EASE OF USE

- Easy to use on-screen User Interface
- Independent of CDS & instrument
- Automated vacuum leak check
- Use of synthetic air improves stability and reduces oxygen related risks!
- Universal mounting of instrument on any leading GC brand(s)

BEST IN MARKET PERFORMANCE FOR HIGH ROI

- Best in market sensitivity
- Pressure point in base ensures baseline stability
- Enhanced furnace temperature control improves temperature accuracy and reduces downtime
- New patented probe design improves catalyst capacity and stability of baseline

FULL COMPLIANCY

- Complies to all SCD standardized methods:
  - ASTM D5504
  - ASTM D5623
  - ASTM D7011
  - ASTM D7807

ANALYSIS & PERFORMANCE

With Sulfur Species known for their detrimental effects on catalysts in refining processes even at the lowest of levels, the need for a constant monitoring of Sulfur species throughout the complete process is quite evident. This task mandates solutions that are not only fast and sensitive, but above all very robust in time, so they can just do what they were designed for: produce the correct value.

SeNse Chemiluminescence detector for gas chromatography provides all these arguments. With a Sensitivity of 0.3 pg S/sec, true equimolarity, 4 decades of linearity, 10e7 in selectivity, combined with an unrivaled stability over time, SeNse clearly is the market leading technology.

SeNse new ceramics, its Constant Detector Base pressure system, redesigned electronics and furnace the system has already proven to be extremely stable over time.
Lastly, SeNse uses Air instead of Oxygen! Air is clearly more economical, but also more readily available, and definitely safer in the lab.

APPLICATION: ASTM D5504

Key Applications for Sulphur include D5504 (Sulphur components in Natural gas and Gaseous fuels and D5623 (suphur components in gasoline and petroleum liquids with final boiling point upto 230°C such as (aromatic) solvents, and gasoline blend streams.
SeNse SCD based GC Analyzers focus on compliance and performance, so lab productivity can be maximized right from commissioning and maintenance kept to a minimum. During our In Factory Testing we test and document the analytical performance of these solutions to method, to allow fast transitioning.

D5504 - Sulphur species in Natural gas and Gaseous Fuels (Calibration Mixture Chromatogram, Linearity H2S, and chromatogram of TetraHydroThiophene (THT) in Natural gas.

Reference	#	Components	Concen-tration	Unit	CAS no	Accuracy [%]	Blend tolerance [%]	Qty	Cylinder Size [litre]	Fill Pressure	Min. storage temperature	Valve Connec-tion
11137MIX-17	1	Helium	Balance	mol %	7440-59-7			1	20 Alu	150 bar Gas		Din-5
	2	Butyl mercaptan	1	mol ppm	109-79-5	10	1-2,5 ppm					
	3	Carbon disulfide	1	mol ppm	75-15-0	10	1-2,5 ppm					
	4	Carbonyl sulfide	1	mol ppm	463-58-1	10	1-2,5 ppm					
	5	Diethyl sulfide	1	mol ppm	352-93-2	10	1-2,5 ppm					
	6	Dimethyl sulfide	1	mol ppm	75-18-3	10	1-2,5 ppm					
	7	Ethyl mercaptan	1	mol ppm	75-08-1	10	1-2,5 ppm					
	8	Hydrogen sulfide	1	mol ppm	7783-06-4	10	1-2,5 ppm					
	9	Isobutyl mercaptan	1	mol ppm	513-44-0	10	1-2,5 ppm					
	10	Isopropyl mercaptan	1	mol ppm	75-33-2	10	1-2,5 ppm					
	11	Ethylmethyl sulfide	1	mol ppm	624-89-5	10	1-2,5 ppm					
	12	Methyl mercaptan	1	mol ppm	74-93-1	10	1-2,5 ppm					
	13	Propyl mercaptan	1	mol ppm	107-03-9	10	1-2,5 ppm					
	14	sec-Butyl mercaptan	1	mol ppm	513-53-1	10	1-2,5 ppm					
	15	tert-Butyl mercaptan	1	mol ppm	75-66-1	10	1-2,5 ppm					
	16	Thiophene	1	mol ppm	110-02-1	10	1-2,5 ppm					
	17	Tetrahydrothiophene	1	mol ppm	110-01-0	10	1-2,5 ppm					

Please note that the mixture is offered in mol concentration, as we are unable to offer in vol ppm concentrations.

APPLICATION: ASTM D5623

Chromatographic conditions are optimized to obtain adequate separation of the common Sulfur compounds. Analytical Controls delivers two dedicated liquid samples to validate the peak identification according to ASTM D5623.

D5623 - Sulphur Species in Gasoline and Petroleum Liquids with Boiling point up to 230°C. (Peak ID mixes 1 and 2)

Comp. ID #	Peak ID mix #	Components
1	1	Ethanethiol
2	2	Dimethylsulfide
3	1	Carbon Disulfide
4	1	2-Propanethiol
5	1	2-methyl-2-propanethiol
6	1	1-Propanethiol
7	2	Ethylmethylsulfide
8	1	2-Butanethiol
9	2	Thiophene
10	1	2-Methyl-1-propanethiol
11	2	Diethylsulfide
12	1	1-Butanethiol
13	2	Dimethyldisulfide
14	2	2-Methyl Thiophene
15	2	3-Methyl Thiophene
16	2	Diethyldisulfide
17	2	Benzothiophene
18	2	3-Methylbenzothiophene

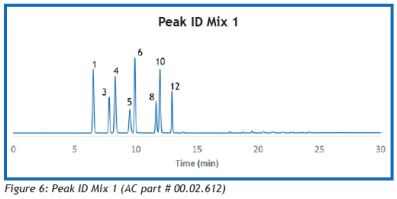

Figure 6: Peak ID Mix 1 (AC part # 00.02.612)

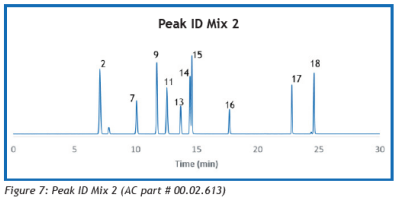

Figure 7: Peak ID Mix 2 (AC part # 00.02.613)