



INTRODUCTION

This book addresses itself to those of you who are going to become forklift truck operators and it deals with those subjects which you as an operator should know about. The aim of the manual is to help you to become a safe and efficient truck operator.

Perhaps you already have some relevant experience and feel that you know all there is to know about forklift trucks. However, it is our contention that every body, irrespective of their experience, has something to learn from this book.

A good truck operator must be thoroughly familiar with the rules for safe truck operation.

INCREASING NUMBERS OF ACCIDENTS

The number of accidents in which forklift trucks are involved is far too high. Lack of training, or lack of proper training, has been identified as the major cause of these accidents. In the past, far too many people have been allowed to use these powerful machines with little or no training and the result has been far too many accidents to people, product and premises. Most accidents involving lift trucks are serious, often fatal.

Accidents must not occur due to lack of knowledge of how the truck works or of current legislation , or safe working rules!

PALLET TRUCKS AND STACKER TRUCKS

The support arms are characteristic of these types of trucks. They carry their loads between the wheel axles and, therefore, do not require a counterweight in the same way as a counterbalanced truck does.

The distance between the arms is such that they can roll under a pallet from the short side. Since a pallet is relatively low, the support arm wheels must be of small diameter. This means that the truck requires an even, flat surface with bearing capacity and without unduly steep gradients.

The low-lift pallet truck lacks a mast and is used for moving goods at floor level. It can be pedestrian or rider operated. The operator's area can be designed for either sitting or standing.



With an operator seat this truck is well suited to longer journeys. It is mostly used for moving pallets inside warehouses and production halls, but can even be used for loading and unloading lorries and railway wagons.

High lift stacker trucks are equipped with masts and are used mainly in warehouses and stores for transport and stacking. These too can be rider or pedestrian operated

Inspection procedures

The truck must be checked at the beginning of each shift. Some companies have their own procedures. Sometimes this means that you, the truck operator, are not required to do all the work involved. However, you, the operator, will always be responsible for ensuring that the truck is in a safe condition. If your company does not have its own procedure for recording the inspection the following method can be easily created, using a simple exercise book.

Upon commencement of each day or shift the operator should spend a few minutes inspecting the truck to ensure that it is fit for use. A simple checklist covering both engine powered or electric trucks is provided below. The result of this inspection should be recorded as shown in the following example.

Report **all faults** to your supervisor.

The daily inspection is not an end in itself. Its purpose is to reduce the risk of accidents caused by mechanical defects. Take out "insurance" by checking your machine properly every day, then treat it properly throughout the work shift.

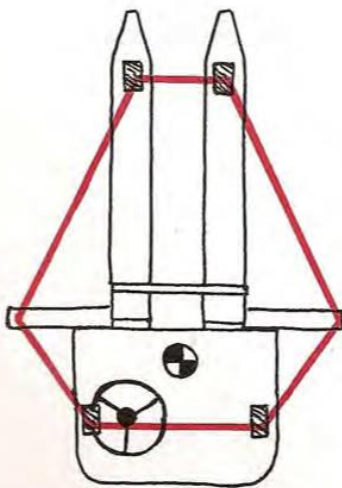
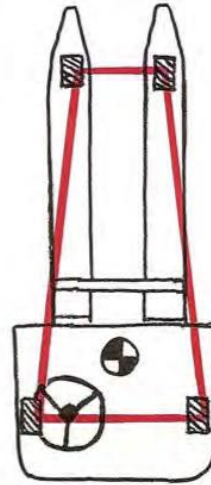


STACKER TRUCKS

The stacker trucks carries the load between the wheel axles and therefore has no need of a counterweight to balance it.

THE STACKER TRUCK BEARING SURFACE

As a rule the wheels of a stacker are always separately mounted in the truck, which is way each wheel is a support. The illustration shows the most common shape of the bearing surface and the position of centre of gravity when the truck is unloaded.



