# Assessment Mapping (for traditional units from old Training Packages)

*This document is used to demonstrate content validity of the assessment tool*

Table 1 Main details

| Details | Unique description |
| --- | --- |
| **Unit Code, name and release number** | MEM05050B - Perform routine gas metal arc welding (1) |
| **Skills Team** |  |
| **Region/Campus** |  |
| **SkillsPoint (owned by)** | Innovative Manufacturing, Robotics and Science |

*NOTES:*

* *Event columns can be added or deleted as required*
* *Rows for elements and performance criteria, etc. can be added or deleted as required*
* *Each component of the unit must be mapped to at least* ***one assessment criteria*** *or* ***question*** *in one or more assessment events*
* *Do NOT delete the section labelled Employability Skills. If the Employability Skills ARE EXPLICIT in the performance criteria, they do not need to be listed. However, if the Employability Skills ARE NOT incorporated in the performance criteria they must be listed and mapped.*
* *Dimensions of Competency must be considered when selecting assessment types to ensure that the range of tasks you have chosen cover the following:*
  + *Task Skills*
  + *Task Management Skills*
  + *Contingency Planning Skills*
  + *Job Role Environment Skills*

## Unit component mapping to assessment event/s

Table 2 Unit component mapping to assessment event/s

| Element number | Element name | Performance criteria number | Performance criteria description | Knowledge  1 of 2  Theory  Assessment | Skills 2 of 2  Task 1 Prepare and set up  Task 2 Weld and clean up |
| --- | --- | --- | --- | --- | --- |
| 1 | Identify weld requirements | 1.1 | Weld requirements are identified from job instructions |  | Task 1  Part 1 Items 1,2,3  Part 3 Item 16  *Procedure sheets are job instructions.* |
|  |  | 1.2 | Locations of welds are identified in according to standard operating procedures and job specifications |  | Task 2  Part 1 Items 3,4  Task 2  Part 2 Items 3,4 |
| 2 | Prepare materials for welding | 2.1 | Materials are cleaned and prepared ready for welding | Part 2 Q3,6  Part 3 Q2,3,4,5 | Task 1  Part 1 Items 1,2,3 |
| 3 | Prepare equipment for welding | 3.1 | Welding equipment is set up correctly | Part 1 Q9,10,11,12  Part 2 Q9  Part 3 Q11 | Task 1  Part 2 Items 4,5,6,7,8 |
|  |  | 3.2 | Settings and consumables are selected to suit application | Part 1 Q1,2,3,5,6,8,13,14  Part 2 Q1,4,5,7,10  Part 3 Q11 | Task 1  Part 3 Items 1,2,5,6,7,8,9,10,11,12,13,14 |
| 4 | Perform routine welding using GMAW | 4.1 | Safe welding practices are applied | Part 1 Q20,21,22,23,24,25  Part 2 Q2  Part 3 Q9,10 | Task 1  Part 2 Items 1,2,3  Part 3 Item 15  Task 2  Part 1 Item 2  Part 2 Item 2 |
|  |  | 4.2 | Materials are welded to job requirements | Part 1 Q2,4,7,12,16,17,18  Part 2 Q1,3,4,6,8,9  Part 3 Q6,7 | Task 1  Part 3 Items 15,16  Task 2  Part 1 Items 3,4  Task 2  Part 2 Items 3,4 |
|  |  | 4.3 | Welds are cleaned to standard operating procedures | Part 1 Q15  Part 2 Q10 | Task 2  Part 1 Items 5,6  Task 2  Part 2 Items 5,6 |

## Employability skills NOT explicit in the performance criteria

Table 3 Employability skills NOT explicit in the performance criteria

| Employability skills | Description | Knowledge  1 of 2  Theory  Assessment | Skills 2 of 2  Task 1 Prepare and set up  Task 2 Weld and clean up |
| --- | --- | --- | --- |
|  | This unit contains employability skills embedded in the performance criteria |  |  |

## Required skills

Table 4 Required skills

| Required skills | Description | Knowledge  1 of 2  Theory  Assessment | Skills 2 of 2  Task 1 Weld preparation  Task 2 Practical welding |
| --- | --- | --- | --- |
|  | Look for evidence that confirms skills in: |  |  |
| RS1 | Preparing materials |  | Task 1  Part 1 Items 1,2,3 |
| RS2 | Setting up welding equipment |  | Task 1  Part 2 Items 1,2,3,4,5,6,7,8,  Task 1  Part 3 Items 9,10,11,12,13,14  Task 2  Part 1 Item 2  Task 2  Part 2 Item 2 |
| RS3 | Welding with GMAW |  | Task 1  Part 3 Items 15  Task 2  Part 1 Items 3,4  Task 2  Part 2 Items 3,4 |
| RS4 | Reading and interpreting routine information on written job instructions, specifications and standard operating procedures |  | Task 1  Part 1 Items 1,2,3,  Task 1  Part 3 Item 24  Task 2  Part 1 Item 3,4  Task 2  Part 2 Item 3,4 |
| RS5 | Following oral instruction |  | Task 2  Part 1 Item 5  Task 2  Part 2 Item 5 |
| RS6 | Using measurement skills relating to joint preparation and routine GMAW |  | Task 1  Part 1 Items 1,2,3, |

## Required knowledge

Table 5 Required knowledge

| Required knowledge | Description | Knowledge  1 of 2  Theory  Assessment | Skills 2 of 2  Task 1 Weld preparation  Task 2 Practical welding |
| --- | --- | --- | --- |
|  | Look for evidence that confirms knowledge of: |  |  |
| RK1 | Different current and voltage settings, gas flow rates wire diameters, wire feed speed and other variables to suit typical situations. | Part 1 Q1,2,3,12  Part 2 Q1  Part 3 Q1,6,14 |  |
| RK2 | Material and equipment preparation | Part 2 Q1,2,4,10  Part 3 Q2,3,4,5 |  |
| RK3 | Properties and characteristics of materials and consumables | Part 1 Q4,5,6,7,8  Part 2 Q4,5,6,7,8,9 | Part 3, Q6 not mapped |
| RK4 | Equipment and equipment settings | Part 1 Q1,2,3,9,10,11  Part 2 Q10  Part 3 Q9,10 |  |
| RK5 | Fuel gas properties and applications | Part 1 Q3,5,11,13,14,16  Part 2 Q2,11  Part 3 Q8,11 |  |
| RK6 | Post-welding treatments | Part 1 Q15 |  |
| RK7 | Weld characteristics | Part 1 Q18,19  Part 3 Q8 |  |
| RK8 | Safe welding practices | Part 1 Q20,21,22,23,24  Part 3  Q9,10 |  |
| RK9 | Use and application of personal protective equipment for routine GMAW | Part 1 Q20,25  Part 3 Q10 |  |

## Critical aspects

Table 6 Critical aspects

| Critical aspects | Description | Knowledge  1 of 2  Theory  Assessment | Skills 2 of 2  Task 1 Weld preparation  Task 2 Practical welding |
| --- | --- | --- | --- |
| CA1 | Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts. |  | All practical tasks |
|  |  |  |  |