

RESPIRABLE DUST SAMPLER ECOTECH MODEL AAS 217NL

CONCEPT

High Volume Air Samplers remain workhorse for air quality monitoring. Modification and improvements are done in basic HVS by incorporating a cyclone in the sampler which fractionates ambient air suspended particles into two fractions one upto 10 micron which passes through the cyclone and deposited on filter paper while other above 10 micron removed by cyclone get accumulated in the cup fitted at bottom of cyclone.

Ecotech developed RDS based on the concept and requirement given in the BIS 5182 (Part-23) 2006. While developing a user friendly provisions are made in the machine for fitting of Gaseous Pollutants Sampling Attachment. Due to provision of fitting of gaseous attachment AAS 217NL has become an unique system using which one can sample simultaneously PM₁₀, SO₂, NO₂, NH₃ and O₃. Collected PM₁₀ dust can be analyzed for Heavy metals (Ni, As and Pb) and Benzo(a)pyrene without compromising in single dust sample collected by AAS 217NL as per existing standard methods.



TECHNICAL FEATURES

In AAS 217NL ambient air is sucked using low maintenance brushless and noiseless blower through corrosion free aluminum modular pipe and pass through a sharp cutoff cyclone which divides the particulate matters in two fractions one below 10 microns and another above 10 microns. The Respirable dust (below 10 microns) directly get deposited on filter paper and the coarser dust (above 10 microns) collected in the cup fitted under the cyclone. A time totalizer records the total running time of the blower. A programmable digital timer makes the instrument to stop and start as per requirements set in the timer. The manometric systems indicates the rate of flow in cubic meter per minute which can be read directly on calibrated scale. Ecotech RDS has all branded components and suitable for outdoor field use.

In 217NL regenerative blower is fitted where impeller is directly mounted on the induction motor. Due to use of induction motor stabilizer is not required. Induction motor has capability to maintain its rpm automatically of wide range of input voltage 180-260v. Due to very low noise it can be operated in residential and sensitive areas without any disturbances. Noiseless blower does not require regular maintenance.

Only SS hardware are used in sampler. All Ecotech products are lockable and can be opened by single master key provided with each instrument. User convenience kit with tools operation manual and accessories are supplied with instrument.

SPECIFICATIONS :

Ref:	Meet requirements given in BIS 5182 (Part -23) 2006
Flow Rate :	0.9 – 1.4 m ³ /min free flow
Suction Pump	Low maintenance Brushless & Noiseless Regenerative Blower where impellor is directly mounted on motor.
Particle Size :	Particles of 10 microns & below collected on Filter Paper. Particles bigger than 10 microns collected in a separate sampling cup fitted under the cyclone.
Sampling Time :	Can be operated upto 32 hours on continuous basis
Sampling Time Record :	0 to 9999.99 hrs. Recorded on a Time Totalizer.
Particle Size	Separate provision for collection of Respirable and Non-respirable(less than and greater than 10 microns) size particles.
Body	The body of RDS is robust enough to withstand impacts and vibration in transportation it is made of heavy Aluminium sheet.
Power requirement :	Nominal 220 V, Single Phase, 50Hz AC mains supply.
Size & Weight :	430 x 320 x 900mm., (Approx)
Connectivity	Gaseous Pollutants Sampling Attachment (AAS 109) in field.

WARRANTY

ALL ECOTECH PRODUCTS CARRY ONE YEAR WARRANTY



For pricing information and queries contact:

ECOTECH INSTRUMENTS

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