



# Level 2 Certificate of Competence in Forklift Truck Operations (0014-33)

July 2020 Version 1.1

**Qualification Handbook**

## Qualification at a glance

<b>Industry area</b>	Agriculture
<b>City &amp; Guilds number</b>	0014-33
<b>Age group</b>	16-19, 19+
<b>Entry requirements</b>	Centres must ensure that any pre-requisites stated in the <i>What is this qualification about?</i> section are met.
<b>Assessment</b>	<p>To gain this qualification, candidates must successfully achieve the following assessments:</p> <p>Practical assessment with oral questioning by a City &amp; Guilds NPTC approved assessor. The assessor can be the same individual who carried out the training or could be a different person. The assessor <b>must</b> be approved and registered with City &amp; Guilds NPTC.</p> <p>The assessment must be a stand-alone process that is separate to the training, and <b>cannot</b> be spread out across the length of the training course i.e. the assessment is conducted at the end of the training course or on a separate day.</p>
<b>Grading</b>	Pass only
<b>Approvals</b>	Full centre approval Qualification approval
<b>Support materials</b>	n/a
<b>Registration and certification</b>	Registration and certification of this qualification is through the Online Registration System (ORS) via Walled Garden, and is subject to end dates.

Title and level	Size (GLH)	TQT	City & Guilds qualification number	Ofqual accreditation number
Level 2 Certificate of Competence in Forklift Truck Operations	21 - 24	24 -28	0014-33	603/5339/9

<b>Version and date</b>	<b>Change detail</b>	<b>Section</b>
1.0 February 2020	First version	
1.1 July 2020	Certification module numbers updated	1. Introduction

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# 1 Introduction

## Purpose statement

The following purpose is for the **Level 2 Certificate of Competence in Forklift Truck Operations (603/5339/9)**

Area	Description
OVERVIEW	
Who is this qualification for?	Individuals who operate a forklift truck as part of their work in agriculture, horticulture or distribution and warehousing. It has been developed to cover the “basic training” requirements of the Approved Code of Practice for Rider-operated Lift Trucks. It will provide the individual with the knowledge, understanding and skills required to prepare and operate a forklift truck safely and to industry standards in line with current legislation.
What does this qualification cover?	Individuals can choose the type of forklift truck for assessment: counter balance forklift, rough terrain masted or telescopic forklift. The assessment covers the preparation and operation of the machine, pre-use maintenance and safety checks, recognition of controls and instruments, and operating to the capacity of the machine. There is an optional unit that covers the use of a forklift truck for materials handling.
WHAT COULD THIS QUALIFICATION LEAD TO?	
Will the qualification lead to employment, and if so, in which job role and at what level?	This qualification will support progression into employment where safe operation of a forklift truck is part of the role. Safe operational skills are key to efficient use, good working practice and preventing accidents, leading to business benefits in terms of less machinery damage and down time. However, achievement of this qualification does not replace any legal requirement to obtain a driving licence for operation on the highway.
Why choose this qualification over similar qualifications?	This is a specialist qualification demonstrating the individual is able to safely operate a forklift truck to a recognised level of competency.
Will the qualification lead to further learning?	Individuals who successfully complete this qualification could go on to increase their level of proficiency through consolidation practice within a working environment, or develop skills in safely operating other land-based machinery.

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## WHO SUPPORTS THIS QUALIFICATION?

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Employer/Higher Education Institutions	The National Farmers Union
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FURTHER INFORMATION	Please refer to the Qualification Handbook, available on the City & Guilds NPTC website, for more information on the structure of this qualification, the content of the units, and assessment.
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## Qualification structure

For the **Level 2 Certificate of Competence in Forklift Truck Operations (Rough Terrain Telescopic)** learners must be trained and assessed in a minimum of one of the units listed below. The qualification will be endorsed to the context of the unit assessed:

Unit number	Unit title	GLH
<b>Mandatory unit</b>		
206	Prepare and operate a rough terrain telescopic or masted forklift truck	21
<b>Elective unit</b>		
208	Operate a rough terrain telescopic or masted forklift truck for materials handling	3

For the **Level 2 Certificate of Competence in Forklift Truck Operations (Masted)** learners must be trained and assessed in a minimum of one of the units listed below. The qualification will be endorsed to the context of the unit assessed:

Unit number	Unit title	GLH
<b>Mandatory unit</b>		
206	Prepare and operate a rough terrain telescopic or masted forklift truck	21
<b>Elective unit</b>		
208	Operate a rough terrain telescopic or masted forklift truck for materials handling	3

For the **Level 2 Certificate of Competence in Forklift Truck Operations (Counter Balance)** learners must be trained and assessed in a minimum of one of the units listed below. The qualification will be endorsed to the context of the unit assessed:

