

rates, times, and temperatures. Investigate prior to test.

Process Data: It is absolutely imperative for the facility to record the pertinent data during the test so that the measured emissions can be correlated to a production rate and compared to the permit limit. The test will be unacceptable without production data.

Method 1: If stack is between 4" - 12" then Method 1a must be employed. If duct is <4" then alternative methods must be used (contact SSCU with any test questions)

Stack Diameter? _____ Measured on site?

Port distance from upstream disturbance (A) _____ Upstream Diameters (A) _____

Port distance from downstream disturbance (B) _____ Downstream Diameters (B) _____

of Sampling Points? _____ (Draw a line vertically from the "Distance A" axis down to the step chart, and from the "Distance B" axis up to the step chart. The maximum # of points marked on the chart yields the minimum # of points to be sampled.)

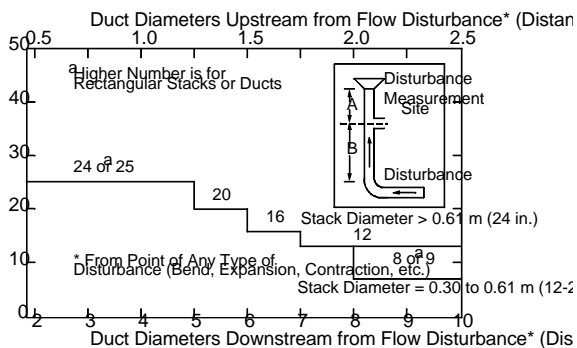


Figure 1-1. Minimum number of traverse points for particulate traverses.

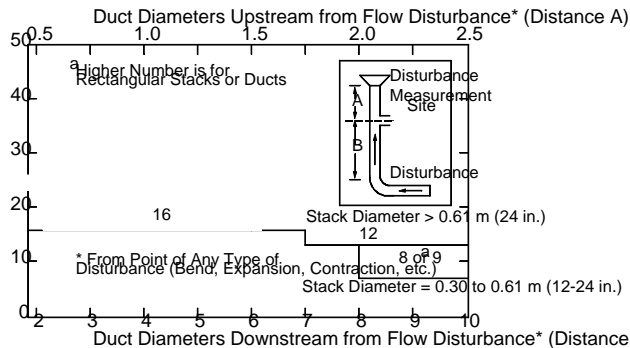


Figure 1-2. Minimum number of traverse points for velocity (nonparticulate) traverses.

Points correctly marked on the pitot tube? _____ Port length accounted for in calculations? _____

Remarks: _____

Barometric Pressure: Barometric pressure must be adjusted minus 0.1" per 100ft elevation increase or vice versa for elevation decrease. (Elevation at which barometric pressure is measured to the elevation at the test platform.)

Orsat, Analyzer or Fyrites: The measurement of O₂ & CO₂ is usually performed with an Orsat. However, it is acceptable to use an analyzer if it has been calibrated per Method 3a. Fyrites are acceptable for CO₂ measurement. An O₂ fyrite can be grudgingly accepted when the results are used to calculate molecular weight only. In no case shall an O₂ fyrite be accepted if the emission standard is in terms of lb/mmBtu or corrected to a percentage of oxygen.

Orsat Triplicate: For each test run there must be three individual analysis of the O₂ & CO₂ concentrations in the flue gas. The analysis must be repeated until the following analysis criteria is met:

CO₂ - any three analyses differ by

- a) <0.3% when CO₂ > 4.0%
- b) <0.2% when CO₂ < 4.0%

O₂ - any three analysis differ by

- a) <0.3% when O₂ > 15.0%
- b) <0.2% when O₂ < 15.0%

Calculate F_o:

$$F_o = \frac{(\%C - \%O_2)}{\%C \cdot \phi}$$

Coal:	Anthracite and lignite	1.016 - 1.130	Gas:	Natural	1.600 - 1.836
	Bituminous	1.083 - 1.230		Propane	1.434 - 1.586
Oil:	Distillate	1.260 - 1.413		Butane	1.405 - 1.553
	Residual	1.210 - 1.370	Wood:		1.000 - 1.120

Exit Temperature: The temperature of the dry gas leaving the impingers/condenser must be below 68F. When the ambient temperature is above 68F it may take approximately 5 minutes for the thermal effects of the ice bath to cool the exit thermometer below 68F.

Leak Check: If the results of the leak check indicate a leak (>0.02cfm), record the leakage rate. Suggest repeating the run, but it is the discretion of the test team and facility to accept the leak. However, the sample volume will be adversely adjusted due to the leakage rate.

Isokinetics: If the test team indicates that the isokinetic rate of a run is over 110% or under 90%, the run should be voided and repeated.

Particulate Sample Clean-up: If any particulate sample is lost during clean-up, the run should be voided and repeated.

Remarks: _____
