

Application Data Sheet

No.54

System Gas Chromatograph

Permanent Gas with CO/CO₂ Gas Analysis System Nexis GC-2030PCC2 GC-2014PCC2

The system enables a quantitative and qualitative analysis of O2, N2, CO and CO2, in municipal gas. A fixed volume of gas sample is introduced into the chromatographic system by loop sample injection and individual components of the sample are identified by the thermal conductivity detector (TCD). Using a backflush column, H2O and C3+ are vented out of the system. The valve timing allows the O2, N2, CH4 and CO as a mixed peak to elute to an MS-13X for separation while the CO2 is separated by the P-Q and detected by TCD-2014. Lab Solution chromatography workstation system handles all aspects of GC control, automation, and data handling.

| System Configuration: | Concentration Range: | | | | |
|---|----------------------|------------------|---------------------|------------|----------|
| One 10-port valve and one 6-port valve / four | | Name of Compound | Concentration Range | | Detector |
| • | | - | Low Conc. | High Conc. | |
| packed columns with one TCD detector | 1 | O2 | 0.01% | 50% | TCD-1 |
| Sample Information: | 2 | N2 | 0.01% | 50% | TCD-1 |
| • | 3 | CO | 0.01% | 10% | TCD-1 |
| O_2, N_2, CO, CO_2, CH_4 | 4 | CH4 | 0.01% | 90% | TCD-1 |
| $0_2, 1_2, 00, 00_2, 01_4$ | 5 | CO2 | 0.01% | 10% | TCD-1 |

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

System Features

- Versatile software for operate the system easily
- One TCD channel
- Good repeatability

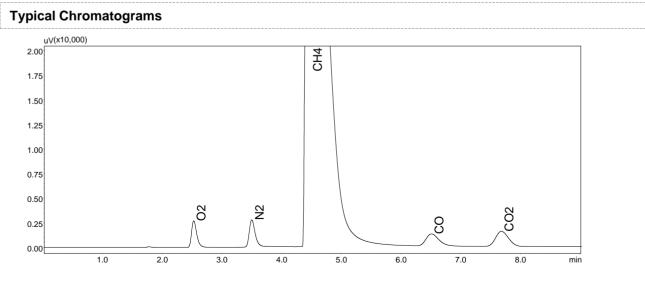


Fig. Chromatogram of TCD

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