

Task Risk Control Sheet

Electric Arc Welding

RCS No: NR/L3/MTC/RCS0216/TK62
Issue: 2

Key Risks!

- Struck by Train (1)
- Electrocution (3)
- Fuelling (4)
- On Track Plant (9)
- Manual Handling (11)
- Slips, Trips and Falls (12)
- Noise (15)
- Adverse Weather (19)
- Hot Work

Personnel Involved

E&P	✓
S&T	✓
Track	✓
Off Track	✓
Property	✓

Tools / Equipment

Welding Equipment

Plant

RRV

Generator

Task Risks	Controls	Implemented By
Key Generic Track Risks	• See Generic Track Risks NR/L3/MTC/RCS0216/TK00 All except for 14 & 18	
Electrocution	• See Risk Control sheets NR/L3/MTC/RCS0216/GA20 Working Adjacent to DC Electrified Rails Risk Level 1- 5, • See Risk Control Sheet NR/L3/MTC/RCS0216/GA21 - Working Near Electrical Overhead Line Equipment • When required, check that continuity bonds are fitted when working on the traction return rail in AC areas	All Staff / COSS / Team Leader
Inhalation of fumes from heating of oils, grease, electrodes / flux cored wires and skin contact from NDT spray	• Site specific briefing, including hazardous substances hazards and controls shall be given • Use Personal Protective Equipment e.g. eye / face protection and respiratory protective equipment • Sheer speed tents shall not be used for arc welding • Local exhaust ventilation shall be used where necessary • Non-Destructive Testing shall not be undertaken until rail temperature is below 50°C • Provision of information on hazardous substances and control measures shall be available • Only trained and competent welders shall be used	All Staff / COSS / Team Leader Line Manager
Electric shock from equipment	• Only trained and competent welders shall be used • Scheduled planned maintenance shall be in place for all equipment • Pre-work checks shall be completed on equipment • Site specific briefing shall be given • Work piece shall be earthed	Line Manager All Staff / COSS / Team Leader
Fire / Explosion / Splatter	• Personal protective equipment shall be used including visor, gauntlets, flame retardant clothing, knee length welding boots • Clean area of oil and grease before welding • Cylinders and petroleum spirit shall be excluded from ignition sources • Site specific briefing shall be given • Waste hot material shall be placed in an area free of flammable material whilst cooling and prior to disposal shall be placed in a metal receptacle (electrode stub ends) • 6kg dry powder fire extinguisher shall be taken to site • Propane shall not be used in confined spaces or tunnels	All Staff / COSS / Team Leader

Task Risk Control Sheet

Key Risks	Controls	Implemented By
Radiation Exposure	- Hand or head shield (to British Standard BS EN 175 'Equipment for eye and face protection during welding and allied process') shall be used at all times - Filters (to British Standard BS EN 175 'Filters for welding and related techniques') shall be used at all times	All Staff / COSS / Team Leader
Adverse Weather Conditions	- See Risk Control Sheet NR/L3/MTC/RCS0216/GA01 – Work On or Near the Line - A welding umbrella can be used for this activity but in extreme weather conditions or very high winds an assessment shall be made for its continued use.	All Staff / COSS / Team Leader
Grinding dust / sparks	- See Risk Control Sheet NR/L3/MTC/RCS0216/0003/SP01 – Use of Abrasive Wheels - Provision of hazardous substances information and controls shall be available - Personal Protective Equipment shall be issued and used, such as eye and respiratory protective equipment - Site specific briefing shall be given	All Staff / COSS / Team Leader

PPE Required by NR / Maintenance Policy



Wear Head Protection



Wear Foot Protection



Wear Hi Visibility Clothing



Wear Safety glasses to BS EN166.F

If safety glasses introduce a risk (ie weather conditions) then the Team Leader shall assess the risk. The outcome of the assessment shall be recorded on the SSOWPS pack and safety glasses may be removed. **This does not supersede the requirements for eye protection detailed on relevant Task Risk Control Sheets.**

Additional PPE Required by Task Risk Control Sheet



Wear Hand Protection



Use Welding Mask



Wear Hearing Protection



Wear Flame Retardant Protection



Wear Respiratory Protection