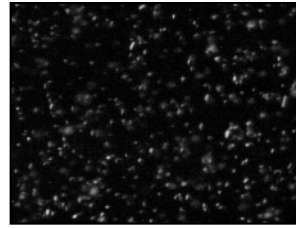
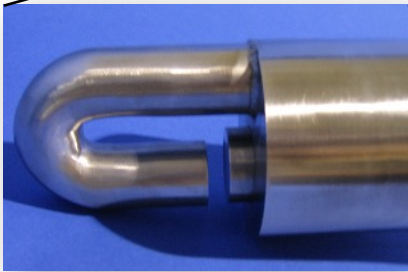
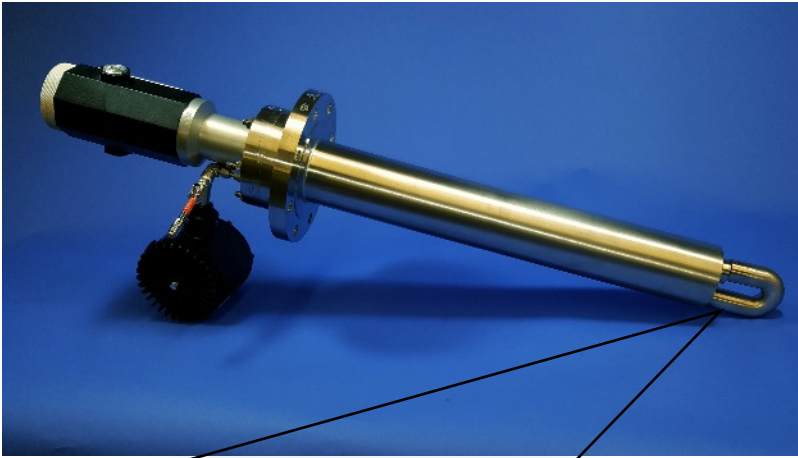


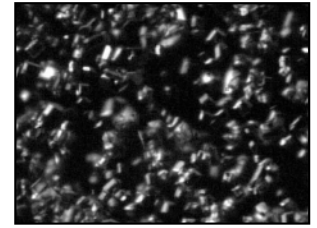
CANTY

PROCESS TECHNOLOGY

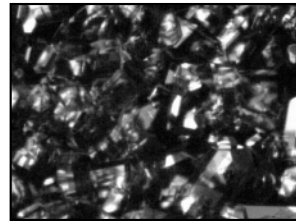
CRYSTALSCOPE™ PARTICLE SIZING SYSTEM



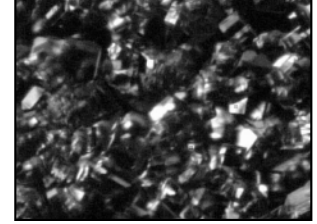
Stage I-Seeding Stage



Stage II-Crystal Growth



Stage III-Crystal Growth



Stage IV-Full Growth

FEATURES

- Real Time Crystal Size Analysis
- Standard Ethernet Control From CANTY Vector System
- Uniform Backlighting For True Shape Illumination
- Ethernet controlled Magnification For Variable Lens Settings
- Fused Glass, High Pressure/Temperature Seal From Process
- Various Outputs, 4-20mA, OPC Interface, Modbus, etc ...

PARTICLE SIZING

- Crystal Distribution By Major, Minor Diameter, Area, Perimeter Available with Vector System.
- Crystal Size & Shape
- Crystal Count
- Density Of Crystals
- Detection Of Seeding Problems
- Automated Temperature & Vacuum Controls During Crystal Growth
- Increased Efficiency During Filtration

THE CANTY ADVANTAGE

Control your crystal size and prevent spontaneous nucleation!!!

