vision
without
limits

FOOD INDUSTRY

PROCESS TECHNOLOGY

BUFFALO

DUBLIN

THAILAND

LED FIBER OPTIC LIGHTING

THE INDUSTRIES
BRIGHTEST FIBER OPTIC
AND DIRECT MOUNT LED!

CANTY provides a combined LED light and sight glass to optimize viewing and minimize total package cost. Illuminate through an existing sight glass or a newly installed FuseView $^{\text{TM}}$

CANTY LIGHTS

LED Process Lighting









OPTIMUM VIEWING

CANTY HYL lighting systems are designed to illuminate for optimal viewing. Our patented design transmits an intense beam of LED light into a process or pressure vessel.

Bundles mount direct to FuseView™ -No light loss due to reflection!



CANTY 12" bundle models mount directly to a sight glass with an optional bracket.

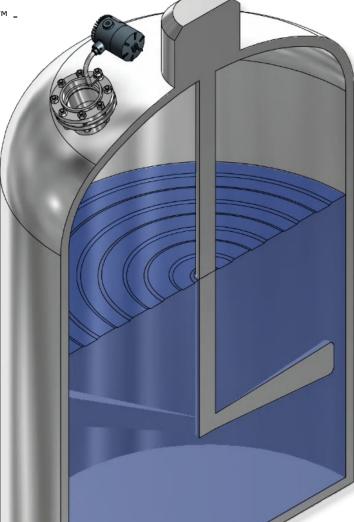
- View and illuminate through one nozzle
- Maximum LED illumination
- Cool light output there is no product bake-on



Flexible fiber optics allow for mounting in any convenient location!

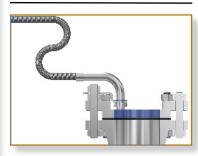
CANTY 24" and longer bundle models mount remote from the sight glass with an optional bracket for increased accessibility.

- High Intensity LED Lighting
- NEMA 4, IP66, Explosion proof, Flame proof models
- Fused glass seal provides a safe, reliable, hermetic seal between electronics and the process area.





Unique bracket maintains bundle contact to eliminate reflection!



- Minimal bend radius 2.5"
- Minimal area of sight glass is consumed by fiber optics.
- Industries largest view -FuseView™

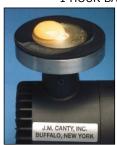
Consult factory to easily upgrade your existing halogen lights to LED!

CANTY lights feature a unique, high output LED array and reflector assembly that focuses the light from the bulb into the process vessel or tank. An optional UV filter is used to protect product from harmful wavelengths, providing only cool light into the process and eliminating sight glass bake-on.

ADVANTAGES OF THE CANTY UNIQUE LED ARRAY

- Redundancy LED array with numerous diodes
- Highly efficient. Maximum lumens with minimal power draw.
- More lumens per square inch than standard LED bulbs.
- More uniform, dispersed compared to a single emitter to allow for optimal illumination.
- Solid-state lighting for rugged industrial applications.
- Uniform consistent white light.

1 HOUR BAKE-ON TEST







COMPETITOR'S LIGHT NOTE: EGG IS BAKED ON

CANTY IS MEASURED AND MEETS THE NEW DIRECTIVE WHICH LIMITS THE AMOUNT OF RADIATION TO AVOID PROBLEMS IN THE FIELD.

HIGH PURITY LED LIGHTING

- 316L SS, Hastelloy® C276, Hastelloy® C-22®, glass wetted material options
- ANSI and DIN mounting options
- Pressure ratings to 10,000 PSI [690 bar] available







Nickel-plated LED light housing

APPLICATIONS

- · Process vessels
- Solid material hoppers
- Spray dryers
- Sterilizers
- Filters
- Crystallizers
- Centrifuges



PureView™ Sanitary LED Light and Sight Glass

The CANTY PureView[™] is a sanitary / hygienic fiber optic LED light and fused sight glass combination. The PureView™ combines the maximum viewing area through a CANTY FuseView $^{\text{\tiny IM}}$ sanitary sight glass with a CANTY high output LED light, providing the best view possible while minimizing space and connections.