If the truck is fitted with support castor wheels or lateral stabilisers then the bearing surface is considerably increased. This means that there are greater possibilities of stacking of greater heights whilst still retaining good stability. The illustration shows a truck with stabilisers, the bearing surface and centre of gravity.

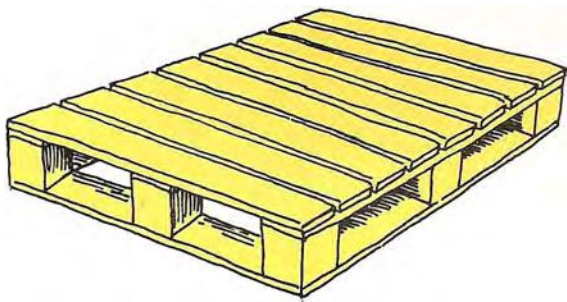
THE EUR PALLET

The EUR (European Pallet) is becoming more and more common. Most European countries use an agreed pallet dimension of 800 x 1200 mm, and to increase flexibility in transit, they also use a HALF PALLET, 800 x 600 mm.

TIMBER PALLETS

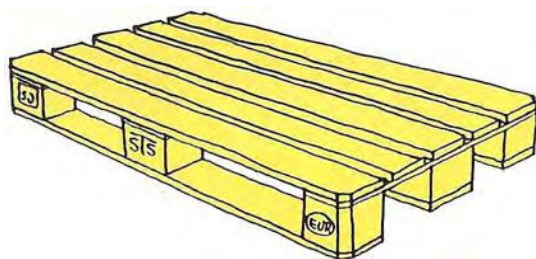
Timber pallets are commonly used in a wide range of industries and services, forming an essential part of many mechanical handling systems in factories, distribution, warehouse and the like.

The most common size in use in the UK is 1000 x 1200 mm, two- and four- way entry.



THE EUR PALLET

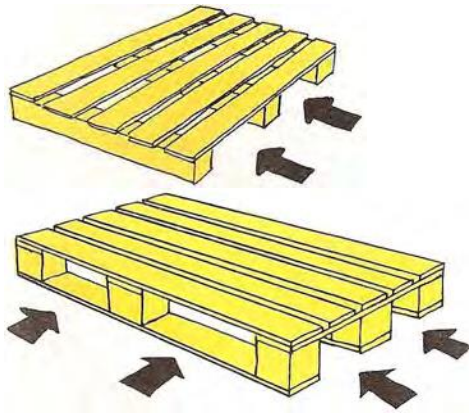
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TWO- AND FOUR- WAY PALLETS

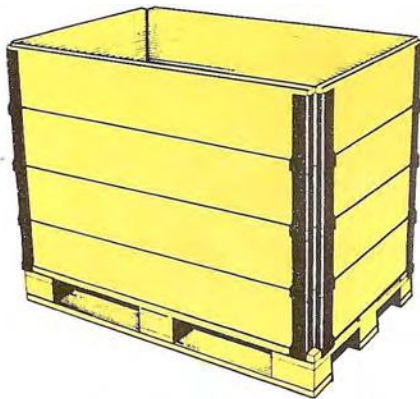
The four-way entry pallet can be handled from all four sides. A pallet which can only be handled from two sides is called a two-way entry pallet.

Pallets are available in wood, plastic, sheet metal, fibre board and paper board.



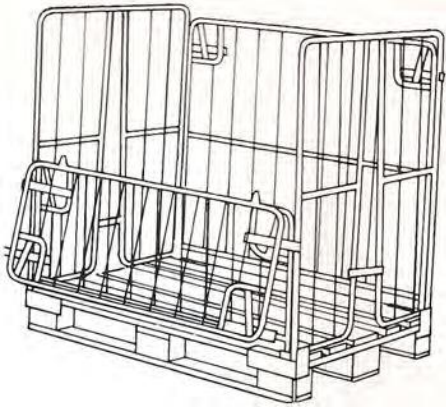
PALLET COLLARS

Folding pallet collars are often used, especially for long distance transport, to retain goods on the pallet. Stable and stackable transport packing is achieved by placing a lid on the collars. The collars must be bound together to make them more secure and special collar tensioners are available. Collars are foldable which means they can easily be returned.



