

Application  
Data Sheet

No.53

**System Gas Chromatograph**

**Permanent Gas with CO/CO<sub>2</sub> Gas Analysis System  
Nexis GC-2030PCC1  
GC-2014PCC1**

The system enables a quantitative and qualitative analysis of O<sub>2</sub>, N<sub>2</sub>, CO and CO<sub>2</sub>, in municipal gas. A fixed volume of gas sample is introduced into the chromatographic system by sample loop injection and individual components of the sample are identified by the thermal conductivity detector (TCD). Using MS-13X, O<sub>2</sub>, N<sub>2</sub>, CH<sub>4</sub>, CO are separated meanwhile CO<sub>2</sub> is separated by P-Q column and detected by TCD. Two automated valves are configured in the system. Lab-Solution chromatography software handles all aspects of GC control, automation, and data handling.

**Analyzer Information**

**System Configuration:**

Two 10-port valves / four packed columns with one TCD detector

**Sample Information:**

O<sub>2</sub>, N<sub>2</sub>, CO, CO<sub>2</sub>, CH<sub>4</sub>

**Concentration Range:**

No.	Name of Compound	Concentration Range		Detector
		Low Conc.	High Conc.	
1	O <sub>2</sub>	0.01%	50%	TCD-1
2	N <sub>2</sub>	0.01%	50%	TCD-1
3	CO	0.01%	10%	TCD-1
4	CH <sub>4</sub>	0.01%	90%	TCD-1
5	CO <sub>2</sub>	0.01%	10%	TCD-1

Detection limits may vary depending on the sample. Please contact us for more consultation.

**System Features**

- Versatile software easy GC system operation
- One TCD channel
- Good repeatability

**Typical Chromatograms**

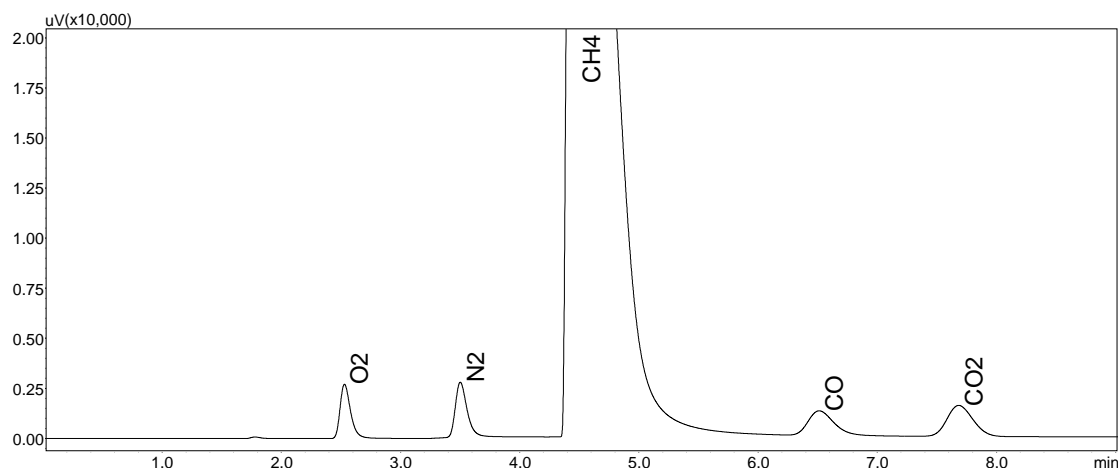


Fig. Chromatogram of TCD

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