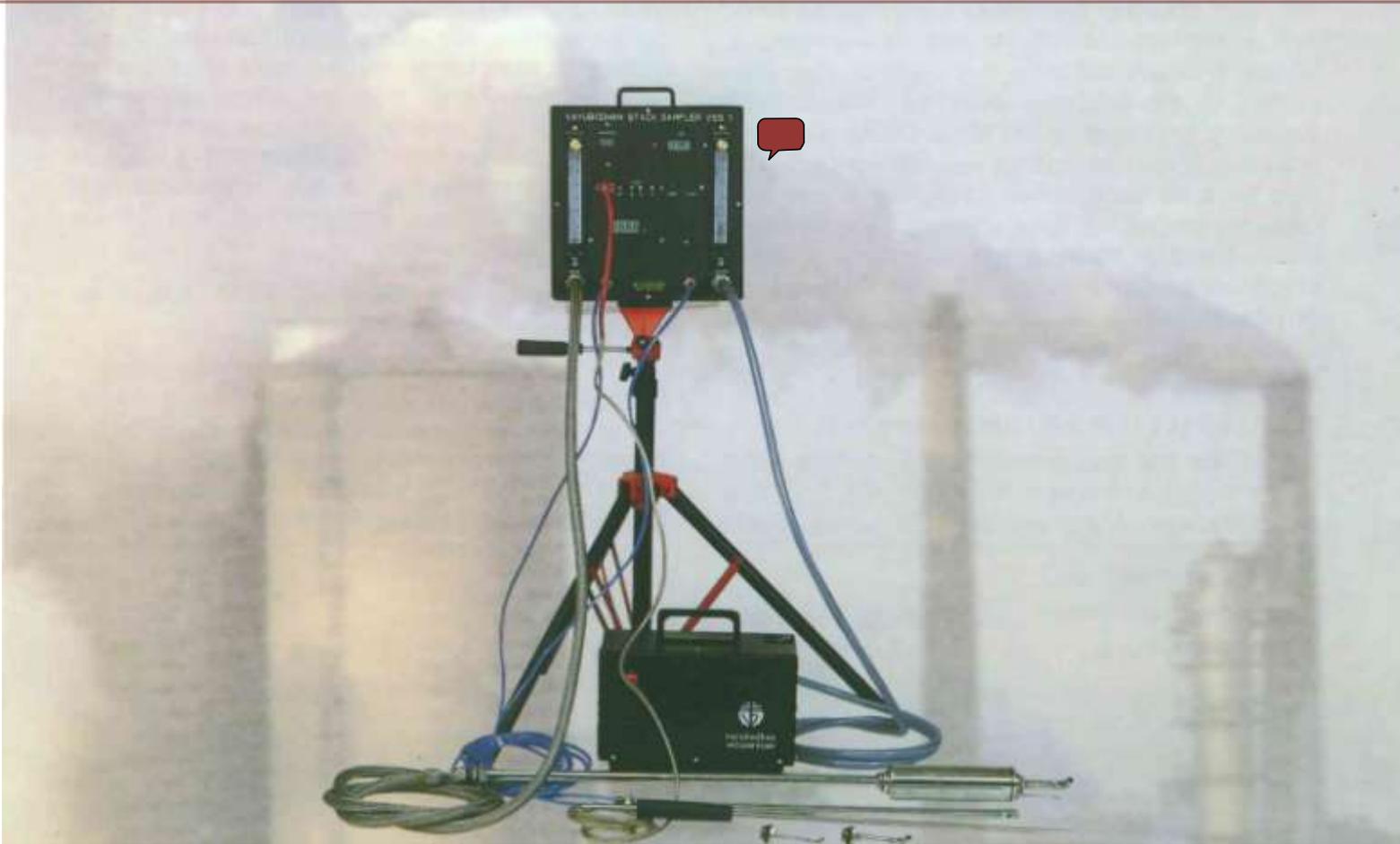


## STACK SAMPLER VSS1



### MAIN FEATURES

- Digital Pressure Cell in place of cumbersome manometer.
- Measures total quantity / volume of emissions.
- Determines velocity of gases.
- Reduction in size and weight of panel.
- Extendable arm for pitot and probe pipe.
- Probe set accommodated in a carrying case.
- Provision of measuring temperature and suction pressure at metering point individually for PM & GAS stream.
- Minimum number of joints to minimize leakages.
- Tripod stand for better accessibility.
- Compact Hardware & Portable light weight vacuum pump.
- Sampling train with simplified glass joints.

