

Chemical Imaging Technology

A highly innovative technology highlights invisible and visible defects for accurate inspection and sorting. CIT identifies chemical signatures quickly to create high-resolution chemical image maps of objects for fast classification and sorting, at high industrial levels of throughput. Our mission is to utilise the advantages of CIT to create solutions for the potato processing industry that were unimagined till now – only Sherlock Separator offers a complete palette of unique solutions for advanced potato processors.

Sherlock Separator uses a powerful camera system to deliver real time chemically sensitive spectral images in the near-infrared. Chemical specific signatures, acquired and identified in real-time on a pixel-by-pixel basis, are used to produce spatial maps highlighting differences of chemical composition.

Our in-house developed and patented technology detects sugarend defects and glassy potatoes; with the additional advantage of highly sensitive and accurate foreign body detection. Designed to be easily implemented in the processing line after potato peeling, Sherlock Separator transports potatoes via a vibration conveyor to the camera system for inspection in free fall and subsequent separation into three quality streams. In addition to our unique paddle ejection system, which ensures highly accurate and save removal of defect potatoes and all kinds of problematic foreign bodies, the integrated peel scanning device controls your peeling process to reduce yield losses and guarantee high product quality.

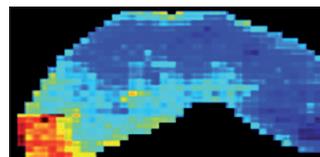
technology inside



View of a normal colour cam:
No Sugarend defect is visible



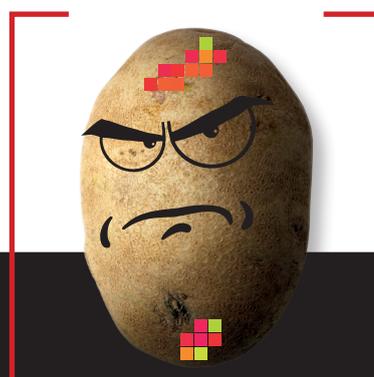
View of the Chemical Imaging Camera:
According to different chemical structures of each pixel the defect Sugarend is visible



The defect Sugarend visible on one half after frying and invisible on the other half of same potato before frying



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