NEXIS VP TN-TS ANALYZER
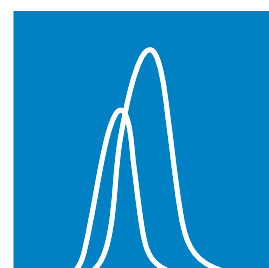
SUPERIOR TOTAL NITROGEN | SULFUR ANALYSIS WITH ACCURACY, SPEED AND EASE-OF-USE

- **Powerful TN/TS analysis within 4 minutes**

- **DSP Technology™ to achieve ultra low detection limits**

- **AS120 Liquids autosampler with ONE-Cal™ Technology**

- **Un-biased Sulfur data with TRINITY™ in TS an TN/TS mode operation**

MOST POWERFUL PERFORMANCE WITH UNSURPASSED DETECTION LEVELS

The TSHR Total Nitrogen/Sulfur Analyzer, model NEXIS VP, is the most sensitive and reliable vertical combustion analyzer available, to detect precisely, from ultra-trace to high ppm level, simultaneous total nitrogen/sulfur concentrations in a wide range of liquids and LPG/Gas samples. The NEXIS VP model TN/TS analyzer configuration detects these substances through a uniquely high effective NEX-Z™ combustion tube design that includes high quality Ultra Violet Fluorescence (UVF) and Chemiluminescence (CLD) detectors.

Customers in refineries, petrochemical plants and commercial testing labs which require high productivity and precision at very low concentration levels will benefit from the NEXIS VP model combustion analyzer. The ease-of-use operation combined with reliability and variety of liquid sample handling, the NEXIS VP delivers fast, precise and accurate sulfur/nitrogen analysis data. The NEX-Z™ Combustion tube in combination with the reliable temperature-controlled sample inlet port is suitable for the whole range of liquid hydrocarbon samples without the need of special catalyst or inlays. This makes the NEXIS the ultimate product solution for analysis needs, such as product quality monitoring and control of key refinery processes.

TN

TS

The NEXIS VP is designed to facilitate high sample throughput by the AS120 liquid autosampler through syringe introduction methods with optional heated and cooled sample trays. For Gas and LPG samples the NEXIS VP TN/TS analyzer can be connected to a NEXIS Gas Module (GM) module to facilitate the safe and automated sampling and analysis process for these type of samples with fast connectivity and ease of use operation through NEXIS LINK™ software.

The NEXIS VP model analyzer meets stringent compliance to international ASTM, ISO, DIN, EN and UOP regulatory methods.

KEY ADVANTAGES

- Accurate, Fast and Reliable Total Nitrogen/Sulfur Data

- Unique vertical furnace tube NEX-Z™ design for effective combustion

- Use of DSP Technology™ for ultra-trace level detection levels of total sulfur and nitrogen with superior LOD

- Regulatory compliance to international standards (ASTM, ISO, UOP, DIN)

- Simultaneous analysis of TN/TS with TRINITY™ module application for unbiased total sulfur data

- AS120 Liquid autosampler with heated and cooled tray capabilities for high sample throughput

- Ease-of-Use and access to main analyzer parts for user maintenance

ELEVATE PRODUCTIVITY TO A NEXT LEVEL

AS120: RELIABLE LIQUIDS XYZ-SAMPLER

The AS120 model autosampler can be configured in 3 versions to handle a large variety of liquid samples. The position of the sampler has no impact on laboratory bench space and has enhanced sampling capabilities with heated and cooled tray capabilities. The highly efficient unique designed cooled sample tray is very effective to handle volatile liquid samples. Even more the AS120 liquid sampler can use ONE-Cal™ technology, to prepare out of 1 (stock)standard a customized calibration line automatically with high precision and accuracy.

KEY ADVANTAGES

- Time saving Automatic customized ONE-Cal™ Single Source Calibration feature for liquids AS120 at NEXIS VP Compatible with syringes from 25 to 250 uL

- Faster sample run times through a Powerful temperature controlled cooled and heated sample tray design with sample temperatures down to 18°C within 1 minute for analysis of volatile liquid samples
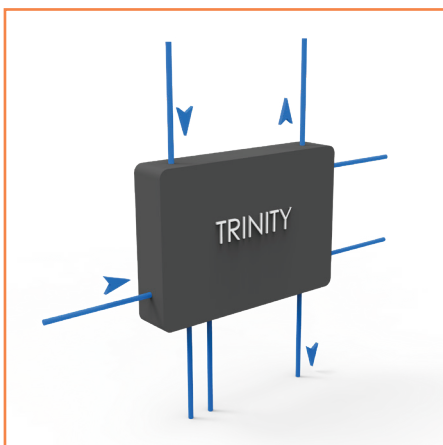
TRINITY™: POWERFUL TUNABLE SOLUTION FOR REPORTING UNBIASED SULFUR DATA

In order to have interference free total sulfur analysis consistent with ASTM D5453-19a, TSHR has developed a unique software controlled and integrated customer solution in the NEXIS VP TS and TN/TS analyzer configurations.

