

GS-Tek

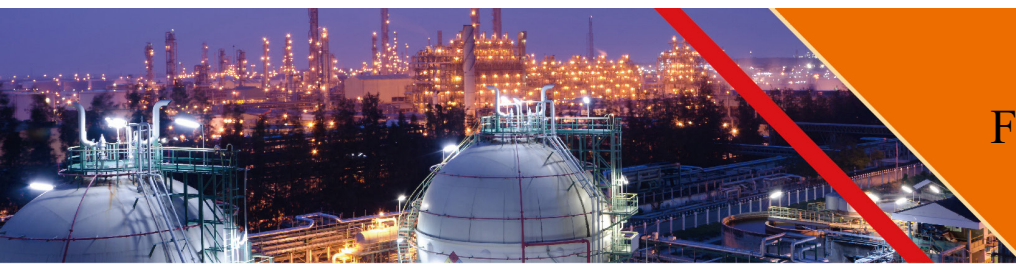
GS-Tek ANALYZER

Accuracy/High efficiency/Fast speed/Reliability



Offer you an accurate and reliable analytical solution
Diversified combinations and affordable system configuration
Timely after-sales support service, your best partner

The gas produced by the refinery is mainly composed of hydrocarbons, permanent gases, etc. Analysis of such gases is a necessary method for quality control of chemical products and monitoring industry operations. In the development and catalysis of petrochemical products, the target compounds usually contain various high-boiling compounds and isomers. The system can provide accurate composition analysis of these refinery gases. Gs-tek offers different configurations for fast refinery gas analyzer and can extend the analysis to C8+(including aromatics) analysis and H₂S analysis.



Fast Refinery Gas Analyzer

Features of Analyzer:

1. Using multi-zone chromatographic column temperature control
2. With our special GC column for refinery gas analysis, the baseline separation for C₄ compounds could be achieved.
3. Fast Refinery Gas Analyzer 1, target compound:
H₂, He, O₂, N₂, CO, CO₂, C₁-C₅, C₆⁺, sulfur not included.
4. Fast Refinery Gas Analyzer 2, target compound:
H₂, He, O₂, N₂, CO, CO₂, H₂S, C₁-C₇, benzene, C₈⁺, sulfur included.



Fast Refinery Gas Analyzer 1 (C6+, sulfur not included)

Instrument configurations:

Four valves / seven columns (packed columns and capillary columns) / dual TCD + FID / multi-zone temperature control

Analysis time <15min

Compliance with Test Method Standard:

ASTM D1945, D1946, D3588, GPA-2261

note: The system can be equipped to the SHIMADZU and AGILENT host systems.

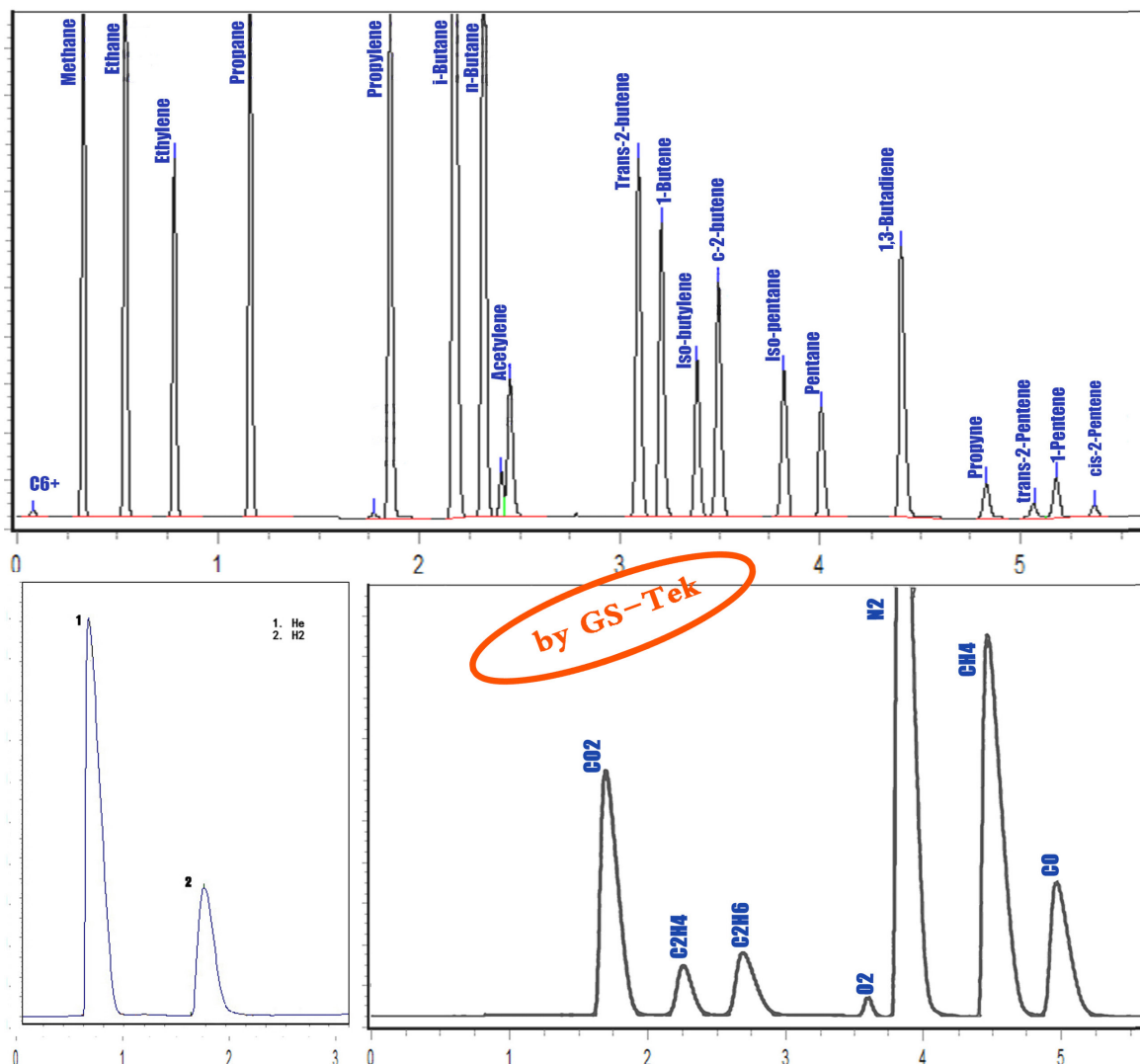
Sample: refinery gas or similar component sample