SANITARY LED LIGHTING

APPLICATIONS

TRI-CLAMP®

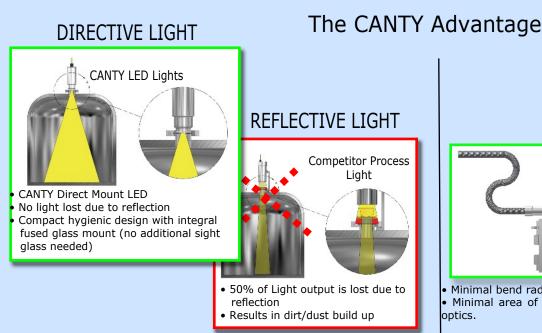
- Fermentors
- Food
- Sterile Process Applications
- Sanitary Areas

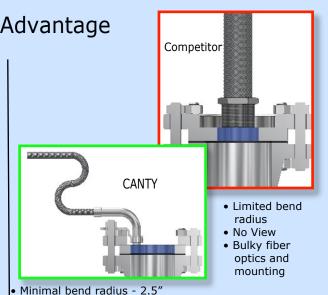
- Biotech Applications Meets ASME/BPE Standards
 - 316L and Hastelloy® Materials
 - NEMA 4X / IP66
 - Cold light, high output LED
 - Fused glass Safe Light
 - CIP/SIP Process Compatible





All CANTY LED lights feature a hermetic, fused glass, high pressure / temperature seal to completely seal the light from the process. The 316L SS or Hastelloy® design and variety of mounting connections make CANTY Lights ideal for any application.





Minimal area of sight glass is consumed by fiber optics.

For More Information Click

CANTY SANITARY SIGHT GLASSES & SIGHT FLOWS

PED ASME BPE

CANTY sanitary FuseView™ sight glasses are fused, one-piece sight glasses, featuring a hermetic fused glass to metal seal. The CANTY high pressure, fused glass design requires no special gasketing or torque requirements. CANTY Sanitary sight glasses have been designed and tested to ensure the safest product available.

CANTY can provide certification of material and testing if required, following ASME code and TUV requirements for process vessels. FM approval is available on some models.



TRI-CLAMP® FuseView™



Available in full view and flush mount styles, the hermetic sanitary design is ideal for sanitary applications. CANTY features the largest viewing area of any fused sight glass on the market today.

GLASS WETTED FuseView™



Designed for glass-lined reactors and vessels where only glass is allows in contact with the product. Large diameter fused glass seal allows the gasket to seal on the glass only. Perfect for glass wetted, C2000 and exotic material reactors.

ANSI/DIN FLANGED FuseView™



Ideal retrofit for new or applications, the ANSI/DIN flanged Fuseview[™] offers the largest viewing area of any fused sight glass on the market today.

HEATED TRI-CLAMP® FuseView™



Designed for use with a heater to eliminate Condensation from forming on the glass. Provides a high pressure, hermetic fused glass seal with additional mounting space for heating accessories.

ASEPTIC NA-CONNECT® FuseView™



Designed for sanitary, CIP/SIP applications. The sanitary design eliminates air pockets and trapped material and is designed for full torquing. The cannot be over-torqued.

SANITARY FLANGE FuseView™



Incorporate a through hole bolt pattern in the sight glass, eliminating the need for a retaining flange. The low profile design and hermetic, fused seal provide a high strength, sanitary sight glass free of air pockets or pockets for material accumulation.

Sanitary Sight Flows



CANTY sanitary sight flows are designed with the same attention to safety as industrial units. They are available with Tri-Clamp®, butt weld, TS, or any available sanitary connection.

How It Works

To manufacture a FuseView™ we heat the glass to it's molten point where it flows to the wall of the metal. At that point the glass fuses or bonds to the metal. Then we slowly cool the FuseView™ until the glass solidifies. The metal has a higher coefficient of expansion than the glass and the metal compresses on the glass. This squeezing pre stresses the glass and puts it under radial



compression. Glass is strong in compression but not under tension or shear. When the FuseView™ is pressurized the glass bends and relieves the compression and avoids tension. This is the same as is done with concrete - it is pre stressed in compression in order to take bending.

The CANTY Advantage



CANTY

- Full 3.0" [76 mm] view (4" Tri-Clamp®)
- Hastelloy® C, Hastelloy® C276 and Hastelloy® C-22®

Metal Glass

- 2.17" [55mm] view (4" Tri-Clamp®)
- DIN 1.4462 = Duplex SS NOT 316L SS

CANTY provides the largest view possible!



CANTY

 CANTY model is hermetically fused. Note - glass is still fused to the ring after cutting.

Metal Glass

Not actually fused! Metal section breaks away cleanly.

(Comparable models shown cut with band saw)

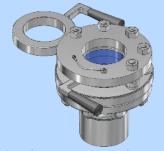
CANTY QUICKPORT™ CLOSURES



The CANTY QuickPortTM is a patented, safe, quick opening closure for process vessels. Originally used in the offshore diving industry as a transfer lock on decompression chambers, QuickPortsTM are used with no additional interlock by the tank to be pressurized or evacuated. A pressure differential holds the door securely in place and no bolting is involved. Meets ASME code section VIII for quick opening closures.



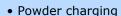
The QuickPort™ features a hinged door or window that opens laterally to provide full port access. The closure consists of a pad and a retaining flange held apart by spacers, a floating seal ring, and a door in the form of a FuseViewTM sight glass. As the door is pivoted into the closure, the spring loaded seal ring is deflected back to allow the door to fit tightly between the flanges. The spring force creates an air tight seal on the door face, and allows the tank to be pressurized or evacuated.



Closed Position = Complete Containment



QuickPort™ APPLICATIONS









Funnel = Clamp-On or Drop In



QuickPort™ HAZOP OPTIONS

- Air Cylinder Locking Pin
- Spring Loaded Locking Pin
- Limit Switch

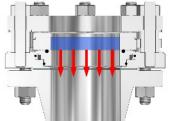


Sprayball = No Additional Nozzle Needed



Vessel Charging and Sampling with Dover Pac®

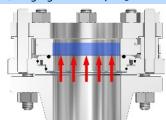




Seal Under Vacuum

HOW IT WORKS

The zero leak design has been proven through a combination of air/liquid submergence testing. This cycles the QuickPort $^{\text{TM}}$ through external pressure, no pressure and ultra high internal pressure leak testing where a constant o-ring seal is maintained.



Seal Under Positive Pressure

PROCESS VESSEL CAMERAS



CANTY's process vessel cameras with integral light source allow for high quality remote viewing of a process vessel from the operator control

- Integral fiber optic guided lighting ensures uniform illumination in the viewing area.
- System hard-mounts directly to the process vessel, so it does not have any reflection issues.
- Camera and light combination through one port.

Eyes in the Process • Visual Verification • Integral Lighting



BioCam™ - High Purity

Explosion Proof Process Cameras

CANTY Camera & Light Vision Systems are a patented design to view and illuminate the inside of a pressure or process vessel through a single connection. There is no need for multiple ports! CANTY can supply an integrally mounted camera and light (optional) in

flanged, sanitary or NPT threaded process connections. CANTY fused glass technology provides a safe, high pressure, hermetic fused glass barrier between the process and the camera electronics.

The key to CANTY Camera & Light Vision Systems is the CANTY LED Light. CANTY uses fiber optic light guides to focus cool, effective light into a process or pressure vessel. Cool light eliminates product bake-on, adding no heat to the process. Fiber optic light guides deliver the maximum amount of light into the tank. The resulting live, remote image from a CANTY Camera & Light Vision System is unparalleled!

