

CANTY

PROCESS TECHNOLOGY

FROTH CONTROL CAMERA



HOW IT WORKS

J.M. Cauty froth cameras are Ethernet based imaging systems that are designed for industrial applications in mining. The Froth Camera is a unique process camera/light combination that has been designed for outdoor use. Alternative systems that have been used have provided good information but have limited uptime due to components designed for Lab/University applications. CANTY provides field proven equipment. CANTY process cameras have over a 35 year history in Oil & Gas, Mining, Chemical and Pharma industries where the toughest applications are found.

CANTY LIGHTS MAKE IT POSSIBLE

The key to CANTY Froth Camera System is the high intensity, long life LED fiber optic system. CANTY uses fiber optic light guides to focus cool, effective light into a process vessel or area. Cool light eliminates product bake-over on the viewing window. Fiber optic light guides have been specifically designed to work in conjunction with cool light to maximize the light transmission into the vessel. The resulting live, remote video image from this illumination is unparalleled!

FROTH MEASUREMENT

- BUBBLE:
- Velocity
 - Direction
 - Size Distribution
 - Stability
- LEVEL:
- Liquid Level
 - Froth/Bubble Level

SPECIFICATIONS

Video Output:	Ethernet TCP/IP
Ambient Temp:	-30°C to 50°C (Consult factory additional temperature needs)
Power Req.:	24 V DC
Cable:	CAT6 Ethernet
Environmental ratings:	NEMA 4, IP66

APPLICATIONS

The CANTY imaging software provides flotation measurement of bubbles. Velocity, direction size distribution and stability are measured. This data is obtained by digitizing the image and analyzing it for shape and edge contrast to determine where the bubbles are and their size. The high speed camera freezes the image. The next image is acquired and the difference in bubble position is determined. This distance gives the velocity and the direction vector. A reference rod is placed in the view of the camera in the froth which has a CANTY FOAMFLOAT. The provisionally patented FOAMFLOAT allows the camera to see the height of foam against its side and then by measuring the top of the float then calibrate that to the liquid level.

UNIQUE SPRAY & FUSED GLASS

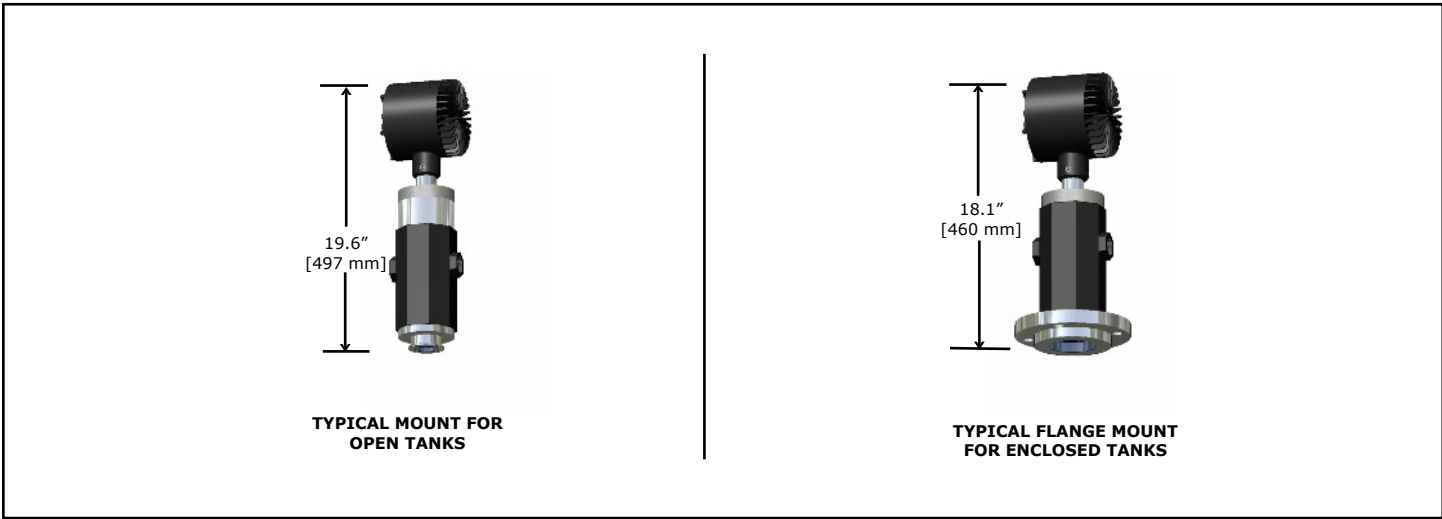
The system uses a fused glass front cap which provides a hermetic glass to metal seal that is shatter proof and high impact. The glass is fused at 2000°F and then cooled which enables the metal ring to fuse and compress on the glass providing a reliable flush surface.

The spray ring jets onto the fused glass flush surface cleaning the viewing surface to allow accurate continual reads. Water pressure of 40 - 80 PSI is typically used.

CANTY

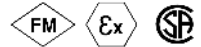
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Ordering Information

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



EXAMPLE:

V 6 E X X B C 1 X

VISION SYSTEM

V - North American standard
VE - European standard

ENVIRONMENTAL RATINGS

6 - NEMA 4 weather proof, IP66

CAMERA OPTIONS

E - Ethernet Video color camera
(Note: Please contact CANTY for analog video options)

LENS OPTIONS

CAMERA POWER SUPPLY OPTIONS

X - User supplies 24V DC direct.
(Note: Consult factory for AC to DC power supplies)

WETTED MATERIAL OPTION

B - 316 L Stainless Steel*

LIGHT OPTIONS

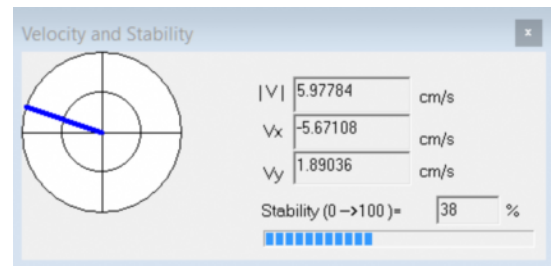
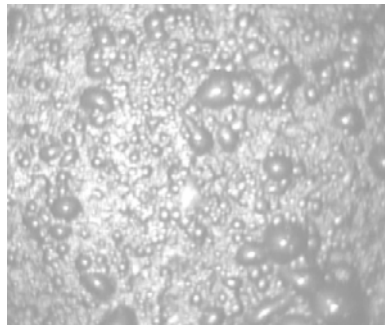
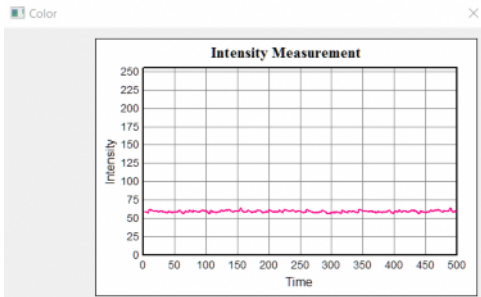
X - 24V DC LED Integral Light Source

RETAINER MATERIAL

0 - No flange required (if selecting a flanged model). Select this option when choosing open tank surveillance mount models.
1 - 150 # carbon steel ANSI flange for enclosed tanks.

MOUNTING CONNECTION

Consult factory for additional sizes and ratings.
X - Surveillance Mount with 3-bolt mounting block
C - 3" ANSI flange



*Canty reserves the right to upgrade to Hastelloy® C family of alloys or equal at their own cost
** Not available with all models

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