



HEALTH AND SAFETY  
AUTHORITY

**NATIONAL AUTHORITY FOR OCCUPATIONAL  
SAFETY AND HEALTH**

**Code of Practice**

**Rider-operated lift trucks:  
operator training**

**and**

**Supplementary Guidance**

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**RIDER-OPERATED LIFT TRUCKS:**

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**OPERATOR TRAINING**

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**SUPPLEMENTARY GUIDANCE**

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# CODE OF PRACTICE: RIDER-OPERATED LIFT TRUCKS – BASIC TRAINING OF OPERATORS

## Foreword

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The National Authority for Occupational Safety and Health (by virtue of Section 30 of the Safety, Health and Welfare at Work Act, 1989, following consultation with a wide range of organisations including Irish Institute of Purchasing and Materials Management (IIPMM), (incorporating the former Irish Institute of Materials Handling), FACTS (Forklift Advisory Consultancy and Training Services Ltd.), ICTU, FAS, Crown Controls Galway, NIFAST/Liberty Risk and Trident Industrial Trucks Cork Ltd., and with the consent of Mr Tom Kitt, TD, Minister of State at the Department of Enterprise, Trade and Employment, given on 21<sup>st</sup> January, 2001) has issued a Code of Practice entitled “**Code of Practice - Rider-operated lift trucks: operator training**”.

The Code of Practice provides practical guidance as to the observance of the provisions of:-

Section 6 (2) (e) of the Safety Health and Welfare at Work Act, 1989, Regulations 13 and 14, and, in particular, Part IV, Use of Work Equipment, as amended, of the Safety, Health and Welfare at Work (General Application) Regulations, 1993, and section 17 of the Safety in Industry Act, 1980, as they relate to the basic training of operators of rider operated lift trucks.

This Code of Practice comes into effect on 15<sup>th</sup> May, 2001.

Notice of the issue of this Code of Practice was published in the Iris Oifigiuil of 29th March, 2001.

As regards the use of Codes of Practice in criminal proceedings, section 31 of the Safety, Health and Welfare at Work Act, 1989, provides as follows:-

“31.—(1) A failure on the part of any person to observe any provision of a code of practice shall not of itself render him liable to any civil or criminal proceedings; but where in any criminal proceedings a party is alleged to have committed an offence by reason of a contravention of any requirement or prohibition imposed by or under any of the relevant statutory provisions being a provision for which there was a code of practice at the time of the alleged contravention, subsection (2) shall have effect with respect to that code in relation to those proceedings.

(2) Any provision of the code of practice which appears to the court to give practical guidance as to the observance of the requirement or prohibition alleged to have been contravened shall be admissible in evidence; and if it is proved that any act or omission of the defendant alleged to constitute the contravention is a failure to observe such provision of the code, or if it is proved that any act or omission of the defendant is a compliance with such provision of the code, then such failure or compliance shall be admissible in evidence.”

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C D Body  
Secretary to the Board

# CODE OF PRACTICE: RIDER-OPERATED LIFT TRUCKS – BASIC TRAINING OF OPERATORS

## Introduction

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1. *This Code of Practice relates to the provision of basic training for lift truck operators.*

In Ireland every year there are up to 300 reportable injuries involving vehicles and lift trucks used in the workplace. They also involve a heavy cost on the employer's business and the lives of the workers. An incident not involving injury may result in costly damage to trucks, fittings and goods.

Generally the legislation requires that persons shall not work, nor be required to work, on, at or with any machine unless they have been fully instructed as to the dangers arising in connection therewith and the precautions to be observed and has received a sufficient training in work at the machine.

The training of lift truck operators may be broken down into three stages:

- Basic training* – the basic skills and knowledge required for safe operation;
- Specific job training* – knowledge of workplace and experience of any special needs and handling attachments;
- Familiarisation training* – operation on the job under close supervision.

These stages can be taken separately, or they may be combined or integrated, particularly where training is carried out on an employer's premises. In either case, it is essential that each stage be covered fully, with due regard to the experience, if any, of the trainees and the type or types of truck which they will be expected to operate. The first two stages need to be carried out off the job, i.e. sheltered from production and other pressures. The third stage needs to be carried out on the job, but under close supervision.

This Code of Practice advises only on basic training of lift truck operators. To comply with their duties under the **Safety, Health and Welfare at Work Act, 1989 and the Safety, Health and Welfare at Work (General Application) Regulations, 1993, as amended**, employers must ensure that **all** operators they employ, both new and existing, are adequately trained and, when necessary, provide for their additional or refresher training. Supervisors must also receive appropriate training.

Supplementary advice on basic training is set out in the accompanying supplementary guidance, which also gives advice on lift truck training generally, including specific job and familiarisation training, operator selection and authorisation, and the responsibilities of the self-employed and controllers of work-sites. The guidance is relevant to all operators. It can thus serve as a yardstick for the employers of existing lift truck operators, as well as those newly employed to operate lift trucks.

The Code and supplementary guidance relate to stacking rider-operated lift trucks, including articulated steering truck types. "Rider-operated" means any truck capable of carrying an operator and includes trucks controlled from both seated and stand-on positions, which may be fixed or foldaway. Straddle carriers and non lift trucks fitted with removable attachments which modify their function, allowing them to be used temporarily as lift trucks, e.g. agricultural tractors with forklift attachments, are not included.

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Anyone driving a lift truck on the public highway must comply with the appropriate road traffic legislation.

## **SCOPE**

2. *The Code covers stacking rider-operated lift trucks, including articulated steering truck types. "Rider-operated" means any truck capable of carrying an operator and includes trucks controlled from both seated and stand-on positions, which may be fixed or foldaway. The purpose of this coverage is to include all types of lift truck having similar training requirements and to which the advice can reasonably be applied. Straddle carriers and non lift trucks fitted with removable attachments which modify their function, allowing them to be used temporarily as lift trucks, e.g. agricultural tractors with fork lift attachments, are not included (operators of machines adapted for temporary use as lift trucks should already have been trained to use the attachments they need for the jobs they do).*

## **LEGISLATION**

3. *Section 6 of the Safety, Health and Welfare at Work Act, 1989 includes the following provision:*

*Section 6(1) It shall be the duty of every employer to ensure, so far as is reasonably practicable, the safety, health and welfare at work of all his employees.*

*The matters to which the duty in Section 6(1) extends include in particular:*

*Under section 6(2)(e), the provision of such information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the safety and health at work of his employees.*

*The Safety Health and Welfare at Work (General Application) Regulations, 1993 apply to all workplaces. Particular attention must be given to Regulations 13 and 14 of Part II, General Safety and Health Provisions, in so far as they apply to training and to Part IV, as amended, Use of Work Equipment .*

*Section 32 of the Factories Act, 1955, as substituted by Section 17 of the Safety in Industry Act, 1980, relating to training and supervision of persons working at machines, is also relevant.*

4. *Extracts from the legislation referred to above are set out at the Annex to this Code of Practice*

## **OBLIGATION TO PROVIDE BASIC TRAINING**

5. *Employers should not allow anyone to operate, even on a very occasional basis, lift trucks within the scope of this Code who have not satisfactorily completed basic training and testing as described in this Code, except for those undergoing such training under adequate supervision.*

## **SELECTION OF INSTRUCTORS**

6. *When arranging for training, employers should satisfy themselves that it is in accordance with this Code. Operator training should only be carried out by instructors who have themselves undergone appropriate training in instructional techniques and skills*

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assessment. They should give instruction only on the types of lift truck and attachments for which they have been trained and successfully tested as operators. Instructors also need sufficient industrial experience to enable them to put their instruction in context and an adequate knowledge of the working environment in which the trainee will be expected to operate.

