

Real Time Particle Size & Liquid Analyser

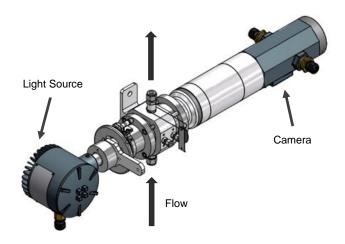


The SMS Particle Analyser enables clients to collect crucial Total Suspended Solids (TSS) and Particle Size Distribution (PSD) data directly from process lines in real-time.

The System Overview

The online particle size analyser system does not involve manual handling of samples, and this allows clients to obtain live sand rate and PSD data of online processes that may constitute health hazards such as presence of mercury, NORM, H2S, abnormally high levels of CO2, etc.

Vision-based particle analysis systems typically suffer from the limitation of requiring single-phase liquids, but SMS' system is the first of its kind in the industry as it has the capability to separate water and solids from live streams to allow the visual system to analyser and produce results immediately.



Benefits

Increased Safety

 Reduced risk and personnel exposure to potentially harmful samples

Intelligent Analysis

Distinguishes solids, oil, water and gas particles

Not Sample Size Limited

No minimum sample weight requirement

Minimal Turnover

No logistics of samples to labs for results involved

Features

Real Time Solids Analysis

Real Time sand rate and PSD data with visual verification

Side- Stream Multiphase Fluid Separation

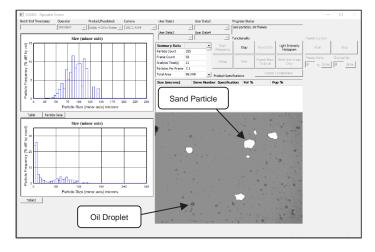
- NACE rated vessel static or dynamic flow
- Variable temperature with heating for waxy crude

Robust Monitoring System

 Requires minimal maintenance, infield calibration, integrated jet spray ring for lens cleaning

Fused Glass Window

 Fused glass to metal window creates a smooth surface that does not alter fluid dynamics









Sense

Understand

Aberdeen / Abu Dhabi / Kuala Lumpur www.smsintegrity.com info@smsintegrity.com

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Specification

Functional Characteristics

Analysis Technique	Vision based system – self lighting, calibration adjustable
Data Output	Typical PSD Data (Dv, Dn values in Excel format files)
Max Flow Rate	8 Liters/minute
Accuracy	0.7 micron – 2,200 - micron particle size options
Calibration	Factory set calibration
	Calibration recommended after significant transportation and according to project scope
Reading Frequency	Up to 15 frames per second (depending on acquisition settings)
Data Interface	Real time output direct into acquisition system
Maintenance	Monthly visual checks only
Power	12–24 VDC or 100-240 VAC, 50/60Hz
Hazardous Area	
Classification	Available in NEMA4, IP66, Explosion Proof or Flame Proof Packages
Ambient Temperature	0 to 50°C (32 to 122°F) std. Contact for other requirements
Output Ranges & Accuracy 0.7 micron – 20,000 micro particle size options	
Outputs	Analogue: Dual isolated 4-20 mA (loop powered)
	Digital: OPC, RJ45
Displays	External graphic display 128 x 64
Interface	CantyVision Intelligent Analysis
Pipework Connections	Small bore eg ½ "swageloc
Dimensions	Canty Particle analyser: 1200 x 800 x 500mm, 15kg
	Power supply box: 770 x 770 x 350mm, 10kg

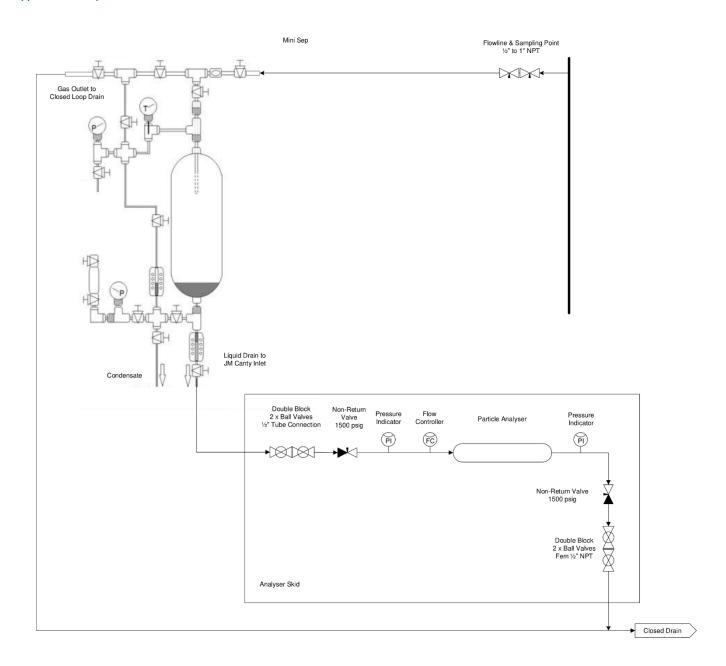
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Typical Set Up



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