

RHEN602

Hydrogen Analyzer



For more than 80 years, leading companies around the world have recognized LECO as the authority in rapid elemental analyzers. Featuring state-of-the-art solid-state thermal conductivity (TC) detector technology, the RHEN602 Hydrogen Analyzer is designed to provide you with even greater stability, accuracy, and convenience—helping you to improve your production performance.

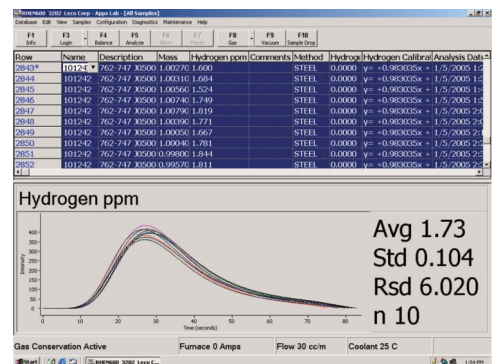
The enhanced operating parameters of the RHEN602 allow users to optimize sample mass, thereby improving accuracy and precision for a wide range of metals, refractories, and other inorganic materials, especially at low levels (<2 ppm). Multiple method selection assures optimal furnace and system settings for each sample matrix. On-board diagnostics minimize downtime.

Ideal for aluminum as well as other metals, refractories, and inorganic materials, the RHEN602 offers you an advanced furnace operating system for more detailed power profiles and complete control of set points and ramp rates.

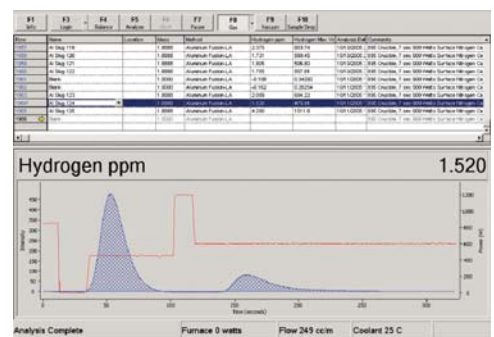
Features

- Programmable electrode furnace (capable of bulk and surface analysis of aluminum)
- Up to 6 g nominal sample mass offering improved precision and detection limits (material dependent)
- Calibration by gas dose or standards
- State-of-the-art solid-state thermal conductivity (TC) detector technology
- Easy-to-use operating system maximizes flexibility for production and research applications
- SmartLine® Remote Diagnostics allows LECO service to connect directly to your instrument for quicker solutions and maximized up-time

Software Interface



Standard interface incorporates sample information, sample plots, and statistics



The advanced furnace control of the RHEN602 software facilitates the analysis of surface and bulk hydrogen in aluminum

Specifications

Instrument Range at 1 g*	Hydrogen: 0.05 ppm to 250 ppm
Precision**	0.02 ppm or 2% RSD, whichever is greater
Calibration	Standards, multi-point; manual; gas dose
Analysis Time	7 min (includes outgas/purge/analysis delay)
Sample Size	1 g nominal
Detection Method	Thermal Conductivity
Chemical Reagents	<ul style="list-style-type: none">• Anhydrous Magnesium Perchlorate (MgClO₄)• Sodium Hydroxide on an inert base• Schutze Reagent• Copper Sticks and Turnings
Gases Required	
Carrier:	Argon, 99.99% pure, 20 psi (1.4 bar) ±10%
Pneumatic:	Compressed Air, 40 psi (2.8 bar) ±10%; <i>source must be oil and water free</i>
Dosing:	N ₂ , H ₂ , or He, 99.99% pure, 20 psi (1.4 bar) ±10%
Gas Flow Rates	
Carrier:	250 cm ³ /min
TC Reference:	35 cm ³ /min
Pneumatic:	280 cm ³ /analysis
Furnace	
Type:	Electrode furnace; current, power, and temperature control
Power:	7500 W, maximum
Single Furnace/ Determinator Dimensions^{††}	31 in H x 26 in W x 30 in D (79 cm x 66 cm x 76 cm)
Sound Pressure Level	66 dBa excluding vacuum (max reading at operator's level per IEC/EN 61010-1)
Environmental Conditions	
Operating Temp:	50°F to 86°F (10°C to 30°C)
Rel. Humidity:	20% to 80%, non-condensing
Electrical Power Requirements	230 V~ (±10%; at max load), 50/60 Hz, single phase, 40 A, 31400 Btu/h
Weight (approximate)	
Determinator:	410 lb (186 kg)
Total Shipping:	460 lb (209 kg)
Part Numbers	
RHEN602C	Hydrogen Determinator with software, PC, and flat panel display
Options	
625-501-915G	Autocleaner Kit
625-501-921G	Batch Autoloader/Autocleaner Kit
751-350-110	L-250 Balance and Interface Kit (0.1 mg)
633-103-353	Ultra High Purity Inert Gas Regulator
633-103-354	Air Regulator
710-198-B/O	SmartLine [®] Remote Diagnostics

*The range may be extended beyond listed values.

**One σ , conformance tested by gas dose analysis.

[†]Average output based on nominal operating parameters.

^{††}Allow a 6 in (15 cm) minimum access area around all units.

SmartLine is a registered trademark of LECO Corporation.
Specifications and part numbers may change.
Consult LECO for latest information.

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