## **TRAINING AREA AND FACILITIES**

7. Basic training may be given at a suitable training centre or venue, or on an employer's premises. Where practicable, training areas should be sheltered from adverse weather conditions.
8. Basic training needs to be carried out off the job. Even when conducted on an employer's premises this means that the instructor and trainees, together with the lift truck and loads, should be wholly concerned with training, kept away from normal commercial operations, and not be diverted to other activities while training is in progress. Lift trucks used for training must be in good mechanical condition, properly maintained (taking into account manufacturers' recommendations), conform to all legal requirements and be suitable for the particular uses to which they will be put.
9. A suitable manoeuvring area should be provided and appropriately marked. While training is in progress access to this area should be restricted to the instructor and trainees. The area will need to include facilities for simulating the manoeuvring space likely to be encountered in the workplace, including slopes. For rough terrain trucks an appropriate surface and obstacles representative of the conditions for which training is being provided is necessary.
10. A supply of loads appropriate to the training being given, such as loaded and unloaded pallets, bags, sacks, bales, drums, bulk materials and freight containers is necessary to make training realistic. Similarly, there should be appropriate facilities for simulating loading and unloading from racking at various heights as well as road vehicles.
11. A training room or other suitable accommodation, together with appropriate training aids (for example projectors, models) should be made available to enable the instructor to cover, under reasonable conditions, the principles of lift truck operation.

## **TRAINING STRUCTURE AND CONTENT**

12. Training should be largely practical in nature and of sufficient length to enable trainees to acquire the basic skills and knowledge required for safe operation, including knowledge of the risks arising from lift truck operations. It should not be altered to suit immediate operational or production needs.
13. The ratio of trainees to instructors needs to be such as to allow each trainee adequate time to practise operating the truck under close supervision and to prepare for the practical tests.
14. Training should follow a carefully devised programme which ensures that each stage is introduced in an appropriate sequence, building on what has gone before, and allowing adequate time for learning and practice before the next stage is tackled. The easier driving skills should be dealt with before progressing to more difficult operations such as pallet or other load handling. At each stage the instructor will need to explain and demonstrate safe operation, which should then be practised by the trainees under direct supervision.

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15. *Basic training should be given on all the types of lift truck and attachments that operators will or could be required to use in their work. If the operator is subsequently required to operate another type of lift truck, or there is a change of handling attachment, additional, practical conversion training will be required. Employers should also consider the need for conversion training where the truck type does not change, but the size and weight alters significantly.*
16. *The course content will depend upon the lift truck operations the trainee will be expected to carry out. The objectives of a basic training course, some of which are listed in Appendix 2 to the accompanying supplementary guidance, need to be tailored to fit all the lift truck operations to be undertaken by the operator.*

## **TESTING**

17. *The instructor should assess a trainee's progress continuously to ensure that the required standards are achieved at each stage of basic training. Additionally, trainees are required to pass a test or tests, practical and theoretical, of the skills and knowledge needed for safe operation.*

## **RECORDS**

18. *Employers need to keep a record for each employee who has satisfactorily completed basic training and testing in accordance with this Code. The record should include sufficient information to identify the employee and the nature and content of the training and testing completed. Either a copy of any certificate of basic training issued, or the relevant details, should be included in employers' records.*

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## Extracts from Relevant Legislation

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### Extract 1

#### Safety, Health and Welfare at Work Act, 1989, (No. 7 of 1989)

##### Section 6 - General duties of employers to their employees

- 6.— (1) It shall be the duty of every employer to ensure, so far as is reasonably practicable, the safety, health and welfare at work of all his employees.
- (2) Without prejudice to the generality of an employer's duty under subsection (1), the matters to which that duty extends include in particular—
- (a) as regards any place of work under the employer's control, the design, the provision and the maintenance of it in a condition that is, so far as is reasonably practicable, safe and without risk to health;
  - (b) so far as is reasonably practicable, as regards any place of work under the employer's control, the design, the provision and the maintenance of safe means of access to and egress from it;
  - (c) the design, the provision and the maintenance of plant and machinery that are, so far as is reasonably practicable, safe and without risk to health;
  - (d) the provision of systems of work that are planned, organised, performed and maintained so as to be, so far as is reasonably practicable, safe and without risk to health;
  - (e) the provision of such information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the safety and health at work of his employees;
  - (f) in circumstances in which it is not reasonably practicable for an employer to control or eliminate hazards in a place of work under his control, or in such circumstances as may be prescribed, the provision and maintenance of such suitable protective clothing or equipment, as appropriate, that are necessary to ensure the safety and health at work of his employees;
  - (g) the preparation and revision as necessary of adequate plans to be followed in emergencies;
  - (h) to ensure, so far as is reasonably practicable, safety and the prevention of risk to health at work in connection with the use of any article or substance;
  - (i) the provision and the maintenance of facilities and arrangements for the welfare of his employees at work; and
  - (j) the obtaining, where necessary, of the services of a competent person (whether under a contract of employment or otherwise) for the purpose of ensuring, so far as is reasonably practicable, the safety and health at work of his employees.
- (3) For the purposes of this section, a person who is undergoing training for employment or receiving work experience, other than when pursuing a

course of study in a university, school or college, shall be deemed to be an employee of the person whose undertaking (whether carried on by him for profit or not) is for the time being the immediate provider to that person of training or work experience, and employee, employer and cognate words and expressions shall be construed accordingly.

### **Section 9 - General duties of employees**

- 9.— (1) It shall be the duty of every employee while at work—
- (a) to take reasonable care for his own safety, health and welfare and that of any other person who may be affected by his acts or omissions while at work;
  - (b) to co-operate with his employer and any other person to such extent as will enable his employer or the other person to comply with any of the relevant statutory provisions;
  - (c) to use in such manner so as to provide the protection intended, any suitable appliance, protective clothing, convenience, equipment or other means or thing provided (whether for his use alone or for use by him in common with others) for securing his safety, health or welfare while at work; and
  - (d) to report to his employer or his immediate supervisor, without unreasonable delay, any defects in plant, equipment, place of work or system of work, which might endanger safety, health or welfare, of which he becomes aware.
- (2) No person shall intentionally or recklessly interfere with or misuse any appliance, protective clothing, convenience, equipment or other means or thing provided in pursuance of any of the relevant statutory provisions or otherwise, for securing the safety, health or welfare of persons rising out of work activities.

### **Extract 2**

### **Safety, Health and Welfare at Work (General Application) Regulations, 1993, S.I. No.44 of 1993)**

### **PART II - General Safety and Health Provisions**

#### **Regulation 13. TRAINING**

- (1) It shall be the duty of every employer in providing training on matters of safety and health to his employees to ensure that –
- (a) his employees receive, during time off from their duties and without loss of remuneration, adequate safety and health training, including, in particular, information and instructions relating to the particular task or workstation involved,
  - (b) where tasks are entrusted to an employee, his capabilities in relation to safety and health are taken into account, including in relation to the manual handling of loads by employees the individual risk factors set out in the Ninth Schedule, and
  - (c) particularly sensitive risk groups of employees are protected against any dangers which specifically affect them, including in relation to the manual handling of loads by employees the individual risk factors set out in the Ninth Schedule.

