



## **ProQual Level 3 Diploma in Plant Maintenance (Construction)**

### **Qualification Specification**

## Contents

	<b>Page</b>
Introduction	3
Qualification profile	3
Qualification structure	4
Centre requirements	5
Support for candidates	5
Assessment	6
Internal quality assurance	6
Adjustments to assessment	6
Results enquiries and appeals	7
Certification	7
Learning Outcomes and Assessment Criteria	8

## Introduction

The aim of the ProQual Level 3 Diploma in Plant Maintenance (Construction) is to recognise the knowledge, skills and competence demonstrated by an individual in the workplace. This qualification provides the opportunity for individuals who specialise in the maintenance and repair of construction plant and equipment to demonstrate their competence.

The awarding organisation for this qualification is ProQual Awarding Body and the regulatory body is the Office of Qualifications and Examinations Regulation (Ofqual). The specification for these qualifications has been approved by the Welsh Government for use by centres in Wales and by the Council for the Curriculum Examinations and Assessment (CCEA) for use by centres in Northern Ireland.

## Qualification Profile

Qualification title	<b>ProQual Level 3 Diploma in Plant Maintenance (Construction)</b>
Ofqual qualification number	601/8767/0
Level	Level 3
Total qualification time	1030 hours
Guided learning hours	1030
Assessment	Pass or fail Internally assessed and verified by centre staff External quality assurance by ProQual verifiers
Qualification start date	1/5/16
Qualification end date	

## Entry Requirements

There are no formal entry requirements for this qualification.

Centres should carry out an **initial assessment** of candidate skills and knowledge to identify any gaps and help plan the assessment.

## Qualification Structure

To achieve the qualification candidates must complete all of the mandatory units:

Mandatory Units			
Unit Reference Number	Unit Title	Unit Level	GLH
R/508/3954	Configure plant for Operational Activity	2	40
K/508/3958	Service, maintain and adjust components on plant and equipment	3	60
M/508/3959	Join materials to repair components	2	80
H/508/3960	Control the use of resources for plant maintenance and repair activities	3	80
J/508/4048	Dismantle and assemble components	2	80
L/508/4049	Inspect plant and equipment	3	80
J/508/4051	Provide technical information to plant users	3	40
R/508/4053	Co-ordinate plant maintenance activities	3	40
T/508/4062	Fabricate components for plant and equipment	2	60
F/508/4064	Confirm work meets quality standards	3	40
K/508/4074	Move standard loads	2	60
J/508/4079	Manage health, safety and welfare	3	90
A/508/4080	Hand over plant and equipment	2	40
J/508/4082	Remove and replace components	2	80
R/508/4084	Repair and overhaul plant equipment	3	80
D/508/4086	Plant maintenance workshop practice	2	40
M/508/4092	Diagnose and rectify faults in plant and equipment	3	80

## Centre Requirements

Centres must be approved to offer this qualification. If your centre is not approved please complete and submit form **ProQual Additional Qualification Approval Application**.

### Staff

Staff delivering this qualification must be appropriately qualified and occupationally competent.

### Assessors/Internal Quality Assurance

For each competence-based unit centres must be able to provide at least one assessor and one internal quality assurance verifier who are suitably qualified for the specific occupational area. Assessors and internal quality assurance verifiers for competence-based units or qualifications will normally need to hold appropriate assessor or verifier qualifications, such as:

- Award in Assessing Competence in the Work Environment
- Award in Assessing Vocationally Related Achievement
- Certificate in Assessing Vocational Achievement
- Award in the Internal Quality Assurance of Assessment Processes and Practices
- Certificate in Leading the Internal Quality Assurance of Assessment Processes and Practices

## Support for Candidates

Materials produced by centres to support candidates should:

- enable them to track their achievements as they progress through the learning outcomes and assessment criteria;
- provide information on where ProQual's policies and procedures can be viewed;
- provide a means of enabling Internal and External Quality Assurance staff to authenticate evidence

## Assessment

Candidates must demonstrate the level of knowledge described in the unit. Assessment is the process of measuring a candidate's knowledge and understanding against the standards set in the qualification.

Assessment guidance is included to assure consistency.

Each candidate is required to produce evidence which demonstrates their achievement of all of the learning outcomes and assessment criteria for each unit.

