

Welding Inspection and Quality Control Checksheet

Project Name: Checksheets.com	Project Code: CHKSHEETS1
Equipment Tag: -----	System: -----
Discipline: Structural	Location: -----
Contractor: -----	Date: 22/01/2026

1. Pre-Weld Preparation

Verification of welding preparation and setup requirements

#	Activity / Check Item	Response
1	Verify welding procedure specification (WPS) is approved and available <i>WPS must be project-approved and match weld requirements</i> Ref: AWS D1.1	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
2	Confirm welder qualification and certification validity <i>Check welder identification and qualification certificate</i> Ref: AWS D1.1	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
3	Verify base material traceability and specifications <i>Confirm material certificates match design requirements</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
4	Check weld joint preparation and fit-up <i>Verify bevel angle, root gap, and alignment per WPS</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
5	Confirm cleanliness of weld joint area <i>Joint must be free from oil, paint, rust, and contaminants</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
6	Verify welding consumables type and storage condition <i>Check electrode/wire specification and storage requirements</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail

2. Welding Execution

Monitoring of welding process and parameters

#	Activity / Check Item	Response
7	Verify welding parameters comply with approved WPS <i>Check amperage, voltage, travel speed, and preheat temperature</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
8	Confirm preheat and interpass temperature maintained <i>Record actual temperatures if specified in WPS</i> Ref: WPS Requirements	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
9	Verify weld sequence and technique per procedure <i>Check progression direction and layer sequence</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
10	Document any deviations or repairs during welding <i>Record any process variations or corrective actions</i>	

3. Visual Examination

Visual inspection of completed welds per AWS standards

#	Activity / Check Item	Response
11	Check weld profile and reinforcement within acceptable limits <i>Measure weld size and reinforcement height</i> Ref: AWS D1.1 Table 6.1	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
12	Inspect for cracks in weld and heat affected zone <i>Use magnifying glass if necessary - zero tolerance for cracks</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
13	Check for undercut depth and length <i>Undercut shall not exceed 1 mm depth for most applications</i> Ref: AWS D1.1	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
14	Verify absence of overlap and incomplete fusion <i>Check weld toes for proper fusion to base material</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
15	Inspect for porosity and slag inclusions <i>Surface porosity must be within acceptable limits</i> Ref: AWS D1.1	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
16	Check arc strikes and spatter removal <i>All arc strikes ground smooth and spatter removed</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
17	Verify weld start/stop locations acceptable <i>Check crater fill and start/stop quality</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail

4. Non-Destructive Testing (NDT)

NDT requirements and acceptance verification

#	Activity / Check Item	Response
18	Confirm NDT method and extent per project specifications <i>Select primary NDT method required</i>	
19	Verify NDT technician certification and qualification <i>Check Level II minimum certification for interpretation</i> Ref: SNT-TC-1A / ISO 9712	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
20	Confirm NDT procedure approved and applicable <i>NDT procedure must be project-approved</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
21	Verify surface preparation adequate for NDT method <i>Surface condition must meet NDT procedure requirements</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
22	Document NDT results and acceptance criteria met <i>All indications evaluated per acceptance standards</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail
23	Record NDT report number and filing location <i>Enter NDT report reference number</i>	

5. Post-Weld Heat Treatment (PWHT)

PWHT requirements and verification where applicable

#	Activity / Check Item	Response
24	Verify if PWHT is required per project specifications <i>Check material specifications and code requirements</i>	
25	Confirm PWHT procedure approved and followed <i>Only applicable if PWHT required</i>	<input type="checkbox"/> Pass <input type="checkbox"/> N/A <input type="checkbox"/> Fail

26	Verify heating/cooling rates and hold temperatures recorded <i>Check temperature charts and thermocouple locations</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Pass	N/A	Fail
27	Confirm post-PWHT hardness testing completed if required <i>Hardness verification per code requirements</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Pass	N/A	Fail

6. Final Documentation and Sign-off

Completion of welding documentation and acceptance

#	Activity / Check Item	Response		
28	All welding defects identified and corrected <i>All non-conformances resolved and re-inspected</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Pass	N/A	Fail
29	Weld location drawings marked up with actual weld locations <i>As-built drawings updated with weld identification</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Pass	N/A	Fail
30	Welding summary report completed <i>Summary includes all welders, procedures, and test results</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		Pass	N/A	Fail
31	Construction QC inspector signature and date <i>QC inspector final acceptance signature required</i>			

Prepared By:

Reviewed By:

Approved By:

Date: _____ Sign: _____

Date: _____ Sign: _____

Date: _____ Sign: _____