Target compounds: H₂, He, O₂, N₂, CO, CO₂, C₁-C₅, C₆₊ (back flushing peaks)

Detection sensitivity:

Permanent gas > 0.01% Hydrocarbons > 1.0 ppm

Typical chromatogram:



Typical chromatogram 1, 2, 3



Fast Refinery Gas Analyzer 2 (C8+, sulfur included)

Instrument configurations:

Four valves / seven columns (packed columns and capillary columns) / dual TCD + FID / multi-zone temperature control/sulfur inert path

Analysis time <20min

Compliance with Test Method Standard:

ASTM D7833, D1946, UOP 539

Note: The system can be equipped to the SHIMADZU and AGILENT host systems.

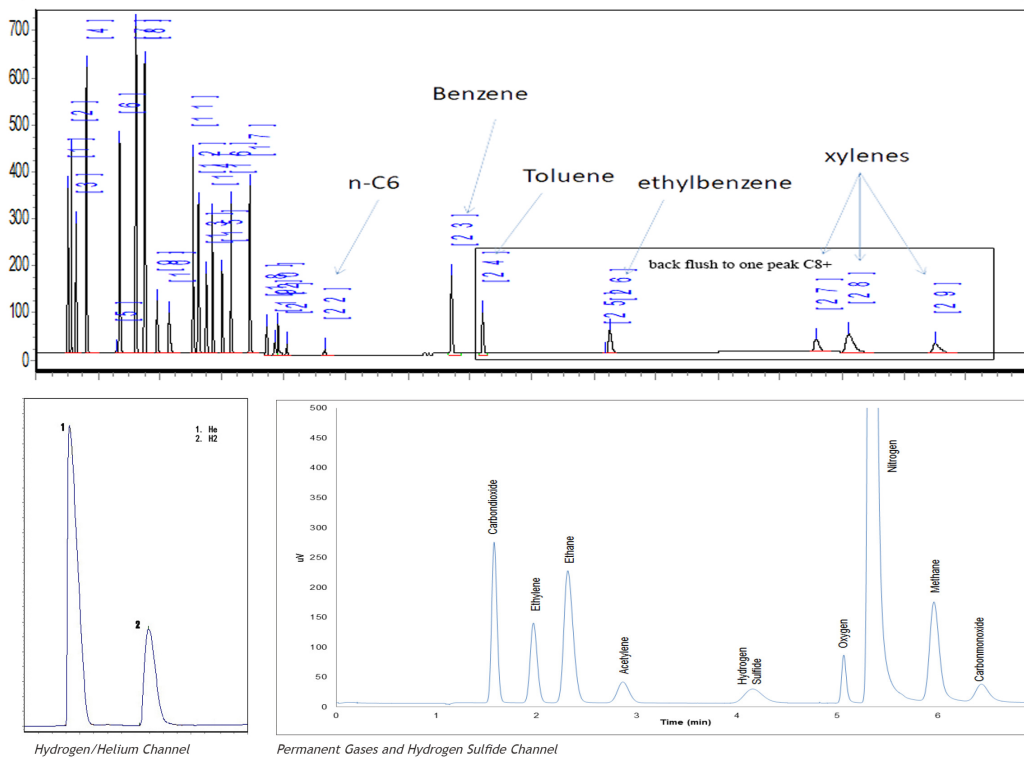
Sample: refinery gas or similar component sample