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- (2) Training under paragraph (1) shall be adapted to take account of new or changed risks and shall be provided on recruitment of employees or in the event of transfer of employees, a change of job, the introduction of new work equipment, a change in equipment or the introduction of new technology, and shall be repeated periodically where appropriate.
- (3) It shall be the duty of every employer to ensure that employees from other undertakings engaged at work in his undertaking have received appropriate instructions relating to any risks to health and safety which may be encountered during work activities while working in his place of work.
- (4) It shall be the duty of every employer who uses the services of a fixed-term employee or a temporary employee to ensure that such employee receives sufficient training appropriate to the particular characteristics of any work activity involved, account being taken of his qualifications and experience.

**Regulation 14. DUTIES OF EMPLOYEES**

It shall be the duty of every employee, taking into account training and instructions given by his employer, to –

- (a) make correct use of machinery, apparatus, tools, dangerous substances, transport equipment and other means of production, and
- (b) in cases where an employee is provided with personal protective equipment pursuant to these Regulations –
  - (i) to make full and proper use of such equipment,
  - (ii) to use such equipment in accordance with the instructions provided under Regulation 26 (c), and
  - (iii) to take all reasonable steps to ensure that such equipment is returned to storage after use.

**Extract 3**

**PART IV of the Safety, Health and Welfare at Work (General Application) Regulations, 1993 (S.I. No. 44 of 1993)  
[as amended from 2 May, 2001, by the Safety, Health and Welfare at Work (General Application) (Amendment) Regulations, 2001 (S.I. No. 188 of 2001)]**

**Use of Work Equipment**

**Regulation 18. INTERPRETATION FOR PART IV**

In this Part –

“danger zone” means any zone within or around work equipment in which an employee is subject to a risk to his health or safety;

“exposed employee” means any employee wholly or partially in a danger zone;

“use of work equipment” means any activity involving work equipment, including starting or stopping the equipment, its use, transport, repair, modification, maintenance and servicing, and cleaning.

**Regulation 19: DUTIES OF EMPLOYER**

It shall be the duty of every employer, to ensure that –

- (a) the necessary measures are taken so that the work equipment is suitable for the

work to be carried out or is properly adapted for that purpose and may be used by employees without risk to their safety and health;

- (b) in selecting the work equipment, account is taken of the specific working conditions, characteristics and hazards in the place of work having regard to the safety and health of the employees and any additional hazards posed by the use of such work equipment;
- (c) where it is not possible fully to ensure that work equipment can be used by employees without risk to their safety or health, appropriate measures are taken to minimise any such risk;
- (d) where the use of work equipment is likely to involve a specific risk to the safety or health of employees –
  - (i) the use of such work equipment is restricted to those employees required to use it; and
  - (ii) in cases of work involving repairs, modifications, maintenance or servicing of such work equipment, the employees concerned are competent to carry out such work;
- (e) the necessary measures are taken so that employees have at their disposal adequate information and, where appropriate, written instructions on the work equipment;
- (f) information and instruction referred to in paragraph (e) contains at least adequate safety and health information concerning –
  - (i) the conditions of use of work equipment,
  - (ii) foreseeable abnormal situations, and
  - (iii) the conclusions to be drawn from experience, where appropriate, in using such work equipment,and that such information and any such written instructions are comprehensible to the employees concerned;
- (g) employees are made aware of safety and health risks relevant to them, work equipment present in the area or site, and any changes affecting them in as much as they affect work equipment situated in their immediate work area or site, even if they do not use the equipment;
- (h) where the safety of work equipment depends on the installation conditions–
  - (i) an initial inspection is carried out after installation and before it is first put into service, and
  - (ii) an inspection is carried out after assembly at a new site or in a new location, and that the work equipment is installed correctly and is operating properly;
- (i) in the case of work equipment which is exposed to conditions causing deterioration liable to result in a danger to safety or health–
  - (i) periodic inspections and, where appropriate, testing is carried out;
  - (ii) special inspections are carried out when exceptional circumstances arise which are liable to make the work equipment unsafe, including modification work, accidents, natural phenomena or prolonged inactivity; and
  - (iii) safety and health conditions are maintained and deterioration is detected and remedied in good time;
- (j) the results of inspections carried out under paragraphs (h) and (i) are recorded and kept available for inspection by inspectors of the Authority for five years from the date of inspection;
- (k) when work equipment is used in another place of work, it is accompanied by evidence of the last inspection carried out under paragraphs (h) and (i);

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- (l) inspections carried out under paragraphs (h) and (i) are carried out by a competent person and are appropriate to the nature, location and use of the work equipment; and
- (m) the working posture and position of employees while using work equipment, and ergonomic requirements, are taken into account having regard to the safety and health of the employees.

**Regulation 20: COMPLIANCE WITH THE REQUIREMENTS OF THE FIFTH SCHEDULE**

- (1) Without prejudice to the provisions of Regulation 19, but subject to paragraph (1A), it shall be the duty of an employer to ensure that any work equipment provided before the 31st day of December, 1992, for use by employees at a place of work complies with the minimum requirements of the Fifth Schedule, and that work equipment which has to be provided for use by employees and which has not been put into use before that date, shall comply with –
  - (i) the provisions of any relevant directive of the European Communities relating to work equipment which is applicable; and
  - (ii) the minimum requirements laid down in the Fifth Schedule, where the provisions of no other such directive apply.
- (1A) Work equipment which but for this paragraph would be subject to the requirements of paragraphs 22 to 27 of the Fifth Schedule and which was provided to employees before the 5th day of December, 1998, shall not be so subject until the fifth day of December, 2002.
- (2) It shall be the duty of an employer to take the measures necessary to ensure that throughout its working life work equipment is kept, by means of adequate maintenance, at a level such that it complies with the provisions of paragraph (1).
- (3) The requirements of the Fifth Schedule shall apply having regard to the provisions of this Part and where a corresponding risk exists for the work equipment in question.

**Regulation 3 of S.I. No. 188 of 2001**

These Regulations are without prejudice to the provisions of any enactment or instrument made under an enactment in force immediately before the commencement of these Regulations relating to mandatory certification, testing, examination, inspection and reporting in respect of work equipment.

**Extract 4**

**Fifth Schedule [As amended from 2 May, 2001, by S.I. No. 188 of 2001]  
(Regulation 20)**

**Requirements for Work Equipment**

- 1. (1) Work equipment control devices which affect safety shall be clearly visible and identifiable and appropriately marked where necessary.
- (2) Except where necessary, control devices shall be located outside danger zones and in such a way that their operation cannot cause additional hazard, and cannot give rise to any hazard as a result of any unintentional operation.