Evidence can include:

- assignments/projects/reports
- worksheets
- portfolio of evidence
- record of oral and/or written questioning
- candidate test papers

**Learning outcomes** set out what a candidate is expected to know, understand or be able to do.

**Assessment criteria** specify the standard a candidate must meet to show the learning outcome has been achieved.

*Learning outcomes and assessment criteria for this qualification can be found from page 8.*

## Internal Quality Assurance

An internal quality assurance verifier confirms that assessment decisions made in centres are made by competent and qualified assessors, that they are the result of sound and fair assessment practice and that they are recorded accurately and appropriately.

## Adjustments to Assessment

Adjustments to standard assessment arrangements are made on the individual needs of candidates. ProQual's Reasonable Adjustments Policy and Special Consideration Policy sets out the steps to follow when implementing reasonable adjustments and special considerations and the service that ProQual provides for some of these arrangements.

Centres should contact ProQual for further information or queries about the contents of the policy.

## Results Enquiries and Appeals

All enquiries relating to assessment or other decisions should be dealt with by centres, with reference to ProQual's Enquiries and Appeals Procedures.

## Certification

Candidates who achieve the requirements for qualifications will be awarded:

- A certificate listing the unit achieved, and
- A certificate giving the full qualification title -

### **ProQual Level 3 Diploma in Plant Maintenance (Construction)**

#### **Claiming certificates**

Centres may claim certificates for candidates who have been registered with ProQual and who have successfully achieved the requirements for a qualification. All certificates will be issued to the centre for successful candidates.

#### **Replacement certificates**

If a replacement certificate is required a request must be made to ProQual in writing. Replacement certificates are labelled as such and are only provided when the claim has been authenticated. Refer to the Fee Schedule for details of charges for replacement certificates.

## Unit R/508/3954

### Configure plant for Operational activity

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know the requirements for configuring plant and equipment.	1.1 Interpret the specification for the task 1.2 Identify the tools and equipment to be used for the task including moving equipment, cranes, appliances, accessories, ancillary equipment, material handling equipment, batching plant and attachments 1.3 Identify personal protective equipment (PPE) for the task in accordance with the specification 1.4 State workplace safety and legislative requirements for disposing of waste
2 Know how to configure plant and equipment.	2.1 Give examples of the setting up requirements for the plant and equipment 2.2 State the care and control procedures for the plant and 2.3 equipment 2.4 Describe the configuration methods and procedures to be used State procedures for recording and documenting the task in accordance with specification.
3 Configure plant and equipment.	3.1 Select personal protective equipment (PPE) for the task, in accordance with the specification. 3.2 Comply with all current workplace safety and legislative requirements. 3.3 Follow the defined procedures for the setting up the plant or equipment. 3.4 Configure the plant or equipment in according with manufacturers specification and statutory requirements. 3.5 Check that all operating parameters are achieved. 3.6 Check that the equipment operates to specification upon completion of the installation. 3.7 Complete all records accurately. 3.8 Dispose of waste in accordance with legislative requirements.



## Unit K/508/3958

### Service, Maintain and Adjust Components on Plant and Equipment

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know the requirements for servicing, maintaining and adjusting plant and equipment.	<ul style="list-style-type: none"><li>1.1 Interpret the maintenance schedule for the specified plant and equipment.</li><li>1.2 Interpret the specified service history for guidance on maintenance requirements.</li><li>1.3 Interpret the manuals and guides required for the work.</li><li>1.4 Identify the tools and equipment to be used for the task.</li><li>1.5 Explain the periodic and schedules service and adjustment methods to be used for the work.</li><li>1.6 Identify personal protective equipment (PPE) for the task, in accordance with the specification.</li></ul>
2 Know how to service, maintain and adjust plant and equipment.	<ul style="list-style-type: none"><li>2.1 Give examples of the safety checks to conduct on the plant and equipment prior to servicing and maintenance.</li><li>2.2 Explain how and where to seek higher level approval for works to be carried out.</li><li>2.3 Explain methods for routine and non-routine adjustment procedures.</li><li>2.4 Explain methods used for periodic and scheduled servicing.</li><li>2.5 State workplace safety and legislative requirements for disposing of waste.</li><li>2.6 Explain procedures for reporting when maintenance activities cannot be met.</li></ul>
3 Carry out servicing, Maintenance and adjustment of plant and equipment.	<ul style="list-style-type: none"><li>3.1 Select personal protective equipment (PPE) for the specified task, in accordance with the specification.</li><li>3.2 Complete work in accordance with the manufacturer's specifications and the specification.</li><li>3.3 Operate plant and equipment to conduct functional and safety checks.</li><li>3.4 Complete servicing, maintenance and adjustment activities to specification.</li><li>3.5 Dispose of waste in accordance with legislative requirements.</li><li>3.6 Record all maintenance activities and pass details onto the appropriate person/s.</li></ul>

