

H 2021

Hydrogen Analyzer special for Aluminium and Aluminiumalloy





H 2021

Hydrogen Analyzer special for Aluminium and Aluminium alloy

Analysis principles

Melting of the Sample by a high frequency induction furnace (HF)

Features

- Melting point control with automatic furnace stop
- Automatic furnace cleaning by N₂ gas
- Gas calibration
- Measurement of temperature by pyrometer
- Self cleaning of the quartz combustion tube by heating

Sample mass

Up to 6 g in graphite crucible

Detection system

Thermal Conductivity
Detector (TCD)

Pneumatic

- Furnace cylinder movement up/down: < 1 bar/air
- Closed furnace in end position: 6 bar/air

Technical parameters

High-frequency furnace

The RF Generator is a free floating, air-cooled oszillator in a Colpitts circuit.

Controller

High performance controller by National Instruments

Analysis time (Sample dependent)

Around 7 minutes

Reproducibility

+/-1% relative (by gas)

Measuring Ranges (Sample dependent)

- From 0,004 ppm
- Up to 90 ppm

Induction furnace

- 13.7 MHz, 20 MHz or 27 MHz
- 2.3-3.0 KVA Power

Gases required

Nitrogen:

Purity carrier gas N_2 5.0

• 2 bar (30 psi) for analysis

Compressed air:

- 6 bar (90 psi)
- Oil- and water free

Power requirements

Analyzer:

230V AC +/-10%, 50/60Hz

(Automatic fuse: 16A Type C)

Dimensions ($W \times H \times D$)

 $550 \times 775 \times 600$ mm $21.7 \times 30.5 \times 23.6$ inch

Weight

 $\sim 100 \text{ kg}$

Accessories

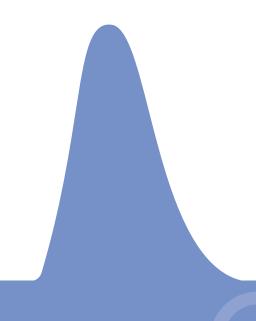
- Analytical balance
- 0,000 lg to minimum 120 g
- New PC system
- Windows based operating system

Option

Color printer

Sensitivity

0,001ppm









Mühlenweg 17 D-41372 Niederkrüchten Tel. +49 (0) 2162-266 47 90 Fax +49 (0) 2163-57 57 819 Fax +49 (0) 3222-687 88 18 Mobil +49 (0)178-6 99 84 90 info@jung-instruments.com www.jung-instruments.com

CSONH