

## **Qualification Specification**

# **ECITB Level 2 Diploma in Introduction to Welding in Engineering Construction Operations**

Qualification number: 610/6205/4

Regulated by Ofqual

Qualification start date: 01/09/2025 Issue RV1-0 valid from 01/09/2025

#### **Issue**

This specification is Issue RV1.0. We will inform Approved Centres of any changes to this issue. The latest issue can be found on our website.

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#### **Changes to this document**

The table below sets out all revisions made to this document since it was first issued, and the dates on which the revisions were effective from.

New Issue number	Summary of changes made between the previous issue and this current issue	Page number	Date of change

#### **Accessibility**

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#### 1. Overview

#### 1.1 ECITB

The Engineering Construction Industry Training Board (ECITB) is the employer-led skills, standards and qualifications body for the development of the engineering construction workforce of Great Britain. An arms-length body of the UK Government, the ECITB reports to the Department for Education.

The ECITB awarding organisation for regulated engineering construction qualifications is part of the training board. Our qualifications certify knowledge and competence across craft and technical disciplines. They improve quality and standards for the industry, helping engineering construction companies to maintain occupational competence.

This document is for use by approved centres to ensure that their candidates gain the relevant Knowledge, Skills and Behaviours (KSBs) for their role specific activities. It is also used by ECITB's External Quality Assurers and employers may be interested in this document if they have employees or applicants who hold this qualification.

#### 1.2 Regulation

This qualification is regulated by Ofqual and is listed on Ofqual's Register of Regulated Qualifications.

This qualification has an operational start date of 01/09/2025. This is the date centres may start registering candidates and delivering courses leading to the qualification.

#### 1.3 Objective

The objective of this qualification is to:

- prepare candidates for employment by attaining a range of knowledge, skills and behaviours to support welding within the engineering construction industry.
- provide opportunities to progress to the next level of vocational welding qualifications in the engineering construction industry.

#### 1.4 Candidates

This qualification is suitable for candidates currently working in, or those that are interested in entering the engineering and construction industry in the role of welding operative. This qualification is also suitable for individuals who would like to acquire engineering competencies in a realistic, sheltered, and controlled environment such as that offered by colleges, training providers and company training centres. This will then enable a safe progression into the workplace/employment.

The individual working in these roles will conduct welding activities in engineering construction under the direct supervision of a crafts person, charge hand or supervisor to prepare work areas and equipment, conduct welding activities and dismantle welding equipment and environments and reinstate the work area within a limited range of engineering construction components and materials. They are able to interpret documents, welding specifications, engineering drawings and diagrams and understand the on-site hazards and health, safety and environmental requirements of plant and systems.

A candidate must register for this qualification via an ECITB approved centre based in England. If you are a candidate looking for a centre, please email ECITB at <a href="mailto:qualifications@ecitb.org.uk">qualifications@ecitb.org.uk</a> to help identify a suitable centre for you.

#### 1.5 Language

This qualification is available in English only.

For candidates who use English as a second language, an approved centre must satisfy itself prior to registering a candidate that the candidate's level of English is sufficient to be

able to access the learning and undertake the assessment at the appropriate level, and to be able to interact with others and work safely.

#### 1.6 Entry requirements

There are no mandatory entry requirements. The qualification is open to any candidate who the approved centre believes has the ability to reach the assessment requirements set out within this document. A candidate must have a sound grasp of the English language and mathematics to be able to follow instructions as well as complete the learning and assessment required within this qualification. The approved centre will work with the candidate and, where appropriate, employer, to determine the candidate's suitability for the qualification.

#### 1.7 Progression

Candidates who pass this qualification can progress to a range of further career options. These include apprenticeships in engineering construction and associated disciplines and gain employment in these areas.

- ECITB Level 3 Diploma in Pipe Welding in Engineering
- ECITB Level 3 Diploma in Plate Welding in Engineering

You can find information about career progression in Engineering Construction at <u>Careers in Engineering Construction ECITB</u>.

