Yes

No

Slag Inclusion Description (if Yes)

Write something...

Weld Bead Width (mm)

Enter a number...

Weld Appearance Photos

 Upload File

Dimensional Accuracy

Checks related to weld size, throat thickness, and alignment to design specifications.

Weld Size (mm/inches)

Enter a number...

Throat Thickness (mm/inches)

Enter a number...

Root Opening (mm/inches)

Enter a number...

Weld Offset (mm/inches)

Enter a number...

Actual Weld Length (mm/inches) - Compared to Design

Enter a number...

Alignment Verification (Vertical/Horizontal/Angular)

- Vertical
- Horizontal
- Angular

Angular Misalignment (degrees) - If Applicable

Enter a number...

Joint Fit-Up

- Correct
- Minor Adjustment Needed
- Major Adjustment Needed

Notes/Discrepancies related to Dimensional Accuracy

Write something...

Non-Destructive Testing (NDT)

Results and documentation of NDT methods applied (e.g., visual inspection, dye penetrant, radiography, ultrasonic).

Visual Inspection Method

- ASME Section V
- AWS D1.1
- Company Standard
- Other (Specify in LONG_TEXT)

Visual Inspection Notes/Observations

Write something...

Dye Penetrant Inspection Performed?

- Yes
- No

Dye Penetrant Penetration Time (seconds)

Enter a number...

Dye Penetrant Development Time (minutes)

Enter a number...

Radiographic Testing Performed?

Yes

No

Radiography Images (if performed)

 Upload File

Radiography Interpretation Notes (if performed)

Write something...

Ultrasonic Testing Performed?

Yes

No

Ultrasonic Scan Angle (degrees)

Enter a number...

Destructive Testing (DT) (if applicable)

Results and documentation of DT methods applied (e.g., tensile testing, bend testing).

DT Method Performed

- Tensile Test
- Bend Test (Room Temperature)
- Bend Test (Heat Treated)
- Impact Test
- Macroetch
- Other (Specify in LONG_TEXT)

DT Method Specification (e.g., ASTM, AWS)

Write something...

Tensile Strength (MPa/psi)

Enter a number...

Elongation (%)

Enter a number...

Bend Angle (degrees) - Room Temperature

Enter a number...

Bend Angle (degrees) - Heat Treated

Enter a number...

Macroscopic Examination Results (grain size, porosity, etc.)

Write something...

DT Report/Certificate

 Upload File

Deviations from Specified DT Procedure and Explanation

Write something...

Welder Qualification & Documentation

Verification of welder certification and documentation of welding performed.

Welder ID Number

Enter a number...

Welding Process Certified For

- SMAW (Stick)
- GMAW (MIG)
- GTAW (TIG)
- FCAW (Flux-Cored)
- Other (Specify)

Specific Materials Certified For (e.g., Steel Grade)

Write something...

Date of Certification Expiration

Enter date...

Upload Welder Certification Document

 Upload File

Welder Signature

Write something...

Any Restrictions/Limitations on Certification

Write something...

Post-Weld Treatment (if applicable)

Checks related to post-weld heat treatment, stress relieving, or other processes.

Type of Post-Weld Treatment Applied

- Stress Relief
- Solution Annealing
- Heat Treatment (Specify)
- None

Maximum Temperature (°C/°F)

Enter a number...

Soaking Time (hours)

Enter a number...

Cooling Rate (°C/°F per hour)

Enter a number...

Detailed Procedure Description

Write something...

Heat Treatment Chart/Record

 Upload File

Heat Treatment Completion Date

Enter date...

Furnace ID

Material Traceability & Documentation

Verification of material certifications and records related to weld materials.

Material Certification Available?

Yes

No

Upload Material Certification (e.g., Mill Certificate)

 Upload File

Material Specification Number

Write something...

Batch/Lot Number

Enter a number...

Supplier Name

Write something...

Date of Material Receipt

Enter date...

Notes on Material Traceability (if any)

Write something...