

Hypertherm

Preventive Maintenance Protocol Checklist

Customer: _____
 Location: _____
 Contact: _____
 Date: _____

Hypertherm system: _____
 System serial #: _____
 System arc hours: _____
 (if equipped with an hour meter)

Comments *P* - Performed *NP* - Not present on system _____

Power supply

- P* *NP* 1. Inspect for particulates and blow out
- P* *NP* 2. Inspect wiring harnesses
- P* *NP* 3. Inspect main contactor
- P* *NP* 4. Inspect air filter on front of system
- P* *NP* 5. Inspect pilot arc relay

Coolant system

- P* *NP* 6. Inspect filter element
- P* *NP* 7. Perform coolant flow test
 - A. Coolant flow checked at _____
gallons per minute (_____ L/min)

Torch main body

- P* *NP* 8. Inspect water tube
- P* *NP* 9. Inspect current ring
- P* *NP* 10. Clean threads on torch front end
- P* *NP* 11. Inspect Vespel torch insulator
- P* *NP* 12. Inspect torch and consumable O-rings
- P* *NP* 13. Verify proper fit of retaining or shield cap
- P* *NP* 14. Inspect hose fittings
- P* *NP* 15. Inspect torch-to-torch-lead connections

Gas flows

- P* *NP* 16. Inspect plumbing from gas supply
 - P* *NP* A. Oxygen
 - P* *NP* B. Nitrogen
 - P* *NP* C. Air
 - P* *NP* D. CO₂
 - P* *NP* E. Argon-hydrogen
 - P* *NP* F. Methane
 - P* *NP* G. Inspect compressed air filter system

Gas flows (cont.)

- P* *NP* 17. Perform gas leak test
 - A. Oxygen pressure drop at _____
psi in 10 minutes (_____ bar)
 - B. Nitrogen pressure drop at _____
psi in 10 minutes (_____ bar)
- P* *NP* 18. Inspect for hose restrictions
 - P* *NP* A. Motor valve hoses
 - P* *NP* B. Gas console to motor valve
 - P* *NP* C. Off-valve to torch body
 - P* *NP* D. Hoses in power track

Cable connections

- P* *NP* 19. Inspect cables
 - P* *NP* A. From IHS probes to IHS console
 - P* *NP* B. Control cable from off-valve to motor valve console
 - P* *NP* C. From motor valve console to power supply
 - P* *NP* D. From high-frequency console and gas console to power supply

High-frequency console

- P* *NP* 20. Inspect for moisture, dust and particulates
- P* *NP* 21. Inspect spark gap subassembly
 - A. Electrode gap range _____
to _____
- P* *NP* 22. Inspect torch leads

System grounding

- P* *NP* 23. Inspect for proper system component grounding
- P* *NP* 24. Inspect connection from cutting table to workpiece (+) lead

General comments and recommendations:

Preventive maintenance performed by: _____ Date: _____