

DELTRON

New generation of AI fruit sorting technology

Empowering agriculture with AI&Robotics

Shenzhen Deltron Intelligence Innovation Technology

Team Background

Founded in 2016, with the mission of 'Empowering agriculture with AI & Robotics', Deltron is committed to improving standardization and production efficiency through advanced self-developed technology.

Deltron's members come from renowned universities and research institutes such as Robotics Institute of Hong Kong University of Science and Technology and DJI. Guided by Professor Li Zexiang (Chairman of DJI).

Deltron is an innovator of the "New generation of AI fruit sorting technology". We creatively applied deep learning and AI technology to the post-harvest standardization of fruits. We have independently developed a series of intelligent products, such as the "AI Appearance Sorter", "AI Internal Quality Sorter" and "AI All-in-One Sorter".

Partners



2016
Established

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Established

2019

Achieved independent R&D of the fruit appearance and internal quality inspection module.

2020
Collaborated with Walmart and Pagoda on the "Portable Device" portable non-destructive quality inspection device, which received unanimous praise from Walmart's QC department.

2021

Deployed large-scale AI intelligent sorting equipment for sorting fruits such as citrus and apples, implemented in major fruit-producing regions like Yunnan and Guangxi.

2022
Expanded equipment sorting range to include small fruits like plums and jujubes.

2023

Launched smaller yet powerful sorting equipment tailored for the Chinese market. Expanded equipment sorting range to include lemons, kiwis, and passion fruits.

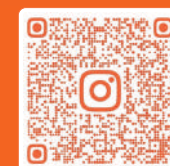
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Instagram



Whatsapp



Website

Client Cases

LEMON

Renowned as "China's Lemon Capital," Anyue County boasts a flourishing lemon industry. In 2023, the county's lemon cultivation area reached 31,360 hectares, with an annual lemon output of 530,000 tons and a comprehensive industry value of \$2.3 billion.

The county's lemon exports amounted to \$19.6 million in 2023, primarily reaching markets in 12 countries, including the Philippines, Russia, Vietnam, Malaysia, Uzbekistan, and Saudi Arabia.



Challenges

Non-standardized planting

Resulting in inconsistent lemon quality.

Ordinary sorting machines

Cannot accurately and meticulously grade lemons.

Manual sorting

Cannot meet the export standards for lemon export trade.

Small-scale processors

Are limited by funds and plant space, making it difficult to purchase large equipment.

Deltron launched AI lemon sorting equipment, which is compact and high-performance.



Accurate classification

Multi-level classification of lemons by size, weight and appearance defects.



Save space

Small footprint, freeing up more space for customers.

PASSION FRUIT

Developed in 2019 by the Guangxi Academy of Agricultural Sciences, Qinmi No. 9 passion fruit has emerged as a popular variety due to its exceptional qualities.

With a remarkable sweetness level exceeding 20 Brix, this high-yielding passion fruit commands premium prices and has garnered favor among both buyers and consumers.



Challenges

High economic value

High economic value and the desire to further develop high-end passion fruit for export. Aiming to create gift box products of different grades and prices to meet domestic and international consumer demands.

Large production volume

Large production volume with precise grading requirements necessitates equipment with multiple outlets to handle different grading needs.

The AI passion fruit sorting equipment can classify passion fruits into 7 different sizes and perform multiple defect detections, meeting customers' multi-level and precise grading requirements.

