analyzer

TX

7000

Reliable and sensitive Total Chlorine analysis with fully automated Ease-of-Use analyzer model

The TSHR Total Chlorine Analyzer, model TX 7000, is able to measure fast and accurate low level chlorine concentrations in a wide range of liquid hydrocarbon samples. The analyzer with vertical positioned combustion tube, is most compact designed to provide users a safe and ease-of-use total chlorine analysis solution for small and high sample throughput labs.

The sample is introduced by syringe Liquid autosampler, model HR 7000, in a heated oxygen free environment to ensure a complete vaporization of the sample. The carrier gas ensures that the vaporized sample will carry into the combustion zone where oxygen will be added to complete the oxidation of the sample. After the dual zone combustion stage, the gasses go through an acid scrubber where all moisture and other potential interferences are removed.

The conditioned combustion gasses will flow towards the coulometric cell where the halide ions reacts with silver ions. The amount charge needed to regenerate the precipitated silver ions is directly related to the total chlorine/ halide concentration. The compact coulometric titration cell can handle up to at least 60 samples without refreshing of the electrolyte solution.

The HR 7000 liquid autosampler is designed for automatic sample throughput at high performance and reliability. This solution provides a most compact fully automated total nitrogen analyzer, which can be extended to a capacity of 121 samples automatic analysis or having heated sample tray capabilities.

The TX 7000 is matrix independent and fully complies with ASTM, DIN, IP, UOP and CEN regulatory methods.

Key advantages

Compact and Robust design

Accurate, Fast and Reliable Total Chlorine Data

Fully Automated Analysis by HR 7000 Liquid autosampler

Easy to use coulometric titration cell

Enhanced application range for liquids and LPG/Gasses

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Analytical specifications

Sample Matrix*	Liquid Organics
Working range	0,1 – 5000 mg/kg
Quantity of Sample	1 – 100 uL
Analysis time	< 10 minutes
Relative Standard Deviation*	< 2% (> 1 ppm)
Type of sample	High & Low boiling point sample
Highest boiling point	450 deg C (subject to sample matrix)
Regulatory Compliance	ASTM D4929, ASTM D5194, ASTM D5808, UOP 779, UOP 910

*Depend on typical application and sample matrix

Technical specifications

Furnace Voltage	2 x 24 V , 50/60 Hz
Furnace Power	2 x 300 W
Furnace Temperature Sensor	2 x Ni-Cr/Ni
Furnace configuration	Dual temperature controlled
Furnace Temperature	1250 °C Max
Type of Analysis	Total Chlorine (optional Total Sulfur micro-coulometry)
Detection Principle	Micro Coulometric Titration
Dimensions	600 x 1100 x 580 mm (WxHxD)
PC operating system	Windows 7 or higher
Computer	Intel Core i3 / AMD Phenom or better
Software	Athena
Standard Supply**	HR 7000 Liquid Autosampler for 2 mL vials
Optional Supply	GM 7000 LPG / Gas Module

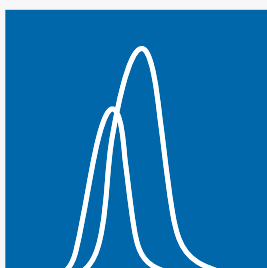**HR 7000 model Liquid Autosampler need to be selected for operation of TX 7000

Facility requirements

Voltage	115/230 V , 50/60 Hz
Power	1200 W
Gas connector	1/8" swagelok
Gasses	O_2 (99,6%) medical grade 2.6
	or O_2 (99,995%) 4.5
	Ar (99,998%) technical grade 4.8
Gas pressure	2 – 3 Bar (30-45 psi)
Ambient temperature	5 – 35 °C (41 – 95 °F)

Contact info

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