## Unit M/508/3959

### Join Materials to repair components

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know the requirements for joining materials.	1.1 Interpret the specification for the work. 1.2 Identify the tools and equipment to be used for the task including oxyacetylene gas, manual metal arc, manual inert gas, electrical soldering tools and soldering coppers. 1.3 Identify personal protective equipment (PPE) for the specified task, in accordance with organisational requirements. 1.4 State current workplace safety and legislative requirements. State legislative requirements for disposing of waste. 1.5
2 Know how to join materials to repair components.	2.1 Give examples of joining procedures including high temperature fusion welding and low temperature soldering. 2.2 State how to ensure requirements for fume extraction, fire precautions and procedures are in place prior to commencing fabrication and repair. 2.3 Describe checks to undertake on equipment and materials before use. 2.4 State the operating parameters for equipment in accordance with the specification. 2.5 State procedure for shutting down equipment.
3 Join and repair components	3.1 Select personal protective equipment (PPE) for the task, in accordance with the specification. 3.2 Check equipment and materials before use. 3.3 Prepare all joints according to the specification. 3.4 Set the equipment to the necessary operating parameters, according to manufacturer's instructions. 3.5 Make specified joints using thermal joining techniques including measuring, pre-treating, cleaning, cutting, positioning, tacking and welding. 3.6 Shut down equipment. 3.7 Dispose of waste in accordance with legislative requirements.

## Unit H/508/3960

### Control the Use of Resources for Plant Maintenance and Repair Activities.

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know the resources required for plant maintenance and repair.	<ul style="list-style-type: none"><li>1.1 Interpret the specification for planning the use of resources.</li><li>1.2 Identify the information required to plan the resources.</li><li>1.3 Identify the resources required including materials and substances, tools, equipment, parts, components, support facilities, test equipment, technical information, space, time and people.</li><li>1.4 Identify the person/s to obtain advice from when resources are not available.</li></ul>
2 Know how to control the use of resources.	<ul style="list-style-type: none"><li>2.1 Identify the quantity of resources required to meet specification.</li><li>2.2 Give examples of sources of additional or alternative resources.</li><li>2.3 Explain procedures for dealing with deviations from planned resource use and wastage.</li><li>2.4 Explain how to record details of resource usage in accordance with the specification.</li></ul>
3 Control the use of resources for plant maintenance and repair.	<ul style="list-style-type: none"><li>3.1 Calculate the quantity of resources required.</li><li>3.2 Make necessary resources available.</li><li>3.3 Make those using resources aware of their responsibilities for care and use.</li><li>3.4 Encourage others to maximise the use of resources and avoid wastage.</li><li>3.5 Take corrective action to remedy deviations from planned resource use.</li><li>3.6 Use resources according to specification and in line with regulatory requirements.</li><li>3.7 Assess resource use and wastage levels.</li><li>3.8 Maintain appropriate records for resource use and allocation.</li></ul>

