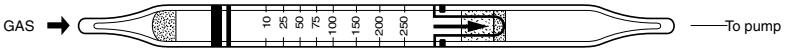
Tube No.
106S

CARBON MONOXIDE



1. PERFORMANCE

1) Measuring range : 10-250 ppm
   Number of pump strokes 3 (300mℓ)
2) Sampling time : 9 minutes/3 pump strokes
3) Detectable limit : 1 ppm (300mℓ)
4) Shelf life : 3 years
5) Operating temperature : 0 ~ 40℃
6) Temperature compensation : Necessary (See "TEMPERATURE CORRECTION TABLE")
7) Reading : Direct reading from the scale calibrated by 3 pump strokes
8) Colour change : Yellow → Dark brown

2. RELATIVE STANDARD DEVIATION

RSD-low : 10 % RSD-mid. : 5 % RSD-high : 5 %

3. CHEMICAL REACTION

Potassium disulphate palladate (II) is reduced and Palladium is liberated.

$CO + K_2Pd(SO_3)_2 \rightarrow K_2(SO_3)_2PdCO$

$K_2(SO_3)_2PdCO \rightarrow CO_2 + SO_2 + Pd + K_2SO_3$

4. CALIBRATION OF THE TUBE

STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	ppm	Coexistence
Acetylene	Dark brown stain is produced.	5	Higher readings are given.
Hydrogen sulphide	Dark red stain is produced.	20	〃
Sulphur dioxide		COconc.× 1/5	〃
Nitrogen dioxide		COconc.× 1/10	〃

TEMPERATURE CORRECTION TABLE

Scale Readings (ppm)	True Concentration (ppm)				
	0℃ (32˚F)	10℃ (50˚F)	20℃ (68˚F)	30℃ (86˚F)	40℃ (104˚F)
250	210	230	250	275	300
200	170	185	200	220	240
150	130	140	150	165	180
100	80	90	100	110	120
75	65	70	75	80	85
50	40	45	50	55	60
25	20	25	25	25	30