Number of
Outlets

32

Number of
lanes

4

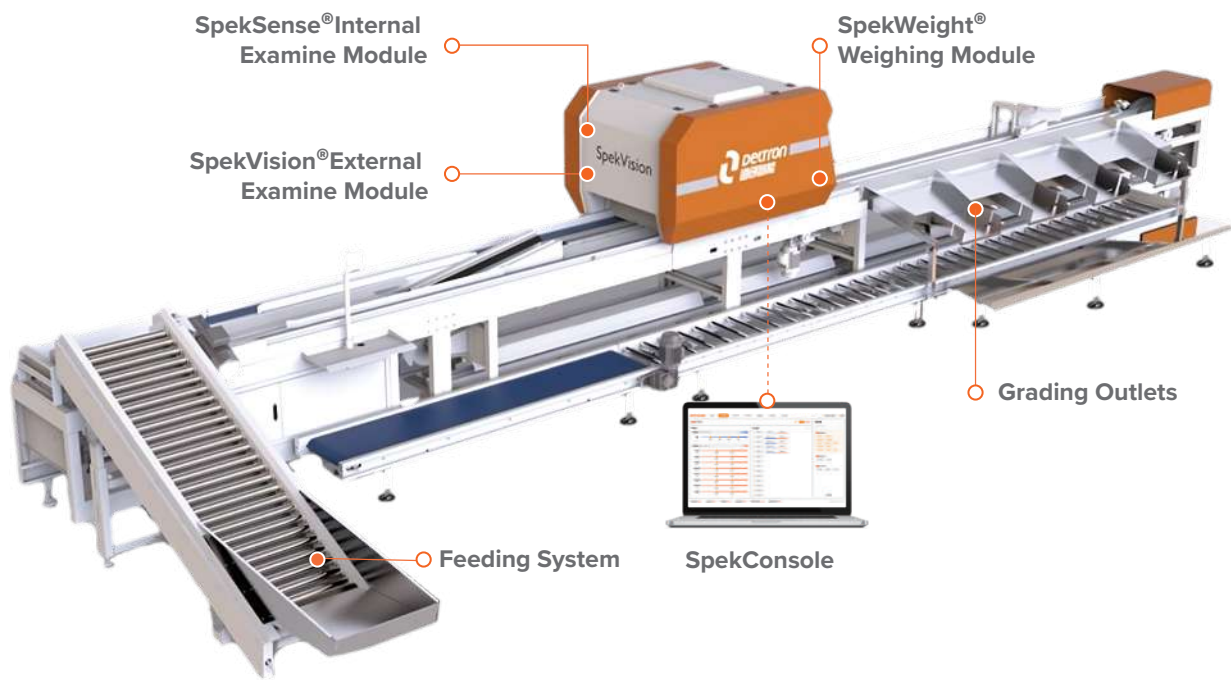
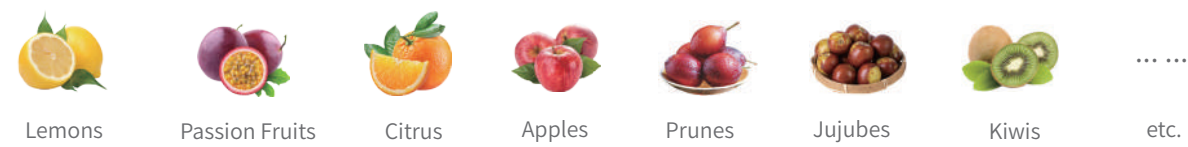
Capacity

8tons/h

AI Fruit Sorting Machine

Next-Gen Sorting Machine
Superior AI Experience

Applicable Fruits



AI **100%**
AI performance

±2 grams
weight detection error

3tons/h
processing capacity per lane

150+
defect database

360°
full data collection

Specifications referenced to single lane data	Number of Outlets	Capacity	Overall Weight	Voltage	Power
	24	3 tons/h	2.8t	220V	6.36kw