- NON-CONTACT Foam Control
- Strobed LED Light
- Percent Foam
- Verify Empty



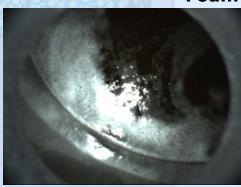
Empty / Low Level



Non-Contact Level



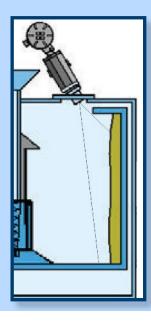
Foam Detection





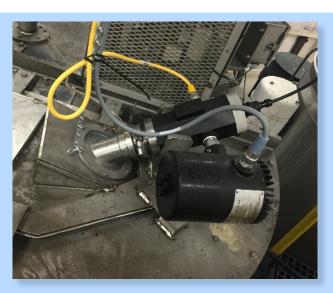
For More Information Click **Here**

CENTRIFUGE CAMERA CONTROL



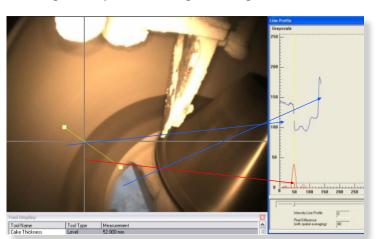
A camera light combination system is mounted to the centrifuge using the CANTY angled mounting plate. This allows for continuous monitoring from the control room, of initial product filling, the various washing and spinning cycles, and product discharge, therefore enabling greater operator control and efficient identification of any process issues.

CantyVision™ image processing software can be used to measure and detect various process parameters on both batch and continuous centrifuge systems.



Cake Thickness ● Color Line Control ● Wash Optimization

The CantyVision™ Level / Edge tool, can be configured to track any edge based on the difference in color or grayscale of 2 materials / components. In a batch centrifuge, this edge is the intersection between the product cake, and the centrifuge base plate. This edge tracking is a direct measurement of the cake thickness.

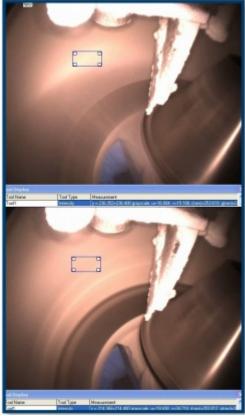


In a continuous centrifuge, the same Level / Edge tool can be configured to track the position of the color line. This allows the operator to adjust the feed conditions to maintain a constant color line position, and avoid washing above the color line, which is inefficient due to spacing on screen and subsequent liquid carry over.

The CantyVision™ Intensity tool can be used to optimize the product washing & spinning phases of the centrifuge process.

If there is overstanding liquid present on the surface of the cake during washing, it indicates less than optimal filtration, which could be due to too high a wash fluid feed rate, or possibly fine particles plugging the filter mesh (indicative of a problem with crystallization).

This overstanding liquid is detected by CantyVision $^{\text{TM}}$, as when liquid is present, there is a higher than normal intensity reading due to the reflection of the imaging system's light source from the surface. In addition to detecting the initial presence of overstanding liquid, a subsequent drop in intensity reading indicates that all wash fluid has eventually been filtered through. This can be used to control the introduction of additional wash cycles, or to determine when the washing process is complete and the product can be discharged.

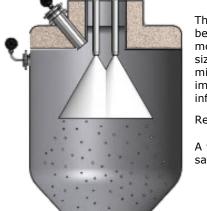


For More Information Click Here

SPRAY DRYER MONITORING

CANTY Spray Dryer Monitoring Systems are vision based, industrial camera / light combinations used to view spray nozzle patterns in real time. This allows operators to see changes in the profile of the spray pattern, and detect clogging before it becomes a problem. Operators can easily view for product build-up before there is a chance for fire.

This Vision System can be automated by the CANTY Vector™ Image Processor to measure the size and shape of the spray pattern profile. Alarms can then be sent to the control system if nozzles clog or the spray pattern changes.



The CANTY SolidSizer™ and Vector™ System can be used simultaneously with the spray nozzle monitoring system to determine the final product size. Particles ranging from .002″ to .24″ (50 micron - 6mm) are analyzed using 2 dimension imaging software for true size and shape information.