Target compounds: H₂, He, O₂, N₂, CO, CO₂, H₂S, C₁-C₇, benzene, C₈+ (back flushing peaks)

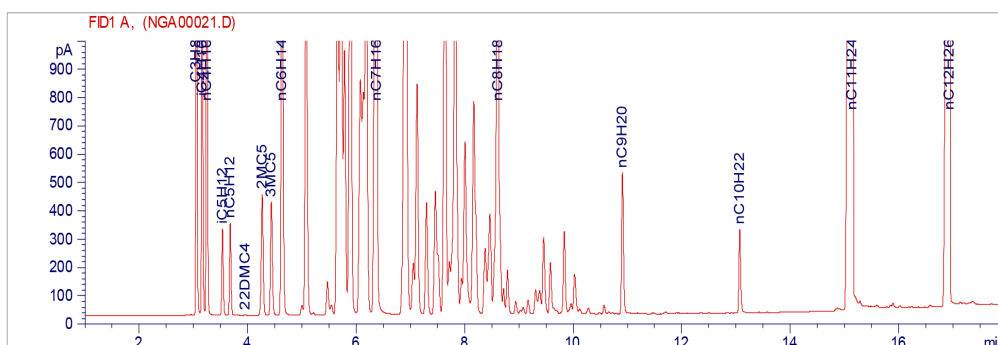
Detection sensitivity:

Permanent gas > 0.01% Hydrocarbons > 1.0 ppm

Typical chromatogram:

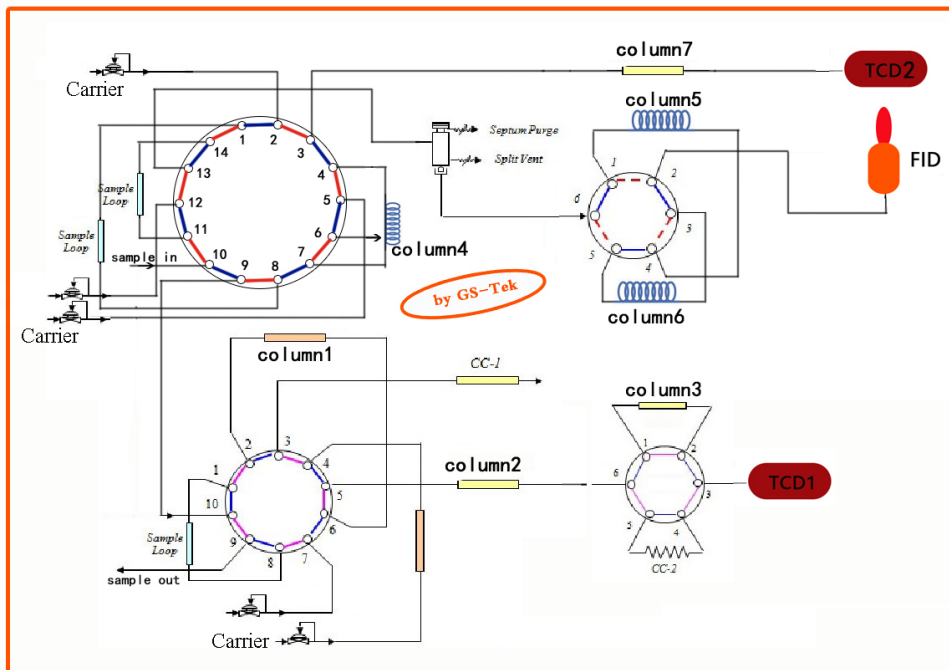


Typical chromatogram 1, 2, 3



C1~C12 extended analysis

Typical flow diagram:



About US:

GS-Tek: the legal name of the entity is General Separation Technologies, Incorporated, GS-Tek has more than 40 year practical experience and in-depth expertise in gas chromatography analyses in many areas. GS-Tek manufactures wide ranges of quality chromatography columns with similar performances to other brands. Additionally, GS-Tek provides solution based turnkey analyzers for customers and collaborators. GS-Tek is doing international marketing and sales. For details, visit our website: www.gs-tek.com

Contact:

GS-Tek

625 Dawson Drive, Ste A

Newark, DE 19713 USA

Phone: +1-302-533-5646

Email: info@gs-tek.com

Website: www.gs-tek.com