#### 1.8 Standards

Each unit in this qualification has been mapped to Occupational Standards (formerly known as Apprenticeship standards) and National Occupational Standards (NOS). The assessment criteria within this qualification have been developed by the ECITB in consultation with stakeholders, including employers in the industry, Assessment Associates who are subject experts and approved centres.

#### 1.9 Units and grades

This qualification consists of 6 mandatory units. Candidates must attain all the learning outcomes in each unit to gain a pass in the qualification. Candidates achieve a unit by meeting all of the assessment criteria linked to all learning outcomes at the appropriate standard. The units in section 2 of this document detail the assessment criteria. The qualification grades available are pass or fail. We issue a qualification certificate but do not issue unit certificates.

The qualification contains the following units:

ECITB unit ref no.	RQF unit ref no.	Unit title	RQF level	Mandatory or optional
SAF2	A/651/7125	Work safely in an engineering construction environment	2	Mandatory
REL2	D/651/7126	Maintain working relationships, communicate effectively, support diversity and inclusion	2	Mandatory
DOC2	F/651/7127	Interpret and follow documentation and procedures	2	Mandatory
PRE2WL	H/651/7128	Prepare work area, materials, tools and equipment for welding activities	2	Mandatory
IWT2WL	J/651/7129	Introduction to welding techniques	2	Mandatory
RWA2WL	M/651/7130	Reinstate the work area after welding activities	2	Mandatory

#### 1.10 Guided Learning Hours (GLH) and Total Qualification Time (TQT)

Values for Total Qualification Time (TQT), including Guided Learning Hours (GLH), are calculated by considering how much time it would take the typical candidate to complete the learning and assessment activities to achieve the learning outcomes of a qualification.

TQT is an estimate of the total amount of time, on average, that the candidate will take to complete the supervised and unsupervised learning and assessment for the qualification.

GLH is a subset of the TQT and only refers to the supervised time that the candidate will spend with a tutor/ trainer/ assessor/ invigilator.

Individual candidates' requirements and different programme delivery methods at approved centres mean there will be variation in the actual time taken to complete a qualification. Values for TQT, including guided learning, are estimates.

There are 420 GLH for this qualification.

Some examples of activities which can contribute to guided learning include:

- classroom or workshop-based learning supervised by a tutor/trainer
- work-based learning supervised by a tutor/trainer
- live webinar or phone tutorial with a tutor/trainer in real time
- e-learning supervised by a tutor/trainer in real time
- all forms of assessment which take place under the immediate guidance or supervision of a tutor/trainer.

The TQT for this qualification is 420 hours.

Some examples of activities which can contribute to TQT include:

- independent and unsupervised research/learning
- unsupervised compilation of a portfolio of work
- unsupervised e-learning
- unsupervised e-assessment
- watching a pre-recorded podcast or webinar
- unsupervised work-based learning
- all guided learning.

The number of GLH/TQT is identical due to the candidate being supervised throughout the duration of this qualification.

The GLH and TQT for each unit are in this table:

ECITB unit ref no.	RQF unit ref no.	Unit title	RQF level	GLH	TQT
SAF2	A/651/7125	Work safely in an engineering construction environment	2	20	20
REL2	D/651/7126	Maintain working relationships, communicate effectively, support diversity and inclusion		20	20
DOC2	F/651/7127	Interpret and follow documentation and procedures	2	20	20
PRE2WL	H/651/7128	Prepare work area, materials, tools and equipment for welding tasks	2	40	40
IWT2WL	J/651/7129	Introduction to welding techniques	2	280	280
RWA2WL	M/651/7130	Reinstate the work area after welding activities	2	40	40
Total				420	420

#### 1.11 ROF level

This qualification is at RQF level 2. The RQF level descriptor is:

Knowledge descriptor (the holder)	Skills descriptor (the holder can)
Has knowledge and understanding of facts,	Select and use relevant cognitive and
procedures and ideas in an area of study or	practical skills to complete well-defined,
field of work to complete well-defined tasks	generally routine tasks and address
and address straightforward problems.	straightforward problems.
Can interpret relevant information and	Identify, gather and use relevant
ideas.	information to inform actions.
Is aware of a range of information that is	Identify how effective actions have been.
relevant to the area of study or work.	