## Unit J/508/4048

### Dismantle and Assemble Components

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Knowing the requirements for dismantling and assembling plant and equipment components.	1.1 Interpret engineers' drawings and specifications for the work. 1.2 Identify personal protective equipment (PPE) for the task, in accordance with the specification. 1.3 State workplace safety and legislative requirement. 1.4 State legislative requirements for disposing of waste.
2 Know how to dismantle and assemble plant and equipment components.	2.1 Describe methods of recording component placement and orientation before dismantling. 2.2 State approved procedures for the isolation and disconnection of equipment. 2.3 Give examples of how components are dismantled and assembled according to the specification. 2.4 State how to check that components are in serviceable condition. 2.5 Describe procedures for storing serviceable components for reuse.
3 Carry out assembly and dismantling of plant and equipment components.	3.1 Select personal protective equipment (PPE) for the task, in accordance with the specification. 3.2 Check that all components are in serviceable condition for reassembly. 3.3 Dismantle components in accordance with the specification. 3.4 Assemble components in accordance with the specification. 3.5 Secure components using connectors and other devices 3.6 Check the completed assembly meets the specification. 3.7 Store serviceable components for reuse. 3.8 Dispose of waste in accordance with the legislative requirements.

## Unit L/508/4049

### Inspect Plant and Equipment

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know the requirements for inspecting plant and equipment.	1.1 Interpret drawings and specifications for the task. 1.2 Identify the appropriate tools and equipment for the task including hand and power tools, specialist tools, diagnostic and computer aided equipment. 1.3 Identify appropriate personal protective equipment (PPE) for the task, in accordance with the specification. 1.4 State workplace safety and legislative requirements.
2 Know how to inspect plant and equipment	2.1 Explain how to check tools and equipment are in useable condition and calibrate for use. 2.2 Give examples of the inspection checks to be made including visual, periodic, pre delivery, off hire and returned items of plant and equipment. 2.3 Identify the acceptance criteria to be used for the inspection. 2.4 Explain how to remove parts and components from plant and equipment. 2.5 Give examples of critical, non-critical and typical defects. 2.6 Explain procedures for rectifying defects and recording inspection results.
3 Inspect plant and equipment according to the specification.	3.1 Select appropriate personal protective equipment (PPE) for the task, in accordance with the specification. 3.2 Comply with workplace safety and legislative requirements. 3.3 Remove parts and components to gain access to plant and equipment. 3.4 Carry out visual, functional and operational inspections according to the specification. 3.5 Identify critical, non-critical and typical defects or variations from the specification. 3.6 Correct minor defects according to manufacturer's instructions. 3.7 Refit parts and components following inspection. 3.8 Record the results of the inspection in line with organisational and legislative requirements.

**Unit J/508/4051**  
**Provide Technical Information to Plant Users**

<b>Learning Outcome - The learner will:</b>	<b>Assessment Criterion - The learner can:</b>
1 Know how to provide technical information to plant and equipment users.	1.1 Identify the types of plant and equipment previously worked on including wheeled, tracked, static, small, portable plant, tools, attachments and ancillary equipment. 1.2 Explain procedures for storage, care and security. 1.3 Identify the types of documentation and product information available to plant users. 1.4 Identify the types of technical information that can be provided on the use of specific plant and equipment. 1.5 Explain the types of technical information that conform with health and safety and other relevant legislation and guidelines.
2 Know how to provide support to users of plant and equipment.	2.1 Describe workplace safety and legislative requirements. 2.2 Summarise processes for offering operational support to users. 2.3 Explain the reason for retaining feedback on the support provided. 2.4 Explain how to record details of the support provided
3 Provide technical information and support to users of plant and equipment.	3.1 Collate documentation and product information for the plant and equipment user. 3.2 Provide users with technical information on the use of plant and equipment. 3.3 Check information provided conforms to health and safety and other relevant legislation and guidelines. 3.4 Provide operational support to users relating to personnel, service and maintenance, callouts, spares and technical back-up. 3.5 Obtain feedback from users on support provided. 3.6 Record details of the support provided.

## Unit R/508/4053 Co-ordinate Plant Maintenance Activities.

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
<p>1 Know how to organise plant maintenance activities in accordance with the specification.</p>	<p>1.1 Explain how to plant work methods based on ensuring the best use of resources.</p> <p>1.2 Explain how to prioritise work activities to make best use of time and resources.</p> <p>1.3 Explain procedures for allocating roles and responsibilities to individuals.</p> <p>1.4 Give examples of contingency arrangements 1.5 to mitigate risks.</p> <p>1.6 Explain how to record the work plan. State workplace safety and legislative requirements.</p>
<p>2 Work effectively with others</p>	<p>2.1 Establish working relationship with others.</p> <p>2.2 Deal with disagreements if they arise.</p> <p>2.3 Seek advice from others to resolve problems 2.4 and conflicts. Inform others about work plans or activities which affect them.</p>

