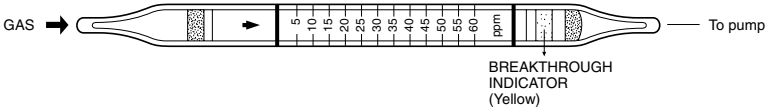
Tube No.
500

TWA-CARBON MONOXIDE



1. PERFORMANCE

1) Measuring range : 5-400 ppm
(0.5 hr.) (4 hrs.) (8 hrs.)
50-400 ppm 5-100 ppm 5-60 ppm
2) Sampling time : 8 hrs. (6 mℓ/min.)
3) Shelf life : 3 years
4) Operating temperature : 0 ~ 40℃
5) Reading : Direct reading from the scale calibrated by 8 hrs. Sampling
6) Colour change : White → Brown ringed

2. RELATIVE STANDARD DEVIATION

RSD-low : 15 % RSD-mid. : 15 % RSD-high : 15 %

3. CHEMICAL REACTION

Iodine pent-oxide is reduced.

$$CO + I_2O_5 + H_2SO_4 \rightarrow I_2$$

4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

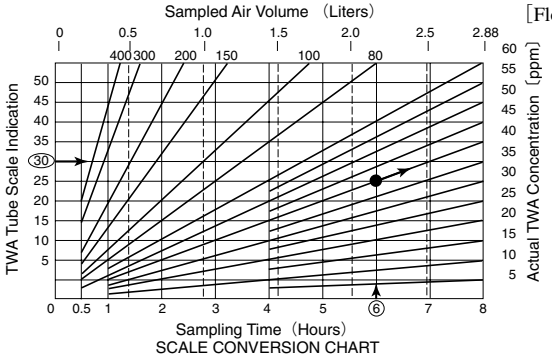
Substance	Interference	ppm	Coexistence
Butane		50	Higher readings are given.
Hexane		50	〃

(NOTE)

1) Model PM-2 personal sampler (option) ia available for this tube.
2) Flow Rate and Sampling Time
(1) In case of 8 hours, sampling with 6 mℓ/min., the TWA concentration can read directly by the scale printed on the tube at the top of Brown ring.
(2) If the sampling duration is less than 8 hours, the actual TWA concentration can be obtained graphically from the chart provided below.
(3) If the flow rate is not 6 mℓ/min, divide the scale reading by the ratio of sampled air volume to 2880mℓ.

$$\text{Actual TWA concentration (ppm)} = I \times \frac{2880}{V}$$

I = Scale reading
V = Sampled air volume in mℓ
[Flow rate (mℓ/min.) × Sampling duration (min.)]



SCALE CONVERSION CHART

Example :
(a) If sampling time is 6 hours and scale reading is 30, the actual TWA concentration is 40 ppm.
(b) If sampled air volume is 1.5ℓ and scale reading is 10, the actual TWA concentrationis 19.2 ppm.