

A large, blue industrial machine with the word 'spectrim' printed in white on its top surface. The machine has a long, horizontal profile with several small, rectangular components along its length.

spectrim

spectrim™

Our industry is becoming increasingly sophisticated as it seeks to meet consumer demands and packing operations need to develop increasingly complex packs as a response. Spectrim is Compac's answer to the future of produce sorting and the next step on our journey to a completely automated, lights out packing facility. It is the platform through which we will address the industry challenges of sorting produce, adding value to packed crops and reducing complexity of operation, all with increased operation efficiency.

Built from the ground up, Spectrim is the most powerful optical sorting platform ever offered to the industry. The brief: design and manufacture a sorting platform which delivers superior performance, usability and a continuously upgradable platform for the produce industry. The Compac development team worked alongside our customers, learning and understanding the challenges the industry faces as well as looking outside of produce sorting, to other industries to identify technologies which could be applied to our industry.

THE NEXT GENERATION GRADING PLATFORM

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Spectrim™ is the most powerful industrial imaging platform introduced into the produce industry. It leverages all our learnings from previous systems and developments in machine-vision systems from other industries.

- KEN MOYNIHAN, CTO



Spectrim™ Fundamentals



High Performance Hardware

POWERFUL IMAGING

Spectrim is the most powerful industrial imaging platform to be introduced into the produce industry. It leverages all our learnings from previous systems and developments in machine-vision systems, as well as research findings from other industries.

LIGHTING

The key to effective imaging of fruit is uniformity of lighting. Spectrim allows produce to be lit in a way that minimizes shadows and reflections across lanes. This ensures illumination power and consistency on your produce, which is critical for superior grading.

SENSORS & CAMERAS

Spectrim's sensors and cameras generate up to 500 images of every piece of produce at the highest clarity through a combination of superior lighting and high quality optics. Spectrim uses multiple wavelengths when processing images. Each wavelength can be configured to target specific defects.

Intelligent Software

SOFTWARE DESIGNED FOR USABILITY

Spectrim not only contains a number of enhancements such as SmartSkin and SmartMap but also contains new and more powerful grading algorithms which build a far more accurate 3D model of each fruit. Utilizing the 500 images generated by the system and increased computational power of Compac's unique algorithms, Spectrim delivers both incredibly powerful grading performance and a system which is easy for the operator to use.

SMARTSKIN™

Utilizing machine learning algorithms, the operator teaches the system which parts of the surface are good and bad skin areas with a simple click and drag interface. SmartSkin targets hard to detect defects such as apple russet and greatly simplifies defect detection and improves accuracy.

SMARTMAP™

With a simple point and click interface, Spectrim is able to learn and classify different defect types. This enables the operator to tune the system and create sophisticated pack grades with ease. Using defect classification and machine learning functions, Spectrim identifies potential defects on sample fruit for the operator to classify. This significantly reduces setup time for operators and improves the accuracy of defect grading.

Future-proofed Platform

ROBUST DESIGN

Designed with future upgrades in mind, Spectrim is a platform capable of receiving hardware upgrades as new technology becomes available. The Spectrim platform is also designed for installation on existing Compac sorters with minimum downtime to your packing operation.

SERVICE & MAINTENANCE

Serviceability and maintenance was a key consideration in the development of Spectrim. With easy access for servicing and components mounted to allow for quick replacement, the Spectrim platform enables packers to achieve superior levels of up-time.

HYGIENE

Spectrim has been designed with food hygiene requirements in mind. Using appropriate materials and designs which facilitates easy cleaning, the Spectrim platform promotes food trust with your customers and supply chain.

Spectrim™ Roadmap

With launch customers in California, Washington and New Zealand already committed to taking delivery of their Spectrim platforms for apples, citrus, stonefruit and kiwifruit, production slots are filling fast. Contact us below for updates and information for your fruit.



Apples



Citrus



Stonefruit



Kiwifruit

Visit compacsort.com/spectrim for more information