#### 1.12 Equity, diversity and inclusion

We have designed this qualification and its assessments to enable fair access to all candidates as far as reasonably possible, while taking industry requirements into consideration e.g. health and safety.

This qualification is designed to promote equity, diversity, and inclusion (EDI) through the learning outcomes (LOs) and assessment criteria (ACs) within it. The qualification ensures that candidates understand the importance of creating inclusive environments and are equipped with the skills to do so. The scope of the qualification covers maintaining and communicating effectively to promote good working relationships with all individuals within the workplace.

You may wish to refer to our *Equal Opportunities Policy* and the *Reasonable Adjustments* and *Special Considerations Policy and Procedure* at <u>The ECITB Awarding Organisation</u> <u>ECITB</u>. If you would like to discuss arrangements for reasonable adjustments, please contact us at <u>qualifications@ecitb.org.uk</u>.

#### 1.13 Sustainability

This qualification is designed to provide an understanding of sustainability principles and practices, integrating them throughout its learning outcomes (LOs) and assessment criteria (ACs). The qualification ensures that candidates are equipped with the knowledge and skills to implement sustainable practices in their professional roles. The scope of the qualification covers critical sustainability topics, such as resource management, environmental protection, and correct disposal of materials, and equipment.

#### 1.14 Digital skills

This qualification is designed to provide an understanding of digital skills by integrating them throughout its learning outcomes (LOs) and assessment criteria (ACs). The qualification ensures that candidates can use digital tools and technologies essential for workplaces. This could include emailing, data management, and following cybersecurity practices.

#### 2. Units

#### 2.1 Unit features

The qualification units are all presented in a standard layout, providing information for candidates, tutors/trainers, assessors, IQAs and EQAs as well as those who may wish to know about the units for progression purposes, such as training providers, colleges and employers. Each unit has the following sections in it:

#### **ECITB** unit number

The unique unit code that identifies the unit on ECITB systems.

#### **RQF** unit number

The unique unit code that identifies the unit on the Register of Regulated Qualifications.

#### **Unit title**

The name of the unit, which reflects the content of the unit.

#### **RQF** level

The level measures the degree of challenge posed by the qualification compared to other qualifications. The level is determined by using Ofqual's level descriptors.

#### **Unit aim**

A summary of what the unit enables the candidate to do.

#### **Learning outcomes**

What a candidate will know, understand and/or be able to do upon attainment of the unit. Each learning outcome starts with the letters LO.

#### **Assessment criteria**

The requirements a candidate is expected to meet in order to demonstrate the attainment of the related learning outcome. Each assessment criterion starts with the letter K if it relates to Knowledge or understanding, with S if it relates to Skills or with B if it relates to Behaviours. Each assessment criterion starts with a command verb which instructs the candidate in what to do.

#### **Additional Information**

This section provides further information related to those learning outcomes and assessment criteria where clarification is required to support delivery and assessment, to ensure the range of teaching, learning and content of the unit can be met. The text highlighted in **bold** within the assessment criteria indicates that additional information is provided at the end of the unit. This additional information outlines specific content that approved centres/ candidates are encouraged to explore and include within their evidence as appropriate to their role and workplace. The information should be used by candidates to prepare for the qualification, by tutors/trainers to deliver a programme of learning, by assessors to assess candidate evidence, and by IQAs and EQAs for quality assurance. This may also be used to write questions for knowledge tests.

#### **Assessment**

This section outlines the ways the unit will be assessed.

#### **Standards**

The Occupational Standards (OS, formerly known as Apprenticeship Standards) and the National Occupational Standards (NOS) that the unit is aligned to, builds on or selectively covers.

#### 2.2 Units

**ECITB Unit number: SAF2** 

**RQF Unit number: A/651/7125** 

Unit title: Work safely in an engineering construction

environment

#### **RQF level: 2**

**Unit aim:** This unit is designed to enable the candidate to gain an understanding of relevant health and safety legislation, safe working practices and emergency procedures. The knowledge gained underpins the development of skills and behaviours to minimise risk, deal with hazards and work safely at all times.

