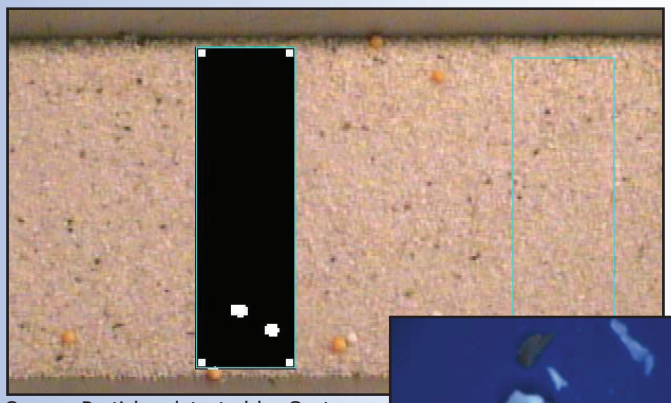
In-Line Color Analysis

CANTY
PROCESS TECHNOLOGY

Vector System - In-Line Color Analysis

Color analysis is a unique function of the Vector System. There are two systems available:
- Color analysis using a color system
- Color analysis using a Black & White system

The video picture from a Vision System Camera is fed into the Vector System. This signal is then broken down into an array of pixels. The Vector then processes this information through complex Fourier transforms, and various signal analysis routines to analyze the color of a **liquid** or **solid**.



Orange Particles detected by Canty color analysis software

Color Analysis

The Color Analysis system relies on a color or RGB Canty Vision System. This video signal is processed by the Vector Board, and broken down into a matrix of pixels. The color components in each of the primary colors are then analyzed, yielding a pallet of **256,000,000** different color combinations. This information is then processed, relating all colors to a finite, numerical representation. Complex data stratifications are then used to determine the color of the product.

Solidsizer™ TS

Color Speck Detection System

Black Speck Detection

Black & White Vector systems use a gray scale system. The color of each pixel in the video picture is represented on a **"gray scale"**, where color intensities are represented as a shade of gray, with the two extremes being black and white. Each color intensity is represented as a numerical value, with black being 0, white 255, and all others a shade of gray in between. In this manner, all colors are represented as a numerical value, and can be automatically processed, yielding valuable color readings.

In-Line Turbidity / Color Analysis / Percent Solids Measurement System

Canty Color Speck Systems

Reference the below Canty documents for more information:
TA8748-1 - Solidsizer™ TS - Color Analysis and Particle Sizing in one unit
TA10612-1 - Color Speck Detection System
TA10591-1 - In-Line Turbidity / Color Analysis / Percent Solids Measurement System

CANTY JM Canty Inc | Buffalo, NY USA | Ph: (716) 625 4227 | Fax: (716) 625 4228
JM Canty Intl Ltd | Dublin, Ireland | Ph: + 353 (01) 882 9621 | Fax: +353 (01) 882 9622
www.jmcanty.com
Document P/N: TA7565-1 Rev.2