Unit number	Unit title	GLH
<b>Mandatory unit</b>		
207	Prepare and operate a counter balance forklift truck	21

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## Qualification Endorsement Certification Module numbers

Certification module number	Certification module title
901	Level 2 Certificate of Competence in Forklift Truck Operations (Rough Terrain Telescopic)
902	Level 2 Certificate of Competence in Forklift Truck Operations (Masted)
924	Level 2 Certificate of Competence in Forklift Truck Operations (Counterbalance)

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## 2 Centre requirements

### Approval

New centres will need to gain centre approval. Existing City & Guilds centres who do not currently offer this qualification must go through the Qualification Approval (QAP) process. For centres currently offering 0014-16 Level 2 Award in Land-based Forklift Truck Operations (Rough Terrain, Masted and Telescopic Types) or 0014-17/20 Level 2 Award in Land-based Forklift Truck Operations (Counterbalance Type), there is a Fast Track method of approval. Please email [qasupport@cityandguilds.com](mailto:qasupport@cityandguilds.com) for further information on the approval process

### Physical resources

Centres must be able to demonstrate that they have access to the equipment and technical resources required to deliver this qualification and its assessments.

### Assessment Guidance for the Assessor

Staff assessing these qualifications must be approved Certificate of Competence City & Guilds NPTC Assessors. They do not have to be independent, but can be, and can have been involved with the training of the Candidate. This qualification can only be assessed by an Assessor who is suitably qualified and meets the requirements of the awarding body.

Certificate of Competence City & Guilds NPTC Assessors must meet the following requirements:

- show competence and provide evidence of industry expertise in the qualification/s they wish to assess
- hold the qualification as a candidate and have been technically evaluated as an Assessor
- be up to date with their verification and relevant first aid
- demonstrate continuing technically relevant CPD

Compliance with these requirements is a pre-requisite for Assessors remaining on the list of approved Assessors.

Verification is a process of monitoring assessment; it is an essential check to confirm that the assessment procedures are being carried out in the way City & Guilds has laid down. The overall aim of verification is to establish a system of quality assurance that is acceptable in terms of both credibility and cost effectiveness and approved Assessors will be subject to a regular visit by the Verifier at a time when assessments are being undertaken.

A selection of assessment reports completed by the Assessor will be evaluated by a City & Guilds approved Quality Consultant.

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## **Safe Practice**

Appropriate PPE must be worn at all times

All equipment must be operated in such a way that the Candidate, Assessor, other persons, animals or other equipment are not endangered.

If these conditions are not observed this will result in the Candidate not meeting the required standard.

## **Validation of Equipment**

A Manufacturer's instruction book or other operator's manual should be available for the Candidate to use during the assessment if required.

All equipment being used for this assessment must comply with the relevant requirements of the Provision and Use of Work Equipment Regulations (PUWER) 1998.

Vehicles must comply with department of Transport and road Traffic acts where relevant.

Any appropriate item of machinery complying with current legal requirements is acceptable for the assessment, provided it is suitably equipped for all assessment activities to be carried out.

Safe Practice Appropriate Personal Protective Equipment (PPE) must be worn at all times.

The Assessor must ensure that a site specific risk assessment is carried out.

All equipment must be operated in such a way that the Candidate, Assessor, other persons, or other equipment are not endangered.

All ancillary equipment, when detached, must be safely parked.

Failure to operate safely and comply with these requirements will result in the Candidate not meeting the required standard.

Warning signs stating that an assessment is in progress should be available.

The Assessor may stop the assessment on the grounds of safety at any time at his/her discretion.

Before any assessments take place, Assessor & Candidate should to be aware of any local or national issues to prevent breach of security, safety and any cross contamination or damage to the local environment.

A breach of Health and Safety that puts any person at risk during the assessment process will result in the assessment being terminated and the Candidate not meeting the required standard.

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## **Age restrictions**

This qualification is approved for learners aged 16 – 19, 19+.



## 3 Administration

Approved centres must have effective quality assurance systems to ensure valid and reliable delivery and assessment of qualifications. Quality assurance includes initial centre registration by City & Guilds and the centre's own internal procedures for monitoring quality assurance procedures.

Consistent quality assurance requires City & Guilds and its associated centres to work together closely; our Quality Assurance Model encompasses both internal quality assurance (activities and processes undertaken within centres) and external quality assurance (activities and processes undertaken by City & Guilds).

### External quality assurance

City & Guilds will undertake external moderation activities to ensure that the quality assurance criteria for this qualification are being met. Centres must ensure that they co-operate with City & Guilds staff and representatives when undertaking these activities.