#### Learning outcome:

1. The candidate will understand the relevant health, safety and environmental legislation, regulations, safe working practices, personal site safety responsibilities and be able to work safely in an engineering construction environment.

# **Knowledge assessment criteria:**The candidate can, within the context of their role:

# K1.1 Describe the statutory requirements of key **health and safety legislation and regulations**relevant to the role.

- K1.2 Explain the purpose and nature of risk assessments, method statements and permit to work systems.
- K1.3 Explain the key consequences of not meeting health and safety responsibilities.
- K1.4 State the purpose of personal protective equipment (PPE) for specific tasks.
- K1.5 List the checks to ensure portable electrical appliances are safe to use.
- K1.6 Describe typical first aid procedures in the workplace including how to report accidents.
- K1.7 State common workplace emergency and evacuation procedures, including individual roles and responsibilities.

#### Skills assessment criteria:

The candidate can, within the context of their role:

- S1.1 Follow relevant health and safety legislation, regulations and workplace procedures when carrying out tasks.
- S1.2 Implement risk assessments, method statements, and permit-to-work systems correctly before and during work activities.
- S1.3 Demonstrate safe working practices to meet legal and organisational health and safety responsibilities.
- S1.4 Select and use the appropriate personal protective equipment (PPE) for the task being undertaken.
- S1.5 Carry out visual and pre-use checks to confirm that portable appliances are safe for operation.
- S1.6 Respond appropriately to workplace incidents, applying basic first aid procedures and reporting protocols.
- S1.7 Follow site-specific emergency and evacuation procedures and carry out assigned roles during drills or real situations.

#### Learning outcome:

2. The candidate will understand risk and hazard management techniques and take appropriate action to deal with potential hazards and mitigate risks.

#### **Knowledge assessment criteria:**

The candidate can, within the context of their role:

### Skills assessment criteria:

The candidate can, within the context of their role:

- K2.1 Describe the common types of **hazards** associated with processes, tools, equipment and materials.
- K2.2 State the potential effects of hazards on people, property, and the environment.
- K2.3 Describe types of injury that may result from workplace hazards and how they can be prevented.
- K2.4 Explain the risks within the work environment and relevant tasks.
- K2.5 Describe the process for managing hazards and associated risks, including roles, responsibilities, and procedures for reporting.

- S2.1 Identify and report **hazards** related to processes, tools, equipment, and materials in accordance with workplace procedures.
- S2.2 Take appropriate **action** to minimise the impact of hazards on people, property, and the environment.
- S2.3 Apply safe working practices to prevent injury from identified hazards.
- S2.4 Assess and use appropriate control measures to mitigate risks within the work environment and relevant tasks.
- S2.5 Follow workplace procedures for hazard management, including risk assessment, control measures, and accurate reporting.

#### Behaviours assessment criteria:

The candidate must demonstrate the following as part of the observed skills assessment or provide additional evidence as part of their portfolio of evidence, specifically:

- B1.1 Safety conscious works safely at all times
- B1.2 Risk aware identifies hazards and minimises risk
- B1.3 Effective communicator works effectively with others including keeping others informed
- B1.4 Conscientious follows procedures and completes documentation accurately and correctly
- B1.5 Takes initiative deals with routine problems effectively and highlights those that cannot be solved

#### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills and behaviours will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge, skills and behaviours will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

#### **Standards**

- ECI C02 Work safely and manage risks and hazards in engineering construction
- ST0537 Engineering Operative

**ECITB Unit number: REL2** 

RQF Unit number: D/651/7126

Unit title: Maintain working relationships, communicate

effectively, support diversity and inclusion

**RQF level: 2** 

**Unit aim:** This unit will enable the candidate to understand the importance of maintaining working relationships and equip them to develop skills and behaviours to communicate effectively whilst adhering to processes and regulations.

#### Learning outcome:

1. The candidate will understand and be able to maintain good working relationships with all individuals and communicate in manner that complies with Equality, Diversity & Inclusion (ED & I) policies.