PALLET SUPPORTS

There are a number of other methods to support goods on pallets, besides pallet collars. Here we have a metQod which uses collapsible sides.



TILTING AFFECTS THE CENTRE OF GRAVITY

The position of the common centre of gravity is affected by mast tilt, because when tilting you increase or decrease the distance between the centre of gravity of the truck and that of the load. The higher the load is lifted, the greater the effect. - As illustrated in fig 1 .

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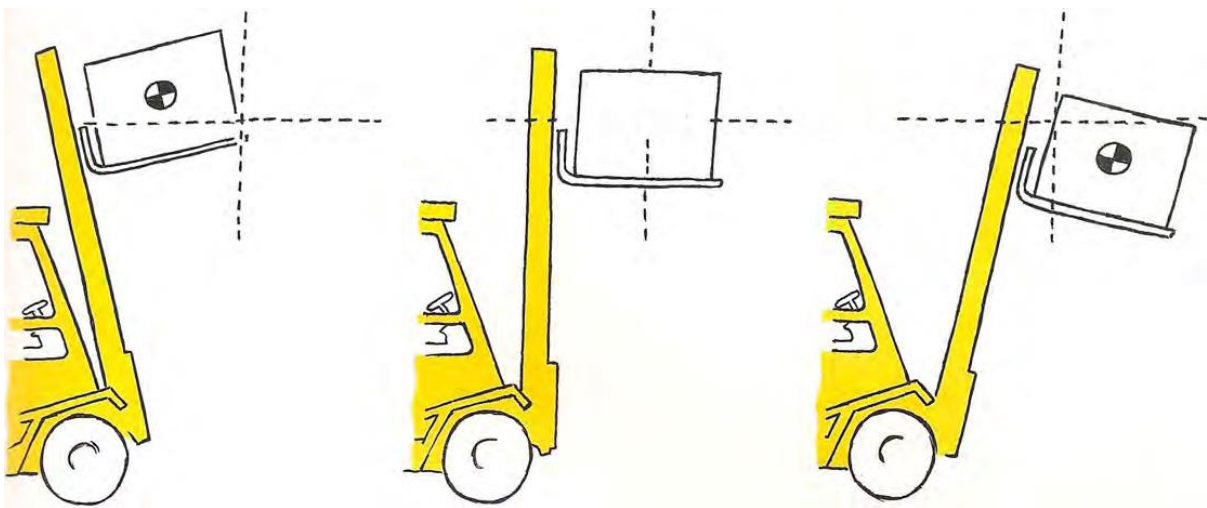