City & Guilds requires the Head of Centre to

- facilitate any inspection of the centre which is undertaken on behalf of City & Guilds
- make secure arrangements to receive, check and keep assessment material secure at all times, maintain the security of City & Guilds confidential material from receipt to the time when it is no longer confidential and keep completed assignment work and examination scripts secure from the time they are collected from the candidates to their dispatch to City & Guilds.

### Malpractice

Please refer to the City & Guilds guidance notes *Managing cases of suspected malpractice in examinations and assessments*. This document sets out the procedures to be followed in identifying and reporting malpractice by candidates and/or centre staff and the actions which City & Guilds may subsequently take. The document includes examples of candidate and centre malpractice and explains the responsibilities of centre staff to report actual or suspected malpractice. Centres can access this document on the City & Guilds website.

Examples of candidate malpractice are detailed below (please note that this is not an exhaustive list):

- falsification of assessment evidence or results documentation
  - plagiarism of any nature
  - collusion with others
  - copying from another candidate (including the use of ICT to aid copying), or allowing work to be copied
  - deliberate destruction of another's work
  - false declaration of authenticity in relation to assessments
  - impersonation.
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These actions constitute malpractice, for which a penalty (eg disqualification from the assessment) will be applied.

Where suspected malpractice is identified by a centre after the candidate has signed the declaration of authentication, the Head of Centre must submit full details of the case to City & Guilds at the earliest opportunity. Please refer to the form in the document *Managing cases of suspected malpractice in examinations and assessments*. Alternatively please complete the form, JCQ/M1. Copies of this form can be found on the JCQ website: <http://www.jcq.org.uk>

### **Access arrangements and special consideration**

We have taken note of the provisions of equalities legislation in developing and administering this specification.

We can make arrangements so that candidates with disabilities, special educational needs and temporary injuries can access the assessment. These arrangements must be made before assessment takes place.

It is the responsibility of the centre to ensure at the start of a programme of learning that candidates will be able to access the requirements of the qualification.

Please refer to the *JCQ access arrangements and reasonable adjustments and Access arrangements - when and how applications need to be made to City & Guilds* for more information. Both are available on the City & Guilds website:

**<http://www.cityandguilds.com/delivering-our-qualifications/centre-development/centre-document-library/policies-and-procedures/access-arrangements-reasonable-adjustments>**

### **Special consideration**

We can give special consideration to candidates who have had a temporary illness, injury or indisposition at the time of the examination. Where we do this, it is given after the examination.

Applications for either access arrangements or special consideration should be submitted to City & Guilds by the Examinations Officer at the centre. For more information please consult the current version of the JCQ document, *A guide to the special consideration process*.

### **Language of examinations**

City & Guilds has a responsibility to ensure that candidates can be assessed in the following languages only:

- English
  - English in Northern Ireland
  - English in Wales.
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## 4 Units



## Unit 206

## Prepare and operate a rough terrain telescopic or masted forklift truck

<b>Level:</b>	2
<b>GLH</b>	21

### What is this unit about?

The aim of this unit is to provide the learner with the knowledge, understanding and skills required to prepare and operate a rough terrain telescopic or masted forklift truck and to industry standards.

### Learning outcomes

In this unit, learners will be able to

1. Know the hazards, risk assessment requirements and legislation for the use of rough terrain telescopic or masted forklift truck
  2. Carry out pre-start checks on a rough terrain telescopic or masted forklift truck
  3. Operate a rough terrain telescopic or masted forklift truck
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## Scope of content

This section gives details of the scope of content to be covered in the teaching of the unit to ensure that all the learning outcomes can be achieved.

### Learning outcome:

#### 1. Know the hazards, risk assessment requirements and legislation for the use of rough terrain telescopic or masted forklift truck

### Topics:

- 1.1 Site specific hazard and risk assessment
- 1.2 Health and safety legislation in relation to forklift truck operations
- 1.3 Relevant legal and safety considerations when operating a forklift truck on or near a public highway
- 1.4 Personal Protective Equipment (PPE)

#### Topic 1.1

The hazards, risks and control measures relating to the site, task and machine:

- Slopes
- Ground conditions
- Contact with moving parts
- Manual handling
- Overhead obstructions
- Overhead power lines (OHPL)
- Surface obstructions
- People and/or animals
- Ditches/waterways
- Hot components
- Fuel and oil
- Bio hazards
- Dust/fungal spores

Walking the site and verbally reporting:

- Evaluate risks
- Implement appropriate control measures
- Confirm that the condition of the site is acceptable
- Confirm who they would report to if the site condition is unsuitable

#### Topic 1.2

The relevance of LOLER:

- The Lifting Operations and Lifting Equipment Regulations (LOLER):
  - Lift trucks must have a record of inspection
  - Lift trucks must have a certificate of thorough examination

Relevant pieces of health and safety legislation in relation to the preparation and use of the machine:

- Health and Safety at Work Etc. Act (**HASAWA**):
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- Duties imposed on the employer/employee/others
- Provision and Use of Work Equipment Regulations (**PUWER**):
  - Machine must be properly maintained according to manufacturer's recommendations
  - Vehicles must be fitted with Falling Objects Protection Systems (FOPS) and Roll Over Protection Systems (ROPS)
- Management of Health and Safety at Work Regulations (MHSWR):
  - Comply with risk assessments
- Control of Substances Hazardous to Health (COSHH):
  - Fuel handling and protection from contaminants
- Personal Protective Equipment Regulations (PPE):
  - PPE must be provided, maintained and worn
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR):
  - Certain categories of injuries must be reported

Additional legal and safety requirements relating to the use of a forklift truck:

- The lift truck is fitted with a restraint system if there is a possibility of overturning
- The Capacity Plate or Safe Working Load (SWL) plate must not be exceeded
- machine used in accordance with HSE guidance PM28 if used with an attached personnel access platform
- Operator must be trained and competent
- Operator has written authorisation to use the machine
- Operator to be within confines of the cab/canopy

### Topic 1.3

Legal and safety considerations relating to the use or movement on or near the public highway or other areas to which the public has access:

- Be road legal
- Appropriate vehicle tax/exemption
- Insurance cover
- Operator holds valid driving licence
- Have an orange flashing beacon when driven on unrestricted dual carriageways (other road types subject to individual Risk Assessment)
- Ensure safe speed appropriate to conditions
- Comply with relevant speed limits

How to prepare the machine for road use:

- Forks folded or covered
- Four wheel drive mode disengaged (if applicable)
- Differential lock disengaged (if applicable)
- Two wheel steer mode selected (if applicable)
- Boom/mast control locked (if applicable)

### Topic 1.4

PPE for forklift truck operations:

- Safety boots
- Ear defenders
- Dust mask

- Head protection
- Face/eye protection
- Hand protection
- Non-snag clothing
- Any other protection highlighted in the risk assessment

### Learning outcome:

2. Carry out pre-start checks on a rough terrain telescopic or masted forklift truck

### Topics:

- 2.1 The function of all instruments and controls
- 2.2 Checks to the forklift truck to ensure that it is safe to use
- 2.3 The factors that can affect the stability of the Forklift truck

#### Topic 2.1

Safely mounting and dismounting from forklift truck cab using hand and footholds provided (usually facing inwards).

The functions of all instruments and controls on the forklift truck being:

- All internal/external controls and instrumentation applicable to the forklift truck

Information and warning symbols:

- Interpretation of information and warning symbols
- Interpretation of decals

Safe load indicator/warning device (if fitted):

#### Topic 2.2

Carry out inspection of forklift truck prior to use to establish that it complies with statutory legislation and it is safe to use:

- Horn working
- Reversing alert/warning system
- All lights working
- Cab glass undamaged and clean
- Wipers in working order
- Mirrors clean and undamaged
- Indicators clearly visible and undamaged
- Operator presence controls
- The Capacity Plate or Safe Working Load (SWL) plate must be in place and SWL must not be exceeded
- All moving parts, belts, pulleys and chains are guarded
- Telescopic components in good working order
- Condition of wear pads
- Pallet forks are a matched pair, compatible with machine, in good condition and secure
- Wheel nuts tight and secure
- Correct tyre pressures

- Tyres free from excessive wear and damage
- Lubrication sites identified
- Absence of oil leaks
- Ram safety stops available
- Isolation devices working where fitted and correctly deployed e.g. cab switch isolator for third service
- Lift chains undamaged (if masted machine)
- Condition of mast rollers (if masted machine)

Daily pre-start checks, referring to manual if required:

- All pre-start checks applicable to the forklift truck being used - as specified in the manual

Adjustments to ensure comfort and safety:

- Mirrors adjusted for clear view
- Steering wheel adjusted to suit operator
- Seat adjusted to suit operator
- Condition and function of seat-belt

Safe starting and stopping procedure:

- Controls in neutral
- Cold starting technique demonstrated or explained
- Engine started
- SAFE STOP procedures followed

All hydraulic functions checked for safe operation and absence of leaks:

- Hydraulic functions fully tested to ensure correct, smooth operation and absence of leaks before lifting any loads

Parking brake effectiveness:

- Any suitable method of checking parking brake

Driving short distance at normal operational speed to check safe operation of brakes:

- All round observation before moving off
- Brakes checked by driving short distance on level, smooth ground and applying the foot brake

### **Topic 2.3**

Causes of sideways (lateral) instability:

- Exceeding safe working load
  - Turning at speed
  - Operating with a soft tyre
  - Uneven ground
  - Turning on a slope
  - Carrying load too high
  - Load not centrally placed
  - Articulation under load
-