#### **Knowledge assessment criteria:**

The candidate can, within the context of their role:

- K1.1 Describe the importance of working with equality, diversity, and inclusion in mind.
- K1.2 Explain why it is important to treat people fairly and with respect in the workplace.
- K1.3 State why it is important to work with honesty and integrity.
- K1.4 List codes of conduct, including work-based and professional codes of conduct relevant to the role.
- K1.5 State the importance of maintaining good working relationships and the benefits, considering the impact of own work on others
- K1.6 Describe the different problems that affect working relationships and the actions that can be taken to deal with specific difficulties.
- K1.7 State the importance of reporting lines, procedures, systems and documentation and the consequences of failing to follow them.
- K1.8 Describe the limits of their own responsibility and who to refer to for clarification on issues.

#### Skills assessment criteria:

The candidate can, within the context of their role:

- S1.1 Apply a positive response when others ask for help or information.
- S1.2 Treat people fairly and with respect in the workplace.
- S1.3 Demonstrate honesty and integrity in the completion of tasks and interactions with others.
- S1.4 Comply with codes of conduct, as appropriate for the role.
- S1.5 Maintain effective relationships by considering the impact of own work on others.
- S1.6 Keep others informed about work activities which affect them.
- S1.7 **Resolve problems and disagreements** in a constructive and objective manner.
- S1.8 Seek assistance from others in a polite and courteous manner.
- S1.9 Report problems within the limits of their own responsibility escalating if needed.

#### Behaviours assessment criteria:

The candidate must demonstrate the following as part of the observed skills assessment or provide additional evidence as part of their portfolio of evidence, specifically:

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B1.1 Effective communicator – works effectively with others including keeping others informed

B1.2 Ethical and sustainability behaviours such as:

- Conforms to environmental expectations
- Uses resources efficiently and effectively
- Treats all people fairly and with respect

#### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills and behaviours will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge, skills and behaviours will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

#### **Standards**

- ECI C01 Maintain working relationships, communicate effectively and support diversity and inclusion
- ST0537 Engineering Operative

**ECITB Unit number: DOC2** 

RQF Unit number: F/651/7127

Unit title: Interpret and follow documentation and procedures

#### RQF level: 2

**Unit aim**: This unit will enable the candidate to understand documentation and procedural requirements and equip them with skills and behaviours to interpret and follow documentation and procedures.

#### Learning outcome:

1. The candidate will understand how to interpret engineering drawings and documents and be able to interpret and use these, following procedures.

Knowledge assessment criteria: The candidate can, within the context of their role:		<b>Skills assessment criteria:</b> The candidate can, within the context of their role:	
K1.1	Describe engineering drawings, documentation and conventions used in their role.	S1.1	Identify the correct drawings/documents relevant to the task.
K1.2	<b>procedures</b> , standards and the importance of checking the validity of		Check the <b>validity</b> of the documentation to be used for work to be undertaken.
K1.3	any documentation to be used. State <b>procedures</b> related to	S1.3	Adhere to all required procedures including authorisation procedures.
K1.4	allocated tasks undertaken. Describe typical reporting and authorisation processes and	S1.4	•
K1.5	procedures and their importance.	S1.5	Interpret and use relevant plans and schedules.
	<b>procedures</b> and requirements in relation to allocated workplace activities.	S1.6	Report any instance where the requirements of the activity cannot be fully met or where there are variations from the specification or plan of work.
		S1.7	Follow appropriate handover procedures.
		S1.8	•

#### Behaviours assessment criteria:

The candidate must demonstrate the following as part of the observed skills assessment or provide additional evidence as part of their portfolio of evidence, specifically:

- B1.1 Conscientious follows procedures and completes documentation accurately and correctly
- B1.2 Takes initiative deals with routine problems effectively and highlights those that cannot be solved

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#### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills and behaviours will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge, skills and behaviours will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

#### **Standards**

- ECI C05 Interpret and follow documentation and procedures
- ST0537 Engineering Operative

**ECTIB Unit number: PRE2WL** 

RQF Unit number: H/651/7128

Unit title: Prepare work area, materials, tools and equipment

for welding tasks

#### RQF level: 2

**Unit aim:** This unit will equip the candidate with the knowledge and skills to prepare the work area, materials, tools and equipment for welding activities in the engineering construction industry.

