

Portable weld-finish grinding - JSA - A

en-SG · Basic task controls · v1.0 · 2026-10-14 · Sources: article section 9

Site: | Item ID: | Work area:

Approval	Work supervisor	Technical reviewer	Release / handover authority

1. Job details and team signatures

Date / time		Location / area		Assessor		Supervisor	
Team signatures							

2. Conditions and hold points

Stage	Time	Location / area	Environment / readings	Item / condition	Controls	Plant / tools	Approval / signature
HP-0 Start							
HP-1 Select wheel							
HP-2 Mount and trial							
HP-3 Grind within limits							
HP-4 Stop and inspect							

Complete after actual checks. Recheck after changes, defects or shift handover.

3. JSA risk assessment

Job stage	Hazards and effects	Failure factors	Technical and procedural controls	Site verification	P	S	R	A
1. Match weld scope	1. Section loss 2. Coating-dust exposure 3. Nearby fire	1. Finish limits unclear 2. Material unknown 3. Spark travel missed	1. Match weld and finish drawing 2. Identify metal/coating 3. Plan sparks/dust control	1. Weld/drawing ID 2. Material/coating data 3. Fire and exposure assessment				
2. Select wheel	1. Wheel fracture 2. Side-load failure 3. Guard interference	1. Speed mismatch 2. Cutoff purpose confused 3. Wrong diameter/thickness	1. Match maximum speed 2. Verify actual grinding purpose 3. Match guard dimensions	1. Tool/wheel rating 2. Permitted contact face 3. Dimensions and guard				
3. Mount and trial	1. Unexpected start 2. Damaged-wheel breakup 3. Vibration	1. Power left connected 2. Inspection omitted 3. Mount/handle loose	1. Separate power at standstill 2. Inspect/test for wheel type 3. Mount guards and handle	1. Isolated/stopped state 2. Wheel damage/history 3. Mount and guard checks				
4. Grind within limits	1. Kickback 2. Wheel overload 3. Base-metal gouge	1. Bad edge approach 2. Unapproved contact face 3. Removal limit ignored	1. Use intended wheel face 2. Maintain two-hand control 3. Check geometry progressively	1. Contact and snag points 2. Handle/stance/direction 3. Remaining dimensions				
5. Stop and inspect	1. Coasting contact 2. Hot-metal burn 3. Overground weld used	1. Tool laid down spinning 2. Heat ignored 3. Appearance accepted	1. Wait for complete stop 2. Check heat and smouldering 3. Verify dimensions/inspection	1. Standstill/power state 2. Residual heat 3. Geometry/inspection				
6. Close and transfer	1. Hidden fire spreads 2. Damaged tool reused 3. Uninspected weld covered	1. Spark destinations missed 2. Defect unmarked 3. Hold not passed on	1. Check heat/spark reach 2. Segregate defective tools 3. Transfer use restrictions	1. Fire-watch disposition 2. Tool/wheel status 3. Pending work/holds				

P/S/R/A: Complete only after actual site assessment using the site risk method.

4. Pre-work checklist

☐ Weld/drawing ID	☐ Tool/wheel rating	☐ Isolated/stopped state
☐ Contact and snag points	☐ Standstill/power state	☐ Fire-watch disposition
☐ Fire and exposure assessment	☐ Remaining dimensions	☐ Pending work/holds