Results can be sent to the control system, allowing pressure adjustments to be made automatically.

A full particle size distribution can be obtained or just critical measuring points. All results can be saved to a file for a historical record.

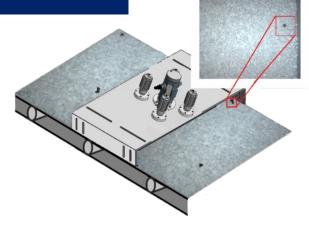


- Fiber Optic "Cold" Light Means No Product Bake-On
- Fused Glass Interface
- Multiplexing Video Inputs
- World Wide Approvals to FM, CSA, and ATEX
- Single Nozzle Viewing / Illuminating
- Remote Dimmer
- Spray Rings Available For Cleaning
- Multiple Outputs Such As 4-20mA, Or TCP/IP Interfaces Can Be Used

For More Information Click Here

DEFECT DETECTION / BLACK SPECK





Off specification (discolored) product detection is performed in real time, directly on the product conveyor. As the product moves through the shrouded measurement zone, images are captured under uniformly controlled lighting conditions. CantyVision $^{\text{TM}}$ software then analyzes these images in order to detect and record any particles that do not fit within the user defined acceptable color range. For additional information, see document TA11500-1053. For defect detection, see the CANTY SolidSizer $^{\text{TM}}$.

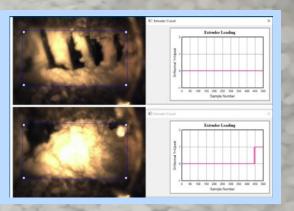
Extruder Process Control

HOPPER / FEEDER LEVEL

- CANTY camera/light combination monitors the entrance of the extruder barrel.
- Monitors extruder screw loading.
- Ensures that the chute does not become blocked.

VENT CAMERA Camera and

- light monitors extruder vent to see and control when product begins to block this region.
- Camera and light also allow for clear view of extruder screw.



STRAND MONITOR CAMERA

- · Tracks position of each strand and alarms on balling or breakage.
- Real-time monitoring of strands done remotely from the central control room.
- Closed loop control via OPC or 4-20Ma output.

EXTRUDER MELT CAMERA

- monitors extruder melt by combining microscopic camera and high intensity LED light source connected to the central flow cell mounted
- contaminants and air bubbles in real time.



- The CANTY InFlow™ analyzer directly on the extruder barrel.
- Integrated fused glass technology allows for imaging at high process temperatures and pressures.
- The system is used to detect

PARTICLE SIZING

- Final product quality control to detect particle size and black speck contaminants.
- · CANTY's range of vision based particle analysis systems provide realtime true size and shape characterization.
- Analysis can be done at line through use of a sweep sampler, or offline through use of a laboratory instrument.



PARTICLE ANALYSIS

SOLIDSIZER™ - PARTICLE SIZE ANALYZER

Meets ASTM Standards • Nuts / Almonds • Food Granular Particle Size from 10µm to no upper limit*

Size and shape analysis of dry particles is performed by the range of Canty SolidSizer™ equipment. The product to be analyzed is fed into the system hopper, where the built in material handling system separates the particles into one even layer, and transports them into the analyzer's measurement zone.

Within the measurement zone, the particles pass between a high intensity LED light source and camera, which captures high resolution images 2D images.

These images are then binarized, and by analyzing the number and position of the image pixels, a full particle **SIZE** and **SHAPE** distribution.

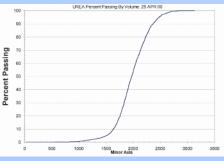


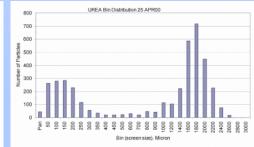


Lab or Industrial (At-Line) Systems









BLACK SPECK or COLOR SPECK detection is available as an add on to a particle size and shape analyzer, or as a stand alone system. This uses a camera system with controlled front lighting system for accurate color representation within the captured images. Multiple measurement zones can be configured to allow for detection of particles of different colors within the same product.