The CANTY CrystalScope™ is a vision based system for monitoring crystal size in real time from nucleation to full growth. This inline microscope includes a high speed camera with adjustable shutter speed, combining a lens configuration that offers dynamic Ethernet controlled calibration for magnification and focus settings. Incorporated into the CrystalScope™ design is CANTY's patented uniform fiber optic "cold" lighting system which is vital to imaging crystals for true two dimensional size and shape for process control (through 4-20 mA, OPC interface, Modbus, etc ...). CANTY Fuseview™ technology is incorporated to provide a high pressure, high temperature hermetic seal. The gap between the fused glass interfaces can be adjusted to optimize the image, displaying silhouettes of the crystals. The CANTYVISIONCLIENT™ results from the image analysis lead to automated adjustments to temperature and vacuum during the critical stages of crystal growth, without the need to gather samples to be analyzed in the lab. Better control in crystallization will result in increased efficiency during filtration. Combine this with a CANTY "cake" detection system for your Nutsche Filter or centrifuge for total real time process control. Operators view the process at all times for visual verification and results are archived for historical record.

SPECIFICATIONS

- Power: 120 VAC / 60 Hz (230VAC / 50 Hz)
- Shutter Speed: variable up to 1/100,000 sec

CANTY

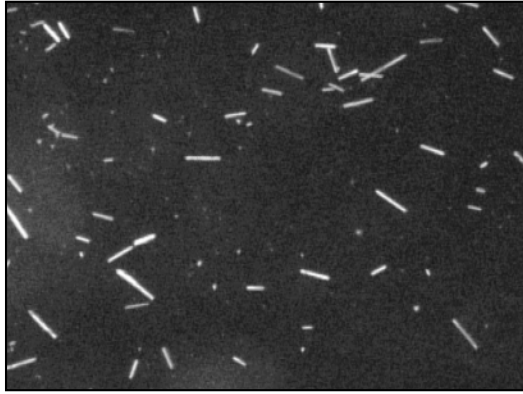
Buffalo, NY USA
Ph: (716) 625 4227

Dublin, Ireland
Ph: + 353 (01) 882 9621

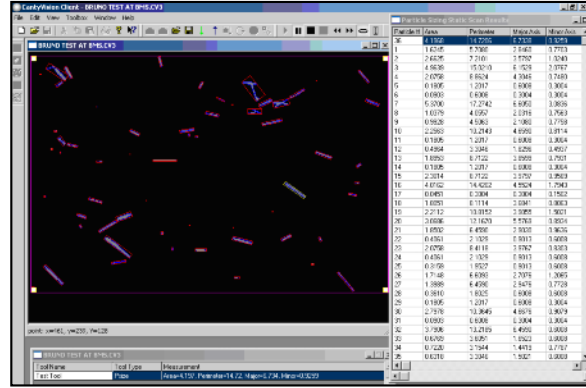
Phuket, Thailand
Ph: + 66 (83) 968 9548

www.jmcanty.com

Document P/N: TA10493-100 Rev. 4



Raw Image



CantyVision™ scanned image

Ordering Information

HOW TO ORDER: Select the appropriate symbols and build a part number as shown:

EXAMPLE:

VOA743A1C

Video Format/Input Power

- A - EIA B&W, 115V AC, 60 Hz (North American Standard)
- B - CCIR B&W, 230V AC, 50 Hz (European Standard)
- C - NTSC Color, 115V AC, 60 Hz (North American Standard)
- D - PAL Color, 230V AC, 50 Hz (European Standard)

Environmental Rating

- 6 - WP/ IP
- 7 - EXP/ FP

Connection

- 3 - 4" Tri-Clamp®
- 4 - 4" Flanged
- 5 - 6" Tri-Clamp®
- 6 - 6" Flanged

Insertion Length

- 1 - Variable Depth (6" - 36"; 152 mm - 914 mm)
- 2 - 42" (1067 mm)
- 3 - 72" (1829 mm)
- 4 - 102" (2591 mm)

O-Ring Material

- B - Viton®
- C - Buna
- D - EPDM
- E - Silicone

Wetted Material

- 1 - 316L Stainless Steel*
- 2 - Hastelloy® C276 Or Equal
- 3 - Hastelloy® C-22® OR Equal

Data Outputs

- A - None
- B - 2 Channel 4-20 mA
- C - 8 Channel 4-20 mA
- D - OPC Interface
- E - Modbus

* Canty reserves the right to upgrade to Hastelloy® C-family of alloys or equal at their own cost.

• The [Canty Vector System](#) is included with the Crystal Scope.

