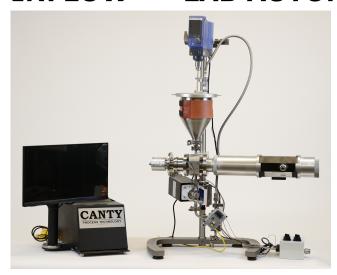
# CANT

## PROCESS TECHNOLOGY

# INFLOW™ - LAB AUTOMATED DILUTION SYSTEM



The Laboratory Dilution System is used to run highconcentration samples using automated dilution control to enable optimal image capture and analysis.

Typical uses for this system include the particle analysis of paints/pigments (ASTM D8090), drilling muds (water and oil based), pharmaceutical and AM powders and other various highly concentrated slurries. Most often particle sizes are small (<300 microns) and the flow regime through the InFlow analyzer is laminar which is advantageous in aligning particles for optimal presentation to the camera. This enables effective particle size and shape analysis. Non-dissolving fluids are used as diluents to disperse the particles sufficiently for measurement. Most often, pure water or hydraulic oil can be used for this purpose.

The measurement zones of all Canty liquid analyzers are identical, regardless of in-line or lab usage, and are based on fused glass-to-metal technology which presents a smooth, flat surface at the light and camera tips for the fluid to flow between. These surfaces are highly polished making them ideal for analysis of even the harshest materials (crude, drilling mud etc...). The Core unit contains the power supply, switch and Vector Control Module (VCM) in one small, table top package. The VCM is a fan-less, solid state, embedded processor hosting the CANTYVISION software. The VCM calculates particle size and distribution, and also controls the dilution rate of the fluid being measured based on the on-screen particle count so there is no need for operator adjustment or input. The system provides live video as images are captured for visual verification of the analysis which is a benefit in many instances.

Unlike a laser analysis which requires dilution to be controlled over a narrow, repeatable range, the Canty system requires a minimum dilution (determined by the software in real time) and no maximum dilution limit.

#### **FEATURES**

- Provides both real time in flow measurement and a continuous real time view of the product
- Software controlled auto-dilution; removes operator error and subjectivity
- Stand-alone analysis system; no need for installing software on a customer PC
- Video alarms to record irregularities in samples
- Utilizes Canty Cold Light and Fused Glass
- Available In NEMA4 / IP66
- All measurement data stored in Excel file format
- Size distribution by length, width, area, and perimeter
- Shape by aspect ratio, circularity, solidity etc...

#### **ADVANTAGES**

- Real time particle size and shape analysis
- Objective SHAPE analysis to give a competitive edge to customers
- Eliminate errors associated with sieves
- Eliminate errors associated with laser dilution
- No drying needed to run particle size analysis
- Reduce analysis waiting time for operators
- Detects gas bubbles unlike laser, which read gas bubbles as particles
- Don't waste time drying samples!

#### **MATERIALS / MEDIA / APPLICATIONS**

- Slurry Analysis
- Water Based
- Powders
- Paints/Pigments
- Drilling Mud Oil Based
- Granules

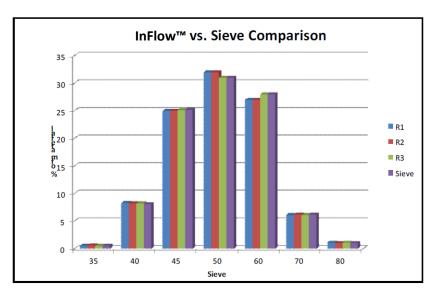
Buffalo, NY USA Ph: (716) 625 4227

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

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

· Replaces existing lab screen/sieves





### **Ordering Information**

#### **HOW TO ORDER:**

120V AC INPUT SYSTEM: **LABD-1**230V AC INPUT SYSTEM: **LABD-2** 

#### **DELIVERABLES:**

- Canty's 1/2" Tri-Clamp® InFlow™ with High-Resolution Analysis, with Digital Knob Control Zoom & Focus Adjustment for Repeatability of Set-ups.
- Digital Software-Controlled Overhead Mixer
- Four Liter Glass Vessel with Easy Tri-Clamp® Connector for Easy Removal
- Actuator with Three Way Valve; this is to Dilute & Rinse the System
- CoreUnit™ with CANTYVISION™ Embedded VCM for Stand-Alone Analysis without the need for customer-supplied PC
- Quick-Connect Cabling to Allow Customer to Move Unit in and out of Fume Hoods and Ease of Location Changes



Canty CoreUnit™



Inline Systems Available - see TA11500-1043



Buffalo, NY USA Ph: (716) 625 4227 Dublin, Ireland Ph: + 353 (01) 882 9621 Phuket, Thailand Ph: + 66 (83) 968 9548