

CANTY

PROCESS TECHNOLOGY

TEMPERATURE MEASUREMENT BY VISION



Image of Furnace Tubes

HOW IT WORKS

Canty's thermal vision system is quite similar to other radiative temperature methods, by measuring the energy produced by a process. The advancements in CCD cameras has allowed for the ability to measure wavelengths in both the visual range and near infrared range. As the intensity of emitted energy of an object grows due to its rise in temperature and associated change in color, the camera registers this change. Also, Canty's thermal vision cameras have excellent sensitivity into the near IR and can detect temperatures of objects starting at approximately 500° F and above. With the ability to detect such a wide range of temperatures, the Canty thermal vision system allows for the use of one tool to detect a wide range of material.

CANTY VISION SOFTWARE

The Canty imaging system takes the digitized image and extracts the temperature measurement by comparing pixel intensities to the calibration. Multiple zones can be used to measure temperature in various areas of interest. As always, visual verification is available on screen from anywhere on the network.

ADVANTAGES

- Non-Contact means to measure temperature
- Rugged and robust camera housing that withstand constant plant conditions (Class 1, Div. 1 Groups B, C, & D) and WP, IP
- 24/7 monitoring ability anywhere via a Ethernet connection
- Ethernet or Coaxial

APPLICATIONS

- Hydrogen Crackers
- Ethylene Furnaces
- Refractory Tube & Wall Temperature Profile
- Furnace Tube Monitoring - Detect Hot Spots
- Molten Metal Slag, Roll, Sheet, & Crucibles
- Slab or Continuous Pour of Metal (Steel, Aluminum, Copper)
- Kiln flame temperature (Monofuel Applications)
- Kiln & Furnace Product Temperature

FEATURES

- Capability to measure areas as opposed to points
- Multiple measurement Zones
- Visual of process on screen
- False detect filtering for slag
- No re-calibration needed

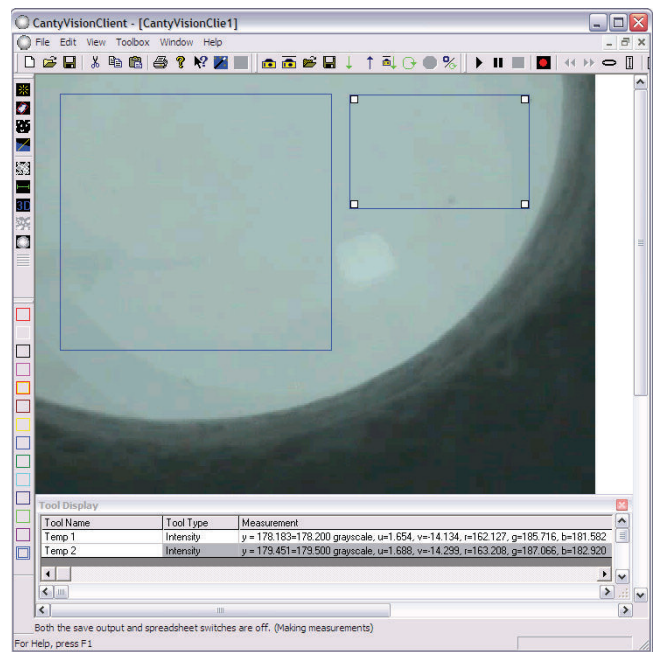


Image of Canty Software Analyzing Aluminum Bath w/ Multiple Zones

CANTY

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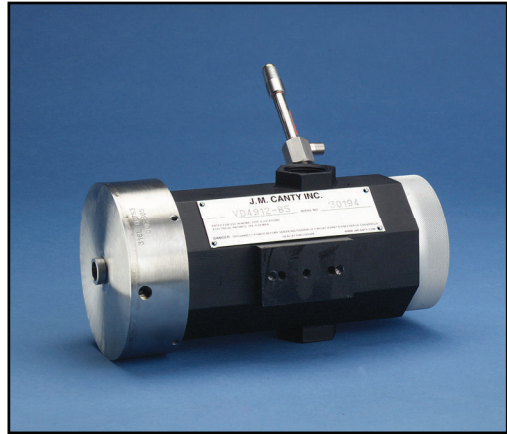
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TECHNICAL INFORMATION



Canty HT Insertion Camera System



Canty HT Surveillance Camera System

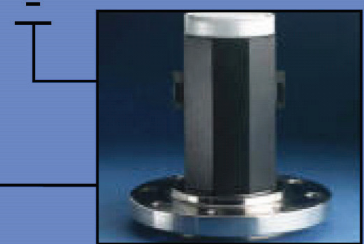
Please reference the below Canty datasheets for more information regarding Canty's High Temperature Camera System.

TA7355-1 - Canty Insertion and Flush Mount HT Camera

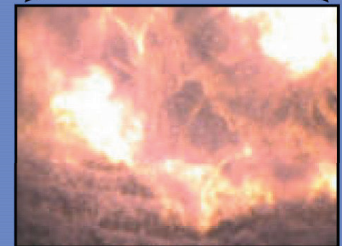
TA10494-1 - Canty HT Surveillance Camera

Canty High Temperature Camera Configuration:

The Canty HT camera captures an image of the object being measured and sends the data, via Ethernet connection, to the computer containing CANTYVISIONCLIENT™ Software. The Canty software then analyzes the image and sends the user defined output (ex: 4-20mA). Other computers on the same network as the Canty HT camera can also look at the images being produced and view the process 24/7, right from their desk.



Output:
- OPC
- 4-20mA
- Excel
- And Many More



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