- (3) (a) If necessary, from the main control position, an employee shall be able to ensure that no person is present in danger zones.
  - (b) Where this is impracticable, a safe system such as an audible or visible warning signal (or such a signal that is both audible and visible) shall be given automatically whenever the machinery is about to start.
  - (c) An exposed employee shall have the time or the means (or both) quickly to avoid hazards caused by the starting or stopping (or both) of the work equipment.
  - (d) Control systems shall be safe and shall be chosen making appropriate allowance for the failures, faults and constraints to be expected in the planned circumstances of use.
2. (a) It shall be possible to start work equipment only by deliberate action on a control provided for the purpose.
- (b) A control shall be included in work equipment -
  - to restart it after a stoppage for whatever reason,
  - to control a significant change in the operating conditions,
 unless such a restart or change does not subject exposed employees to any hazard.
- (c) This paragraph does not apply to restarting or a change in operating conditions as a result of a normal operating cycle of an automatic device.
3. (a) All work equipment shall be fitted with a control to stop it completely and safely.
- (b) Each work station shall be fitted with a control to stop (some or all of the work equipment), depending on the type of hazard, so that the equipment is in a safe state.
- (c) The equipment's stop control shall have priority over the start controls and, when the work equipment or the dangerous parts of it have stopped, the energy supply of the actuators concerned shall be switched off.
4. Where appropriate, and depending on the hazards the equipment presents and its normal stopping time, work equipment shall be fitted with an emergency stop device.
5. (a) Work equipment presenting risk due to falling objects or projections shall be fitted with appropriate safety devices corresponding to the risk.
- (b) Work equipment presenting hazards due to emissions of gas, vapour, liquid or dust shall be fitted with appropriate containment or extraction devices (or both) near the sources of the hazard.
6. Work equipment and parts of such equipment shall, where necessary for the safety and health of employees, be stabilised by clamping or some other means.
7. Where there is a risk of rupture or disintegration of parts of work equipment, likely to pose significant danger to the safety and health of employees, appropriate protection measures shall be taken.
8. (a) Where there is a risk of physical contact with moving parts of work equipment which could lead to accidents, those parts shall be provided with guards or devices to prevent access to danger zones or to halt movement of dangerous parts before the danger zones are reached.

- (b) Such guards and protection devices shall:
  - be of robust construction,
  - not give rise to any additional hazard,
  - not be easily removed or rendered inoperative,
  - be situated at sufficient distance from the danger zone,
  - not restrict more than necessary the view of the operating cycle of the equipment, and
  - allow operations necessary to fit or replace parts and for maintenance work, restricting access only to the area where the work is to be carried out and, if possible, without removal of the guard or protection device.
- (c) Any part of a stock-bar which projects beyond the head-stock of a lathe shall be securely fenced unless it is in such a position as to be safe to employees as it would be if securely fenced.

9. Areas and points for working on, or maintenance of, work equipment shall be suitably lit having regard to the operation to be carried out.
10. Work equipment parts at high or very low temperature shall, where appropriate, be protected to avoid the risk of employees coming into contact or coming too close.
11. Warning devices on work equipment shall be unambiguous and easily perceived and understood.
12. Work equipment shall be used only for operations and under conditions for which it is appropriate.
13. (a) Where possible maintenance operations shall be carried out when equipment is shut down.
  - (b) Where this is not possible, it shall be necessary to take appropriate protection measures for the carrying out of such operations or for such operations to be carried out outside the area of danger.
  - (c) If any machine has a maintenance log, it shall be kept up to date.
14. (a) All work equipment shall be fitted with clearly identifiable means to isolate it from all its energy sources.
  - (b) The reconnecting of the work equipment to its energy sources shall be such as to pose no risk to the employees concerned.
15. Work equipment shall bear warnings and markings essential to ensure the safety and health of employees.
16. Employees shall have safe means of access to, and be able to remain safely in, all the areas necessary for production, adjustment and maintenance operations.
17. All work equipment shall be appropriate for protecting employees against the risk of the work equipment catching fire or overheating, or of discharges of gas, dust, liquid, vapour or other substances produced, used or stored in the work equipment.

18. All work equipment shall be appropriate for preventing the risk of explosion of the work equipment or of substances produced, used or stored in the work equipment.
19. (a) Work equipment shall be installed, located and used in such a way as to reduce risks to users of the work equipment and for other employees.
  - (b) Without prejudice to the generality of subparagraph (a) -
    - (i) sufficient space to reduce such risks shall be provided between moving parts of work equipment and fixed or moving parts in its environment; and
    - (ii) all forms of energy and substances used or produced shall be supplied and/or removed in a safe manner.
20. Work equipment shall be erected or dismantled under safe conditions in particular observing any instructions which may have been provided by the manufacturer.
21. Work equipment which may be struck by lightning while being used shall be protected by devices or appropriate means against the effects of lightning.
22. Work equipment with ride-on employees shall be fitted out in such a way as to reduce the risks for employees during the journey and such risks shall include the risks of contact with or trapping by wheels or tracks.
23. Where an inadvertent seizure of the drive unit between an item of mobile work equipment and its accessories and/or anything towed might create a specific risk, the work equipment shall be equipped or adapted to prevent blockages of the drive units and where such seizure cannot be avoided, every possible measure shall be taken to avoid any adverse effects on employees.
24. Where drive shafts for the transmission of energy between mobile items of work equipment can become soiled or damaged by trailing on the ground, facilities shall be available for fixing them.
25. (1) Mobile work equipment with ride-on employees shall be designed to restrict under actual conditions of use, the risks arising from work equipment roll over either by –
  - (a) a protection structure to ensure that the equipment does not tilt by more than a quarter turn,
  - (b) a structure giving sufficient clearance around the ride-on employees if the tilting movement can continue beyond a quarter turn, or
  - (c) by some other device of equivalent effect.

(2) The protection structures may be an integral part of the work equipment but are not required when the work equipment is stabilised during operation or where the design makes roll over impossible.
26. Where there is a risk of a ride-on employee being crushed between parts of the work equipment and the ground, should the equipment roll over, a restraining system for the ride-on employees shall be installed.
27. Fork-lift trucks carrying one or more employees shall be adapted or equipped to limit the risk of it overturning –

- (a) by the installation of an enclosure for the driver,
- (b) by a structure preventing the fork-lift truck from overturning,
- (c) by a structure ensuring that, if the fork-lift truck overturns, sufficient clearance remains between the ground and certain parts of the fork-lift truck for the employees carried, or
- (d) by a structure restraining the employees on the driving seat so as to prevent them from being crushed by parts of the fork-lift truck which overturns.

28. Self-propelled work equipment which may, in motion, engender risks for persons shall comply with the following conditions:

- (a) the equipment shall have facilities for preventing unauthorised start-up,
- (b) the equipment shall have appropriate facilities for minimising the consequences of a collision where there is more than one item of track - mounted work equipment in motion at the same time,
- (c) there shall be a device for braking and stopping equipment, and where safety constraints so require, emergency facilities operated by readily accessible controls or automatic systems shall be available for braking and stopping equipment in the event of failure of the main facility,
- (d) where the driver's direct field of vision is inadequate to ensure safety, adequate auxiliary devices shall be installed to improve visibility,
- (e) work equipment designed for use at night or in dark places shall be equipped with lighting appropriate to the work to be carried out and shall ensure sufficient safety for employees,
- (f) work equipment which constitutes a fire hazard, either on its own or in respect of whatever it is towing and/or carrying and which is liable to endanger employees shall be equipped with appropriate fire-fighting appliances where such appliances are not available sufficiently nearby at the place of use,
- (g) remote-controlled work equipment shall stop automatically once it leaves the control range,
- (h) remote-controlled work equipment which may in normal conditions engender a crushing or impact hazard shall have facilities to guard against this risk, unless other appropriate devices are present to control the impact risk.

29. Without prejudice to the requirements of Regulation 13, self-propelled work equipment shall be driven only by employees who have been appropriately trained in the safe driving of such equipment.

30. If work equipment is moving around in a work area, appropriate traffic rules shall be drawn up and followed.

31. Organisational measures shall be taken to prevent employees on foot coming within the area of operation of self-propelled work equipment and if work can be done properly only if employees on foot are present, appropriate measures shall be taken to prevent them from being injured by the equipment.

