|  |  |
| --- | --- |
| Title | **Repair welding defects** |
| Level | **2** | **Credits** | **5** |

|  |  |
| --- | --- |
| Purpose | This Competency Standard identifies the competencies required to perform repairing of welding defects at workplace by welder in accordance with the organization’s approved guidelines and procedures. You will be expected to identify and repair defected areas of job/work pieces at the workplace. Your underpinning knowledge regarding repairing of welding defects will be sufficient to provide you the basis for your work. |

|  |  |
| --- | --- |
| Classification ISCED | 0715 Mechanics and metal trades |

|  |  |
| --- | --- |
| Available grade | Competent / Not yet competent |

|  |  |
| --- | --- |
| Modification history | N/A |

| **Unit of Competency** | **Performance Criteria** | **Knowledge** | **Tools & Equipment** |
| --- | --- | --- | --- |
| G1. Identify the defected areas of job/work piece  | **Trainee will be able to:** P1. Arrange tools and equipment required for the job P2. Follow the instructions of supervisor and inspector’s report to identify defected point (s) P3. Apply specific safety precautions associated with welding equipment | **Trainee will be able to:** K1. Describe the usage of tools and equipment required for the job K2. Read and interpret inspection report regarding inspection of defected areasK3. Enlist the non-destructive tests (NDT) for welding inspection * Visual testing (VT)
* Magnetic particle test (MT)
* Radiographic test (RT)
* Ultrasonic test (UT)
* Dye penetration test (PT)

K4. Describe specific safety precautions associated with welding equipment usage | Inspection report, supervisor’s instructions, measuring tools, PPE |
| G2. Repair defected areas of job/work piece  | **Trainee will be able to:**P1. Arrange the tools and equipment required for repairing defected area(s)P2. Apply the following repair procedure as per inspection report * Grinding
* Cutting
* Gouging

P3. Apply repair welding to specific defected area(s) as per WPS/ instruction sheetP4. Apply specific safety precautions associated with welding equipment | **Trainee will be able to:** K1. Describe the usage of tools and equipment required for the jobK2. Read and interpret inspection report regarding defects K3. Describe the process and selection of defect removal methodsK4. State the need for repair welding K5. Describe specific safety precautions associated with welding equipment usage | Grinder, cutter, gouging equipment, welding equipment with accessories, electrodes/filler wires, gas cylinder, desiccators, electrode drying oven, (argon),WPS/ instruction sheet, PPE |