Contaminant Detection - Mixture Ratio Analysis In the Stage Open Sure Stade Statenth





Black Particles Detected

Color Particles Detected

TURBIDITY

Turbidity / CIP

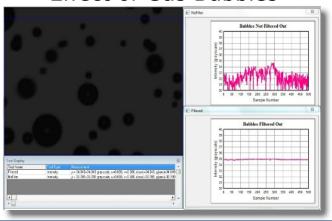
- Monitor for TOC and Particle Level
- Reduce Lab Time
- Monitor for TSS

Turbidity

Turbidity analysis using a high resolution CCD/CMOS image sensor that detects turbidity changes in fluids by measuring the transmittance of light. Using advanced software algorithms the system automatically removes gas bubbles from the analysis resulting in highly accurate and repeatable data outputs. This system is designed for inline use with varying pressures, temperatures, and pipe diameters.

Turbidity (NTU)

Effect of Gas Bubbles



Features

- Ethernet Connectivity
- Real Time Monitoring Of Process In Flow
- Solid One Piece Central Hub
- Supplied With Internal O-Ring Seals
- Easily Installed Modular Unit
- Fused Glass Process Barriers
- Regulated Light Source Emits Cold Light To Prevent Product Bake-On
- OPC, 4-20mA Current Loop, EXCEL Spreadsheet And Relay Outputs Are Available
- Single-Use Options Are Available
- Visual Verification
- In-Line Analysis

For More Information Click Here

VECTOR CONTROL MODULE



The Vector Control Module (VCM) is a small fanless solid state embedded processor that has $CANTYVISION^{TM}$ software pre-installed. It is designed to keep project costs low and to also eliminate the need for a computer. Since the VCM has analog outputs, there is no need for an additional analog output module purchase*. The operator screen makes it simple for operators to see what is going on real time with visual verification.

CantyVision Data-Log Module

The VCM has OPC or 4-20mA outputs to a PLC or DCS for complete control. The VCM comes with the ability to have full administration controlled passwords and permissions. This compact design and cost effective system is easily setup and has a customizable screen. Access to technical support can be obtained with Internet connection.



- Supports up to six camerasOPC outputs
- OPC outputs
- Up to eight analog 4-20mA outputs
- Link to technical support (when Internet connected)
- Digital IO
- Four USB Ports
- Four serial ports
- CantyVision[™] Software installed
- Full administrative control embedded operating system
- Fan-less solid state vision control system

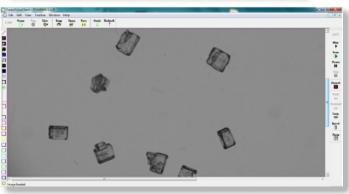
For More Information Click Here

LIQUIDS PARTICLE SIZING

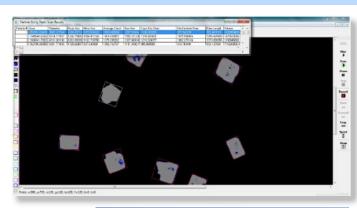


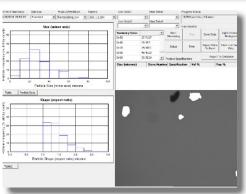
The liquid slurry to be analysed passes through the analyzer flow cell, which incorporates a microscopic camera, and high intensity back lighting system. High resolution 2D images are captured and sent to CantyVision™ software for realtime analysis. Each particle is measured under a range of size and shape parameters including major axis, minor axis, area, perimeter, aspect ratio circularity and equivalent circular diameter, to provide a truly comprehensive particle characterisation. The imaging principle allows for visual verification of any results, and aids the user in developing a greater understanding of their process or product.

Particle Size from 0.7µm to no upper limit* • Particle Shape • Particle Concentration









Various options are available for pipeline (in-line or at-line), vessel and off-line (lab) measurement, all of which include fused glass technology allowing for use on **HIGH PRESSURE & HIGH TEMPERATURE** applications.