32. The transport of employees on mechanically driven mobile work equipment shall only be permitted where safe facilities are provided to this effect and if work shall be carried out during the journey, speeds shall be adjusted as necessary.

33. Mobile work equipment with a combustion engine shall not be used in working areas unless sufficient quantities of air presenting no safety or health risk to employees is provided.

34. When work equipment for lifting loads is installed permanently, its strength and stability during use shall be assured, having regard, in particular, to the loads to be lifted and the stress induced at the mounting or fixing point of the structures.
35. (a) Machinery for lifting loads shall be clearly marked to indicate its safe working load, and where appropriate a load plate giving the safe working load for each configuration of the machinery.
- (b) Accessories for lifting shall be marked in such a way that it is possible to identify the characteristics essential for safe use, and
- (c) Work equipment which is not designed for lifting persons but which might be so used in error shall be appropriately and clearly marked to this effect.
36. Permanently installed work equipment shall be installed in such a way as to reduce the risk of the load –
- (a) striking employees,
- (b) drifting dangerously or falling freely,
- (c) being released unintentionally.
37. (a) Work equipment for lifting or moving employees shall be such as to –
- (i) prevent the risk of the car falling, where one exists, by the use of suitable devices,
- (ii) prevent the risk of the user falling from the car, where one exists,
- (iii) prevent the risk of the user being crushed, trapped or struck, in particular through inadvertent contact with objects, and
- (iv) ensure that persons trapped in the car in the event of an incident are not exposed to danger and can be freed.
- (b) Where for reasons inherent in the site and height differences, the risks referred to in subparagraph (a)(i) cannot be avoided by any safety measures, an enhanced safety coefficient suspension rope shall be installed and checked every working day.
38. Work equipment which is mobile or can be dismantled and which is designed for lifting loads shall be used in such a way as to ensure the stability of the work equipment during use under all foreseeable conditions, taking into account the nature of the ground.
39. (a) Persons may be lifted only by means of work equipment and accessories provided for this purpose. Exceptionally work equipment not specifically designed for the purpose of lifting persons may be used to this effect provided that appropriate action including adequate supervision has been taken to ensure safety.
- (b) While employees are on work equipment designed for lifting loads, the control position shall be manned at all times. Persons being lifted shall have reliable means of communication. In the event of danger, there shall be reliable means of evacuating them.
40. (a) Unless required for the effective operation of the work, measures shall be taken to ensure that employees are not present under suspended loads.
- (b) Loads shall not be moved above unprotected workplaces usually occupied by employees. Where work cannot be carried out properly any other way, appropriate procedures shall be laid down and applied.
41. Lifting accessories shall be selected as a function of the loads to be handled, gripping points, attachment tackle and the atmospheric conditions having regard to the mode and configuration of slinging, and lifting accessory tackle

shall be clearly marked so that users are aware of its characteristics where such tackle is not dismantled after use.

42. Lifting accessories shall be stored in a way that ensures that they will not be damaged or degraded.
43. When two or more items of work equipment used for lifting non-guided loads are installed or erected on a site in such a way that their working radii overlap, appropriate measures shall be taken to avoid collision between loads and/or the work equipment parts themselves.
44. When using mobile work equipment for lifting non-guided loads, measures shall be taken to prevent the equipment from tilting, overturning or, if necessary, moving or slipping, and checks shall be made to ensure that the measures are executed properly.
45. If the operator of work equipment designed for lifting non-guided loads cannot observe the full path of the load either directly or by means of auxiliary equipment providing the necessary information, a competent person shall be in communication with the operator to guide him or her and organisational measures shall be taken to prevent collisions of the load which could endanger employees.
46. Work shall be organised in such a way that when an employee is attaching or detaching a load by hand it can be done safely, in particular through the employee retaining direct or indirect control of the work equipment.
47. All lifting operations shall be properly planned, appropriately supervised and carried out to protect the safety of employees and if a load has to be lifted by two or more pieces of work equipment for lifting non-guided loads simultaneously, a procedure shall be established and applied to ensure good co-ordination on the part of the operators.
48. (a) If work equipment designed for lifting non-guided loads cannot maintain its hold on the load in the event of a complete or partial power failure, appropriate measures shall be taken to avoid exposing employees to any resultant risks.  
(b) Suspended loads shall not be left without surveillance unless access to the danger zone is prevented and the load has been safely suspended and is safely held.
49. (a) Open air use of work equipment designed for lifting non-guided loads shall be halted when meteorological conditions deteriorate to the point of jeopardising the safe use of the equipment and exposing employees to risks.  
(b) Adequate protection measures in particular to avoid work equipment turning over shall be taken to avoid any risks to employees.

#### **Extract 5**

### **Section 32 of the Factories Act, 1955 [as substituted by Section 17 of the Safety in Industry Act, 1955] - Training and supervision of persons working at machines**

32. (1) A person shall not work, nor shall he be required to work, on, at or with any machine unless he has been fully instructed as to the dangers (if any) arising in connection therewith and the precautions to be observed, and—

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- (a) has received a sufficient training in work at the machine, or
  - (b) is under adequate supervision by a person who has experience and a thorough knowledge of the machine.
- (2) (a) In this section ‘machine’ includes any steam boiler, steam receiver or air receiver, or any lifting machine which is driven by mechanical power.
- (b) Any reference in this section to working on, at or with a machine shall—
- (i) in the case of a steam boiler, be construed as including a reference to working in connection with the generation of steam from that boiler,
  - (ii) in the case of a steam receiver, be construed as including a reference to working in connection with the use of steam in that receiver,
  - (iii) in the case of an air receiver, be construed as including a reference to working in connection with the use of compressed air in that receiver, and
  - (iv) in the case of such a lifting machine, be construed as including a reference to driving and operating the machine.

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Guidance on General Aspects of Training

Introduction

1. This guidance supplements the Health and Safety Authority’s Code of Practice on the basic training of lift truck operators. Like the Code, it relates to stacking rider-operated lift trucks (which includes articulated steering truck types), excluding straddle carriers and non lift trucks fitted with removable attachments which modify their function, allowing them to be used temporarily as lift trucks, such as agricultural tractors with fork lift attachments. “Rider-operated” means any truck capable of carrying an operator and includes trucks controlled from both seated and stand-on positions, which may be fixed or foldaway. This does not mean that training only needs to be given for these lift trucks. The employer’s duty under the Health and Safety at Work legislation to provide training extends to operators of all other types of truck. The advice given in the Code and supplementary guidance can be used as an indication of the standard of training to provide for all types of lift truck. The guidance can be of help not only to employers, but also to organisations offering training for operators and instructors, and to lift truck suppliers.
2. Safe operation of any plant or machinery requires proper training. It is quite wrong to assume that because employees hold a licence to drive, say, a motor vehicle on the public roads they also have the skills necessary to operate a lift truck. For the purpose of this document an operator is anyone who operates a lift truck, even as a secondary or occasional part of their job, and is not limited to people specifically designated as lift truck operators.
3. Employers are responsible for ensuring that adequate training is provided for their employees. Employers should satisfy themselves that any training given covers all aspects of the work to be undertaken and takes account of this guidance, and in the case of basic training is at least to the standard of the Code of Practice. Self-employed lift truck operators may also have responsibilities under Regulation 6 of the Safety, Health and Welfare at Work (General Application) Regulations, 1993, to ensure they undergo the same type of training, achieving the same standard, as employers are required to provide to their employees.
4. **Operators of types of lift truck not covered by this guidance will also need training.** In some cases, for instance, on pedestrian/rider-operated pallet trucks, this may follow a similar approach, but in others, such as straddle carriers a very different training programme will be needed. Training organisations involved in lift truck training should be able to advise on suitable training, but employers will need to take account of the advice on instructor selection contained in this guidance when choosing a training provider, to ensure that the provider has the relevant expertise and experience. The bodies listed in Appendix 1 are able to advise about training providers.
5. Employers also have a continuing responsibility to provide adequate supervision and it is therefore essential that supervisors themselves have sufficient training and knowledge to recognise safe and unsafe practices. This does not mean that supervisors need full operator training, but they do need to understand the risks involved and the means of avoiding or counteracting them. They also need sufficient training to enable them to evaluate the advice of fully trained and experienced operators to ensure they do not over-ride the operator’s advice to the detriment of safety.

