

Handheld Plasma Cutting of Steel Plate - JSA - C

en-US · Supervision, records, handover · 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 Inspect supply and gas							
HP-2 Verify separation support							
HP-3 Hold and restore controls							
HP-4 Inspect and hand over							

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. Cut-plan release	1. Unsupported separation 2. Wrong material cut 3. Hidden coating exposure	1. Final state omitted 2. Plate ID unclear 3. Coating information absent	1. Review both final supports 2. Confirm plate and path identity 3. Resolve material hazards	1. Cutting layout and IDs 2. Support and removal basis 3. Metal and coating information				
2. Hot-work readiness	1. Spark ignition 2. Nearby arc exposure 3. Fume accumulation	1. Adjacent areas not inspected 2. Screens unplanned 3. Ventilation restricted	1. Inspect full spark reach 2. Coordinate protected boundaries 3. Verify extraction and screens	1. Authorization and fire controls 2. Below and opposite-side checks 3. Exposure and PPE basis				
3. Equipment acceptance	1. Shock exposure 2. Return-path failure 3. Gas-system defect	1. Damaged torch retained 2. Clamp on cut-off piece 3. Model limits unavailable	1. Check supply and torch 2. Confirm retained return path 3. Obtain actual instructions	1. Torch lead and earth checks 2. Return clamp location 3. Gas and consumable identity				
4. Separation supervision	1. Piece tips or drops 2. Worker catches hot metal 3. Cable pulled by falling piece	1. Connected stability assumed 2. Removal method unassigned 3. Final cut rushed	1. Gate final separation 2. Keep hands out of load path 3. Confirm support and removal	1. Two-piece support evidence 2. Lower exclusion and handling 3. Release of final cut				
5. Servicing control	1. Unexpected torch ignition 2. Stored-charge injury 3. Repeated unstable cutting	1. Trigger release used alone 2. Internal work unqualified 3. Cause not corrected	1. Define authorized service scope 2. Apply model energy procedure 3. Verify correction before test	1. Isolation and cooling record 2. Qualified internal service referral 3. Torch and control recheck				
6. Part and area handover	1. Uninspected part used 2. Hot-edge injury 3. Delayed fire spread	1. Equipment check overclaimed 2. Storage hazards unmarked 3. Watch closure omitted	1. Separate part acceptance 2. Identify heat and edge limits 3. Complete required fire closure	1. Part IDs and inspection 2. Open defects and storage 3. Fire closure and receiving owner				

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

4. Pre-work checklist

☐ Cutting layout and IDs	☐ Authorization and fire controls	☐ Torch lead and earth checks
☐ Two-piece support evidence	☐ Isolation and cooling record	☐ Part IDs and inspection
☐ Metal and coating information	☐ Release of final cut	☐ Fire closure and receiving owner