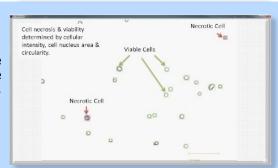
WINE YEAST CELL ANALYSIS

CANTY's vision based technique works on the basic principle of presenting the product between a high intensity LED light source, and a microscopic camera. The captured images are the sent to CantyVision $^{\text{TM}}$ cell detection software for analysis, where they are measured under a number of different size & shape parameters:

- · Cell Diameter and Radius
- Area and Volume
- Nucleus
- Circularity
- Intensity

The software can then output user defined particle size distribution and particle concentration information as well as cell viability percentages. Features include:

- Gigabit Ethernet technology for optimum image retrieval
- Analyze suspended cells down to .7 micron
- · Auto dilution with peristaltic pump or syringe pump done through the software
- Software analysis up to 15 FPS
- 2.5 minutes to run an 8mL sample
- Auto cleaning / flushing cycle with cleanliness determination





FOOD OIL ANALYZER



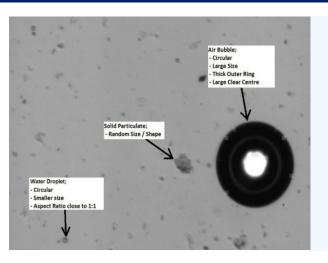
The presence of solid particles and water in various food oils can be problematic for a number of reasons as it can cause the need for excessive and inefficient filtering as well as not meeting required standards for the food industry. Detecting solids and water in these oils is crucial in managing the operation of filtration and seperation equipment. Knowledge of particle shape, in addition to count per mL, enables the user in many cases to assess the type of particulate present and its cause which can assist in pinpointing any point of contamination and preventing it.





WATER CONCENTRATION - WATER DROPLET SIZE - SOLIDS CONCENTRATION - SOLIDS PARTICLE SIZE

PPM OF SOLIDS & PPM OF WATER



- Particle sizing as low as 0.7 μm
- Differentiates between Solid particles, Water droplets, and Gas bubbles for accurate measurement of particles
- Can analyze shape as well as size of particles
- Can detect Microbial growth
- Easy cleaning and Operation
- High-speed gigabit Ethernet camera technology

INTERFACE / PHASE SPLIT

Mounted in the outlet line of a vessel, an imaging system using a unique fiber optically guided 90° lighting arrangement is used to detect the phase change during a batch liquid - liquid separation process.

Image analysis software can identify the aqueous, organic, and emulsion phases, with connection to the DCS allowing for complete automation of the system. Eliminate false alarms!



For More Information Click Here

Cell Count & Viability

CANTY's vision based technique works on the basic principle of presenting the product between a high intensity LED light source, and a microscopic camera. The captured images are the sent to CantyVision™ cell detection software for analysis, where they are measured under a number of different size & shape parameters:

- Cell Diameter and Radius
- Area and Volume
- Nucleus
- Circularity
- Intensity

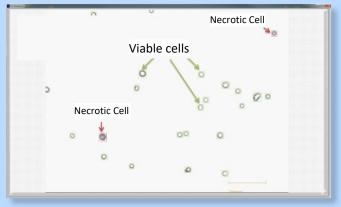
NO DYE **NEEDED**

The software can then output user defined particle size distribution and particle concentration information as well as cell viability percentages. Features include:

- Gigabit Ethernet technology for optimum image retrieval
- Analyze suspended cells down to .7 micron
- · Auto dilution with peristaltic pump or syringe pump done through the software
- Software analysis up to 15 FPS
- 2.5 minutes to run an 8mL sample
- Auto cleaning / flushing cycle with cleanliness determination



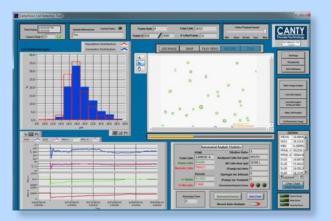
Individual cell information - distinguishes between live and dead cells



Cell viability determination using cellular intensity, cell nucleus area, and circularity



Automated syringe pump feed mechanism & dilution pump



Cell Concentration Determination

The CANTY Cell Analysis Software along with a syringe pump and peristaltic pump automatically dilutes concentrated cells to the appropriate optimal imaging density. The software then calculates a dilution ratio based on the amount of the cells to the amount of dilution buffer. The dilution process is performed automatically at a rate of up to 15 frames per second.