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6. Safety representatives selected or appointed in accordance with the Section 13 of the Safety, Health and Welfare at Work Act, 1989, should be consulted about the training arrangements for lift truck operators. If there are no appointed safety representatives employers will need to consult with all their employees either through an agreed Safety Committee or directly in accordance with the above mentioned Section 13 and Regulation 12 of the General Application Regulations, 1993. Safety representatives and employees can play an important role in encouraging the safe operation of lift trucks.
7. Employers should ensure that employees who use lift trucks on other people's premises are fully trained to do so, and that suitable arrangements have been made to enable the controllers of those premises to satisfy themselves, before allowing use of trucks, that visitors have been adequately trained to operate safely the lift truck(s) to be used. Such visitors might be lorry drivers or maintenance or inspection personnel. Suitable arrangements could be provision of documentation on an individual basis or written assurance that all their employees who will visit the site and be expected to operate lift trucks are trained and competent to do so. Visiting personnel will also need site specific information, which could be provided by clear signs or, where risk assessment indicates the need, site vehicle and third party rules, to enable them to work safely. A useful precaution might be to limit clearly areas where people who are not familiar with the premises can operate. It is highly unlikely that visiting lorry drivers will have undergone training which would enable them to use safely lift trucks provided by occupiers of work-sites. Drivers with their own lift trucks or regular contractors' drivers who frequently visit the same sites may be satisfactorily trained and have sufficient site knowledge to operate safely.
8. Employers who do not control work-sites where their employees may operate lift trucks and those who do control such sites need to co-operate to ensure that only people trained as described in the Code of Practice and this supplementary guidance are allowed to operate lift trucks. Such co-operation is equally important on multi-occupied sites, such as business parks and markets where trucks may be shared. The responsibility of those who control work-sites to ensure that the workplace is safe does not detract from the employer's duty to ensure that their own employees are adequately trained.
9. Employees also have responsibilities. Section 9 of the Safety, Health and Welfare at Work Act, 1989, and Regulation 14 of the Safety, Health and Welfare at Work (General Application) Regulations, 1993, require them to take reasonable care for their own health and safety and that of other people. They must also co-operate with their employers to assist them in complying with their statutory duties.

### **Selection of people for training**

10. Employers should select potential lift truck operators carefully. Those selected for training need to have the ability to do the job in a responsible manner and the potential to become competent operators. Operators of lift trucks on docks premises must be aged at least 18 years.

Young persons (under 18 years of age) are often exposed to risks to their health and safety when using work equipment as a consequence of their immaturity, lack of experience or absence of awareness of existing or potential risks. Therefore, such young people should not be allowed to operate lift trucks without adequate supervision unless they have the necessary competence and maturity, as well as having successfully completed appropriate training. Children under minimum school leaving age should never operate lift trucks.

11. Those selected should have the necessary level of physical and mental fitness and learning ability for the task. People with disabilities may well be able to work safely with lift trucks. In cases where a disability is potentially relevant to the safe operation of lift trucks employers should seek appropriate medical advice on a case by case basis.
12. Where employees claim to be trained and have sufficient operating experience already, employers should insist upon evidence. They need to satisfy themselves that the training, experience and ability is in fact sufficient for the lift trucks and handling attachments in question to be operated safely in the working environment concerned. Where evidence is not available, employers will need to arrange assessment of the person's competence and provide any training which the assessment indicates is necessary before allowing the employee to operate a lift truck.
13. It may be useful to apply a selection test to avoid wasteful attempts to instruct unsuitable trainees. Advice on trainability assessment can be obtained from the bodies listed in appendix 1.

### Training of operators

14. The training of operators should always include the three stages of training:

<i>Basic training</i>	– the basic skills and knowledge required for safe operation;
<i>Specific job training</i>	– knowledge of workplace and experience of any special needs and handling attachments;
<i>Familiarisation training</i>	– operation on the job under close supervision.

The first two stages are sometimes combined or integrated but should always be off the job. The Code of Practice covers basic training but some supplementary guidance on this is included below.

### Basic training

15. Basic training needs to cover fully the skills and knowledge required for the safe operation of the type of lift truck and handling attachments (if any) which the trainee will be required to operate, including the risks arising from lift truck operation. Such risks would include not only those directly related to the operation of trucks, but associated tasks, such as the fire hazard created by possible production of hydrogen when recharging batteries. Appendix 2 lists objectives which may need to be included.
16. **Length of training** may vary depending on the objectives to be covered, the trainee/instructor ratio and the ability and previous experience of the trainees. (for instance, an agricultural tractor driver may need less training on a rough terrain truck than a complete novice). As a rough guide, the normal length of a course for novice operators would be five days. In all cases the time devoted to training needs to be sufficient to ensure that the basic training objectives can be achieved.

17. Operators with some experience of lift trucks or relevant experience of similar vehicles may need less extensive training than those with no experience of lift trucks. However, the value of such experience should not be overestimated. The ability to drive private cars or other conventional road vehicles for example does not remove the need for proper training on lift trucks which have very different stability and handling characteristics as well as different controls. An operator with basic training on one type of lift truck or handling attachment cannot safely operate others, for which they have not been trained, without additional, conversion training.
18. Training providers can arrange short assessment courses to judge the ability and training needs of experienced operators who have had limited formal training.
19. Given the wide range of lift trucks, operator experience and company requirements, some training organisations will arrange for a basic course to be tailored to meet a client's requirements. The basic course described in the Code of Practice can be adapted for this purpose, provided always that the appropriate basic training objectives are achieved.
20. The ratio of trainees to instructors to trucks should enable the instructor to demonstrate each part of the practical training and the trainee to obtain adequate hands-on experience while also having an opportunity to learn from the performance of other trainees. There should be adequate time for each trainee to have sufficient practical experience to become a safe operator and to do so under close supervision. A trainee:instructor:truck ratio of 2:1:1 is probably ideal, but in any case the ratio should not exceed 3:1:1 except for lecture sessions.
21. Trainees need to be continually assessed. Appendix 3 lists tests of operator skills which may be appropriate. Advice on operator testing may be obtained from the bodies listed in appendix 1.
22. It is essential that newly trained operators be given specific job and familiarisation training as described below. Once fully trained, operators should also be given the opportunity to put the skills and knowledge acquired during training into practice at their workplace to reinforce that training. Newly acquired skills can swiftly be lost if not used.

