

Module 38

Truck Loading

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Introduction

From most places where citrus is produced in South Africa, export citrus is transported over long distances from the farm or packhouse to the harbour where it is loaded onto ships. The most common form of transport used in South Africa is road transport.

Pallets stacked with cartons of export fruit are loaded onto trucks at the packhouse. Strict guidelines must be followed for the manner in which trucks are loaded.



Types of Trucks

There are three types of trucks that are generally used to transport citrus, and the type of truck that is used for a particular load depends on the citrus type and on the type of carton in which it is packed. You need to know the different procedures and loading restrictions for each type of truck.

The three types of trucks that are used are:

- ❖ Refrigerated trucks, also called reefer trucks
- ❖ Tautliners
- ❖ Flatbed trucks



Refrigerated (Reefer) Trucks

Refrigerated trucks are used when the market requires fruit to be pre-cooled before shipping, and is used mostly for transporting soft citrus.



Tautliners

Open-top display cartons are transported on tautliners. These are the trucks with curtains on the sides. The reason why we use these trucks is that one cannot walk on top of pallets loaded with open-top display cartons without damaging the fruit, even if it is covered with a pallet cap. A tautliner with a ceiling is therefore suitable.



Flatbed Trucks

Flatbed trucks are used to transport pallets stacked with telescopic cartons. These are the most commonly used cartons for exporting citrus from South Africa.



Load Inspection

Before loading begins, the pallets that are ready for loading must be lined up and inspected by the driver.

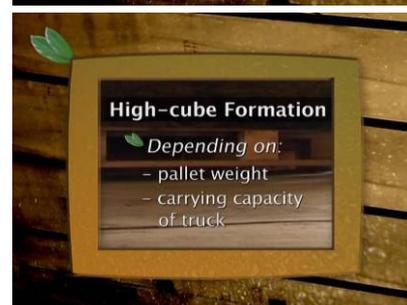
The driver must check that the pallet bases are not broken, that every second pallet is wrapped in black plastic to protect the cartons from damage chafing, and that the number of pallets agrees with his loading instructions.

The forklift operator and the driver must make sure that the right number of pallets is loaded onto the truck and that the truck is not overloaded.

The general guideline for standard pallets is 32 pallets of open-top display cartons per truck, and 28 pallets of telescopic cartons.

If the pallets are stacked in high-cube formation, we calculate the number of pallets that can be loaded according to the pallet weight and the legal carrying capacity of the vehicle.

The forklift operator is the last line of quality control in the packhouse and he must check that the cartons on the pallets are properly stacked and tightly strapped before he loads the pallets on the truck.



Truck Inspection

The forklift operator must also check the truck he is about to load. For flatbeds and tautliners he must check that the bed of the truck is smooth and will not damage the basis of the pallets being loaded onto it. Refrigerated trucks should be clean and the floor and walls must be smooth so that the cartons will not be damaged.

If the forklift operator is unsure about the suitability or condition of the truck, he must inform his supervisor. Remember that it is always better to be safe than sorry.

After loading the truck, the forklift operator must check that the load is properly secured by the truck driver, and that the straps and nets or sails used to secure the load, is in a good condition.



Truck Loading

Trucks are basically loaded in the same way. To load a truck with pallets of the same type, pallets are placed one per side starting at the front of the trailer. Make sure that the load is spread evenly over the trailer. The weight must be distributed evenly over the axles – the front axles of a trailer must not carry more weight than the back axles. Refrigerated trucks are loaded from the back of the vehicle.

For a mixed load of both A15C and open-top cartons, the A15C cartons are loaded on the front and back end of the trailer with the open-top cartons in the middle. This loading pattern is more stable and the cargo is less likely to shift during transport.

Always remember to spread the weight evenly over the axles and never to overload a truck. Never rush while loading – damage to fruit will mean a loss of income to the farmer, the packhouse and ultimately you.



Securing the Load

Once all the pallets has been placed on the truck, the load must be secured to make sure that the pallets do not shift and the cartons do not topple over during transport. The load in a refrigerated truck is enclosed so the cargo is not likely to shift. On a tautliner and flatbed truck, corner pieces, straps, nets and tarpaulins are used to secure the load.



On flatbed and tautliner trucks, there will often be gaps between the pallets at the front of the truck and the front railings of the truck, and on an tautliner also between the back row of pallets and the back of the truck.

When this happens spaces must be filled by using dunnage bags. Dunnage bags are spacers that are filled with air to stabilise the load so that the pallets do not shift during transport.

Pallets that can shift can easily fall over damaging the cartons and the fruit. This happens most often when high-cube pallets are transported, when fewer pallets are placed on the truck before the maximum weight is reached.

Corner pieces are placed on top of the pallets and then tied down with straps. The straps are attached to the truck and tightened using a pulley with a ratchet.

Always remember that you are not transporting a load of bricks and that over-tightening the straps can damage the cartons and cause them to collapse.

On a flatbed truck, a tarpaulin is put in place over the load to protect it from the elements.

Liner board is put on top of the load between the tarps and the cartons. Citrus fruit tends to sweat and produce moisture under the sail. There are also changes in temperature as the truck gets closer to the coast and the harbour, adding to condensation under the sail.

The corrugated sheets absorb this moisture and prevent the top layer of cartons from becoming wet and falling apart.



Overloading

Overloading can easily be prevented by just following the basic loading guidelines.

On every truck you will find a disc indicating the maximum load mass of the truck. Pallets must be weighed at the packhouse before they are loaded, to make sure that this maximum weight will not be exceeded.

This is the first overloading scenario, where the total load on a truck is over the legal weight limit. If this happens, the extra pallets will be removed at the weighbridge and kept at the side of the road until it can be retrieved by another vehicle, causing unnecessary loss of income for the packhouse and the grower.



The second scenario is where one of the axles is overloaded because of uneven weight distribution. Incorrect weight distribution of cargo is dangerous because it affects the handling of the truck and may cause accidents.

This problem can be fixed at the weighbridge by shifting the load before the truck is allowed to carry on, but the transport company will be fined and that fine will be passed on to the packhouse.



Conclusion

Transport is an important link in the supply chain and we have to make sure that we manage as much of the risk as we can. By loading trucks properly and in the prescribed manner, losses that result from shifting cargo or overloading can be minimised.

Always remember that it is your wages that are being sent out on that truck.



active learning

Watch the DVD clips, read through the learning material and do workplace research to gather the knowledge and information to complete the assignments below.

Activity 38.1 – Diagram

Draw a diagram showing the placement of pallets on a flatbed truck for a mixed load of 12 pallets of A15C cartons and 13 pallets of open-top display cartons. Now draw and label the items that you will add to secure the load.

Activity 38.2 – Research Report

Find out from your logistics manager how many trucks were used last season to transport how many cartons of different fruit. Using this information, develop a logistics plan that makes better use of the available resources.

Activity 38.1 – Diagram

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