



## CHECKLIST · SITE REPAIRS

# Mine Site Weld Repair Paperwork Checklist

Lists the records a contractor should hold before, during and after a weld repair on mine plant, so the machine returns to service with a complete, traceable repair file.

**FOR** Fabrication and maintenance contractors repairing buckets, booms, frames, chutes and structures on mine and quarry sites, and the site representatives who accept the work.

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VS-CL-003

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v1.0

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4

## HOW TO USE THIS CHECKLIST

Open a repair file when the work order is raised and work down the list as the job moves. Mark each item Y, N or N/A and note the record reference. The client's contractor management requirements come first. Where their list asks for more, their list wins.

## KEY

**HOLD POINT**

Work stops until it is released.

**WITNESS POINT**

Named person may attend.

☐ Y ☐ N ☐ N/A Every N gets a note.

**Abbreviations** WPS welding procedure specification · PQR procedure qualification record · ITP inspection and test plan · NDT non-destructive testing · MT magnetic particle testing · PT penetrant testing · OEM original equipment manufacturer · NCR non-conformance report

## JOB DETAILS

Work order number

Site and asset (equipment number)

Component and repair location

Contractor

Prepared by

Date

**1**

## BEFORE THE REPAIR

## Approvals and documents in place

Nothing is welded until these are in the file.

| #   | ITEM                        | WHAT GOOD LOOKS LIKE / EVIDENCE TO SIGHT                                                                                        | REFERENCE               | Y                        | N                        | N/A                      | NOTES |
|-----|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------|--------------------------|--------------------------|-------|
| 1.1 | Work order and agreed scope | Work order number, asset, component, the defect and agreed repair extent, and the client's acceptance of the scope.             | Client work order       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 1.2 | Repair procedure authorised | Excavation, preparation, WPS, sequence, NDT and acceptance. Any departure from the OEM instruction accepted in writing.         | OEM repair instruction  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 1.3 | Qualified WPS on file       | Route and PQR or macro record for each joint. A "guidance only" WPS needs qualifying first, or the client's written concession. | AS/NZS 1554.1 Section 4 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |

**OUT OF SCOPE**

Lifting points, lifting lugs and lifting attachments. Their repair or modification goes to an independent registered engineer before any work starts.

**1**
**BEFORE THE REPAIR**
**Approvals and documents in place** continued

| #   | ITEM                    | WHAT GOOD LOOKS LIKE / EVIDENCE TO SIGHT                                                                               | REFERENCE                               | Y                        | N                        | N/A                      | NOTES |
|-----|-------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------|--------------------------|--------------------------|-------|
| 1.4 | ITP issued              | Hold and witness points, who releases each one, the acceptance criteria at each point and the record each produces.    | Client ITP requirements                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 1.5 | Welder records on file  | For each welder on the job, covering the process, position and procedure, and current on the day.                      | AS/NZS 1554.1 clause 4.12               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 1.6 | Steel and consumables   | Grade from OEM data or certificate, or recorded as unidentified. Consumable classification, batch numbers and storage. | OEM data maker's data sheet             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 1.7 | Preheat method set      | Preheat and interpass limits from the WPS, the heating method, and where, when and with what temperature is read.      | AS/NZS 1554.1 Section 5<br>AS ISO 13916 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 1.8 | Permits and isolations  | Permit, isolation and hot work paperwork on the site's own forms, with their numbers recorded in the repair file.      | Site permit system                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 1.9 | Pre-repair photos taken | Defect marked on the steel and photographed with a scale in frame, plus a wide shot that shows its location.           | Photo record                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |

**2**
**DURING THE REPAIR**
**Hold points and the weld record**

Evidence created as the work happens, not reconstructed afterwards.

| #   | ITEM                                               | WHAT GOOD LOOKS LIKE / EVIDENCE TO SIGHT                                                                                             | REFERENCE                  | Y                        | N                        | N/A                      | NOTES |
|-----|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------|--------------------------|--------------------------|-------|
| 2.1 | Defect removal confirmed<br><b>HOLD POINT</b>      | Excavation shape and depth recorded. MT or PT over the excavation shows the crack fully removed before welding starts.               | Repair procedure           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 2.2 | Fit-up and preheat checked<br><b>HOLD POINT</b>    | Fit-up checked against the WPS, preheat measured and recorded. Tacks and temporary attachments welded at the same preheat.           | WPS                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 2.3 | Weld record for each joint                         | Date, welder, WPS, consumable batch, preheat and interpass readings including after breaks, and current and voltage checks.          | AS/NZS ISO 3834            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 2.4 | Back-gouge or root checked<br><b>WITNESS POINT</b> | Two-sided complete penetration repairs: gouge to sound metal and check before the second side, unless qualification shows otherwise. | AS/NZS 1554.1 clause 4.5.2 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 2.5 | Deviations approved first                          | Any change to sequence, consumable, preheat or extent recorded, with who approved it, before the work continues.                     | NCR procedure              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 2.6 | Temporary attachments                              | Dogs, strongbacks and lugs listed. Removal sites ground flush and inspected.                                                         | Repair procedure           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |

**3**

## AFTER THE REPAIR

## Acceptance and close-out

What the client needs to accept the repair and plan the next inspection.

| #   | ITEM                                                 | WHAT GOOD LOOKS LIKE / EVIDENCE TO SIGHT                                                                                        | REFERENCE               | Y                        | N                        | N/A                      | NOTES |
|-----|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------|--------------------------|--------------------------|-------|
| 3.1 | <b>Visual inspection on completion</b>               | Size, profile and surface against the criteria for the weld category. Any dressing leaves grinding marks along the main stress. | AS/NZS 1554.1 Section 6 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 3.2 | <b>Final NDT after dressing</b><br><b>HOLD POINT</b> | After all grinding. The report shows method, extent, technique, acceptance standard and category, and technician qualification. | AS/NZS ISO 9712         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 3.3 | <b>Post-repair photos</b>                            | Same angles as the pre-repair set, with the scale in frame.                                                                     | Photo record            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 3.4 | <b>ITP and weld record complete</b>                  | Every hold point signed and dated, waivers confirmed in writing, and records filed with the work order.                         | Client ITP              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 3.5 | <b>NCRs closed</b>                                   | Rejected welds repaired to a qualified procedure and re-inspected, with the NCR closed and dispositioned.                       | AS/NZS ISO 3834         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 3.6 | <b>Close-out summary</b>                             | What was found, what was done, materials and heat numbers used, and what to watch at the next service.                          | Repair file             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |
| 3.7 | <b>Re-inspection set where required</b>              | Method, interval and owner where the procedure or engineer sets one, entered in the client's maintenance system.                | Maintenance strategy    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |       |

If it is not in the file, the client has to assume it was not done.

## REPAIR FILE INDEX

### File it in this order, so the client can audit it in minutes

- |                                                                        |                                                                             |                                                                             |
|------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <input type="checkbox"/> <b>01</b> Work order and agreed scope         | <input type="checkbox"/> <b>05</b> Welder qualification records             | <input type="checkbox"/> <b>09</b> Weld record and preheat readings         |
| <input type="checkbox"/> <b>02</b> Repair procedure (current revision) | <input type="checkbox"/> <b>06</b> Steel grade and consumable batch records | <input type="checkbox"/> <b>10</b> NDT reports                              |
| <input type="checkbox"/> <b>03</b> WPS and its qualification record    | <input type="checkbox"/> <b>07</b> Permits and isolation references         | <input type="checkbox"/> <b>11</b> NCRs and deviations, closed              |
| <input type="checkbox"/> <b>04</b> ITP with hold point releases        | <input type="checkbox"/> <b>08</b> Pre-repair photos                        | <input type="checkbox"/> <b>12</b> Post-repair photos and close-out summary |

#### COMMON GAPS WE SEE

### Where repair files usually fall short

#### 01 No proof the crack came out.

Rewelding before MT or PT of the excavation is how cracks get buried. Photograph and test the clean excavation.

#### 03 One preheat reading for a long repair.

Heat is lost over breaks and shift changes, and tacks get laid cold. Record readings at intervals and after every break.

#### 05 NDT before the last grind.

If dressing follows the NDT, the finished surface was never inspected. Final NDT comes after the last grinding pass.

#### 02 A “guidance only” WPS used as qualified.

It needs a qualification route, often an existing PQR held by the OEM or contractor, or the client’s written concession.

#### 04 An attachment nobody designed.

A bracket or lug welded to a cyclically loaded member can start a fatigue crack. Attach only what the design allows.

#### 06 An OEM departure with no paper.

Where the repair differs from the OEM instruction, the client’s written acceptance goes in the file before the machine returns to work.

#### SIGN-OFF

| ROLE                                  | NAME | SIGNATURE | DATE |
|---------------------------------------|------|-----------|------|
| Repair file completed by (contractor) |      |           |      |
| Reviewed by (contractor supervisor)   |      |           |      |
| Accepted by (site representative)     |      |           |      |

Signing records that each item was checked and the evidence sighted. It is not a certification of the repair.

#### NEXT STEP

### Have the repair pack prepared for you

For a recurring repair type, Veristruct prepares the repair procedure, WPS, ITP and record templates from your drawings, photos and material details, for your own qualification and approval. Two revision rounds included.

#### SERVICES Weld & Fabrication Documentation • Repair Engineering & Defect Response

*Lifting points and lifting attachments are excluded and go to an independent registered engineer. Veristruct prepares the full technical package and coordinates independent review and certification through registered engineering partners. Work in or for QLD, VIC, ACT or TAS is delivered with a registered engineer engaged before work starts.*

#### TALK TO

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Send the drawings, photos and material details for the repair type. You get a fixed-price quote for a defined package.

#### IMPORTANT

General guidance only. It is not engineering advice for a specific asset and does not replace the drawings, the contract specification, the standards that apply, the site’s own procedures or advice from a qualified person. Standards are named as pointers. Clause references are to AS/NZS 1554.1:2014. Work to the edition your contract names, read from your own licensed copy.

#### REVISION HISTORY

v1.0 8 October 2026 First issue.