

# CANTY

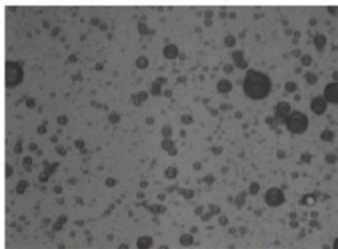
## PROCESS TECHNOLOGY

### QUENCH WATER ANALYSIS SYSTEM



## APPLICATION

Cracking furnaces are often used in the petrochemical industry to break down large hydrocarbon molecules into smaller, more valuable ones such as ethylene and propylene. After cracking, when the gas is quenched via water, there is a significant possibility of leakage of oil into the water. The CANTY INFLOW™ Skid can be used to detect and measure the concentrations of oil and TSS in the quench water down to 1ppm. This technology can be deployed right after the quench as well as at the outlet of the oil / water separators that are used to ensure the quench water meets certain quality levels to be reused or discharged.



OIL IN WATER

## THE CANTY ADVANTAGE

Combining the latest in CCD Ethernet camera technology, with Cauty fused glass technology, high intensity lighting and CANTYVISION™ software, the INFLOW™ provides real time inline analysis (size & concentration) of Oil in Water and TSS.

Cauty's vision based technique works on the fundamental principle of presenting the fluid (water / oil stream) between a high intensity light source and microscopic camera. The captured images are then analyzed by the CANTYVISION™ software, where the suspended particulate (oil, water, solids, gas bubbles) is measured under a number of different parameters to provide size, shape and concentration data. Software filters (size / shape) are applied so oil / water, solids, and air bubbles are individually & simultaneously analyzed.

## FEATURES

- Ethernet Connectivity (Remote Monitoring/Support)
- Intuitive Software Interface
- Data Outputs in the Form of Excel Database
- Control Output Options via OPC / Modbus TCP/IP / 4-20mA
- Fused Glass Process Barrier
- High Intensity Lighting
- Automated Cleaning System
- FM EXP / ATEX FP Options

## BENEFITS

- Real Time Inline Measurement (No Sampling)
- Center Pipeline Measurement (Most Representative)
- Visual Verification
- Simultaneous Measurement of Oil / Water and TSS
- Flow Rates to 10 ft/s (water stream)
- Up to 5% Particle Concentration (Higher for Droplet Size Measurement Only)
- +/-1% Accuracy of Calibrated Scale

**CANTY**

[www.jmcanty.com](http://www.jmcanty.com)

Document P/N: TA11500-1109\_R0

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## ORDERING INFORMATION

HOW TO ORDER: Select the appropriate characters to build the part number:

**SIF-CE-V01BFB1BD4V-01B**

### SYSTEM ARRANGEMENT

CE	CONTROL ROOM VCM (MAX 100m)
CF	CONTROL ROOM VCM (MAX 10km)
F	ON SKID VCM & MONITOR

### OPTICS MEASUREMENT RANGE

1	0-2500 ppm(v), 2-295µm*
3	50 - 50000 ppm(v) / 5-725µm*

### INFLOW CONNECTION TYPE

B	COMPRESSION / TUBE FITTING
E	NPT(F)

### INFLOW CONNECTION SIZE

D	½"
F	1"

### INFLOW WETTED MATERIAL

B -	316L SS**
2	316L SS (NACE)**

### INPUT POWER

A	120V 60Hz
B	230V 50Hz

### CLEANING SYSTEM WETTED

B	316 & 316L SS
2	316 & 316L SS (NACE)

### CLEANING SYSTEM CONFIGURATION

1	PUMP / VALVES / FITTINGS
2	VALVES / FITTINGS ONLY - USER SUPPLIES HIGH PRESSURE WATER

### INFLOW MOUNTING

0	ON SKID
1	IN SHORT LOOP SAMPLER

### ENVIRONMENTAL RATING

3	EXP / UL / CSA
4	ATEX
6	IECEX / ATEX

### PRESSURE RATING

B	150 PSI
C	300 PSI
D	500 PSI

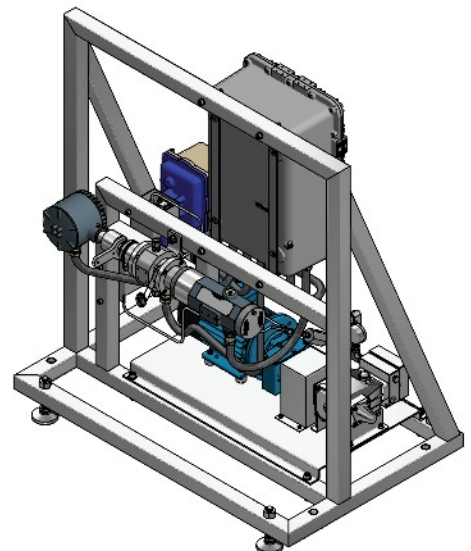
\* Size ranges detailed are the maximum accuracy ranges. Measurement of particles / droplets outside these ranges is possible, but with a reduced level of accuracy. Consult CANTY for details

\*\* CANTY reserve the right to upgrade to Hastelloy C family of alloys or equal at their own cost

	INFLOW	PSU	ACTUATORS	MOTOR	PUMP
<b>FM/UL/CSA</b>	FM EXP	UL & CSA EXP	CSA EXP	CSA EXP	N/A
<b>ATEX</b>	ATEX ZONE 1	ATEX ZONE 1	ATEX ZONE 1	ATEX ZONE 1	ATEX ZONE 1
<b>IECEX/ATEX</b>	IECEX ZONE 1	IECEX ZONE 1	IECEX ZONE 1	IECEX ZONE 1	ATEX ZONE 1

### Notes:

- SIF-CE and SIF-CF Models require a VCM to be ordered separately from datasheet TA12100-1012. Consult with CANTY for suitability of VCM selection.
- Ethernet Cable (max 100m) from SIF-CE Models to VCM in Control Room to be minimum Cat6.
- Fibre Optic Cable (max 10km) from SIF-CF Models to VCM in Control Room to be 10G SM Duplex 9/125µm LC-LC.
- If Short Loop Sampler is selected for INFLOW™ Mounting;  
INFLOW™ connection type must be selected as Compression / Tube Fitting  
INFLOW™ connection size must be selected as 1"  
Short Loop Sampler must be ordered separate from datasheet TA11500-1027



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