



ETCAL Level 2 Certificate in Manufacturing Practices
601/7648/9
Assessment Guide

Introduction

ETA qualifications are developed in conjunction with the industries and employers they service. They are designed to add value and deliver multidimensional outputs that provide impact for both learners and employers.

It is therefore important that the assessment requirements of ETA qualifications are robust whilst not containing unnecessary and over-burdensome challenges that detract from the intended outcomes and impact.

Who is the qualification for?

This qualification has been designed to cover:

- Employees who perform manufacturing activities in a manufacturing environment and wish to have formal recognition of their knowledge to underpin their activity
- Individuals who wish to gain the knowledge to enter a manufacturing workplace
- Learners registered on the Performing Manufacturing Operations apprenticeship framework

Learner entry requirements

There are no formal entry requirements for learners undertaking this qualification. However, centres must ensure that learners have the potential and opportunity to gain the qualification successfully.

Age restrictions

This qualification is not approved for use by learners under the age of 16, and ETA cannot accept any registrations for learners in this age group.

What does the qualification cover?

Mandatory units cover those areas which have a common approach such as organisational safety requirements and problem solving.

Unit Endorsement

These units are endorsed by the Sector Skills Council for Science, Engineering and Manufacturing Technologies (SEMTEA).

Centre & Qualification Approval

Centres wishing to offer the qualification will need to gain ETA's approval to do so. Current ETA centres can do this via Quartz Web. For non ETA Centres to gain approval to run the qualification please provide your details via <http://quartz.etawards/quartz-system.com> and the ETA team will start the process of approval.

Resource Requirements

Assessors

Assessment must be carried out by competent assessors who hold, or are working towards, a current assessor qualification. They will be expected to regularly review their skills, knowledge and understanding and, where applicable, undertake continuing professional development to ensure that they are carrying out workplace assessment to the most up to date national occupational standards. Assessors must be able to demonstrate that they have relevant and sufficient technical competence to evaluate and judge performance and knowledge evidence of this qualification, the units being taken and the associated assessment criteria. This will be demonstrated either by holding a relevant technical qualification or by proven experience in the learner's industry. The assessor's competence must, at the very least, be at the same level as that required of the learner in the assessment so that they are able to demonstrate the skills needed.

Internal Quality Assurance Advisors

Internal quality assurance (IQA) must be carried out by competent quality assurers who should hold or be working towards, a current internal quality assurance qualification. They will be expected to regularly review their skills, knowledge and understanding and, where applicable, undertake continuing professional development to ensure that they are carrying out workplace assessment to the most up to date national occupational standards. Persons carrying out the role of internal quality assurance will also be expected to be fully conversant with the ETA requirements for IQA in centres. These are detailed in the centre manual. IQAAs must be able to demonstrate that they have relevant and sufficient technical competence to understand performance and knowledge evidence of this qualification, the units being taken and the associated assessment criteria. This will be demonstrated either by holding a relevant technical qualification or by proven experience in the learner's industry. The IQAA's competence must be sufficient to recognise what constitutes acceptable performance, knowledge and understanding as required by this qualification.

External Quality Assurance Advisors

ETA will appoint an appropriately qualified person to provide advice and guidance to the centre team and act as their external quality assurance advisor (EQAA). External quality assurance (EQA) must be carried out by competent quality assurers who should hold, or be working towards, a current external quality assurance qualification. They will be expected to regularly review their skills, knowledge and understanding and where applicable undertake continuing professional development to ensure that they are carrying out workplace assessment to the most up to date national occupational standards. EQAAs must be able to demonstrate that they have relevant and sufficient technical competence to recognise performance and knowledge evidence of this qualification as required by the units being taken and the associated assessment criteria.

Assessment environment

The evidence of a learner's competence, knowledge and understanding for this qualification can only be regarded as valid, reliable, sufficient and authentic if demonstrated in a real working environment.

Qualification Structure

Qualification Number		601/7648/9
Title		Certificate in Manufacturing Practices
Unit Level		Level 2
Guided Learning Hours		56
Total Qualification Time		130
Unit Credit Value		13
Unit Grading Structure		Pass

Learners must achieve a minimum of 13 credits to gain the Certificate in Manufacturing Practices. 10 credits by completing the 3 mandatory units and the remaining 3 credits by completing at least one of the 3 optional units

Mandatory Unit requirements

Manufacturing operation processes			
Unit Reference Number: F/503/9464		Unit Credit Value: 3	Unit GLH: 18
Learning Outcome - The learner will:		Assessment Criterion - The learner can:	
1.0	know the key factors for supporting manufacturing operations processes	1.1	describe how to prepare and maintain work areas
		1.2	describe techniques used to transfer materials
		1.3	describe the checks required to support manufacturing operations
		1.4	identify documentation required to support manufacturing operations
		1.5	state the importance of accurate documentation
2.0	be able to support manufacturing operations processes	2.1	prepare equipment and materials for manufacturing operations
		2.2	interpret instructions to undertake manufacturing operations processes
		2.3	apply procedures used in manufacturing operations processes
		2.4	collect data which reflects condition of manufacturing processes
		2.5	record data which reflects condition of manufacturing processes