- 'Live' loads

Causes of fore and aft (longitudinal) instability:

- Exceeding safe working load
- Forks not fully inserted
- Violent braking
- Travelling forward down a slope when loaded
- Incorrect use of tilt at high level loading
- Boom not fully retracted
- 'Live' loads

The term 'load centre' and its importance when loading (Information on load centres and capacities specific to the machine to be obtained from the operator's manual):

- Load centre is 'the distance from the centre of the load to the front vertical face of the fork
- If the load centre is greater (i.e. an extended load) the lifting capacity is reduced
- De-rating if using alternate attachments, extended loads or undercutting

Factors affecting safe loading:

- Slopes and ground conditions
- Stability of loads
- Overall weight and weight distribution of load
- Safe Working Load (SWL) of lift truck
- Carrying extended loads
- Using alternative attachments
- Undercutting
- 'Live' loads

**Learning outcome:**

### **3. Operate a rough terrain telescopic or masted forklift truck**

**Topics:**

- 3.1 Prepare to move the load
- 3.2 Set the fork width to ensure stability of the load
- 3.3 Operate the Forklift
- 3.4 Pick up, travel with and place loads
- 3.5 Park and secure the machine
- 3.6 How to clean the forklift truck and equipment after use and the reasons for cleaning
- 3.7 Post-operational checks

#### **Topic 3.1**

Condition and suitability of load:

- Assess condition of pallet/stillage/box
  - Assess weight of load
  - Assess security and condition of load
  - Estimate load centre
-

### **Topic 3.2**

Carry out adjustments to the forks:

- Fork width adjusted to suit load
- Safe techniques used

Personal safety considerations when manually adjusting fork width:

- Avoid manual handling where possible, use safe manual handling techniques

### **Topic 3.3**

Operate the forklift truck:

- Operate controls in correct sequence according to manufacturer's handbook/operators manual
- Ensure all around observation
- Use correct 'move off' procedure as outlined in manufacturers handbook/operators manual
- Travel with forks at appropriate height (as determined by individual Risk Assessment)
- Use horn when approaching corners, blind bends or entrances

### **Topic 3.4**

Use a machine to pick up a load:

- Apply parking brake
- Transmission in neutral when lifting and lowering - apart from minor adjustments on rough terrain
- Insert forks cleanly without damaging or moving the pallet/stillage/box
- Use 'undercutting' technique as necessary
- Use of side-shift (if fitted)

Use a machine to travel with a load:

- Maintain all-round observation
- Carry load at minimum height without scraping
- Drive at suitable speed
- Accurate negotiation of course
- Ensure operator remains inside frame/cab at all times

Use a machine to move and place loads in specified positions:

- Moving a load which should be at least  $\frac{1}{2}$  of the maximum lifting capacity of the truck
- Positioning loads at ground level
- Positioning loads at operator's eye level
- Positioning loads at least  $\frac{1}{2}$  of the maximum lift height of the truck
- Stacking in front of a vertical face
- Stacking alongside similar loads
- Use of side-shift (if fitted)
- Load placed safely
- Insert/withdraw forks without moving or damaging the pallet/stillage/box

### **Topic 3.5**

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Park forklift truck in specified area:

- Move to secure site
- SAFE STOP procedure followed
- Dismount from the machine safely using correct hand and footholds
- Lock cab (if applicable)
- Isolate battery (if applicable)

### **Topic 3.6**

Reasons for regularly cleaning the forklift truck:

- Prevents personal contamination
- Prevents corrosion
- Prevents soiling of roads
- Makes visual inspection for damage possible
- Facilitates maintenance and adjustments

Methods of cleaning the forklift truck and attachments:

- A brush
- Compressed/blown air
- Water/pressure washer

PPE required for cleaning operations:

- Eye/face protection
- Safety footwear
- Overall/coverall
- Hand protection
- Dust mask

### **Topic 3.7**

Reasons for inspecting the forklift truck after use:

- Inspect for wear and damage
  - Faults can be identified prior to being used again
  - Could prevent another operator from using it if in a potentially dangerous condition
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## Unit 207

## Prepare and operate a counter balance forklift truck

<b>Level:</b>	2
<b>GLH</b>	21

### What is this unit about?

The aim of this unit is to provide the learner with the knowledge, understanding and skills required to prepare and operate a counter balance truck and to industry standards.

### Learning outcomes

In this unit, learners will be able to

1. Know the hazards, risk assessment requirements and legislation for the use of counter balance forklift truck
2. Carry out pre-start checks on a counter balance forklift truck
3. Operate a counter balance forklift truck

## Scope of content

This section gives details of the scope of content to be covered in the teaching of the unit to ensure that all the learning outcomes can be achieved.