With auto dilution of samples it was found that no saturation point was reached for the cell densities tested up to 30 x 10^6 cells per milliliter.

WASTE WATER ANALYZER - OIL & TSS IN WATER

The InFlow[™] Analyzer based on dynamic imaging, features a high speed microscopic camera, and high intensity light source positioned on opposite sides of a central flow cell. As fluid passes through the flow cell, images of any suspended particulate are captured and analysed. Powerful image analysis software can distinguish between oil droplets, suspended solid particles, and gas bubbles to provide simultaneous size, shape and concentration information for each.

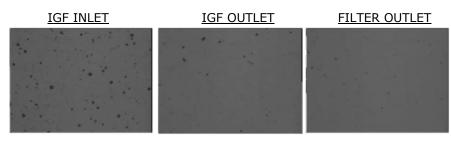


OIL CONCENTRATION OIL DROPLET SIZE -**TSS CONCENTRATION TSS PARTICLE SIZE**

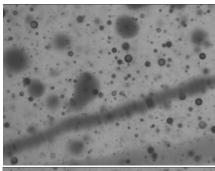


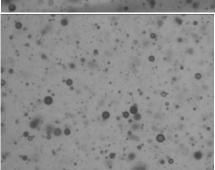
Available in a number on configurations - direct online, side stream, or **portable** - the InFlow™ can be used anywhere within a produced water plant to optimize each stage of separation, to ensure any separation equipment is running at maximum efficiency, and any environmental discharge limits are reached.

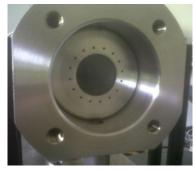
The performance of any separation equipment (hydrocyclone, CFU, IGF, membrane filters.....) is based on operating at the correct configuration for the inlet fluid condition. Similarly, the dosing volume / rate of production chemicals such as emulsion breakers or droplet coalescers, is based on understanding what is present within the fluid to be treated. The InFlow™ delivers this information, providing real time data for oil concentration & droplet size, and total suspended solids concentration and particle size.



SEPARATOR / FILTER OPTIMIZATION - CHEMICAL DOSING CONTROL - ENVIRONMENTAL REPORTING







Any fouling or build up on the InFlow™ glass windows, is removed by using a fully automated high pressure jet washing system through the analyser spray ring. The cleaning fluid can even be the produced water itself!

- Variable concentration range setting; 0-10ppm, 0-100ppm, 0-1,000ppm, 0-10,000ppm
- Options to 80,000ppm
- Particle sizing to 0.7µm
- Fused Glass Windows Options to 600 BAR
- High Intensity LED Lighting
- Gigabit Ethernet Camera Technology



CANTY'S GOAL IS TO PROVIDE EQUIPMENT TO ENHANCE PROCESS CONTROL AND YIELD. WE ACCOMPLISH THIS BY DESIGNING, MANUFACTURING AND SERVICING THE FINEST EQUIPMENT IN THE WORLD

SOME OF THE COMPANIES WE HAVE WORKED WITH

Dairy Farmers of America
Daisy Brand
PepsiCo
Anheuser Bush
Miller Coors
Stone Brewing
Unilever
Nestle
Cadbury

Folgers
Smuckers
Frito-lay
Ortega
Gallo wineries
Land O' Lakes
Diageo
Kellogg's
Kerry group



J.M. Canty Inc. 6100 Donner Road Buffalo, NY 14094 Phone: (716) 625 4227 Fax: (716) 625 4228

Email: sales@jmcanty.com



J.M. Canty International Ltd.
Ballycoolin Business Park
Blanchardstown
Dublin 15, Ireland
Phone: +353 1 8829621
Fax: +353 1 8829622

Email: sales.ie@jmcanty.com