## Unit T/508/4062

### Fabricate Components for Plant and Equipment

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Knowing the requirements for fabricating and repairing components.	1.1 Interpret the specification for the work. 1.2 Describe circumstance's and reasons for fabricating components. 1.3 Confirm the procedures required to carry out the specified task including shaping, cutting, drilling, filing, threading, fabricating and welding, machining and finishing. 1.4 Identify the hand tools and specialist equipment required for the task. 1.5 Identify personal protective equipment (PPE) for the specified task, in accordance with the specification. 1.6 Confirm the quality standards to be achieved. 1.7 State workplace safety and legislative requirements for disposing of waste.
2 Know how to fabricate and repair components.	2.1 Describe how to check that equipment and materials are as specified and fit for purpose. 2.2 State the operating parameters for equipment in accordance with the specification. 2.3 Give examples of methods used for manufacturing components including shaping, cutting, drilling, filing, threading, fabricating and welding, machining and finishing. 2.4 Describe how to check that components comply with the specification.
3 Fabricate and repair the components.	3.1 Select personal protective equipment (PPE) for the task, in accordance with the specification. 3.2 Check that all equipment and materials are as specified and fit for purpose. 3.3 Confirm manufacturer's instructions for setting equipment operating parameters. 3.4 Confirm the components to be produced and materials to be used including carbon steel, aluminium, plastics and composites. 3.5 Set equipment to the necessary operating parameters. 3.6 Comply with procedures for handling sharp edges. 3.7 Assist with the manufacture of components by shaping, cutting, drilling, filing, threading, fabricating and welding, machining and finishing. 3.8 Check that components comply with specification. 3.9 Dispose of waste in accordance with the legislative requirements.



## Unit F/508/4064

### Confirm Work Meets Quality Standards

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know how to implement quality standards for work operations.	<ul style="list-style-type: none"><li>1.1 Identify the quality standards and design requirements to be met during the work.</li><li>1.2 Confirm the people responsible for the implementation of the quality standards.</li><li>1.3 Describe techniques for allocating roles and responsibilities for quality monitoring to others.</li><li>1.4 Explain procedures for recording details of the quality standards identified and roles and responsibilities allocated.</li></ul>
2 Monitor the quality of work.	<ul style="list-style-type: none"><li>2.1 Check the quality of work.</li><li>2.2 Check the work conforms to design requirements.</li><li>2.3 Record the results of inspections.</li><li>2.4 Organise corrective action to meet required quality standards as appropriate.</li><li>2.5 Report the outcomes of quality monitoring to key stakeholders.</li></ul>

## Unit K/508/4074

### Move Standard Loads

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Knowing the requirements for moving loads.	1.1 State current workplace safety and legislative requirements. 1.2 Identify the equipment required including trolleys, rollers, winchers and hoists, pulley and chain blocks, skids, jacks, ropes, cranes and pull lifts. 1.3 State procedures for reporting problems outside own area of responsibility. 1.4 Identify personal protective equipment (PPE) for the task, in accordance with the specification.
2 Know how to prepare for and move loads.	2.1 Describe the characteristics of the load including weigh, distribution and shape. 2.2 State the methods to be used to move the load including manual or lifting aided. 2.3 Identify a suitable route for moving the load. 2.4 Identify a suitable final location for the load. 2.5 State procedures for protecting the load and the surrounding area from damage. 2.6 Describe how to release and secure the load according to the specification.
3 Move Load	3.1 Select personal protective equipment (PPE) for the task, in accordance with the specification. 3.2 Check that the equipment available is capable of evenly distributing and moving the load safely. 3.3 Secure and protect the load and surrounding area before moving operations begin. 3.4 Comply with all current workplace safety and legislative requirements. 3.5 Attach handling equipment to the load. 3.6 Confirm the load is secure. 3.7 Move the load via the selected route. 3.8 Release the load according to the specification.