### Learning outcome:

#### 1. Know the hazards, risk assessment requirements and legislation for the use of counter balance forklift truck

### Topics:

- 1.1 Site specific hazard and risk assessment
- 1.2 Health and safety legislation in relation to forklift truck operations
- 1.3 Personal Protective Equipment (PPE)

#### Topic 1.1

The hazards, risks and control measures relating to the site, task and machine:

- Slopes
- Ground conditions
- Contact with moving parts
- Manual handling
- Overhead obstructions
- Overhead power lines (OHPL)
- Surface obstructions
- People and/or animals
- Ditches/waterways
- Hot components
- Fuel and oil
- Bio hazards
- Dust/fungal spores

Walking the site and verbally reporting:

- Evaluate risks
- Implement appropriate control measures
- Confirm that the condition of the site is acceptable
- Confirm who they would report to if the site condition is unsuitable

#### Topic 1.2

The relevance of LOLER:

- The Lifting Operations and Lifting Equipment Regulations (LOLER):
  - Lift trucks must have a record of inspection
  - Lift trucks must have a certificate of thorough examination

Relevant pieces of health and safety legislation in relation to the preparation and use of the machine:

- Health and Safety at Work Etc. Act (**HASAWA**):
  - Duties imposed on the employer/employee/others
- Provision and Use of Work Equipment Regulations (**PUWER**):



- Machine must be properly maintained according to manufacturer's recommendations
- Vehicles must be fitted with Falling Objects Protection Systems (FOPS) and Roll Over Protection Systems (ROPS)
- Management of Health and Safety at Work Regulations (MHSWR):
  - Comply with risk assessments
- Control of Substances Hazardous to Health (COSHH):
  - Fuel handling and protection from contaminants
- Personal Protective Equipment Regulations (PPE):
  - PPE must be provided, maintained and worn
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR):
  - Certain categories of injuries must be reported

Additional legal and safety requirements relating to the use of a forklift truck:

- The lift truck is fitted with a restraint system if there is a possibility of overturning
- The Capacity Plate or Safe Working Load (SWL) plate must not be exceeded
- machine used in accordance with HSE guidance PM28 if used with an attached personnel access platform
- Operator must be trained and competent
- Operator has written authorisation to use the machine
- Operator to be within confines of the cab/canopy

### Topic 1.3

PPE for forklift truck operations:

- Safety boots
- Ear defenders
- Dust mask
- Head protection
- Face/eye protection
- Hand protection
- Non-slag clothing
- Any other protection highlighted in the risk assessment

### Learning outcome:

2. Carry out pre-start checks on a counter balance forklift truck

### Topics:

- 2.1 The function of all instruments and controls
- 2.2 Checks to the forklift truck to ensure that it is safe to use
- 2.3 The factors that can affect the stability of the Forklift truck

### Topic 2.1

Safely mounting and dismounting from forklift truck cab using hand and footholds provided (usually facing inwards).

The functions of all instruments and controls on the forklift truck:

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- All internal/external controls and instrumentation applicable to the forklift truck

Information and warning symbols:

- Interpretation of information and warning symbols
- Interpretation of decals

Safe load indicator/warning device (if fitted):

## **Topic 2.2**

Carry out inspection of forklift truck prior to use to establish that it complies with statutory legislation and it is safe to use:

- Horn working
- Reversing alert/warning system
- All lights working
- Cab glass undamaged and clean
- Wipers in working order
- Mirrors clean and undamaged
- Indicators clearly visible and undamaged
- Operator presence controls
- The Capacity Plate or Safe Working Load (SWL) plate must be in place and SWL must not be exceeded
- All moving parts, belts, pulleys and chains are guarded
- Telescopic components in good working order
- Condition of wear pads
- Pallet forks are a matched pair, compatible with machine, in good condition and secure
- Wheel nuts tight and secure
- Correct tyre pressures
- Tyres free from excessive wear and damage
- Lubrication sites identified
- Absence of oil leaks
- Ram safety stops available
- Isolation devices working where fitted and correctly deployed e.g. cab switch isolator for third service
- Lift chains undamaged
- Condition of mast rollers

Daily pre-start checks, referring to manual if required:

- All pre-start checks applicable to the forklift truck being used as specified in the manual

Adjustments to ensure comfort and safety:

- Mirrors adjusted for clear view
- Steering wheel adjusted to suit operator
- Seat adjusted to suit operator
- Condition and function of seat-belt

Safe starting and stopping procedure:

- Controls in neutral
-

- Cold starting technique demonstrated or explained
- Engine started
- SAFE STOP procedures followed

All hydraulic functions checked for safe operation and absence of leaks:

- Hydraulic functions fully tested to ensure correct, smooth operation and absence of leaks before lifting any loads

Parking brake effectiveness:

- Any suitable method of checking parking brake

Driving short distance at normal operational speed to check safe operation of brakes:

- All round observation before moving off
- Brakes checked by driving short distance on level, smooth ground and applying the foot brake

### **Topic 2.3**

Causes of sideways (lateral) instability:

- Exceeding safe working load
- Turning at speed
- Operating with a soft tyre
- Uneven ground
- Turning on a slope
- Carrying load too high
- Load not centrally placed
- Articulation under load
- 'Live' loads

Causes of fore and aft (longitudinal) instability:

- Exceeding safe working load
- Forks not fully inserted
- Aggressive braking
- Travelling forward down a slope when loaded
- Incorrect use of tilt at high level loading
- Boom not fully retracted
- 'Live' loads

The term 'load centre' and its importance when loading (Information on load centres and capacities specific to the machine to be obtained from the operator's manual):

- Load centre is 'the distance from the centre of the load to the front vertical face of the fork
- If the load centre is greater (i.e. an extended load) the lifting capacity is reduced
- De-rating if using alternate attachments, extended loads or undercutting

Factors affecting safe loading:

- Slopes and ground conditions
- Stability of loads
- Overall weight and weight distribution of load
- Safe Working Load (SWL) of lift truck
- Carrying extended loads
- Using alternative attachments
- Undercutting
- 'Live' loads

## Learning outcome:

### 3. Operate a counter balance forklift truck

#### Topics:

- 3.1 Prepare to move the load
- 3.2 Set the fork width to ensure stability of the load
- 3.3 Operate the Forklift
- 3.4 Pick up, travel with and place loads
- 3.5 Park and secure the machine
- 3.6 How to clean the forklift truck and equipment after use and the reasons for cleaning
- 3.7 Post-operational checks

#### Topic 3.1

Condition and suitability of load:

- Assess condition of load
- Assess weight of load
- Assess security and condition of load
- Estimate load centre

#### Topic 3.2

Carry out adjustments to the forks:

- Fork width adjusted to suit load
- Safe techniques used

Personal safety considerations when manually adjusting fork width:

- Avoid manual handling where possible, use safe manual handling techniques

#### Topic 3.3

Operate the forklift truck:

- Operate controls in correct sequence according to manufacturer's handbook/operator's manual
- Ensure all around observation
- Use correct 'move off' procedure as outlined in manufacturers handbook/operator's manual
- Travel with forks at appropriate height (as determined by individual Risk Assessment)
- Use horn when approaching corners, blind bends or entrances

### **Topic 3.4**

Use a machine to pick up a load:

- Apply parking brake
- Transmission in neutral when lifting and lowering - apart from minor adjustments on rough terrain
- Insert forks cleanly without damaging or moving the pallet/stillage/box
- Use 'undercutting' technique as necessary
- Use of side-shift (if fitted)

Use a machine to travel with a load:

- Maintain all-round observation
- Carry load at minimum height without scraping
- Drive at suitable speed
- Accurate negotiation of course
- Ensure operator remains inside frame/cab at all times

Use a machine to move and place loads in specified positions:

- Moving a load which should be at least  $\frac{1}{2}$  of the maximum lifting capacity of the truck
- Positioning loads at ground level
- Positioning loads at operator's eye level
- Positioning loads at least  $\frac{1}{2}$  of the maximum lift height of the truck
- Stacking in front of a vertical face
- Stacking alongside similar loads
- Use of side-shift (if fitted)
- Load placed safely
- Insert/withdraw forks without moving or damaging the load

### **Topic 3.5**

Park forklift truck in specified area:

- Move to secure site
- SAFE STOP procedure followed
- Dismount from the machine safely using correct hand and footholds
- Lock cab (if applicable)
- Isolate battery (if applicable)

### **Topic 3.6**

Reasons for regularly cleaning the forklift truck:

- Prevents personal contamination
- Prevents corrosion
- Prevents soiling of roads
- Makes visual inspection for damage possible
- Facilitates maintenance and adjustments

Methods of cleaning the forklift truck and attachments:

- A brush
  - Compressed/blown air
  - Water/pressure washer
-

Personal Protective Equipment (PPE) required for cleaning operations:

- Eye/face protection
- Safety footwear
- Overall/coverall
- Hand protection
- Dust mask

### **Topic 3.7**

Reasons for inspecting the forklift truck after use:

- Inspect for wear and damage
  - Faults can be identified prior to being used again
  - Could prevent another operator from using it if in a potentially dangerous condition
-

## Unit 208

# Operate a rough terrain telescopic or masted forklift truck for materials handling

<b>Level:</b>	2
<b>GLH</b>	3

### What is this unit about?

The aim of this unit is to provide the learner with the knowledge, understanding and skills required to prepare and operate a rough terrain telescopic or masted forklift truck for materials handling safely and to industry standards.

