

# SEG Awards ABC Level 1 Certification in Fabrication and Welding Practice

#### **Assessment Pack**

Name of Learner	_
ABC Awards Registration Number	
Name of Centre	

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#### 1:1 Introduction

This assessment pack contains details of the requirements of the practical tasks and examination in the ABC Level 1 Certificate in Fabrication and Welding Practice. Prior to commencing this qualification, the learner, assessor and appointed IQA should familiarise themselves with the content of this pack and what is to be expected in order to achieve this qualification.

#### 1:2 Details of qualification

The Level 1 Certificate in Fabrication and Welding Practice consists of **FOUR** units, **ALL** of which must be completed to achieve the qualification. Details of the units required are given as:

Units	Level	Credit Value	GLH
1. Health and Safety in an Industrial Environment [K/616/1262]	1	5	50
2. Welding Processes (Manual Metal-Arc and Metal Active Gas) [M/616/1263]	1	5	50
3. Fabrication Processes (Sheet Metal and Plate) [T/616/1264]	1	5	50
4. Engineering Drawing [A/616/1265]	1	5	50

#### 1:3 Role of the Assessor and IQA

It will be expected that the appointed assessor will assess the work both fairly and consistently in all units. Feedback to the learner is an integral part of the assessment process and will be inspected closely during external moderation.

It is also important that there is evidence to show that a suitable sample of internal moderation has taken place on any cohort undertaking this qualification.

Assessment and IQA plans will be required to show that all units are being covered. Signatures of both the assessor and IQA alone on learners work will not be acceptable – there must be evidence of feedback to the learner.

# 1:4 Overview of the assessment requirements for the Level 1 Certificate qualification

Assessment of this unit will be covered by:

- 1:4:1 A mandatory multi-choice external knowledge test (detailed in 1:5)
- 1:4:2 Unit 1 Health and Safety in an Industrial Environment– completion of a risk assessment document (detailed in 1:6)
- 1:4:3 Unit 2 Welding Processes practical welding task (detailed in 1:7)
- 1:4:4 Unit 3 Fabrication Processes practical fabrication assembly (detailed in 1:8)
- 1:4:5 Unit 4 Engineering Drawing produce an orthographic drawing (detailed in 1:9)

#### 1:5 Mandatory multi-choice external knowledge test

An external knowledge test consisting of 30 multi-choice type questions is a mandatory requirement for **all** learners undertaking this qualification. The test will last 1 hour in duration. In order to achieve a pass grade a minimum mark of 60% (18 correct answers out of 30) will be required. The grade recorded will be pass/fail only.

The knowledge test will cover all four units and the breakdown of questions by each unit is as follows:

Breakdown of number of questions for each unit		Number of questions
Unit 01	Health and Safety in an Industrial Environment	10
Unit 02	Welding Processes (Manual Metal-Arc and Metal Active Gas Shielded)	7
Unit 03	Fabrication Processes (Sheet Metal and Plate)	7
Unit 04	Engineering Drawing	6
	Total questions	30

#### 1:6 Unit practical summaries

1:6:1-1:6:4 cover the details of the practical tasks learners are required to undertake in order to achieve this qualification.

#### 1:6:1 Unit 1 Health and Safety in an Industrial Environment

Assessed task	Produce a completed risk assessment document.
Documentation to be completed by the learner	Learner to complete a risk assessment document. Tutor/assessor to assess the document and confirm the results of the assessment.
Details of the task	Learner to complete a risk assessment using the supplied pro-forma prior to carrying out a welding activity. Only <b>one</b> feature required - suggested risks may include: arc eye, arc radiation burns, fumes from welding, handling hot metal and electric shocks.
Assessment criteria	The features of the completed pro-forma shall be assessed by the tutor/assessor and confirmed as acceptable or failing to meet the standard due to insufficient information submitted.
Grade awarded	Pass/Fail – No other grade available.

#### 1:6:2 Unit 2 Welding Processes - Practical Welding

Assessed task	A practical welding task using a welding process of the learner's choice to complete <b>ONE</b> welded joint.
Documentation to be completed by the tutor/assessor	Tutor/assessor to complete the welding matrix document and award a grade for the completed weld.
Details of the task	Learner to complete <b>ONE</b> weld from the options of a lap joint or an open corner joint using either the MMA or MAG welding process.
Assessment criteria	The features of the completed weld shall be assessed against the criteria listed in the welding matrix grading document.
Grades awarded	Fail, Pass, Merit and Distinction

## **1:6:3 Unit 3 Fabrication Processes – Practical Fabrication Assembly**

Assessed task	Produce a fabricated component to the tolerances stated on the drawing supplied in the fabrication section of this booklet.
Documentation to be completed by the tutor/assessor	Tutor/assessor to complete the fabrication matrix document and award a grade for the completed fabrication.
Details of the task	Learner to produce a fabricated assembly to the specifications detailed on the supplied drawing.
Assessment criteria	The features of the completed fabrication assembly shall be assessed against the criteria listed in the fabrication matrix grading document.
Grade awarded	Fail, Pass, Merit and Distinction

### 1:6:4 Unit 4 Engineering Drawing – Produce an orthographic drawing

Assessed task	Using CAD or manual drawing methods, produce a drawing of an engineering component which is supplied in the drawing section of this booklet.
Documentation to be completed by the tutor/assessor	Tutor/assessor to complete the drawing matrix document and award a grade for the completed drawing.
Details of the task	From a supplied isometric drawing, the drawing completed by the learner should be:
Assessment criteria	The features of the completed drawing shall be assessed against the criteria listed in the drawing matrix grading document.
Grade awarded	Fail, Pass, Merit and Distinction

Feedback for all units in this qualification for the assessor, IQA and EQA, together with the final grading structure for this qualification can be found at the end of this booklet.

# The remainder of this document is available to ABC Awards registered centres.

Please contact ABC Awards to obtain a copy.