sagentia

Food Sorting System

Food Sorting System

High speed image analysis and control

Our client needed to improve the performance of its optical food inspection equipment, by adding dual wavelength capability (visible & near IR). The system sorts tonnes of grain and other foods per hour into different quality streams.

Sagentia was tasked to develop the core of the system, comprised of illumination, imaging (cameras & lenses), machine vision algorithms and control signals for the pneumatic sorter.

Sagentia had to determine the correct choice of imaging spectrums and develop a means for interlacing the two imaging systems operating at different wavelengths. We had to align the resultant images in order to allow the algorithms to determine which grains to sort into which bins. For example white / yellow / brown rice and reject (e.g. grit).

The platform has been incorporated into the client's product line, enabling them to achieve world-leading performance.