## Unit J/508/4079 Manage Health, Safety and Welfare.

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know how to implement practices which protect health, safety and welfare.	1.1 Describe methods for establishing project and statutory requirements for health, safety and welfare. 1.2 Describe techniques for allocating responsibilities to others for health, safety and welfare activities. 1.3 List all responsibilities toward health, safety and welfare in the work area. 1.4 Describe how to promote a culture of health, safety and welfare in the workplace. 1.5 Describe procedures for inducting others into the work environment covering health and safety, workplace operations, equipment and resources, risk control and first aid arrangements. 1.6 Explain procedures for confirming other people are suitably competent to conduct assigned activities.
2 Maintain health, safety and welfare.	2.1 Identify opportunities for improving the health and safety of the work environment. 2.2 Monitor health, safety and welfare in accordance with statutory requirements. 2.3 Identify practices or situations that don not comply with statutory requirements. 2.4 Identify corrective actions to maintain compliance. 2.5 Record special work conditions in accordance with organisational and statutory requirements.

## Unit A/508/4080 Hand Over Plant and Equipment

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know the requirements for handing over plant and equipment.	1.1 Describe own role and level of responsibility. 1.2 State procedures for handover in accordance with the specification including recording and documentation. 1.3 Confirm statutory requirements for the specific item of plant or machinery. 1.4 Describe details of the handover environment and personnel to be involved. 1.5 Identify personal protective equipment (PPE) for the task in accordance with the specification. 1.6 Confirm the quality standards to be achieved.
2 Know how to hand over plant and equipment.	2.1 Describe how to check the condition of plant and equipment. 2.2 Identify the person/s to confirm the transfer of responsibility. 2.3 Give examples of how to familiarise users with operation controls, mechanisms and associated systems. 2.4 Describe the emergency shutdown and isolation procedures for the plant and equipment.
3 Hand over plant and equipment according to the specification.	3.1 Select personal protective equipment (PPE) for the task, in accordance with the specification. 3.2 Confirm the condition of the plant and machinery with users. 3.3 Assist with obtaining agreement from users on the moment of transfer of responsibility. 3.4 Help to familiarise users with operation controls, mechanisms and associated systems as appropriate. 3.5 Check that users understand the emergency shutdown and isolation procedures. 3.6 Complete all handover records in accordance with organisational procedures and legislative requirements.

## Unit J/508/4082

### Remove and Replace Components

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know the requirements for removing and replacing components from plant and equipment.	1.1 Interpret engineers' drawings and related specifications prior to work commencing. 1.2 Identify equipment to be worked on including wheeled, traced, static, small and portable plant, power tools, attachments and ancillary equipment. 1.3 State workplace safety and legislative requirements for disposing of waste. 1.4 Identify personal protective equipment (PPE) for the task in accordance with the specification.
2 Know how to remove and replace components from plant and equipment.	2.1 State procedures for component placement and orientation. 2.2 Describe the removal process for robust and fragile components by unplugging, de-soldering, lubricating, freeing off corroded components, hydraulic pressing, filing and dressing. 2.3 Identify precautions to prevent damage to components during disassembly. 2.4 State methods used to record the condition of removed components. 2.5 State methods used to label removed components and store in an appropriate place.
3 Carry out removal and replacement of components to plant and equipment.	3.1 Select personal protective equipment (PPE) for the task in accordance with the specification. 3.2 Remove and replace components in the correct sequence in accordance with the specification. 3.3 Obtain the required replacement components. 3.4 Check replacement components are in serviceable condition and meet the required specification. 3.5 Take precautions to prevent damage to components during removal and replacement. 3.6 Make necessary adjustments to components to meet specification. 3.7 Complete documentation in the required format. 3.8 Dispose of waste in accordance with legislative requirements.