### **Specific job training**

23. Specific job training is a further essential element of training. It will normally follow the completion of basic training but may be combined or integrated with it. The trainee: instructor: truck ratio for basic training also applies to specific job training.
24. Specific job training will be tailored to the employer's special needs and include, where appropriate:
  - (a) knowledge of the operating principles and controls of the lift truck to be used, especially where these relate to handling attachments, or where the controls differ from those on which the operator has been trained. Routine inspection and servicing of that truck in accordance with the operator's handbook or instructions issued by the manufacturer need to be covered, in so far as they may reasonably be carried out by the operator. This should be repeated whenever the design of truck is changed;

- (b) use of the truck in conditions that the operator will meet at work, e.g. gangways; loading bays; racking; lifts; automatic doors; confined areas; cold stores; slopes; rough terrain; loading platforms; and bad weather conditions;
- (c) instruction in site rules, e.g. site layout; one-way systems; speed limits; general emergency procedures; use of protective clothing and devices including operator restraints and eye and hearing protection; work near excavations, overhead lines and other hazards;
- (d) training in the work to be undertaken, e.g. loading particular kinds of vehicle; handling loads and materials of the kind normally found at that workplace, including assessment of weight; use of the fork truck to support working platforms where appropriate, and
- (e) safe systems of work, which should include custody arrangements to ensure that keys are never left in unattended trucks, or in a place where they are freely available, to prevent the use of trucks by unauthorised operators and safe operation in areas where pedestrians may be present.

### **Familiarisation training**

25. This is the third element of training. It needs to be carried out on the job and under close supervision, by someone with appropriate knowledge, possibly the trainee's usual supervisor. It should cover the application, under normal working conditions, of the skills already learned and include familiarisation with site layout, local emergency procedures and any other particular feature of the work which it is not practicable to teach off the job. In very exceptional circumstances, such as use of lift trucks by the emergency services at the scene of an accident or fire, where it is clearly not feasible to train on-site, realistic simulated training may be provided.

### **Authorisation, records and certificates**

26. Following satisfactory completion of training, the employee should be given written authorisation to operate the type or types of truck for which all three elements of training have been successfully completed. Authorisations may be issued on an individual basis and/or recorded centrally by the employer. Authorisations should state the operator's name, the date of authorisation, the truck or trucks to which they relate and any special conditions, such as area limitations. Employers should not allow personnel to operate lift trucks on any premises without authorisation (except in the case of a trainee under close supervision) Employers will also need to ensure that they are satisfied with the continuing competence of authorised operators.

27. Employers should keep adequate records for each employee who has satisfactorily completed any stage of lift truck training. The record will need to include sufficient information to identify the employee and the nature of training completed. An example of an employer's training record is given in Appendix 4. The record could include a copy, or details, of any certificate of training which is issued. While there is no legal requirement for certificates of basic training to be issued, they are strongly recommended as a useful, practical means of providing documentary evidence of relevant training having taken place and an appropriate level of operating ability having been attained. The employee will need a certificate as evidence of training on a change of employment. It is in the interests of both employers and employees for employees to have the original certificate to limit the opportunities for forgery which photocopies present. If only a copy is provided to the employee it will need to be annotated in some way to establish its validity for the purpose of

recognition by other employers. The Construction Skills Certification Scheme organised by FAS, and which includes telescopic forklifts, is an example of such certification.

### **Further operator training and monitoring of standards**

28. There is no specific requirement to provide refresher training after set intervals, but even trained and experienced lift truck operators need to be re-assessed from time to time to ensure that they continue to operate lift trucks safely. This assessment, which should form part of a firm's normal monitoring procedures and be formally timetabled to ensure that it is done at reasonable intervals, will indicate whether any further training is needed. In addition to routine safety monitoring, re-assessment might be appropriate where operators have not used trucks for some time, are occasional users, appear to have developed unsafe working practices, have had an accident or near miss, or experience a change in their working practices or environment. Employers may find it useful to record re-assessment in their safety monitoring records. Employers can, of course, decide that automatic retraining after a set period of time is the best way of ensuring that employees are adequately trained but, where this approach is adopted, it will still be necessary to monitor performance in case retraining is required before the set period ends. The guiding principle is that employers need to maintain the competence of operators to use lift trucks safely through a laid down, formal process of monitoring and assessment.
29. Conversion training, to enable operators to extend the range of trucks they are qualified to drive, may also be appropriate and is widely available. Refresher and conversion training should be approached with the same attention to detail as basic training to ensure that all gaps in, and variants on, existing skills and knowledge are identified and covered during training. For instance, there may be significant variations in configuration or application of controls, even in the same truck types.
30. Training will not in itself ensure the competence of individuals: this will develop with experience and should be monitored. Continued supervision will be necessary to ensure that good standards of operation are maintained.

### **Instructor selection and training**

31. Successful training depends on the competence of instructors. They should be asked to supply evidence of their training and post training experience on the type of truck to be used, both as instructor and operator, and their knowledge of and familiarity with conditions in the industry where trainees will work. This will include expertise in any requirements peculiar to the operation of the truck(s) and in the work trainees will be expected to undertake. Since training is largely accomplished through demonstration followed by supervised practice, it is essential that each demonstration by the instructor is a model, free from technical errors and misjudgements. Instructors must also be able to make effective use of instructional techniques in both the working and classroom environment.
32. Good instructors should:
- (a) have the ability to adapt their approach to suit the needs of different trainees;
  - (b) be able to communicate effectively;

- (c) be able to lead and control; and
- (d) keep their own training and experience as instructors up to date, especially if not training regularly.

An example of an instructional techniques training programme is at Appendix 5. Instructors need to be re-assessed periodically as appropriate. Such re-assessment is particularly important if instructors have not done any training for some time. Advice on instructor training can be obtained from the bodies listed in Appendix 1.

### **Accrediting bodies**

The bodies listed in Appendix 1 are at present operating voluntary accreditation schemes in Ireland. Such schemes are not mandatory and inclusion in these guidelines does not imply approval by the Authority of their schemes but is intended to help set and maintain professional training standards. This should help employers to select training organisations offering a good standard of training. Although employers operating their own in-house training schemes may also find it useful to have them accredited by one of the above bodies, this may not be necessary for successful schemes already in operation in some companies.

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## **ACCREDITING BODIES**

The bodies listed below operate accreditation schemes for training providers and instructors. They may also be involved themselves in the delivery of training to instructors and lift truck operators.

The nature and scope of their accreditation schemes are briefly described.

**1. Foras Aiseanna Saothair (FAS)  
Training and Employment Authority  
27-33 Upper Baggot Street, Dublin 4**

– Also known as **FAS**.

FAS operates a scheme for the approval and registration of Training Organisations and Trainers. Individuals or organisations providing forklift truck training may apply to FAS for inclusion on its register of Approved Trainers/Training Organisations.

FAS also provides training and certification for operators and maintains a register of trained operators.

Further details can be obtained from FAS at

FAS  
Certification and Standards Section  
27-33 Upper Baggot Street  
Dublin 4

**2. RTITB Ltd, Training, accreditation and examiner services, Ercall House, 8 Pearson Road, Central Park, Telford, TF2 9TX (Tel: 01952 520200; Fax 01952 520201).**

RTITB Ltd (formerly the Road Transport Industry Training Board) offers accreditation of lift-truck operator and instructor training to:

- (a) Commercial training organisations providing operator training at permanent centres or on customers' premises with suitable facilities;
- (b) Employers' own in-house lift-truck training schemes;
- (c) Commercial training organisations providing lift-truck instructor courses.