### Learning outcomes

In this unit, learners will be able to

1. Operate a forklift truck for material handling

## Scope of content

This section gives details of the scope of content to be covered in the teaching of the unit to ensure that all the learning outcomes can be achieved.

## Learning outcome:

### 1. Operate a forklift truck for material handling

#### Topics:

- 1.1 The safe use of appropriate attachments
- 1.2 Fit and secure an attachment
- 1.3 Carry out an operation using the attachment
- 1.4 Remove attachment and re-attach forks

#### Topic 1.1

Factors to consider when using alternative attachments:

- Compatibility of attachment
- Hitch type
- Hydraulic connections
- Safe working load of attachment
- Effect on safe working load of machine

Suitable attachments may include; bucket, bale grab, silage fork, rotator/tipler, grain pusher.

#### Topic 1.2

Remove pallet forks and fit an attachment:

- Attachment checked for condition and suitability
- Attachment fitted safely
- Accurate driving
- Correct use of controls
- Attachment secured correctly
- Isolation controls used (if applicable)
- Connect hydraulic services (if applicable)

#### Topic 1.3

Use the attachment to carry out an operation:

- Drive at suitable speed without sudden acceleration or braking
  - Maintain all-round observation
  - Accurate driving and operation
  - Ensure operator remains inside frame/cab at all times
  - Use traction aids on rough terrain if required
  - Operation carried out as designated by task specification
  - Operation carried out safely using appropriate controls according to machine type
-



#### Topic 1.4

Remove attachment and re-attach pallet forks to machine:

- Move to appropriate site
  - Disconnect hydraulic services (if applicable)
  - Remove attachment in a safe manner
  - Re-attach pallet forks
-

## Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **[www.cityandguilds.com](http://www.cityandguilds.com)**.

### City & Guilds Centre Manual

This document provides guidance for organisations wishing to become City & Guilds approved centres, as well as information for approved centres delivering City & Guilds qualifications. It covers the centre and qualification approval process as well as providing guidance on delivery, assessment and quality assurance for approved centres.

It also details the City & Guilds requirements for ongoing centre and qualification approval, and provides examples of best practice for centres. Specifically, the document includes sections on:

- the centre and qualification approval process
- assessment, internal quality assurance and examination roles at the centre
- registration and certification of candidates
- non-compliance and malpractice
- complaints and appeals
- equal opportunities
- data protection
- management systems
- maintaining records
- internal quality assurance
- external quality assurance.

### Our Quality Assurance Requirements

This document explains the requirements for the delivery, assessment and awarding of our qualifications. All centres working with City & Guilds must adopt and implement these requirements across all of their qualification provision. Specifically, this document:

- specifies the quality assurance and control requirements that apply to all centres
- sets out the basis for securing high standards, for all our qualifications and/or assessments
- details the impact on centres of non-compliance

Our Quality Assurance Requirements document encompasses the relevant regulatory requirements of the following documents, which apply to all UK centres working with City & Guilds:

- Ofqual's General Conditions of Recognition
-

The **centre homepage** section of the City & Guilds website also contains useful information on

- **Walled Garden:** how to register and certificate candidates on line
  - **Events:** dates and information on the latest Centre events
  - **Online assessment:** how to register for e-assessments.
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## Useful contacts

### UK learners

General qualification information

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E:

[learnersupport@cityandguilds.com](mailto:learnersupport@cityandguilds.com)

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### International learners

General qualification information

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E: [intcg@cityandguilds.com](mailto:intcg@cityandguilds.com)

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### Centres

Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results

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E: [information@cityandguilds.com](mailto:information@cityandguilds.com)

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### Single subject qualifications

Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change

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E: [singlesubjects@cityandguilds.com](mailto:singlesubjects@cityandguilds.com)

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### International awards

Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports

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E: [intops@cityandguilds.com](mailto:intops@cityandguilds.com)

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### Walled Garden

Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems

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E: [walledgarden@cityandguilds.com](mailto:walledgarden@cityandguilds.com)

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### Employer

Employer solutions, Mapping, Accreditation, Development Skills, Consultancy

T: +44 (0)121 503 8993

E: [business@cityandguilds.com](mailto:business@cityandguilds.com)

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If you have a complaint, or any suggestions for improvement about any of the services that we provide, email: [feedbackandcomplaints@cityandguilds.com](mailto:feedbackandcomplaints@cityandguilds.com)

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## About City & Guilds

As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

## City & Guilds Group

The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Licence to Practice (land-based qualifications) and Learning Assistant (an online e-portfolio).

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