

Solving Your Quality Assurance Needs

Problem Statement

Conventional machine vision systems are largely ineffective for the stringent evaluation of food and agricultural products. Commonly used machine vision systems utilize color video cameras with (Bayer) RGB filters that seek to



replicate the imaging functionality of the human eye. This level of performance is inadequate for many of the functions required in modern processing environments.

Solution

Hyperspectral Imaging is a next generation imaging technology that can be used as an augmentation or replacement to existing machine vision systems. Hyperspectral imaging combines the power of conventional spectroscopy with digital imaging to provide high resolution spectral and spatial information to enable a comprehensive inspection of foods and other products.

Hyperspectral imaging can be extended into the UV or IR to providing details of chemical and structural composition not discernable in the visible spectrum.

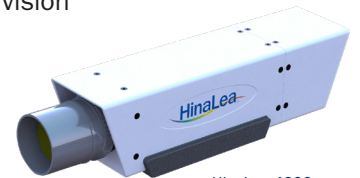
Hyperspectral imaging provides added spectral information that can be utilized by manufacturers for improved quality assurance in a number of areas, including:

- 1. Detecting foreign objects:** presence of foreign objects — plastics, wood, stones, metals and glass
- 2. Identifying mechanical damage:** freshness, bruising, ripeness
- 3. Measuring food freshness:** ingredients homogeneity, product freshness and standardization

HinaLea value proposition

HinaLea Imaging offers intelligent, cost-effective hyperspectral solutions that can assist manufacturers with inline quality assurance.

Our mass manufacturable hardware makes us cost-competitive with existing vision systems while our embedded software allows us to train our systems for specific customer applications.

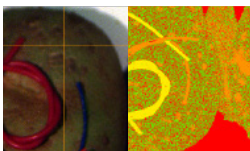


HinaLea 4200
HyperSpectral Imager

Contact us

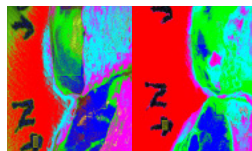
For information on how HinaLea can help with your quality assurance needs, please contact us at sales@hinaleaimaging.com

Foreign Object Detection



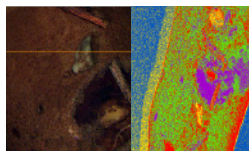
Plastic detection on potatoes

Food Freshness



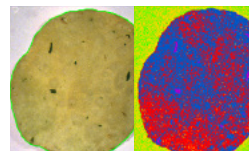
Freshness of chicken

Mechanical Damage



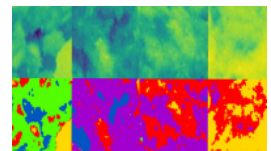
Bruising on potatoes

Ingredient Uniformity



Seasoning uniformity on chips

Food Grading



Fat content in beef