

**Summary of the:**

**LEVEL 3 DIPLOMA IN POLYMER MANUFACTURING TECHNOLOGIES**

This qualification is designed for individuals working in the Polymer Processing and related sectors. It covers knowledge of Thermoplastic processing, methods and materials; engineering principles and quality assurance and quality control. Learners may then choose to complete units that focus on specific processes within Polymer Processing i.e. Injection Moulding, Parison Blow Moulding or Preform Blow Moulding.

Establishing underpinning knowledge and understanding for individuals working in the Polymer Processing and related sectors, this qualification is intended to be capable of delivery through both a taught programme of off-the-job learning or through workplace assessment (for those with access to the real workplace).

Learners must achieve 4 Mandatory Units and ONE of the Optional Units: PMT3.05, PMT3.09 or PMT3.11 dependant on the learner's chosen Pathway.

**What is required from candidates?**

Qualifications are made up of a number of units that have a credit value or credits.

These credits must be achieved in the correct combination from mandatory units: this qualification has 4 Mandatory 2 optional units from the learners chosen pathway units.

Optional Units Group 1: Learners must achieve 6 units. Knowledge and competence units must be taken in combination i.e. if unit 3.3k is chosen, unit 3.3c must also be completed; and vice-versa. Optional Units Group 2: Learners must achieve 8 units. Knowledge and competence units must be taken in combination i.e. if unit 2.10k is chosen, unit 2.10c must also be completed; and vice-versa. If units 3.6k and 3.6c have already been chosen in Option Group 1, they cannot again be chosen from Option Group 2.

Qualifications are now required to indicate the total qualification time (TQT), this is to show the typical time it will take someone to attain the required skills and knowledge to meet the qualification criteria.

Qualifications are also required to indicate the number of hours of teaching someone would normally need to receive in order to pass the qualification. These are referred to as Guided Learning Hours (GLH)..

The units are made up of the things you need to know and the things you need to be able to do to carry out your job safely and correctly. These are called Learning Outcomes, and all must be met to achieve the unit.

Unit Number	Unit Name	
Mandatory Units		
PMT 3.01	Principles of Polymer and Thermoplastic Materials	
PMT 3.02	Thermoplastic Processing Technology and Method	
PMT 3.03	Engineering Principles used in Thermoplastic Processing	
PMT 3.04	Quality Assurance and Quality Control in Thermoplastic Processing	
Injection Moulding Pathway		
PMT 3.05	Injection Moulding Process - Machines and Mould Tools	
PMT 3.06	Injection Moulding Processing – Configure, Optimise and Rectify Problems	
Parison Blow Moulding Pathway		
PMT 3.09	Parison Blow Moulding Process – Machines/Equipment and Moulds	
PMT 3.10	Parison Blow Moulding Processing – Configure, Optimise and Rectify Problems	
Preform Blow Moulding Pathway		
PMT 3.11	Preform Blow Moulding Process – Machines/Equipment and Moulds	
PMT 3.12	Preform Blow Moulding Processing – Configure, Optimise and Rectify Problems	

**Assessment Guidance:**

Evidence should show that you can complete all of the learning outcomes for each unit being taken.

### **Types of evidence:**

Evidence of performance and knowledge is required. Evidence of performance should be demonstrated by activities and outcomes, and should be generated in the workplace only, unless indicated under potential sources of evidence (see below). Evidence of knowledge can be demonstrated through performance or by responding to questions.

### **Quantity of evidence:**

Evidence should show that you can meet the requirements of the units in a way that demonstrates that the standards can be achieved consistently over an appropriate period of time.

### **Potential sources of evidence:**

The main source of evidence for each unit will be observation of the candidate's performance and knowledge demonstrated during the completion of the unit. This can be supplemented by the following types of physical or documentary evidence:

- Accident book/reporting systems
- Safety records
- Training records
- Audio records
- Job specifications and documentation
- Delivery Records
- Witness testimonies
- Correspondence with customers
- Notes and memos
- Photo/video evidence
- Work diaries
- Timesheets
- Telephone Logs
- Meeting records
- Records of toolbox talks
- Equipment
- Prepared materials and sites
- Completed work

**Please Note that photocopied or downloaded documents such as manufacturers' or industry guidance, H&S policies, Risk Assessments etc, are not normally acceptable evidence for GQA unless accompanied by a record of a professional discussion or Assessor statement confirming candidate knowledge of the subject. If you are in any doubt about the validity of evidence, please contact your GQA External Verifier.**