Fig 1

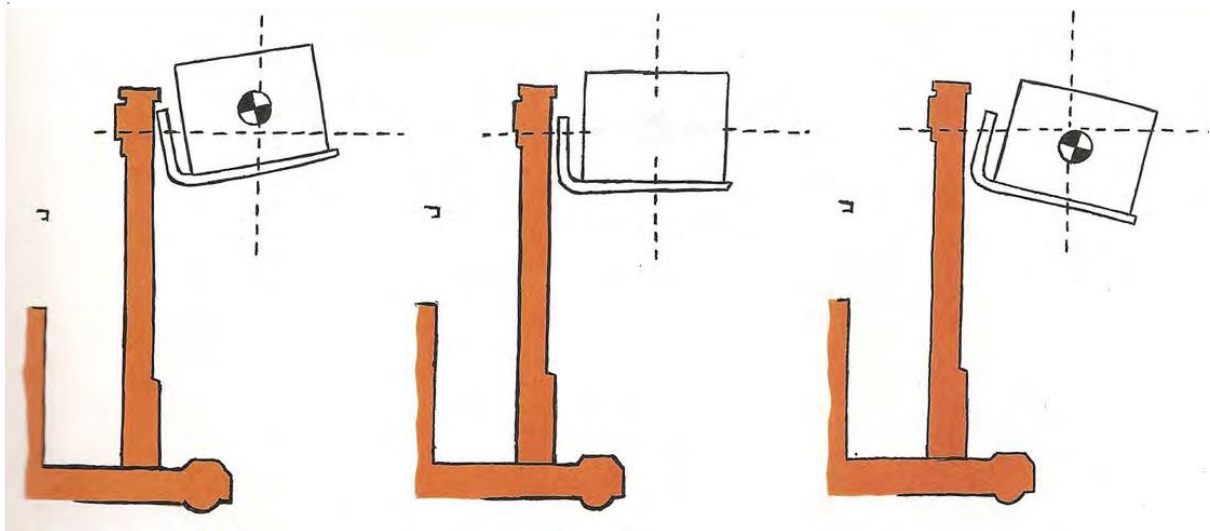
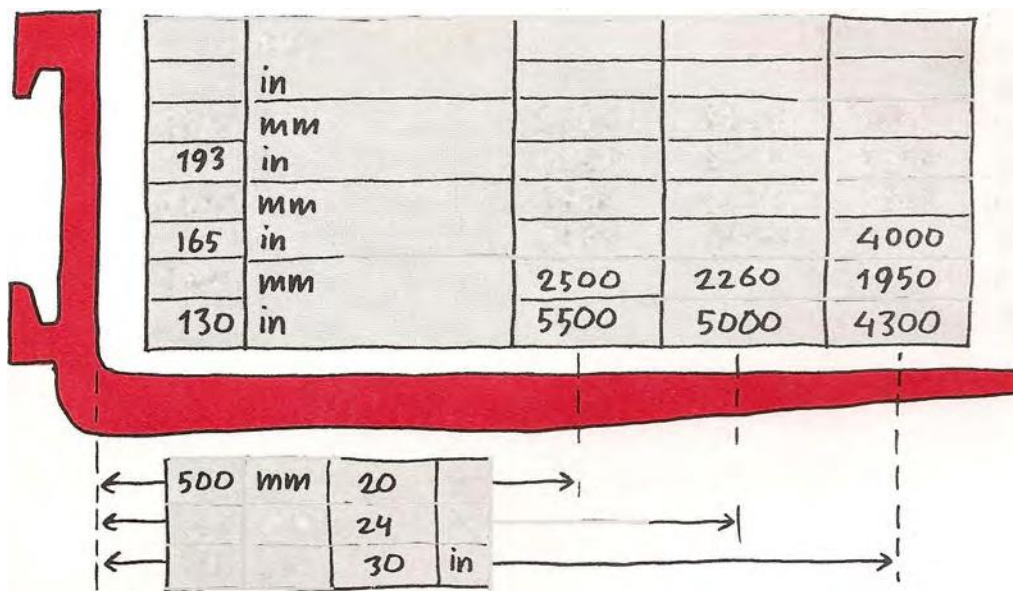
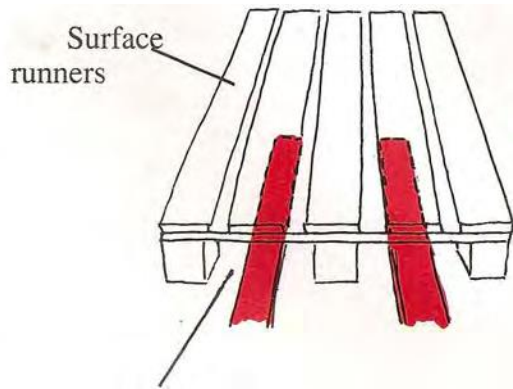


Fig 2

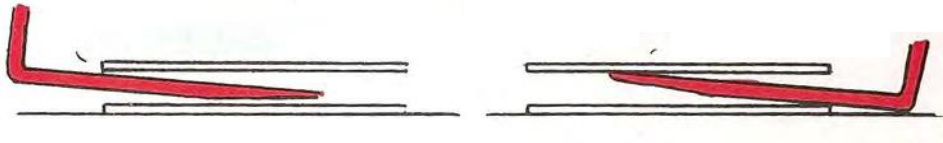
Many high lift reach trucks have a tilting fork mechanism instead of a tilting mast, but as can be seen illustrated in fig 2, the effect is almost the same.