Contribute to problem solving in working relationships			
Unit Reference Number: L/503/9466		Unit Credit Value: 4	Unit GLH: 16
Learning Outcome - The learner will:		Assessment Criterion - The learner can:	
1.0	Know factors that can affect working relationships	1.1	identify statutory regulations that can affect working relationships
		1.2	demonstrate the importance of presentation and timekeeping in the workplace
		1.3	describe the importance of sharing knowledge and information with teams and other groups
		1.4	identify ways to develop and maintain good working relationships
		1.5	identify different methods and styles of communication
2.0	know how to deal with problems in working relationships	2.1	describe the procedures for dealing with and reporting problems
		2.2	identify types of problems
		2.3	identify techniques to solve problems
		2.4	explain how to use data and information to help resolve issues
		2.5	identify who to refer to if you have problems that you cannot resolve

3.0	know the importance of self-development	3.1	describe the importance of contributing to your own personal development
		3.2	describe the benefits of continuous personal development
		3.3	identify what training opportunities are available in your workplace
		3.4	describe the importance of reviewing training and development objectives
		3.5	identify different methods and styles of communication
4.0	Know how to contribute to improving effectiveness in the workplace	4.1	state why it is important to work effectively
		4.2	describe improvement opportunities
		4.3	state the benefits to you and your organisation if improvements are identified
		4.4	identify the data and information available to you to communicate your ideas effectively to others

Understand statutory regulations and organisation safety requirements

Unit Reference Number: R/503/6147

Unit Credit Value: 3

Unit GLH: 9

Learning Outcome - The learner will:		Assessment Criterion - The learner can:	
1.0	Know health and safety guidance, legislation and approved policy for workplace environments	1.1	Describe how to comply with the Health and Safety at Work Act 1974 and main statutory legislation relating to the workplace environment
		1.2	Identify relevant legislation and reporting procedures specific to the organisation's work activities
		1.3	State where health and safety information is located
		1.4	List the steps required to carry out a risk assessment
2.0	Know roles and responsibilities for safe working practices and emergency procedures	2.1	Identify fire and other evacuation procedures
		2.2	Identify First Aider and location of the First Aid facilities
		2.3	State actions to be taken in event of an emergency, accident, injury and dangerous occurrences
		2.4	Describe statutory accident and reporting procedures
3.0	Understand how to apply safe working practices in the workplace environment	3.1	Identify required PPE in the work environment
		3.2	Describe safety symbols and signs in the workplace
		3.3	Explain how to deal with hazards and risks in the workplace
		3.4	Identify hazardous symbols in the workplace
		3.5	Describe how to dispose of waste
		3.6	Describe communication procedures for informing personnel of unsafe working practices

Optional Unit requirements

Manufacturing products			
Unit Reference Number: J/503/9465		Unit Credit Value: 3	
Unit GLH: 18			
Learning Outcome - The learner will:		Assessment Criterion - The learner can:	
1.0	Be able to produce basic manufactured products	1.1	use equipment to achieve required specifications
		1.2	interpret operational procedures in specifications
		1.3	monitor and control equipment to achieve required specifications
		1.4	identify the operations to be performed
		1.5	outline the importance of following specifications
2.0	Be able to maintain quality when manufacturing products	2.1	identify methods of minimising waste during manufacturing operations
		2.2	identify variations from specifications
		2.3	describe how to identify faults and problems in manufacturing operations
		2.4	identify allowable adjustments to achieve specifications

Principles of Testing and Inspection activities for manufactured products			
Unit Reference Number: R/503/9467		Unit Credit Value: 3	
Unit GLH: 13			
Learning Outcome - The learner will:		Assessment Criterion - The learner can:	
1.0	know how to carry out testing and inspection activities	1.1	identify different types of testing and inspection activities
		1.2	describe how to check testing and inspection equipment
		1.3	describe components of job specifications
		1.4	describe types of allowable tolerances
		1.5	describe different types of faults
		1.6	describe types of sampling strategies to check quality
		1.7	describe the impact of sampling strategies on quality
2.0	Be able to carry out testing and inspection activities	2.1	interpret job specifications
		2.2	comply with testing and inspection activity procedures
		2.3	review results of testing and inspection activities
		2.4	apply actions to minimize impact when specifications have not been met
		2.5	report on results of tests and inspections

Fundamentals of using computer controlled equipment

Unit Reference Number: Y/503/9468

Unit Credit Value: 3

Unit GLH: 13

Learning Outcome - The learner will:		Assessment Criterion - The learner can:	
1.0	Know how to make products using computer controlled equipment	1.1	describe how to obtain specification documentation
		1.2	describe actions if error messages are displayed
		1.3	describe methods used to minimise waste in computer controlled manufacturing operations
		1.4	identify faults, problems or variations in computer controlled manufacturing operations
		1.5	describe allowable adjustments to achieve specifications in computer controlled manufacturing operations
		1.6	identify the appropriate people within the working area
		1.7	identify the responsibilities of appropriate people within the working area
2.0	Be able to manufacture products using computer controlled equipment	2.1	check manufacturing programs are at correct start point
		2.2	interpret procedures for starting, running and stopping computer programs
		2.3	monitor computer controlled manufacturing operations
		2.4	apply permitted adjustments to maintain production
		2.5	produce manufactured products to specification and quality requirements