FUEL PARTICULATES

An Advanced Particle Counter for monitoring Aviation Fuels, Fuel Oils, Diesels, Kerosines, Gasolines and Bio Fuels from

SetaAnalytics

SA1000-0 avcount PARTICLE COUNTER

A new laser based particle counter for checking and maintaining the quality of fuel throughout the distribution network. Fuel types include aviation turbine oils, biofuels and biofuel blends, heating oil, gas oil, diesel - automotive and marine, gasoline and kerosine.

For Aviation Fuel:
IP PM-DQ (proposed)
Determination of the level of cleanliness of aviation turbine fuel - Portable automatic particle counter method

For all Fuels:
ASTM (Draft)
Standard test method for the evaluation of the level of cleanliness of distillate and liquid bio-fuels (Portable automatic particle counter method)

- Fully automatic operation
- Particle size 4µm to >70µm
- Cumulative & distributive particle numbers
- ISO4406: 1999 codes
- Uses "Straight from the Bottle" samples
- Precise and reliable results
- Laboratory or portable field use
- Calibrated in accordance with ISO 11171

SA1000-0

BIO-FUEL TESTING

OPTIONAL SOFTWARE AVAILABLE

TECHNICAL DATASHEETS AVAILABLE

FUEL PARTICULATES

Maintaining Fuel Quality in the supply and distribution systems is a major concern. The potential for particulate (dirt) contamination is high, particularly from:

- Refinery Processing Materials
- Corrosion & Rust in Pipes and Tanks
- Airborne Solids
- Degraded & Damaged Hoses and Filters
- Microbiological Growth

The avcount particle analyser is a rugged and portable instrument specifically designed for testing the particulate content of fuel for particles ranging from 4µm to >70µm diameter.

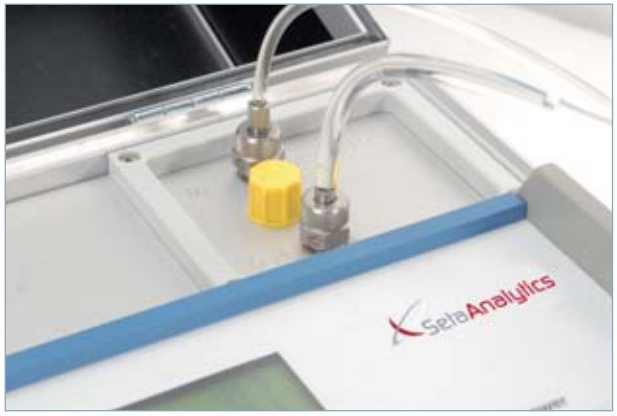
The avcount uses the light obscuration principle, where the fluid under test is passed through a cell comprising a laser and a calibrated sensor. Particles in the fluid cast a shadow onto the sensor, which determines the area / diameter and number of particles in the sample.

Sampling and measurement is simple; fuel is drawn from a sample container or directly from the supply line. avcount has a 10 bar standard pressure rating or can sample up to 315 bar line pressure using the optional pressure reducing system. An integral pump automatically draws the sample through an internal measuring chamber, removing the need for an external sampling pump.

avcount is fully automatic once the test sequence is started. The instrument flushes the cell with sample prior to commencing the measurements. A precise volume of sample is then analysed. The flushing / sample analysing sequences are automatically repeated in accordance with the selected test method.

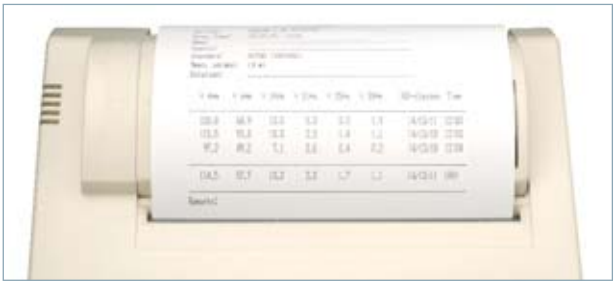
Results are displayed on the LCD screen in real time and printed out on the integral printer as the test progresses. The results are shown for 6 particle size bands in Particles/ml and ISO Code. Results can be saved to memory for trend analysis of samples, printed out on the integral printer or downloaded to a PC or external printer.

The "Log and Show" software option allows data to be downloaded from the instrument to a PC in different formats and allows the instrument to be fuly controlled and configured from any Windows interface.



EASY SAMPLING CONNECTIONS

AUTOMATIC OPERATION & EASY TO FOLLOW MENU SYSTEM



INTEGRAL PRINTER FOR IMMEDIATE RECORD OF RESULTS

SPECIFICATIONS	
Particle Size Range:	4µm to >70µm
Measuring Channels:	6 channels with simultaneous measuring capability
Size Bands - IP PM-DQ	⩾4µm(c), ⩾6µm(c), ⩾14µm(c), ⩾21µm(c), ⩾25µm(c), ⩾30µm(c)
Size Bands - ASTM (Draft)	⩾4µm(c), ⩾6µm(c), ⩾14µm(c), ⩾21µm(c), ⩾38µm(c), ⩾70µm(c)
Results:	Cumulative and distributive particle number/ml Volume percent distribution ISO Codes to ISO 4406: 1999
Measured Sample Volume:	10ml
Total Sample Volume Required:	120ml minimum (includes rinse cycles)
Input (sample) Pressure:	Operation up to 10 bar (optional 315 bar)
Display and Control:	LCD display, 4-key-operation
Measuring Mode:	Single or continuous measurement with a cycle period of 1 - 99 min
Alarm level:	User defined
Printer:	Integral thermal printer
Computer interface:	RS232C
Voltage;	100/230VAC, 50/60Hz, max 30W
Size (HxWxD):	37 x 33 x 21cm
Weight:	11kg