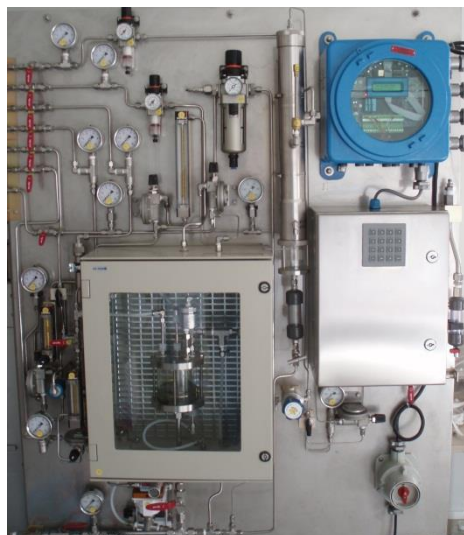




NovaSulf™ HL500 H₂S in HC Liquids Analyser

- **Measurement specific to H₂S**
No interference from other components
- **Wide range capability**
Fully configurable between 0-2ppm to 0-1%
- **Single point calibration**
Low operational costs
- **Touch screen**
Eliminates the need to open the enclosure
- **Many application**
Measures H₂S in most liquid hydrocarbons, including crude oil.
- **Optional alarm outputs**
Monitors low/high sample flow or paper break/motor failure
- **Up to 4 detection modules per controller**
Minimises capital investment



APPLICATIONS:

With its wide-ranging ability to measure H₂S in liquids from % levels down to ppm levels, the HL500 range of H₂S process analysers can be utilised in many process industries, including the measurement of dissolved H₂S in crude oil.

PRINCIPLE OF OPERATION


The Analyser consists of a stripping system coupled with a NovaSulf™ H₂S Analyser. The liquid sample enters the top of an insulated, heated sample handling cabinet via a flow controller to maintain a constant sample flow. Nitrogen flows down a vertical tube to a sintered plug located within the liquid and then flows up through the liquid. As the nitrogen mixes with the liquid hydrocarbons it strips out the dissolved H₂S in the liquid.

The degassed liquid falls into a reservoir and then to the drain. At the same time, the nitrogen containing H₂S in proportion to that in the original liquid is piped directly to the NovaSulf™ HG 500 series H₂S Analyser to be measured.





SPECIFICATIONS ANALYSER:

Measurement principle	Dissolved H ₂ S in liquids is stripped out with a nitrogen carrier gas and measured made using colorimetric techniques
Software	C++ Windows XPe based
Electronics	PC104, AMD Geode LX800 processor 500MHz performance, 256Mb SDRAM, soldered on RAM for high reliability 512Mb industrial bootable compact flash card for the operating system, application, customised parameters and calibration curves storage
Keypad	Accessible through flameproof box using <i>Touchsense</i> [™] technology
Measurement range	Between 0-2ppm H ₂ S to 0-1% H ₂ S in liquid
Repeatability	± 3% full scale
Output	1 x 4-20mA per module (Modbus optional – RS485)
Alarms	1 x measurement alarm, 1 x instrument failure alarm.
Area classification	ATEX approved,  Ex d [ia] IIC T4
Ambient temperature limits	-2°C to +40°C, with ambient swings of 5°C maximum
Tape life	Up to 60 days depending on application.
Weather protection	IP66
Response time	Depends on application between 60 secs to 300 secs

UTILITIES

Power	85 / 264 VAC 50 / 60 Hz, 40VA
Process sample	Max pressure 1.5 – 4.0 bar, flow rate 0.15 to 0.3 l/min , 40°C max temp Free from solids, viscosity <80cP @ 100°C.
Nitrogen	Pressure 4-10 bar, flow 0.5 to 1 l/min

INSTALLATION

Process connections	¼" NPT vent (for sample and atmos. vent) ½" NPT female to atmos. drain
Analyser Vent	To atmospheric, no back pressure or vacuum allowed
Weight	50 Kg approx
Dimensions	800(w), 1700(h), 350(d) mm

ORDERING INFORMATION:

Application
Range
Process conditions
Wall mounting or free standing frame
Power supply

REPRESENTED BY: