

Decapower Welding Equipment Safety Inspection Checklist

This checklist helps ensure safe and compliant welding operations. Review and inspect each item before operation. Document findings and follow up on corrective actions immediately.

Inspection Date: July 08, 2025

1. Preparation

Item	Status (OK / Needs Repair)	Notes / Actions Taken
Workspace clear of flammable materials (10-meter radius)		
Ventilation and lighting adequate		
All required PPE available (helmet, gloves, clothing, respirator)		
Tools ready (multimeter, leak detector, gauge, equipment manual)		

2.1 Welding Cables & Connections

Item	Status (OK / Needs Repair)	Notes / Actions Taken
Visual inspection for cracks, fraying, exposed wires		
Tightened all cable connections (torque wrench)		
Insulation resistance tested $\geq 1\text{M}\Omega$ at 500V (megohmmeter)		

2.2 Gas Hoses & Connections

Item	Status (OK / Needs Repair)	Notes / Actions Taken
No leaks (soap test – no bubbles at joints)		
Hoses flexible and undamaged		
Cylinders upright, secured, valves closed when idle		

2.3 Electrical System

Item	Status (OK / Needs Repair)	Notes / Actions Taken
Ground resistance $\leq 4\Omega$ (earth tester)		
Input voltage matches equipment specs		
No signs of overheating (burn marks, noise)		

2.4 Welding Torch & Electrodes

Item	Status (OK / Needs Repair)	Notes / Actions Taken
Nozzle and tip clean and undamaged		
Shielding gas flow rate correct (flowmeter)		
Ground clamp clean and properly contacting metal		

2.5 Personal Protective Equipment (PPE)

Item	Status (OK / Needs Repair)	Notes / Actions Taken
Helmet lenses clear, auto-darkening functional		
Gloves and clothing intact (no burn holes)		

Respirators in use (NIOSH-approved, if needed)

2.6 Work Environment

Item	Status (OK / Needs Repair)	Notes / Actions Taken
Fire extinguisher available (Class D)		
Ventilation operational (LEV tested)		
Clear emergency exit routes		

3. Functional Testing

Item	Status (OK / Needs Repair)	Notes / Actions Taken
Weld sample tested for stable output (voltage/current)		
Foot pedal and remote controls functional		
Gas regulators and amperage calibrated		

4. Special Considerations

Item	Status (OK / Needs Repair)	Notes / Actions Taken
Quick daily and bi-weekly deep checks for 24/7-use machines		
Additional checks for humid or outdoor conditions		
In-depth checks for machines over 10 years old		