SpekVision® External Examine Module

Detectable indicators

- Coloration
- Defect type
- Defect area

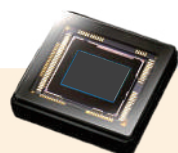


Technical Highlights



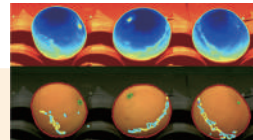
High-Resolution Industrial Camera

Every Detail in Sharp Focus



Lightning-Fast Model Iteration

Unfazed by New Defects



Deep Learning

Smarter with More Use

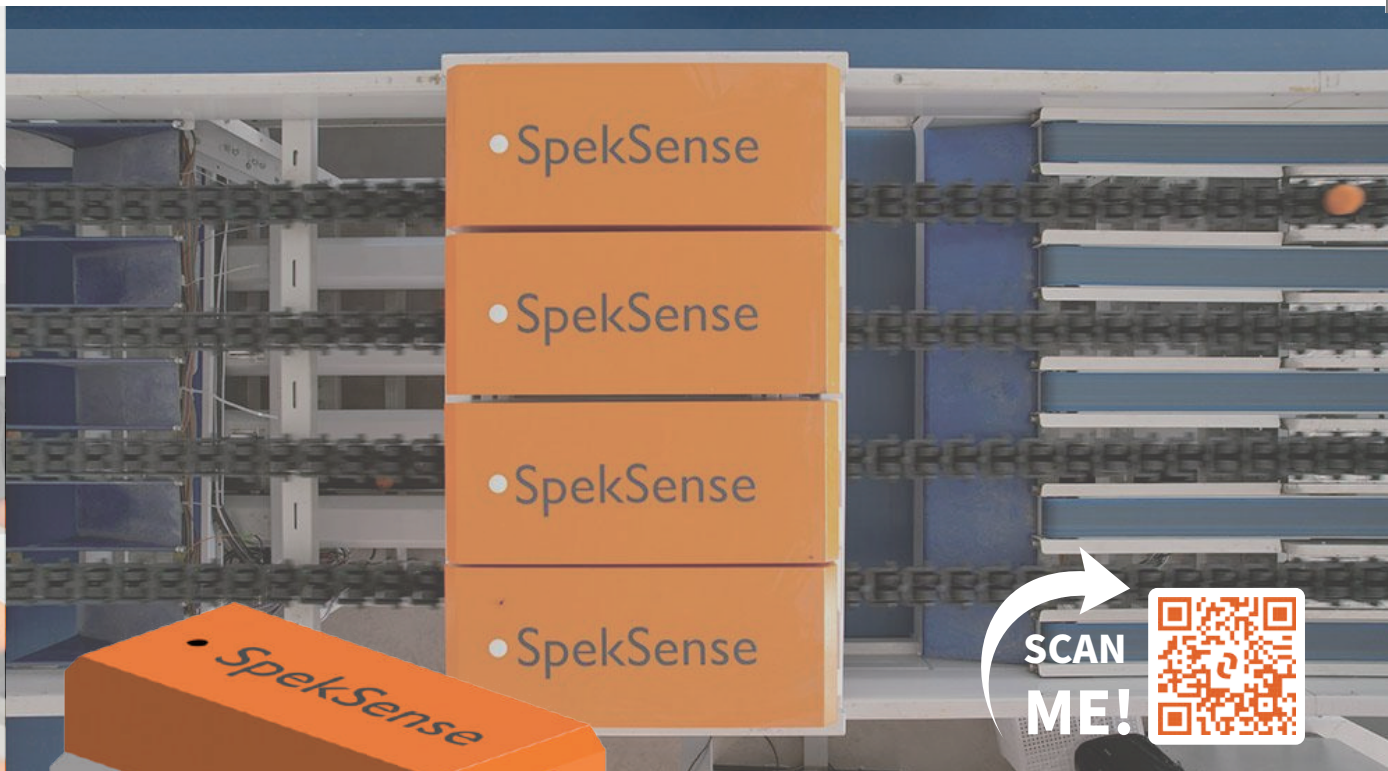
AI Sorting Machine

Intelligent brain, adaptable, handles more defects, categorized identification, makes sorting smarter.



Ordinary Color Sorting Machine

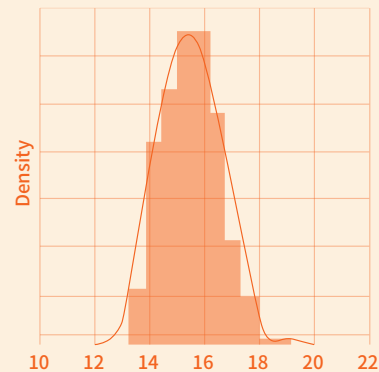
Limited database, sorts limited defects, single labeling, misjudges good fruits.



SpekSense® Internal Examine Module

- Non-invasive detection, internal information acquired in one second.
- Millisecond-level spectral acquisition frequency, higher frequency for greater precision.

Degree Brix



Juiciness



Moldy Core

