

# **JM CANTY**

## **PROCESS TECHNOLOGY**

### **VECTOR SYSTEM**

The Vector System is a unique process control system designed for use in virtually any environment. A complete system consists of a Canty Vision System Camera, Canty lighting, and the microprocessor based Vector System. The Vector System itself consists of two main components : Vector hardware and controlling software.

### **VECTOR HARDWARE**

The Vector hardware accepts a video image from a Canty Vision Camera System, and stores that image in memory. This is done by accepting a video image from a video source and breaking down that picture into pixels. A TV screen is made up of a matrix of tiny pixels. Together these pixels form an image. Each pixel is analyzed and the color of each pixel is stored in computer memory as a numerical value representing a color. For example, a black and white system uses a shade of gray scale, where black is represented by the number 0, and white by 255. All shades of gray in-between are then scaled appropriately. Thus, colors can be represented as a numerical value. This information can then be accessed by the Vector software and used to control your process.

### **SOFTWARE**

Software consists of computer programs and code which can access the numerical color data and methodically process this information. Through the use of dynamic imaging routines, Canty is able to provide several packages:

- Level Tracking/Foam Indication
- In-line Particle Sizing
- Lab Set-up
- In-line Color Analysis, clarity and turbidity
- Width measurement/sheet inspection
- Black Speck Detection
- Opacity / Turbidity
- Cut Software
- Miscellaneous

### **OPTIONS**

**Multiplexing** - Allows user to multiplex up to 8 cameras with one Vector System. The system will control up to 8 Canty Vision Camera Systems simultaneously, providing the same software module is required on each system.

**4-20 mA Output Option**- Allows user to obtain a 4-20 mA output from the Vector System to control the process. Standard output is ASC II code sent via a serial or parallel port.

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