

Case Study

Eshet Eilon's Avocado Sorting & Optical Grading Solution for Avocado Gal, Israel

Overview

Avocado Gal, a leading packinghouse in northern Israel, partnered with Eshet Eilon to expand its avocado sorting capacity and enhance quality control through advanced optical grading technologies.

The Customer

Established in 1980, Avocado Gal is jointly owned by the Galilee Development Company and kibbutzim of the Upper Galilee. Located in the industrial zone of Kiryat Shmona, the facility provides comprehensive packing services for growers across northern Israel. The packinghouse operates advanced lines for a wide variety of fruits: avocado, citrus, mango, lychee and more, serving both export markets and the domestic market.



The Challenge

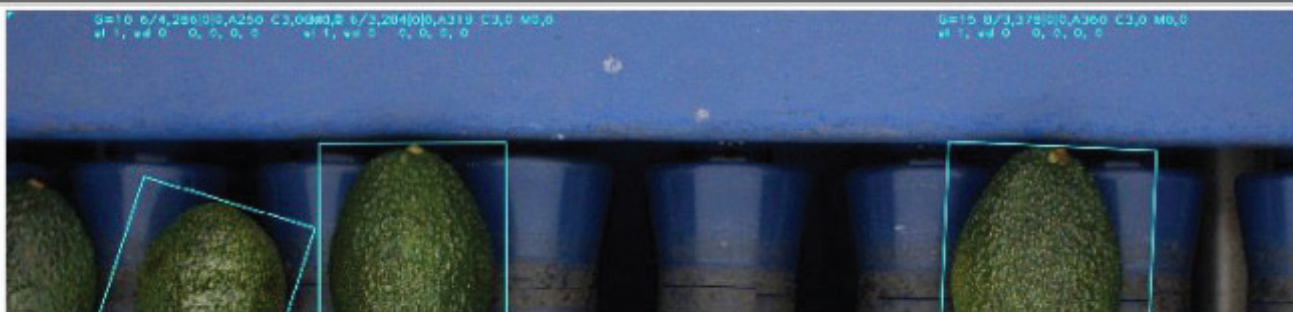
For many years, Avocado Gal relied on Eshet Eilon's pre-grading systems, sorting machines, and high-quality optical cameras.

In preparation for a significant operational expansion, the company planned to double its avocado throughput. To support this growth, the management explored multiple global manufacturers and evaluated all the leading sorting solutions available on the market.

After an extensive review, the team concluded that Eshet Eilon offered the most accurate, reliable, and "avocado-optimized" sorter.

Their decision was based on several key factors:

- High-quality optical system for identifying external defects
- The most suitable grader to handle all avocado varieties
- User-friendly interface
- All stainless-steel machine's construction
- Reliability and long-term operational stability
- Superior service availability and fast technician response times



Our Solution

Eshet Eilon delivered a new (second) sorting line engineered specifically for Avocado Gal's growing operation.

The system includes:

A 6-lane avocado sorter:

Designed to handle all avocado and mango varieties, at high volumes efficiently and maintain gentle fruit handling.

Sorting capacity:

Up to 20 tons\hour of avocados.

Advanced optical grading system:

Capable of identifying and classifying avocados and mangos based on size, color and external quality parameters with high precision.

Optical detection capabilities: Outstanding capability that enables the user to easily grade the fruits to 4-5 levels of quality.

Results

The new system enabled Avocado Gal to achieve:

- **Increased throughput:** Double the annual volume, servicing more clients
- **Improved grading accuracy and consistency:** Higher resolution cameras and newer grading capacity, achieving precision grading
- **Enhanced operational efficiency and better readiness for export-quality demands.**



Conclusion

With the addition of a second Eshet Eilon sorting line, Avocado Gal successfully scaled its capacity while maintaining the high quality required for international avocado markets. The partnership showcases how advanced sorting technologies and strong technical support can drive measurable operational growth.

Discussion

The cooperation between Avocado Gal and Eshet Eilon highlights the critical importance of integrating advanced sorting technologies with precise fruit handling and pre-treatment processes.

As the avocado market becomes increasingly demanding - both in export standards and in consistency of supply - packinghouses must rely on systems that not only increase capacity but also maintain the integrity and quality of every piece of fruit.

Eshet Eilon's approach addresses this need holistically. The gentle infeed systems, including water or dry dumping and controlled box/bin handling, ensure that fruit enters the treatment line without mechanical stress - a key requirement for avocados, which are highly sensitive to bruising. The treatment phase, which includes brushing, waxing, fungicide application and drying, is designed to remove pests and contaminants efficiently while maintaining product shelf life.

Avocado Gal's expansion comes at a time when global buyers expect tighter specifications and stricter quality control. Eshet Eilon's dedicated avocado singulator and high-end vision systems demonstrate clear advantages: reduced giveaway, lower labor dependency, increased operational consistency, and minimized maintenance costs. Options for both cup and roller graders allow tailoring the solution to specific avocado varieties.

The wide range of grading parameters - weight, diameter, color, shape and external defects - offers Avocado Gal the ability to match each fruit to the right market tier. By optimizing grade distribution, the packinghouse can maximize profitability and deliver a more predictable, uniform-quality product to exporters and retailers.

Finally, our software component provides strategic value beyond the physical sorting process. By collecting large volumes of fruit-level data, the system supports improved agricultural decision-making, enables accurate grower payments based on actual fruit quality, and strengthens the operational transparency required in modern supply chains. This data-driven capability is expected to become increasingly valuable as Avocado Gal scales its operations.

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