The forks must be parallel with the pallet runners. The centre of the pallet should be aligned between the forks. If the forks are run in at an angle, the pallet may be damaged or the goods may fall off.



It is important that the forks are horizontal when they are run in under the pallet. They must not be forced in, but must run freely. Carrying the pallet, after an incorrect inspection results in the entire weight of load being borne by a single board, which might then break.



BOTH OF THESE ABOVE ARE THE WRONG WAY



CORRECT WAY

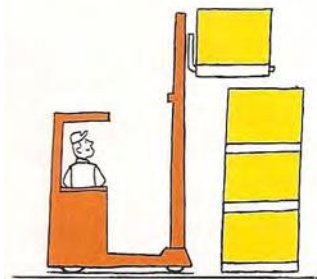
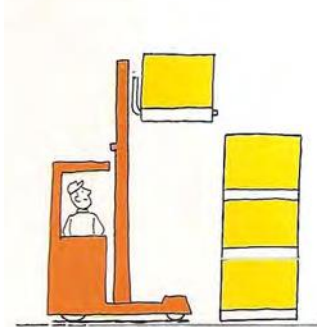
Loading should commence at the front of the lorry platform and goods must be in delivery order - First on - Last off.

It might be necessary to disregard the rule of even load distribution in order to achieve the correct axle weight!

Load from both sides (never slide or push the load to the other side)!

Always follow the instructions given by the driver of the vehicle you are loading (the driver is responsible for his load)!

Stacking - Reach Truck



1. Drive up to the stack with the load low, reached back, and tilted backwards. Stop at the face of the stack and apply the brakes.

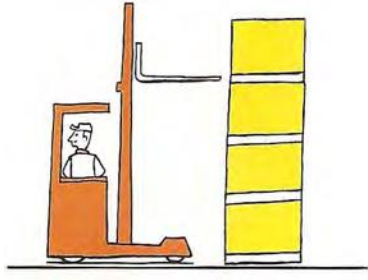
Reduce the tilt until it is just sufficient to maintain the load stability. Check overhead clearance then raise the load until it is clear of the stack.

3. Drive forward, if necessary, to come close to the stack. Avoid turning with the load in the raised position.

Apply the brakes and reach the mast forward.

4.

Tilt the mast to a vertical position. Make the final tilt adjustment, reach or move closer to the stack if necessary. When the load is in a suitable position lower the load onto the stack.



5. Lower the forks so that they are not in contact with the pallet, and reach back. It can be easier if the mast is slightly tilted forward. Reverse to get the forks fully clear of the stack if necessary.

Do not forget to check behind before you commence reversing. When the forks are clear of the stack: stop, apply the brakes lower the forks to the travel position and tilt back before checking that the way is clear and move off



How to operate the truck safely

1. Before entering the pallet check the load is securely stacked and the pallet is not damaged. Carefully guide the forks into the gaps of the pallet by firmly gripping the handle with two hands and in the up-right position push steadily forwards.
2. Raise the forks ensuring there is sufficient space between you and the handle, once the pallet is clear of the floor, return the lever to the neutral position.
3. Ensure there is enough clearance when raising the forks; be aware of any overhead obstructions and any width restrictions.
4. Push the handle down, turn and face the direction you will be travelling, depending on the direction you are turning with determine which hand to hold the truck with. When turning left use your left hand, when turning right use your right hands and grip the handle firmly.
5. Check around for pedestrians and other trucks; ensure your route is clear of obstructions. With the handle low, gently pull to start the truck moving with the forks trailing (behind you). Walk to one side of the truck, always travel at a safe speed and wherever possible travel on the left hand side of the aisle.

