

# Fresh Fruit Surveys. How to win the market with remote inspections.



## Introduction

As early as 2018, a Nielsen study found that fresh foods were “the primary driver of growth in retail stores, accounting for 49% of all sales growth in the fast-moving consumer goods industry. A high demand for “fresh” at supermarkets began long before the effects of COVID19 on the grocery retail supply chains in late 2019. Health-conscious consumers are actively browsing packaging labels and seeking out the freshest fruits and vegetables.

Growers, packers, exporters and shipping companies are expected to invest in providing the best possible quality produce to export markets. The South African export Manual reports that each particular overseas market and/or customer has product specification size, color and maturity of produce. Produce should therefore be grown to fit a particular customer, and the harvesting, grading and packing should be carried out in accordance with those specifications.

The said rules are not only long, complex but have to be tailored to suit each customer, fruit, region. Processes can be jumbled up and statistics lost. An effective solution that can establish clear cut processes of data collection and storage would save time, money and increase market credibility and customer satisfaction.

Understanding the variables involved in the handling of fruits and vegetables and how to manage them are fundamental in taking advantage of the existing market opportunities.

## Manual Quality Control Guide

Fruit and vegetables Etiquette

Packaging

Palletizing

Traceability

Survey

Remote Inspections

## 1: Fruit and Vegetables Etiquette

Fruits and vegetables are perishable. Whilst there are procedures for retarding the ripening process, there exists no reversal procedure once the food starts to decompose. The higher the rate of respiration or transpiration the higher the aging rate of the fruit or vegetable. Produce exposed to temperatures below a critical level dependent on the commodity but above the freezing temperature could also suffer from 'Chilling Injury' a physiological disorder caused by low temperature stress, causing sensitive produce to discolor or reduce their physical appearance. Per the Code of Practice for handling fresh fruit and vegetables in refrigerated shipping containers for Australian exports, the rate of deterioration depends on the environmental conditions following harvest. It states that if the O<sub>2</sub> level in the surrounding air is lowered and the CO<sub>2</sub> level is raised using changed atmosphere conditions called Controlled Atmosphere (CA) or Modified Atmosphere (MA) storage, the respiration rate of fruit and vegetables can be reduced (to extend the shelf life) by altering the composition of the air in the surrounding atmosphere. This can be achieved by reducing the oxygen content, increasing the nitrogen content or a combination of both.

## 2: Packaging

Carton material should be of sufficient strength to withstand rough export handling conditions. Packaging must be able to support a stacking height of up to 2.5 meters (for 8' 6" high containers) and 2.85 meters (for 9' 6" high containers) and withstand humidity without collapsing. Carton blanks and erected cartons must be stored in accordance with manufacturer's instructions. Chilled produce unloaded in South East Asia (and other areas with similar weather conditions) inevitably becomes wet from condensation due to the high humidity in these countries.

Semi-permeable packaging allows fruits to breathe. It enables an increased circulation of Carbon dioxide levels which reduces the respiration process leading to a fall in the production of ethylene slowing the ripening process. A difficulty however arises with modifying or controlling the atmosphere to ensure that mistakes are not made that can lead to prolonged exposure to high levels of carbon dioxide and affect the color and/or flavor of the fruit. The set limits for oxygen and carbon dioxide must not be exceeded, as a very low level of oxygen or a high level of carbon dioxide would cause suffocation of the fruit.

A carton should be formed carefully from the fibreboard blanks, according to the manufacturer's instructions. Ensure the vent blanks are removed otherwise they may become dislodged and clog up the drain outlet. Clogged drain outlets can result in quality and out-turn problems.

All packages must be clearly labeled with the appropriate trade description and bear the manufacturer's statement, and in line with labeling requirements as laid down by the regulatory bodies of the importing countries. If local language is required on the label, ensure that the translation is accurate or sign language is used as it is universal.

Packages should not be over-packed beyond the recommended weight. Any overfill of cartons should be kept to a minimum, and should be consistent between cartons, and should be such to ensure produce does not incur "pressure" damage during transit. Any bulging of cartons should be kept within acceptable limits. Where appropriate, pallet loads of cartons should be allowed to settle before loading.

## 3: Pelletizing

Packages should remain within the pallet dimensions (i.e. no overhanging) to maintain stacking strength and stability as well as ease of stowing into the container. Procedures of Handling at the point of import must be arranged.





#### 4: Traceability

In order to determine export readiness, information is needed on the target market, potential competitors and potential buyers. A product may also demand specific questions relating to that industry. Fresh fruit exported to the European Union (EU) are required to be checked for conformity with the European Community marketing standards for quality and labeling, before they are allowed to be cleared for free circulation by the Customs

In each EU member state. Certain countries, including South Africa, have been certified by the EU as having an Approved Inspection Service. The important issue to focus on is traceability. A good traceability system links a food safety problem to a specific country, pack house, producer orchard or vineyard. This is important for a number of reasons:

A problem can be linked to one specific producer rather than a whole group.

- It is a fast and accurate way to get to the source of the problem which limits risks relating to health and diseases.
- It limits unnecessary costs and
- It limits public concerns and fears

Pre shipment quality inspections are mandatory as they are used to provide the consumer with accurate and relevant information on the product, including information on where it was grown.