#### Learning outcome:

1. The candidate will understand how to and be able to prepare the work area, materials and equipment in the workplace safely and correctly.

#### **Knowledge assessment criteria:**

The candidate can, within the context of their role:

## K1.1 Explain **work area preparation** requirements for the intended work activity.

- K1.2 State the requirement for isolations and why they must be in place before work commences.
- K1.3 List potential hazards and risks that may arise during the preparation of work areas.
- K1.4 Explain how to connect to **service supplies** in line with associated procedures.
- K1.5 List **different types of equipment** that must be prepared to support the specified activity.
- K1.6 Explain how to **select and check the correct materials** ensuring that they are in a usable condition.
- K1.7 Explain material handling and preparation terminology, methods and techniques.
- K1.8 Explain the consequences of not preparing work areas, equipment, tools and materials correctly.
- K1.9 Explain their own individual responsibility for care and security of **tool and equipment control.**
- K1.10 Explain their own responsibility for the correct use of relevant tools and equipment.

#### Skills assessment criteria:

The candidate can, within the context of their role:

- S1.1 Ensure the work environment is suitable and **safe** for **pre-weld activities** to be undertaken.
- S1.2 Check workplace isolations are implemented as specified.
- S1.3 Identify potential hazards and risks during preparation of work areas and report as appropriate.
- S1.4 Connect to service supplies in line with associated procedures as specified.
- S1.5 Select equipment that must be prepared to support the specified activity.
- S1.6 **Select the correct materials** and check they comply to specification.
- S1.7 Prepare materials for the intended task.
- S1.8 Prepare equipment and tools to check they are serviceable and meet operational requirements.

#### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge and skills will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

#### **Standards**

- ECISAEC01 Prepare work areas, materials, tools and equipment
- ST0349 Welder

**ECTIB Unit number: IWT2WL** 

**RQF Unit number: J/651/7129** 

**Unit title: Introduction to welding techniques** 

#### **RQF level: 2**

**Unit aim:** This unit will equip the candidate with knowledge and skills to support welding activities, and the joining of materials by manually controlled welding activities.

#### **Learning outcome 1:**

1. The candidate will understand how to and be able to select the correct processes and equipment when joining materials by manually controlled welding activities.

Knowledge assessment criteria: The candidate can, within the context of their role:		<b>Skills assessment criteria:</b> The candidate can, within the context of their role:		
	Describe the materials, consumables and procedures to be used for the welding task. List the range of gases required for	S1.1 S1.2	Select the correct joining equipment required to perform the joining activities. Select specified materials and	
1/1.2	specific processes.	31.2	consumables for the welding task.	
K1.3	Describe the equipment setting, operating and care procedures required for specific processes.	S1.3	Interpret documentation and follow relevant procedures for the welding task.	
K1.4	Outline the requirements for the welding equipment cable management and inspection	S1.4	Select gases for the specific process in line with the welding task procedure.	
	procedures.	S1.5	Show the correct set up of the joining equipment as specified in the weld procedure.	
		S1.6	Demonstrate correctly routing the welding equipment cables to ensure they are safe and secure for the intended task.	

#### Learning outcome 2:

2. The candidate will understand how to and be able to join specified materials by manually controlled welding processes.

Knowledge assessment criteria: The candidate can, within the context of their role:	<b>Skills assessment criteria:</b> The candidate can, within the context of their role:	
<ul> <li>K2.1 Describe joining processes.</li> <li>K2.2 Identify common weld defects and causes.</li> <li>K2.3 State how to report any variations from the specification and procedures.</li> <li>K2.4 State equipment shut down procedures.</li> </ul>	<ul> <li>S2.1 Produce joints as specified using the appropriate welding technique.</li> <li>S2.2 Demonstrate how to check the joints conform to the specified quality/dimensional accuracy stipulations.</li> <li>S2.3 Report variations follow reporting procedures.</li> </ul>	

S2.4	Demonstrate how to shut down
	equipment to a safe condition on
	completion of joining activities.
	S2.4

#### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge and skills will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

The candidate must be observed on **at least two** occasions interpreting relevant procedures and documentation to include **at least two** of the below:

- product worksheets
- quality assurance documentation/system
- risk assessment/method statements
- weld control card
- weld map/engineering drawing/isometric
- weld procedure.