Access to accreditation is open to any individual or organisation able to demonstrate the meeting of RTITB's published criteria. Annual renewal is subject to the results of regular independent and impartial monitoring, of training provision by RTITB assessors. RTITB accreditation is applicable to the full range of truck/types and attachments and to Material Handling Equipment used in a variety of industry settings.

RTITB Instructor Training is available through a National and International Network of Approved Instructor Centres. Following continuous assessment during the training course, all candidate instructors are independently examined by RTITB.

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Those successful in meeting the required examination standard become eligible for inclusion on the RTITB National Register of Qualified Instructors and are issued with a personal identification badge and certificate.

Registration lasts for a period of 5 years, re-registration is dependent upon the outcome of update training and re-examination by RTITB. Eligibility to become an RTITB Accredited organisation is subject to the provision of RTITB Registered Instructors with appropriate industrial experience.

Further information and advice on any of its schemes and services may be obtained from RTITB at the address, telephone and fax numbers given.

### **3. IIPMM**

The Irish Institute of Purchasing and Materials Management formerly the IIMH (Irish Institute of Material Handlers) operate an accreditation scheme for organisations providing forklift training. It also maintains a Register of Approved Instructors and Training Organisations.

Further details of the scheme can be obtained from IIPMM at

	<b>IIPMM</b>
	5 Belvedere Place, Dublin 1
Telephone:	353-1-8559257 353-1-8559258 353-1-8559259
Fax:	353-1-8559259
E-mail:	<a href="mailto:iipmm@iol.ie">iipmm@iol.ie</a>
Web:	<a href="http://www.iipmm.ie">www.iipmm.ie</a>

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## Appendix 2

### **OBJECTIVES TO BE CONSIDERED FOR INCLUSION IN A BASIC TRAINING COURSE**

On completion of training the trainee to be able to:

1. state the reasons for operator training, the risks associated with lift truck operations and the causes of lift truck accidents;
2. state the responsibilities of operators to themselves and others, including their duties under Section 9 of the **Safety, Health & Safety at Work Act, 1989** and Regulation 14 of the **Safety, Health and Welfare (General Application) Regulations 1993**.
3. identify the basic construction and main components of the lift truck, stating its principles of operation and load handling capabilities and capacities;
4. identify as appropriate handling attachments which may be used with the lift truck;
5. locate and state the purpose and method of use of all controls and instruments;
6. place the forks or other handling attachment in pre-determined positions employing the appropriate controls;
7. identify various forms of load, and state the procedures for their stacking, destacking and separation; assess the weight, and, where relevant, the load centre, of a load; and decide if the load with its known weight and load centre is within the truck's rated/derated capacity;
8. state the factors which affect machine stability, including: turning, especially related to speed and sharpness of turn; load security and integrity; rated capacity and rated load centres; centres of gravity; and speed and smoothness of operation;
9. observe correct procedures when loading and unloading vehicles;
10. make visual checks to ascertain the safety, soundness and rating of structures designed to receive loads, and place and remove loads on and from those structures at various heights;
11. pick up and place loads, and drive and manoeuvre the machine in forward and reverse motions laden and unladen on inclines, in restricted spaces and on level ground (including rough terrain as applicable) observing correct procedures and precautions;
12. park the machine, observing correct procedures and precautions;
13. where applicable state the purpose, and demonstrate the procedures for the use, of safety devices including stabilisers, level indicators, and load indicators, if fitted;
14. carry out inspection and maintenance tasks appropriate to operators as required by the machine manufacturers and any relevant legislation;
15. state the actions to be taken in an emergency while in control of a lift truck, for example, action to be taken in the event of tipover.
16. state why it is essential to have vehicle key custody arrangements.
17. state the general precautions to be observed to prevent collisions with pedestrians.

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RIDER-OPERATED LIFT TRUCKS:

---

OPERATOR TRAINING

---

AND

---

SUPPLEMENTARY GUIDANCE

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## Appendix 3

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### ***BASIC TRAINING: TESTS OF OPERATOR SKILLS***

Testing could include the following as appropriate:

1. operation of the truck within the safety limits defined by the manufacturer;
2. carrying out a pre-use check when the truck is to be used;
3. correct mounting and dismounting procedure and correct driving position;
4. competent use of controls;
5. movement of the truck with forks or attachments in the correct travel position, laden and unladen;
6. correct insertion and withdrawal of forks or other handling attachments without damage to pallet or load;
7. manoeuvring a loaded truck forward and in reverse in a narrowly confined area;
8. performing both a left and a right 90 degree turn with a loaded truck in a narrowly confined area without touching the sides of the area;
9. stacking and destacking loads
  - at different levels
  - in front of a fixed vertical face
  - on the floor alongside similar loads;
10. loading/unloading a vehicle (a suitable simulation may be used where a vehicle is not available);
11. correct parking of the truck.

# Appendix 4

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## **EXAMPLE OF EMPLOYER'S TRAINING RECORD**

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Company name & address

Employee's full name:

Clock number:

Department:

NI number:

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### **Basic training**

Lift truck type(s) used for training:

Model/Capacity:

Attachments:

Organisation carrying out training:

Course description, location and reference number:

Duration and dates of course:

Days from \_\_\_\_\_ to \_\_\_\_\_

Name of instructor:

Reference number:

Date of test:

Name of person carrying out test:

Reference number:

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### **Specific job training**

Lift truck(s) used for training:

Model:

Number:

Instructed by:

Duration of training:

Date of training:

---

### **Familiarisation training**

Lift truck(s) used for training:

Model:

Number:

Instructed by:

Duration of training:

Date of training:

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RIDER-OPERATED LIFT TRUCKS:

---

OPERATOR TRAINING

---

AND

---

SUPPLEMENTARY GUIDANCE

---

## Appendix 5

### **EXAMPLE OF AN INSTRUCTIONAL TECHNIQUES TRAINING PROGRAMME**

The following outline programme for a lift truck instructor course is given as an example. Full details of instructor training courses can be obtained from the bodies listed in Appendix 2.

#### **Course aims**

To provide effective instruction on the following:

- relevant instructional skills, including classroom technique;
- techniques for structuring training material into a logical sequence;
- an objective and critical approach towards the effectiveness of the instruction presented;
- appropriate methods of assessment of the progress of trainees and the testing of basic skills they acquire.

#### **Course objectives**

On completion of training, course members should be able to demonstrate their ability to plan, prepare and present practical and theoretical instruction to an adequate standard. In addition, they should be able to construct, conduct and mark objectively a practical test or tests of trainees' operating ability and issue appropriate documentation.

#### **Course content**

Principles of instruction

Simple task analysis

Preparing a job break-down sheet

Planning, preparing and presenting a practical demonstration

Planning, preparing and presenting a practical lesson

Planning, preparing and presenting a classroom lesson

Use of question and answer techniques

Developing training courses suitable for new trainees or experienced operators

Guidance in specific job and familiarisation training

Constructing, conducting and marking practical tests of trainees' operating ability

Certification of operators after basic training

Employers' authorisations to operate

#### **Final instructor assessment**

Course members should be assessed on:

- practical operating and instructing ability,
- theoretical instructing ability,
- ability to conduct and mark tests of trainees' operating ability and knowledge to an appropriate and consistent standard.

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RIDER-OPERATED LIFT TRUCKS:

---

OPERATOR TRAINING

---

AND

---

SUPPLEMENTARY GUIDANCE

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