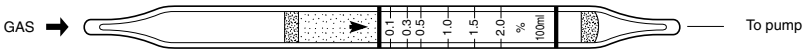
Tube No.
106SH

CARBON MONOXIDE



1. PERFORMANCE

1) Measuring range : 0.1-2.0 %
   Number of pump strokes 1(100mℓ)
2) Sampling time : 3 minutes/1 pump stroke
3) Detectable limit : 0.02 %
4) Shelf life : 1 year
5) Operating temperature : 0 ~ 40 ℃
6) Temperature compensation : Necessary(See "TEMPERATURE CORRECTION TABLE")
7) Reading : Direct reading from the scale calibrated by 1 pump stroke
8) Colour change : White → Brown

2. RELATIVE STANDARD DEVIATION

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

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	ppm	Interference	ppm	Coexistence
Acetylene FIG.1	0.02	Brown stain is produced.	0.3	Pretreat reagent is discoloured to Black and higher readings are given.
Ethylene FIG.2	0.04	〃	0.3	Pretreat reagent is faded and higher readings are given.
Propane	5	Speckled stain is produced.	0.15	Speckled stain is produced and the top of discoloured layer becomes unclear.Higher reardings are given.
Isobutane		〃	0.2	〃
Hexane		〃	0.1	〃

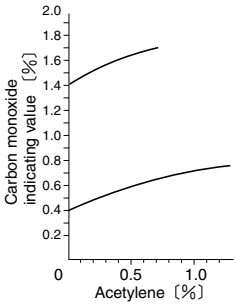


FIG.1 Influence of Acetylene

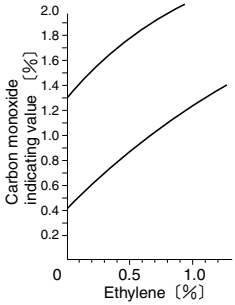


FIG.2 Influence of Ethylene

TEMPERATURE CORRECTION TABLE

Scale Readings (%)	True Concentration (%)				
	0 ℃ (32 ° F)	10 ℃ (50 ° F)	20 ℃ (68 ° F)	30 ℃ (86 ° F)	40 ℃ (104 ° F)
2.0	1.24	1.52	2.00	—	—
1.8	1.14	1.38	1.80	—	—
1.6	1.04	1.25	1.60	—	—
1.4	0.93	1.11	1.40	1.90	—
1.2	0.82	0.97	1.20	1.62	—
1.0	0.71	0.82	1.00	1.12	1.75
0.8	0.60	0.68	0.80	1.02	1.38
0.6	0.47	0.53	0.60	0.73	0.98
0.4	0.33	0.37	0.40	0.48	0.58
0.2	0.17	0.18	0.20	0.22	0.25
0.1	0.08	0.09	0.10	0.11	0.12