# STACK SAMPLER VSS1

## INTRODUCTION

The most common and widely used method (world over) is extractive sample method or Grab sampling technique. Grab sampling technique is also often treated as the reference standard method. Grab Sampling technique is not restricted to a specific pollutant. The same system with different reagents may be used for a variety of pollutants and over different ranges of concentration. This Stack Sampler VSS1 is one such Grab Sampler which can monitor Particulate Matter (PM) and any water-soluble gaseous pollutants like SO<sub>2</sub>, NO<sub>x</sub>, HF, Cl<sub>2</sub>, H<sub>2</sub>S, NH<sub>3</sub>, etc., in industrial emissions from Stationary source / Chimney and Vent.

## PORTABILITY FOR ROUTINE SAMPLING

Only repeat and frequent monitoring can give a true insight into the emission characteristics. It is thus more important to have a simpler and handy device,

which can be used more often with ease and convenience, rather than a bulky and cumbersome system. At times transportation efforts become more hectic & expensive than the actual monitoring exercise. Based on our experience and valuable feedback obtained from our large group of valuable customers, regulatory authorities, consultants, and R&D Centers, need for improved and Handy instrument has been felt.

The Stack Sampler VSS1 has been designed to overcome such problems.

The operating principle is simple. The Particulate Matter is collected over a filtration thimble. It entrap and absorbs various gaseous pollutants in suitable reagents, which are analyzed subsequently by simple Wet Chemistry methods to determine the concentration of specific pollutants.

## TECHNICAL SPECIFICATIONS

Stack Temperature Range	Ambient to 600 deg C read on a Digital Pyrometer
Stack Velocity Range	3to60 m/sec
Thermocouple	T/C sensor in SS 304 casing, length of insertion: 0.6 m with 2m long cable
Manometer	Digital with 0-1300 mm of H <sub>2</sub> O range
Pitot Tube	Calibrated S-type fabricated -SS 304, 0.6 m extendable to 1.2m
Particulate Sampling	2-30 lpm collection on thimble type filter up to 0.3 micron rating
Gaseous Sampling	0.2-3 lpm collection in a set of Borosilicate glass impingers
Rotameter	Plastic body with 2% FSD accuracy, 0-30 lpm PM and 0 - 3 lpm for GAS
Sampling Probe	Made from SS 304 tube, 0.6 m length extendable to 1.2m
Filter Holder	Fabricated from SS 304 tube suitable to hold either cellulose filtration thimble (Size 28mm 10 X 100 mm long) or glass micro fibre thimble (size 19mm ID X 90mm long)
Nozzles Digital	A set of 3 stainless steel nozzles
Clock	0-60 minutes, 1 second readout with start and stop switches
Sampling Train	1 No. of 240 ml cap. & 2 No. of 120 -ml cap. borosilicate glass impingers accommodated in ice tray, placed on the rear side of instrument panel with a provision to keep ice
Vacuum Pump	Monoblock Rotary Vane type, oil lubricated, single phase motor (230V) with more than 50 lpm freeflow capacity

Size and Weight (approx)	Length (mm)	Width (mm)	Height (mm)	Weight (net)Kg
VSS1 Instrument Box	480	380	140	7
Vacuum Pump Assembly	310	150	170	10
Probe Set	810	155	210	14

*Specification subject to change without notice*

WARRANTY: ALL ENVIROTECH PRODUCTS CARRY A ONE YEAR WARRANTY FOR TROUBLE-FREE OPERATION AGAINST ANY MANUFACTURING DEFECT.

## **FOR PRICES, PLEASE CONTACT:-**

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