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| Title | **Perform welding at introductory level** | | |
| Level | **2** | **Credits** | **12** |

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| Purpose | This competency standard is intended for those who carry out a range of welding operations at introductory level in a variety of contexts. People holding credit for this competency standard are able to: Plan and prepare for welding; demonstrate safe welding practice; and complete work. |

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| Classification ISCED | 0713 Electricity and energy |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

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| **Competency Unit** | **Performance Criteria** | **Knowledge and Understanding** |
| **D1:**  **Plan and prepare for welding** | **Trainee will be able to:**  **P1-** Identify worksite for potential hazards  **P2-** Select and use personal protective equipment  **P3-** Identify appropriate welding method to be applied in line with job requirements  **P4-** identify and select welding tools and equipment | **K1-** Safety requirements; Specifications; Hazard identification  **K2-** Personal protective equipment (PPE)  **K3-** Different welding methods, application, and procedures  **K4-** Weldingtools and equipment, and calibration thereof |
| **D2:**  **Demonstrate safe welding practice** | **Trainee will be able to:**  **P1-** Welding operations comply with safe working practice  **P2-** Check and prepare welding equipment and materials  **P3-** Prepare and join metals  **P4-** Check for defects and welding faults  **P5-** Carry out corrective measures | **K1-** Source and nature of hazards associated with welding:  - electric shock, burns (arc radiation, heat), fumes, noise, hard and/or hot particles, chemical (cleaning, pickling), dust  **K2-** Welding equipment may include, but is not limited to:  **-**connections, hose, regulator, torch, cables, gas cylinder, cable insulation, condition of welding torches and/or guns, condition of material and filler metals  **K3-** Factors affecting weld quality  **K4-** Identification of defective welds |
| **D3:**  **Complete work** | **Trainee will be able to:**  **P1-** Complete work related documents and procedures  **P2-** Perform final quality inspection  **P3-** Clean up and store tools, equipment and materials | **K1-** Importance of documentation  **K2-** Importance of quality assurance and control  **K3-** Waste disposal procedures; Care of tools and equipment |