



Steel Fabrication Quality Control Checklist

Material Receipt and Inspection

Verification of incoming steel materials against specifications and documentation.

Date of Material Receipt

Material Order Number

Supplier Name

Material Type (e.g., A36, A572)

☐

A36

☐

A572 Grade 50

☐

A572 Grade 50 HPS 70W

☐

Other (Specify)

Material Thickness (inches)

Enter a number...

Material Width (inches)

Enter a number...

Material Condition (e.g., Normalized, Hot Rolled)

- ☐ Hot Rolled
- ☐ Normalized
- ☐ Cold Drawn
- ☐ Other (Specify)

Notes/Discrepancies Observed

Write something...

Material Certification Received?

- ☐ Yes
- ☐ No

Upload Material Certification (if applicable)

 Upload File

Shop Drawings and Fabrication Plans

Review and approval of shop drawings and fabrication plans for accuracy and completeness.

Shop Drawing Approval Status

- ☐ Approved
- ☐ Rejected
- ☐ Pending Revision

Revision Notes (if applicable)

Write something...

Shop Drawing PDF

 Upload File

Shop Drawing Revision Number

Enter a number...

Fabrication Plan Review Status

- ☐ Approved
- ☐ Rejected
- ☐ Pending Revision

Discrepancies or Concerns Identified in Drawings/Plans?

Write something...

Date of Shop Drawing Approval

Enter date...

Approved By (Name)

Write something...

Cutting and Preparation

Inspection of steel cutting, beveling, and surface preparation.

Material Thickness (mm)

Enter a number...

Cutting Angle Deviation (degrees)

Enter a number...

Cutting Method

- ☐ Plasma
- ☐ Oxy-Fuel
- ☐ Laser
- ☐ Saw


Surface Condition After Cutting

- ☐ Smooth
- ☐ Dagger Edge
- ☐ Rough
- ☐ Burr Present

Notes on Surface Condition or Defects

Write something...

Upload Photo of Cut Edge

 Upload File

Bevel Angle (if applicable)

- ☐ Not Applicable
- ☐ As Per Drawing
- ☐ Deviation Observed

Welding

Verification of welding procedures, welder qualifications, and weld quality.

Welder ID

Enter a number...

Welding Process Used

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

If 'Other' welding process, please specify:

Write something...

Welding Current (Amps)

Enter a number...

Welding Voltage (Volts)

Enter a number...

Interpass Temperature (°C)

Enter a number...

Welding Procedure Specification (WPS) Reference

- ☐ WPS-001
- ☐ WPS-002
- ☐ WPS-003
- ☐ Other (Specify in LONG_TEXT)

If 'Other' WPS, please specify:

Write something...

Visual Inspection Criteria (Check all that apply)

- ☐ Complete Fusion
- ☐ No Undercut
- ☐ No Slag Inclusions (SMAW/FCAW)
- ☐ Proper Weld Profile
- ☐ No Porosity
- ☐ Sound Weld
- ☐ Other (Specify in LONG_TEXT)

Specify any visual inspection findings:

Write something...

Fitting and Assembly

Inspection of the fit-up and assembly of steel components.

Component Fit-Up Gap (Max. Allowable)

Enter a number...

Alignment Verification (Select all that apply)

- ☐ Plumb
- ☐ Level
- ☐ Square
- ☐ True
- ☐ Other (Specify in LONG_TEXT)

Details of 'Other' Alignment Verification (if applicable)

Write something...

Number of Bolted Connections Verified

Enter a number...

Bolt Alignment - Correct?

- ☐ Yes
- ☐ No

Details of Bolt Alignment Issues (if 'No' selected)

Write something...

Component Interference?

- ☐ Yes
- ☐ No

Details of Component Interference (if 'Yes' selected)

Write something...

Attach Photos of Fit-Up & Assembly

 Upload File

Dimensional Accuracy

Verification of dimensions against shop drawings and tolerances.

Length Verification (Member A)

Enter a number...

Width Verification (Member B)

Enter a number...

Thickness Verification (Plate C)

Enter a number...

Angle Verification (Angle D)

Enter a number...

Radius Verification (Round Bar E)

Enter a number...


Tolerance Compliance (Overall Assembly)

- ☐ Within Tolerance
- ☐ Outside Tolerance - Record Deviation
- ☐ Not Applicable

Notes/Comments on Dimensional Accuracy

Write something...

Attach Dimensional Verification Photos (If Needed)

 Upload File

Surface Treatment & Painting

Inspection of surface preparation, coating application, and paint quality.

Surface Preparation Method

- ☐ Sandblasting
- ☐ Grinding
- ☐ Wire Brushing
- ☐ Chemical Cleaning

Surface Profile (Mil)

Enter a number...

Primer Type

- ☐ Epoxy
- ☐ Zinc-Rich
- ☐ Alkyd
- ☐ Other (Specify)


Primer Details (if 'Other' selected)

Write something...

Dry Film Thickness (DFT) - Minimum (mil)

Enter a number...

DFT Gauge Calibration Certificate

 Upload File

Topcoat Type

- ☐ Acrylic
- ☐ Polyurethane
- ☐ Epoxy
- ☐ Other (Specify)

Topcoat Details (if 'Other' selected)

Write something...

Date of Painting

Enter date...

Inspector Signature

Bolting & Fastening

Verification of bolt quality, size, torque, and proper installation.

Bolt Diameter (inches)

Enter a number...

Bolt Grade/Strength

Enter a number...

Target Torque Value (ft-lbs)

Enter a number...

Actual Torque Value (ft-lbs)

Enter a number...

Torque Application Method

- ☐ Manual
- ☐ Hydraulic
- ☐ Air Impact

Bolt Condition (select all that apply)

- ☐ Clean
- ☐ No Rust
- ☐ No Damage
- ☐ Correct Grade Markings
- ☐ Proper Lubrication

Was a calibrated torque wrench used?

- ☐ Yes
- ☐ No
- ☐ N/A

Any unusual observations during bolting?

Write something...

Identification & Marking

Confirmation of proper identification and marking of fabricated steel members.

Component Identification Number

Write something...

Drawing Revision Number

Write something...

Quantity Marked

Enter a number...

Marking Method Used

- ☐ Stenciling
- ☐ Etching
- ☐ Welding
- ☐ Tagging

Marking Location(s)

- ☐ Edge
- ☐ Center
- ☐ Visible Surface
- ☐ All Surfaces

Photograph of Marking (Optional)

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Documentation & Record Keeping

Review of fabrication records, welder certifications, and inspection reports.

Welder Qualification Certificates

 Upload File

Material Mill Certificates

 Upload File

Summary of Non-Conformances & Corrective Actions

Write something...

Number of Certified Welders

Enter a number...

Date of Last Internal Audit

Enter date...

Audit Type (Internal/External)

☐ Internal

☐ External

Record of Deviations from Approved Fabrication Drawings

Write something...

Inspector Signature