# **CARBON MONOXIDE**



# 1. PERFORMANCE

1) Measuring range : 0.2-20 % 0.1-10% 1/2(50ml) Number of pump strokes 1(100ml) 2) Sampling time 2 minutes/1 pump stroke

3) Detectable limit 0.01 % (100ml) 4) Shelf life 3 years

0~40℃ 5) Operating temperature

6) Temperature compensation Necessary  $(0 \sim 20 \,^{\circ}\text{C})$  (See "TEMPERATURE CORRECTION TABLE")

7) Reading Direct reading from the scale calibrated by 1 pump stroke

8) Colour change White → Dark brown

#### 2. RELATIVE STANDARD DEVIATON

RSD-low: 15% RSD-mid.: 15% RSD-high: 10%

# 3. CHEMICAL REACTION

lodine pent-oxide is reduced  $CO + I_2O_5 + H_2SO_4 \rightarrow I_2$ 

### 4. CALIBRATION OF THE TUBE

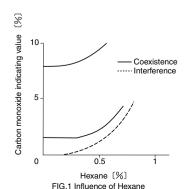
STANDARD GAS CYLINDER METHOD

# 5. INTERFERENCE AND CROSS SENSITIVITY

Substance	Interference	%	Coexistence
Acetylene	Similar stain is produced.	2	Higher reading are given.
Ethylene	"	2	"
Isobutane	Speckled stain is produced.	0.5	"
Propane	"		
Hexane FIG.1	Similar stain is produced.	0.4	The top of discoloured layer becomes unclear and higher readings are given.

## (NOTE)

In case of 1/2 pump strokes, following formula is available for the actual concentration. Actual concentration =  $2 \times$  Temperature corrected value



0.6

0°C (32°F)

4.0

1.0

Scale Readings

10.0

8.0

1.0

#### TEMPERATURE CORRECTION TABLE

(50°F)

0.7

Frue Concentration (%)

10°C (68°F)

0.8

10.0

4.0