ORIFICE TRANSFER STANDARD CALIBRATION

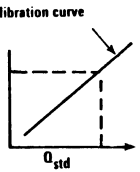
1. Required determinations:
   V_m, t, T_1, P_1 and ΔH
2. Calculate flow of standard volume

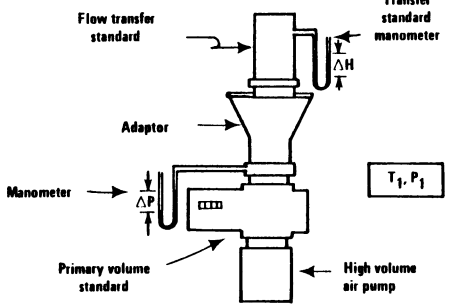
$$V_{std} = V_m\left(\frac{P_1 - \Delta P}{P_{std}}\right)\left(\frac{T_{std}}{T_1}\right) = V_m\left(\frac{P_1 - \Delta P}{P_{std}}\right)\left(\frac{298}{T_1}\right)$$

$$Q_{std} = \frac{V_{std}}{t}$$

P_{std} = 760 mm Hg or 101 k Pa

$$\sqrt{\Delta H\left(\frac{P_1}{P_{std}}\right)\left(\frac{298}{T_1}\right)}$$

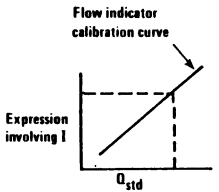


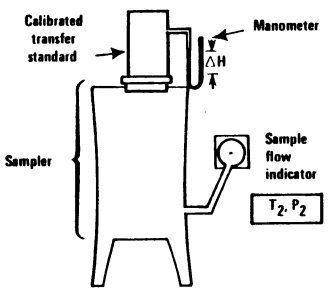


3a

SAMPLER CALIBRATION

1. Required determinations (see Table 1 in step 9.3.9 for the appropriate expression involving I):
   ΔH, T_2, P_2, and I



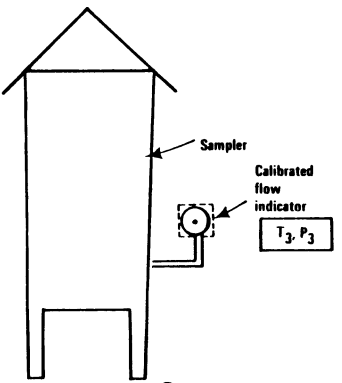


3b

FLOW MEASUREMENT DURING SAMPLING

1. Required determinations:
   T_3, P_3, and I [for specific P and T corrections];

   I [if average barometric pressure and seasonal average temperature have been incorporated at previous calibration.]



3c

Figure 3. Illustration of the 3 steps in the flow measurement process.