3D FruitSorter
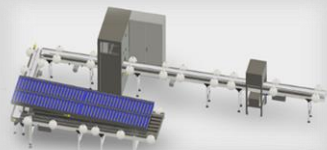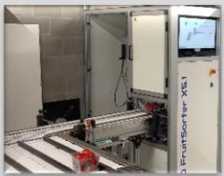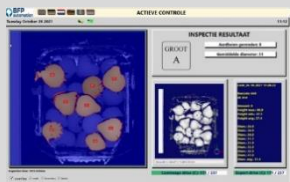
OBJECTIVE FRUIT CLASS DETERMINATION

Usage

For measuring the geometric parameters of fruits.
Fruit classification by humans requires experience and can lead to subjective classifications.
The 3D FruitSorter measures the fruit objects with a high-precision distance laser camera and decides which class the fruit trays belong to.

Machine description

The 3D FruitSorter is equipped with a 3D laser camera which creates a high-quality image, processed by vision tools to perform an accurate measurement of the individual fruit objects.
Based on the calculated geometric parameters, the algorithm determines the sorting class.

Features

- FDA conveyor with slip-torque technology
- Weigh-unit (1g accuracy)
- Barcode reader
- Inline printer
- Pneumatic sorting system
- Suitable for plastic and cardboard trays
- Equipped with Siemens PLC and HMI touch panel
- Data registration of all measured fruit objects and weight into SQL database
- Communication with external applications by REST API
- Equipped with a compatible vision controller for deep-learning (AI) technology

Fully configurable

Each machine is fully configurable: the length of the buffer conveyors, optional buffer conveyors, amount of sorting lanes, algorithms for specific fruits, optional gravity roller conveyors, etc.

Specifications

- High quality materials and manufacturing
- Measuring range with accuracy of +/- 1mm
- 360 Trays per hour for strawberries
- Touch screen operation
- Statistical data available

Connections

Electricity: 3x 240Vac, 50 Hz
CDA: 6 bar
Network connection: RJ45 CAT6