

Burnt Cereal Flake Detection

Equipment: Camera (2 each) VD4912-65 serial 30170, 30171
Installed as Camera 1, camera 2

Vector VCB-3411- PS s/n 49068
With software CVC 10.7.2

Situation: The installation consists of 2 cameras mounted in SS metal shroud with 6 bundle fiber optic bundles directing light to product flowing under cameras. The goal is to detect burnt cereal flakes and prevent them from reaching the packaging stage.



Solution:

To accomplish the task, Color Speck software is used to differentiate the dark, burned flakes from the good flakes while process moves along on conveyor.

Calibration:

To calibrate, a typical burned flake was deposited in a line of good flakes on the production belt. The software is then set to find that flake as a typical detection. Calibration is then verified by running belt with normal product and occasional defect flakes. During this adjustment, scans were run on 'normal production' and two or three black flakes were detected and verified by visual inspection.