The candidate must be observed producing a minimum of **two** different welds from the tables below. The welds must be continuous for a **minimum of 225mm in length** including **at least one stop start.** The end of the weld must be finished to ensure cracks cannot propagate.

The finished weld must be free from mechanical defects created in the cleaning of the weld and must pass a qualification test equivalent to BS EN 4872 Part 1 or a higher standard including mechanical testing and a visual examination.

The process (1), joint type (2) and welding position (3) must not be the same for both assessed welds.

A **minimum of two** different variables should be achieved across both assessed welds. See the example below.

- MAG (1), Square Butt (2), PA (3).
- TIG (1), Open corner weld (2), PA (3).

#### Positions according to BS EN ISO 6947-2019.

Joint type (2)	Square butt weld	Open corner weld	Single sided fillet
Welding Position (3)	Flat position (PA)	Flat position (PA)	Horizontal vertical position (PB)

Joining process(es), materials and procedures to be used:

Welding Process (1)	Minimum Plate thickness		
MIG/MAG	6mm Low Carbon Steel		
MMA	6mm Low Carbon Steel		

TIG 3mm Low Carbon Steel

#### Quality standards and dimensional accuracy

Joint quality, tolerances and acceptance levels must be in accordance with approved welding procedure specifications (WPS) and specified construction standard/specification.

#### **Standards**

- ECISAEC13 Support welding operations in engineering construction
- ST0349 Welder

**ECTIB Unit number: RWA2WL** 

RQF Unit number: M/651/7130

Unit title: Reinstate the work area after welding activities

**RQF level: 2** 

**Unit aim:** This unit will equip the candidate with the knowledge and skills to reinstate the work area after completing welding activities.

#### **Learning outcome:**

1. The candidate will understand how to and be able to reinstate the work area safely and to specification after welding activities.

Knowledge assessment criteria: The candidate can, within the context of their role:		Skills assessment criteria: The candidate can, within the context of their role:		
	State the <b>reinstatement actions</b> to be taken for materials, tools and equipment.  Explain <b>reinstatement procedures</b> of the work area and ensure specific requirements relating to <b>tools</b> , <b>equipment</b> , <b>materials</b> and	S1.1 S1.2 S1.3	equipment, tools, and resources post weld activities. Follow storage procedures for materials, equipment, tools and resources.	
K1.3	resources are met. State the health, safety, and environmental requirements that need to be adhered to in order to dispose of and segregate materials correctly.	S1.4	accordance with the relevant health, safety, and environmental sustainability procedures.	
K1.4	State the correct reinstatement procedure(s) to be implemented to store and where necessary dispose of hazardous and non-hazardous waste and redundant/obsolete equipment.	S1.5 S1.6 S1.7	Complete the signing in and out in accordance with specified procedures.	
K1.5	Describe methods and procedures for quarantining tools, equipment and materials.	S1.7 S1.8 S1.9	organisational requirements	

#### **Assessment**

This section outlines the ways the unit will be assessed.

The candidate's knowledge will be assessed through the completion of a knowledge test for this specific unit.

The candidate's skills will be assessed through observed activities in the workplace or through the completion of skills assessment tests in a simulated environment.

Some of the candidate's knowledge and skills will be assessed in the technical discussion which is holistic and covers aspects of the whole qualification.

The candidate must be observed on at **least two** occasions removing consumables after completing welding activities and storing them correctly in the approved location.

The candidate must also be observed on at **least two** occasions isolating, disconnecting, and storing the welding plant and equipment in the approved location, ensuring that no damage can occur to the plant or equipment.

#### **Standards**

- ECISAEC05 Reinstate the work area after engineering construction activities
- ST0349 Welder