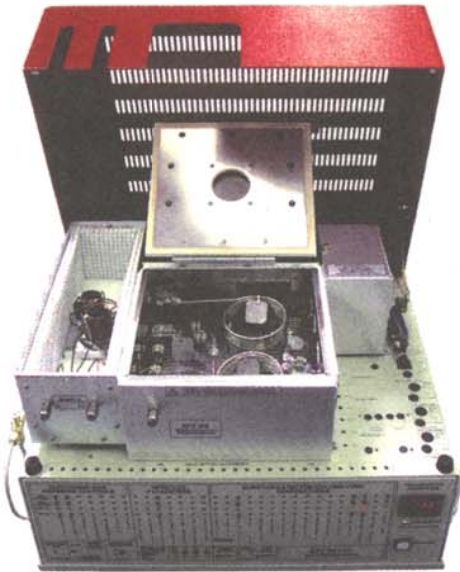


Multiple Gas Analyzer #2 GC System

- Separates a wide variety of peaks in a single injection, including water
- Very tolerant of user adjustments and timing variations
- Simpler than other multiple gas capable systems

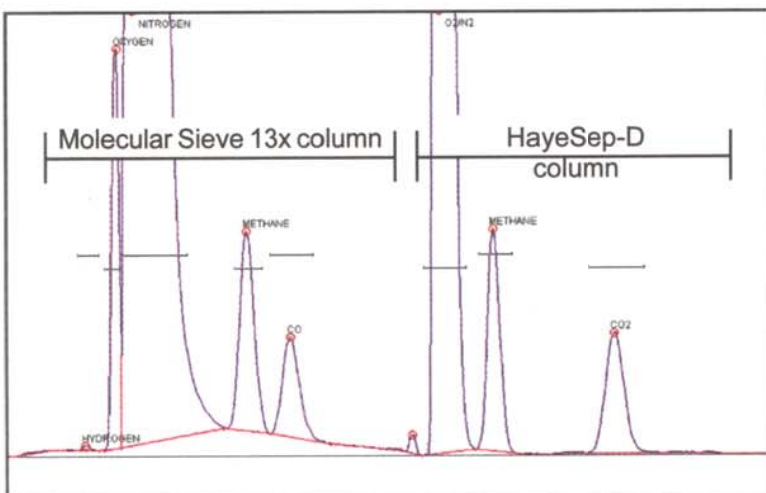


The basic model includes:

- TCD Detector
- Methanizer, FID, and HID options
- 10-port Gas Sampling Valve and Dual Loops
- Two Columns - MoleSieve 13X & HayeSep-D
- 1, 4, or 6 channel PeakSimple Data System
- ...on the compact 8610C chassis

The Multiple Gas Analyzer #2 GC (MG#2) system is preplumbed and ready to resolve H₂, O₂, N₂, methane, CO, ethane, CO₂, ethylene, acetylene, NO_x, water, alcohols, propane, butanes, pentanes and C₆+. The MG#2 is similar to the MG#1, except that the MG#2 can measure water and alcohol in addition to the multiple gas compounds.

To separate such a wide variety of peaks without coelution, the MG#2 turns on the carrier gas flow to each column at different times during the run. This allows the Molecular Sieve column to complete the separation of H₂, O₂, N₂, CH₄ and CO, at which point the MoleSieve carrier flow is turned off and the HayeSep-D carrier flow is turned on. The HayeSep-D column then separates all compounds in the C₁ through C₆ range. A capillary column in parallel with the HayeSep-D can also be useful in separating the hydrocarbons out through C₂₀. Detectors can be TCD, HID, FID or any combination, depending on the exact needs of the analysis.



This chromatogram shows the separation of a 1% Gas Standard sample on a MG#2 GC equipped with a TCD detector. The first 5 peaks came off the MoleSieve column, and the following 3 peaks came off the HayeSep-D column. Note that the methane elutes twice, once from each column.