#### 5: Survey

A Cargo surveyor is appointed by the Cargo Owner, cargo receivers, ship owners, insurers or any other stakeholder in the industry. His job varies from determining the actual cargo loaded on board or to check the condition of the cargo as being loaded / discharged. He also confirms that the cargo loading is performed according to the law.

A cargo surveyor inspects cargoes of seagoing vessels to certify compliance with national and international regulations in cargo handling and stowage. His job responsibilities include:

1. Inspect cargo on seagoing vessels to ascertain that pertinent cargo handling regulations have been observed.
2. Read vessel documents that set forth cargo loading and securing procedures, capacities, and stability factors to ascertain cargo capabilities according to design and cargo regulations.



#### 6: Remote Inspections

The Guidance Notes on the use of Remote Inspection Technologies 2019, defines remote inspections as inspections that are typically carried out with the use of a camera and remote control modules capable of collecting visual data in the form of still images, live-stream videos, or recorded videos. They can be used to assist the attending Surveyor with survey activities where visual examination of the structure is required.

It can also be used to assist owners with a variety of assessment and self-inspection purposes like Asset Management/Maintenance Programs: With safer and potentially quicker or less intrusive methods available for accessing heights, enclosed and confined spaces, and other hazardous areas, owners may establish asset management and/or maintenance programs to regularly perform preventative maintenance.

A remote inspection tool can also be used in A Quality Management System (QMS), a formalized system that facilitates documents processes, procedures, and responsibilities for achieving quality policies and objectives.

It helps coordinate and direct an organization's activities to meet customer and regulatory requirements and improve effectiveness and efficiency on a continual basis.

To achieve the above objectives the Guidance notes recommends that::

- The remote inspection Service Provider should establish their senior management's commitment to continually improve safety and define the methods, processes, and organizational structure required to meet safety goals.
- The Service Provider should incorporate system descriptions, risk assessment, and risk controls as part of their service planning documents.
- The Service Provider maintains organizational procedures that address compliance with SMS requirements and standards, policies, directives, and any requirements applicable to the technology being used.
- The remote inspection Service Provider can also be an inspection service firm that utilizes RIVs manufactured by others. In either case, the quality standards of the equipment, including hardware and software, should be maintained through equipment selection and maintenance.

OPTIMIZ promises the provision of services that meet customer and applicable statutory and regulatory requirements

OPTIMIZ enhances customer satisfaction through the effective application of a management system, including processes for continual improvement of the system and conformity to customer and applicable statutory and regulatory requirements.

OPTIMIZ ensures that cargo can be effectively monitored throughout the processes involved in the fruit and vegetable and documented to prevent backwards investigations. Surveyors would have readily available information if the container has already left the warehouse or storage back to the port to work on without the risk of losing vital information that could cost the customer a claim.

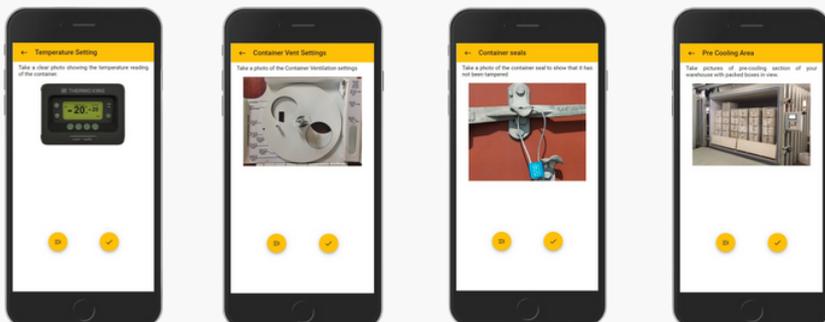
**OPTIMIZ CEO, Kingsly Kwalar is personally involved in every aspect of the running of the organization.**



From the design of the tool, its constant upgrade, ensuring that the operational guides are in conformity with statutory requirements and sourcing partners that can boost the quality of the tool. Its recent partnership with techstars and Impargo are proof of the quest for perfection.

Its remote inspection tool is a mobile phone. Easy to manipulate and affordable. Its software has a wide storage platform that is accessible and stores data in a chronological manner that can be used by other departments for stock taking, claims handling and quality control.

A fruit and vegetable importer or exporter who makes use of OPTIMIZ can, with the use of a mobile phone, carry out quality inspections from the farm, harvesting, precooling, packaging, palletizing and stuffing of the containers.



## Benefits of Remote Inspection (Pictures)

*They say pictures speak a thousand words.*

- ✓ The pictures of the processes are enough proof to establish transparency and trust between the importer and exporter who can also carry out post shipment quality control if necessary to prove that the cargo arrived either in good or bad conditions.
- ✓ Long arguments and fights over claims are greatly reduced, increasing bottom lines and profit margins.
- ✓ Customer satisfaction is guaranteed through the diligence carried out in ensuring that the fruits and vegetables are properly farmed and harvested to suit customer or market demands.
- ✓ The use of expensive surveyors are greatly reduced to cases where there is an absolute need of verification by a physical surveyor.
- ✓ Company personnel can carry out remote inspections without any formal training, saving the company time and money.
- ✓ Remote inspections post covid not only guarantees an increase in market share, it ensures credibility that improves brand awareness and loyalty..

*For more information, send us a direct mail on [hello@optimiz.claims](mailto:hello@optimiz.claims) or visit our website now at [www.optimiz.claims](http://www.optimiz.claims)*