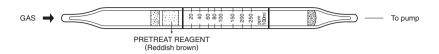
NITROGEN OXIDES



1. PERFORMANCE

1) Measuring range 20-250 ppmNumber of pump strokes $1 (100 \text{m} \ell)$

2) Sampling time : 1 minute/1 pump stroke

3) Detectable limit \therefore 2 ppm 4) Shelf life \therefore 1 year 5) Operating temperature \therefore 5 \sim 45 $^{\circ}$ C

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.

 $NO + CrO_3 + H_2SO_4 \rightarrow NO_2$

 $NO_2 + (C_6H_5)_2NH \rightarrow (C_6H_5)_2NNO$

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

 $NO_2 + (C_6H_5)_2NH \rightarrow (C_6H_5)_2NNO$

4. CALIBRATION OF THE TUBE

NO ; STANDARD GAS CYLINDER METHOD

5. INTERFERENCE AND CROSS SENSITIVITY

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