

We are

CRUX AGRIBOTICS

We enable a more productive, efficient and healthier crop production process addressing the growing resource challenge within the agriculture industry.

INTEGRATED GRADING, SORTING & PACKING

SORTIPACK® – A MODULAR SYSTEM FOR AUTOMATIC GRADING, SORTING AND PACKING

SortiPack® automates the process of sorting and packing of different kinds of fruits and vegetables without human intervention.

SortiPack®, a modular Robotics concept, can be adapted to handle different crops, vegetables and fruit. The vision, machine learning for grading and sorting algorithms can be re-used as it is designed in a modular way. The gripper technology and handling concept can be optimized per type of product and package.

GRADING Based on integrated computer vision systems (2D and / or 3D) and integrated weighing scales

SORTING Intelligent and self-learning algorithms (machine learning) determine optimal allocation of product to robot and package type to minimize waste and optimize give away (weight)

PACKING Industry leading robots that pack product with high speed without human touch and optimized gripper technologies for damage free handling

ADVANTAGES OF SORTIPACK®:

- Saves human labor (cost) and reduces dependency on labor availability
- Increased hygiene due to no human touch and extends shelf life with less damages
- Real time weight optimization per package (minimal give away or rework)
 - Continuous feedback loop and automatic volume/weight calibration
- Data driven advise by SW & all data available per product/sorting class/yield
- Individual product / package data for export / analysis / reporting
 - Real-time yield analysis for optimized class settings
 - Enhanced Tracking & Tracing
- Increased flexibility and scalability (up to 24/7 operations)
- Compact footprint

The SortiPack® system is designed for usage in the sorting- and packing area of greenhouses, packing centers and distribution centers.

SPECIFICATIONS OF THE SORTIPACK® SYSTEM:

- Capacity up to 20 000 products / hour
- Sorting is based on dimensional and / or weight properties of individual products, for example:
 - length, diameter, curvature, weight, Colour, Quality, Etc.
- Packing in multiple kind of packages is possible (i.e. boxes, crates, trays, ...)



VERTICAL BINLOADER CONCEPT TO OPTIMIZE PACKAGE HANDLING

Integrated Binloaders are used for optimized supply of bins and / or boxes to and from the SortiPack® in such a way that multiple sorting classes and package types can be used simultaneously without the need for packages to go through the system in a sequential manner.

The Binloaders are also equipped with integrated weighing function for real time weight optimization per package and can be expanded with automatic supply of boxes and entry of inserts



SPAAS - SORT AND PACK AS-A-SERVICE

Crux Agribotics also offers SortiPack® systems as-a-Service (Sort and Pack as-a-Service).

In this model the customer does not have to finance the full capex investment. Instead in analogy to paying employees per month SortiPack® is delivered based on primarily variable monthly fees including a pay-as-you-use component (i.e. per packed box/crate). Only a limited set-up fee is required to secure the start of the project.

Included in the SPaaS Service are: all required services to safeguard the system's uptime and performance including all hardware, software, assembly and installation, training, and also local support and spare parts. During the SPaaS service, the system works under full warranty and Crux Agribotics will conduct periodic preventive maintenance as part of the variable fees.