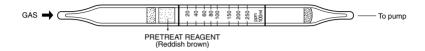
NITROGEN OXIDES



1. PERFORMANCE

1) Measuring range : 20-250 ppm Number of pump strokes $1(100m\ell)$

: 1 minute/1 pump stroke 2) Sampling time

3) Detectable limit 2 ppm 4) Shelf life 1 year 5 ~ 45 ℃ 5) Operating temperature

6) Reading

: Direct reading from the scale calibrated by 1 pump stroke 7) Colour change : White → Yellow

2. RELATIVE STANDARD DEVIATION

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

3. CHEMICAL REACTION

NO; By reacting with an Oxidizer, NO2 is produced.

 $NO + CrO_3 + H_2SO_4 \rightarrow NO_2$

 $NO_2 + (C_6H_5)_2NH \rightarrow (C_6H_5)_2NNO_2$

NO₂; By reacting with Diphenylamine, N-Nitroso-diphylamine is produced.

 $NO_2 + (C_6H_5)_2NH \rightarrow (C_6H_5)_2NNO_2$

4. CALIBRATION OF THE TUBE

NO ; STANDARD GAS CYLINDER METHOD

NO2; PERMEATION TUBE METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

Substance	ppm	Interference	ppm	Coexistence
Hydrogen chloride	Over 600	Dark blue stain is produced.		
	Over 1,000	Brownish red/Yellow/Dark blue stain is produced.		Lower readings are given.
Sulphur dioxide			100	"