6. Always walk. Never run, make sharp turns or stand directly in front of the pallet truck when travelling. Never stand on the inside of a turn.
7. When travelling down a slope with the truck loaded keep the load facing down and control the speed by pulling back with both hands on the handle.
8. Once at your destination, manoeuvre the load into position, ensure you are clear of the load before lowering by slowly pulling on the lever, and lowering the load under control.
9. When fully lowered release the lever into the neutral position. Check all around if it is clear to stand to one side and pull the hand pallet truck clear of the pallet.

WHO SAYS THAT ACCIDENTS DO NOT HAPPEN ??

The following reports highlight some of the typical accidents that occur in industry each year. For obvious reasons the names of individuals have been removed.

DRIVER CRUSHED TO DEATH

A man was crushed to death between a fork lift and the wall of a west midlands coal yard.

The man who was not named died whilst working at

It is believed he was using the truck to remove a barrel of rubbish next to the wall but stopped and climbed on to the forks to make an adjustment. Police said it appeared that the man's foot knocked a lever which moved the forks trapping his HEAD against the wall. They added that there were no suspicious circumstances.

WORKER INJURED COLLEAGUE

Magistrates in CARMARTHEN fined a fork lift operator £50,000 and Jailed him for 4 years for seriously injuring a fellow worker whilst operating a fork lift at work.

..... was operating a fork lift truck at a company in Johnston when he ran over the feet of his work mate, as a result of which one foot had to be amputated.

TRAGEDY AS MAN SEE'S HIS SON KILLED BY A FORK LIFT TRUCK

A tragic accident occurred at a warehouse in STRATFORD UPON AVON When a young lad was killed as his farther drove a fork lift truck at work. 12 year old was being given a ride on the machine by his farther on a Saturday morning. It appears that he leaned outside the body of the truck and struck a support column causing massive head injuries and killing him instantly. THE HSE ARE STILL INVESTIGATING THIS ACCIDENT

HEAVY FINED AFTER MAN LOSES LEG

A Sheffield engineering company has been fined £96,000 after a works fork lift driver lost his leg when his faulty truck toppled on him.

..... aged 26 tried to leap clear of the falling truck but was pinned to the floor by his ankle by the 4 tonne weight. Sheffield magistrates heard that the boss at knew the truck had faulty braked. The company admitted three charges of failing to train Properly, failing to maintain the truck, failing to report a previous accident. Despite engineers advice to stop using the truck. The truck was kept in service. ... needed 3 operations on his crushed foot and now has a false left leg from his knee down.

MANSLAUGHTER CHARGES DUE TO NEGLIGENCE AT WORK

Company director's contractors and management could face prosecution under the new manslaughter rules if employees or members of the public are killed at a work place or on a site.

Jail sentences could be imposed under two new offences.

Directors managers contractor's employees who send others to carry out work activity knowing that there is serious danger to employee's and the employee is killed as a result could be JAILED for reckless killing.

There appears to be some confusion within certain companies regarding the need to train operators on various types of industrial trucks.

The fact is paragraph 7 of the ACOP code does clearly identify that it is a general duty of the employer to provide training UNDER SECTION 2 OF THE HSW ACT to all operators of all types of machines.

It is a legal requirement to train all operators on all types of machines they are required to use.

LARGEST EVER LOCAL AUTHORITY SAFETY FINE FOR SAINSBURY'S

In what is thought to be the largest ever penalty for a health and safety prosecution brought by a local authority – and the fourth biggest ever safety fine, the supermarket giant Sainsbury's was fined a massive £425,000.00. The fine was levied after the food store admitted deliberately disconnecting safety mechanisms which directly resulted in the death of an employee. Winchester Crown Court heard that a worker died when he was crushed by a fork lift truck which had its safety cut off switch deliberately disconnected. Sentencing Sainsbury's Judge Kay said "The story is a picture of working procedures that date back to the dark ages.

Are you and your staff operating industrial machines? Could you be the next to face the courts and jail?