

Rigorous fruit traceability at Agrocanillas

Fruit producer Agrocanillas chooses Datalogic to track its products in the food chain

Agrocanillas S.L. is a Spanish fruit producer situated in the centre of the most important producing zone of tropical fruits in Spain and Europe, where it operates with some of the sector's most modern facilities. Here it cultivates high quality fruit as a result of the subtropical climate of the area and the good ground and water conditions. In order to meet customer demands, Agrocanillas markets a range of products including 10,000 tonnes of avocados, 200,000 kg of medlars, 800,000 kg of mangos and cherimoyas to all of Europe and confining countries, serving customers in a maximum time period of 48-72 hours from the moment of picking the fruit from the tree.

Their facilities extend over a 5,000-square meter wide surface and are totalled mechanised and adapted to the market requirements as far as quality and safety at work are concerned. In addition, and even though they already work with a traceability system covering the whole process, they have now implemented a new electronic system to meet market needs. In its facilities Agrocanillas has specialised equipment to handle and pack the fruit as well as a 900-square meter cold storage chamber where fruit is kept at a temperature between 5 and 7°C until shipping. The team consists of around 30 employees which varies according to the time of year.

Rigorous controls are carried out during the fruit handling and packing processes. Traceability is assured by numbering all the boxes, in order to know where the fruit comes from. With the new laws on traceability Agrocanillas has to assure traceability of its products from the moment of its bulk deposit in the warehouse up until it leaves the premises as a packaged product. In particular, the containers of the product need to be identified, be they pallets, crates, meshes, etc., to know where each fruit comes from and achieve traceability in any moment. For this reason it was decided to implement a data capture system which automates as much as possible the process and provides total visibility.

The expectations of the customer in the solution were very high since total control of production and traceability depend



on the good operation of the project. They specified maximum reliability in so far as correct reading, because codes not read are converted into breaks in the production process and in traceability.

Agrocanillas needed an efficient and reliable identification solution and for this reason it turned to Captura de Datos, a Datalogic Accredited Reseller in Spain, for help. CDC recommended a solution based on Datalogic products. The production characteristics of the customer are a combination of manual identification processes of the bar codes and completely automated processes with fixed position bar code readers. Datalogic, together with the Spanish system integrator Captura de Datos, installed both the Matrix™ and DS2100A fixed position scanners and the Gryphon™ mobile hand held readers.

For the interconnectivity of all the readers working in the narrow band RF system, the STARGATE™ RF base station and STAR-Modem™ industrial narrow band radio modem have been used to provide radio coverage for all the reading points. Full boxes of fruit coming from the fields are labelled with bar codes which contain the lot number. This bar code is read by the DS2100A scanner before the contents of the boxes are emptied into the grader machines for sorting.

The DS2100A is connected to the STAR-Modem™ from Datalogic so as to send the data in real-time by radio frequency to the central IT system. At the production lines the fruit is sorted and put into crates, under the supervision of the Matrix-1031™ scanners. These are placed at the beginning of the line to read the bar codes containing the lot number of the fruit on the labels which have been placed omni-directionally on the boxes arriving. The Matrix readers have also been chosen because of their ability to read poor quality bar codes. Also here the information is sent by radio frequency to the IT system, as the Matrix is connected to the STARGATE™.

The Gryphon™ M hand-held reader is used at the packing line, firstly to read the bar codes on pallets arriving with fruit to be packed. Once the fruit is in the individual packaging which varies according to the customer, the Gryphon™ M is used again to read the product code. The data is transmitted in real-time to the IT system to update the information regarding the fruit and quantity packaged. The Gryphon™ M was chosen to provide more mobility around the packing line according to the type of harvest.

With this solution Agrocanillas has a wholly automated tracking system, and now knows in any moment the state of production, the number of pallets that pass through the grader machines, the number of crates that each operator produces and in general any information regarding the fruit which arrives in the plant up to when it is packaged.