## Unit R/508/4084 Repair and Overhaul Plant and Equipment.

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know the requirements for repair and overhaul of plant and equipment.	1.1 Interpret the specification for the work. 1.2 Interpret technical manuals and engineering guides for the work. 1.3 Identify the tools and equipment required for the work including specialist tools and equipment, hand tools and power tools, lifting and handling aids and accessories. 1.4 Identify personal protective equipment (PPE) for the task, in accordance with the specification. 1.5 State workplace safety and legislative requirements.
2 Know how to access the condition of components of plant and equipment for re-use.	2.1 Explain how to assess the extent of damage and defects to plant and equipment. 2.2 Identify the cause of failure in components. 2.3 Explain procedures for reporting the results of the assessment in accordance with the specification. 2.4 Identify the feasibility and viability of repairs. 2.5 Identify the availability of components and parts of replacement units.
3 Repair and overhaul plant and equipment according to the specification.	3.1 Select personal protective equipment (PPE) for the task, in accordance with the specification. 3.2 Select repair and overhaul techniques based on the findings of the assessment. 3.3 Dismantle plant and equipment in accordance with manufacturers specification. 3.4 Drain fluids and coolants from plant and equipment. 3.5 Clean repair and overhaul components to specification. 3.6 Reassemble repaired components according to manufacturer's specification. 3.7 Adjust assembled and repaired components. 3.8 Carry out maintenance activities and dispose of waste in accordance with legislative requirements. 3.9 Complete records for the work.

## Unit D/508/4086 Plant Maintenance Workshop Practice.

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know the requirements for work activities.	1.1 Describe how to ensure a workplace is suitable for the activities to be undertaken. 1.2 Identify the service supplies that may be required for the specified work activity. 1.3 Identify materials for work activity including coolants, fluids, fuels. Electricity and air. 1.4 Identify and segregate equipment, components and materials including nuts, bolts, washers, fastenings and pins. 1.5 State workplace safety and legislative requirements for disposing of waste.
2 Know how to maintain the work area and resources.	2.1 Describe checks to be undertaken on materials and resources. 2.2 Identify the person/s to be contacted when dealing with problems outside own level of responsibility. 2.3 Give examples of safe handling techniques for resources. 2.4 Describe techniques for storing resources and finishing products in accordance with the specification.
3 Maintain the work area and resources.	3.1 Check materials such as coolants, fluids and fuels are ready for use and stored in a suitable location. 3.2 Prepare the work area for the storage of materials and finished products. 3.3 Dispose of waste in accordance with legislative requirements. 3.4 Report Problems encountered to the appropriate persons. 3.5 Use safe handling techniques for all resources. 3.6 Label resources so they are identifiable. 3.7 Complete necessary documentation in line with the specification. 3.8 Maintain the work area in a safe condition on completion of the task.

## Unit M/508/4092 Diagnose and Rectify Faults in Plant and Equipment.

Learning Outcome - The learner will:	Assessment Criterion - The learner can:
1 Know the requirements for testing plant and equipment following repair.	1.1 Interpret the engineering test specification for the work. 1.2 Identify the tools and equipment required for the work including hand and power tools, diagnostic test and mechanical, electrical and electronic equipment. 1.3 Identify personal protective equipment (PPE) for the task, in accordance with the specification. 1.4 State workplace safety and legislative requirements. 1.5 Give examples of tests in line with the specification and manufacturers' procedures.
2 Know how to carry out tests on plant and equipment.	2.1 Interpret manufacturer's guidance on how and when tests on the performance and condition of plant and equipment are required. 2.2 Give examples of testing methods in accordance with quality standards, statutory requirements and codes of practice. 2.3 Explain how to record the results of tests in the appropriate format. 2.4 Explain how to review test results against the engineering test specification.
3 Analyse the results of the test on plant and equipment.	3.1 Select personal protective equipment (PPE) for the task, in accordance with the specification. 3.2 Conduct tests in accordance with quality standards, statutory requirements and codes of practice. 3.3 Complete all tests within agreed timeframes. 3.4 Gather and collate test data. 3.5 Resolve inconsistencies in data required. 3.6 Record and analyse results of test data.
4 Interpret the results of tests on plant and equipment.	4.1 Check data analysis taking into consideration the test conditions and previous service history. 4.2 Compare results against the manufacturer's technical data and specifications. 4.3 Identify faults or variations from the plant and equipment specification. 4.4 Determine the implications of the fault for other work and for safety considerations. 4.5 Record and report test results according to the specification and legislative requirements. 4.6 Repeat tests as appropriate.





ProQual Awarding Body  
ProQual House  
Westbridge Court  
Annie Med Lane  
South Cave  
HU15 2HG

Tel: 01430 423822

[www.proqualab.com](http://www.proqualab.com)

[enquiries@proqualab.com](mailto:enquiries@proqualab.com)