The use of a novel and sophisticated NO_x Elimination design, TRINITY™ module, enables users to adjust the power level to save operational costs while achieving the most effective elimination of Nitrogen Oxide and finally reporting accurate and non-biased total sulfur data in their samples.
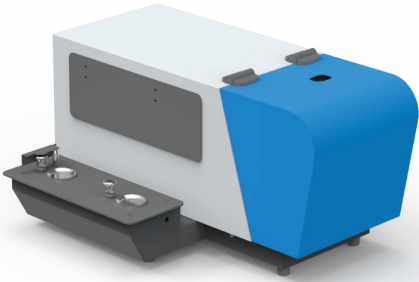
NEXIS GM: AUTOMATIC AND SAFE GAS/LPG SAMPLING

The NEXIS GM is available with built- in safety features to give your lab confidence. It is available in three different configurations and designed to handle pressurized LPG/Gasses and/or non-pressurized gas samples (e.g.Tedlar bags) in a single gas sampling device. The NEXIS GM module is software controlled and will load and inject a pressurized Gas / LPG sample through a sample loop design automatically into the NEXIS analyzer.

KEY ADVANTAGES

- Safe and easy to operate with a Calibration line based on only ONE single Gas/LPG or liquid standard

- Increased bench space with a Compact design with controlled NEXIS LINK software operation

- Operational peace of mind with Safety sensor to ensure safe sample handling
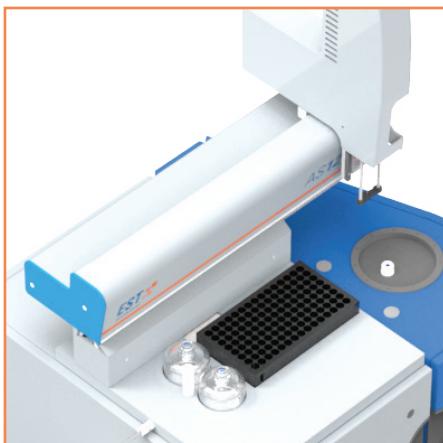
NEXIS VP HAS YOUR LIQUID AND GAS/LPG APPLICATIONS COVERED

The NEXIS VP vertical combustion analyzer is available in 5 different analyzer configurations with no impact on the bench space. The analyzer is designed to run from ultra-trace to ultra-high-level analysis within a few minutes and meet an extended range of customers application requirements.

MARKET APPLICATIONS AT A GLANCE

Market Application	Total Sulfur	Total Nitrogen
Fuels (Diesel, Gasoline, Kerosene)	●	
Volatile Liquid Hydrocarbons	●	●
Light and Heavy Liquid Hydrocarbons	●	●
LPG & Gaseous Hydrocarbons	●	●
Natural Gas	●	
Condensates and Distillates	●	●
Lubricating Oils		●
VGO's		●
Aromatic Hydrocarbons	●	●
High grade chemicals	●	●
Biodiesel	●	
Ethanol	●	
Renewable liquids	●	●
UCOME & Fatty Acids	●	●
Additives		●

Heater status			
	Setpoint	Actual	
Furnace 1	1000	995	°C
Furnace 2	1000	995	°C
Inlet	500	495	°C
NOx Converter	320	315	°C

Flow status			
(Calibrate)	Setpoint	Actual	
Argon/Helium	100	95	ml/min
Oxygen (primairy)	300	295	ml/min
Oxygen (turbo)	100	93	ml/min
Oxygen (ozonator)	100	95	ml/min

PMT settings		
	Setpoint	
TN PMT	0	V
TSUV PMT	700	700 V

Tray settings		
	Setpoint	Actual
Cooling		0 °C

System status Queue manager One-Cal Evaluate results Method Queue editor

NEXIS LINK SOFTWARE WITH DSP TECHNOLOGY™ : INTUITIVE FULL ANALYZER CONTROL WITH ULTRA LOW DETECTION LEVELS

The comprehensive and easy to use NEXIS LINK software supports the operation, full instrument and sampler parameters control and data handling of the NEXIS VP Combustion Elemental Analyzer. A user-friendly diagnostics and clear icons design allow simple analyzer operation at a glance.

KEY ADVANTAGES

- Real time measurement curves with peak overlays

- Export data to LIMS using common file formats such as XML, CSV, Tab, XLSX

- TRINITY™, AS120 liquids sampler and NEXIS GM Gas/LPG sampler operation and control

- Integrated calculation and calibration methods for analysis of Gas and Liquid samples

- Enhanced automatic ranging, calibration and analysis functionalities

TSHR SOLUTIONS FOR COMBUSTION ELEMENTAL ANALYSIS

NEXIS CONFIGURATION AND ORDERING INFORMATION

Analysis	NEXIS VP	Item No.	Voltage
Total Sulfur	●	CT2011001	230V
Total Nitrogen	●	CT2011002	230V
Total Sulfur / Nitrogen	●	CT2011003	230V

ABOUT TSHR

TSHR develops, manufactures and supports combustion elemental analyzers and can count on long time experience with legacy Thermo Euroglas and Thermo Scientific TN/TS/TX products. Our combustion analyzers help laboratories meet challenging industrial issues by providing reliable instrumentation to have high performance with accurate, and precise results and compliance with international standard methods at a low cost of ownership, high productivity and safe operation. We are committed to deliver superior and local customer service worldwide with a network of over 40 distributors.

TSHR is part of EST Analytical (OH, USA) and we have over 200 years of combined experience.

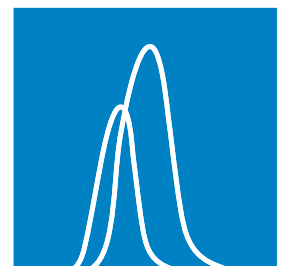*TSHR, YOUR PARTNER IN COMBUSTION ELEMENTAL ANALYSIS*

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Visit our website to find your local TSHR distributor

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