FurnaceDoctor®-Pro PORTABLE INFRARED GAS ANALYZER



FOR HEAT TREAT ATMOSPHERES

FEATURES

- Accurate, affordable infrared measurement of CO, CO₂, and CH₄
- Computation of % Carbon, Dew-point and expected O2 probe millivolts
- Easy to read 7 in. LCD display with touchscreen
- Built-in Ethernet
- USB 2 high speed port for data retrieval
- CQI-9 compliant encrypted data logging and on-screen charts
- Long life, quick-change lithium ion battery with charge indicator (spare batteries available)
- High-volume long-lasting filter and a secondary, self-contained, long-lasting sub-micronic filter
- Handy Process Calculator
- Built-in purge port satisfies safety requirements

BENEFITS

- Accurate calculation of atmosphere carbon potential
- Verification of oxygen probe accuracy
- Easy identification of furnace atmosphere problems and furnace condition
- Evaluation of Endo and Exo generator performance, and catalyst condition
- Optimize nitrogen methanol system performance
- Easy retrieval of data logged gas analysis

EXTENDED MEASUREMENT RANGES

For both endothermic & exothermic furnace atmospheres. Can verify any process that uses "lean" or "rich" exothermic atmospheres such as bright annealing, brazing, or lamination annealing.

FOR CQI-9 COMPLIANCE



● FurnaceDoctor®-Pro		www.group-upc.com	
CO [%]	19.6	CP [%]	0.14
CO2 [%]	1.000	C [%]	0.14
CH4 [%]	10.13	C+CH4 [%]	0.55
		02 [mV]	1,035
H2 [%]	40	DPT [°F]	75
o _F	1,699	_	
Alloy Factor [%]	100	Logging: OFF	Change
CH4 Factor [%]	65.0	***	
Furnace Mode	Change		
Endo Mode	Change	Main Menu	









ADDITIONAL FEATURES

- Enter furnace temperature into the analyzer to compute:
 - Equivalent % Carbon potential
 - Expected probe millivolts for that % Carbon at that temperature
 - Dew point
 - Process Calculator for computing % Carbon or Dewpoint from known or measured furnace atmosphere values
- VNC server for remote and real-time access to analyzer
- Optional wireless network connection to plant network for data logging

CALIBRATION

- UPC provides calibration to primary standard-grade gases in our facility. A calibration certificate is provided to satisfy your in-house documentation requirements.
- We also supply traceable certified grade gas cylinders and associated equipment for calibration in your facility.

FOR CQI-9 COMPLIANCE

Suitable for:

- Annealing
- Austempering
- Carbon Correction
- Carbonitriding
- Carburizing
- Martempering
- Neutral Hardening
- Normalizing
- · Precipitation Hardening
- Stress-Relieving

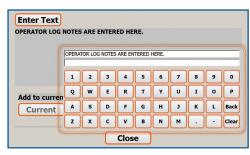
If your process is not listed above, please call us for assistance.

SPECIFICATIONS & OPERATING CONDITIONS

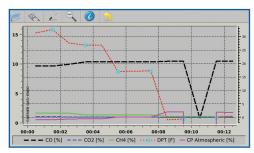
CHARACTERISTICS	CO2	СО	CH4	
Ranges				
- Endothermic - Exothermic	0-2%	0-30% 0-20%	0-10% 0-10%	
- Exothermic	0-20%	0-20%	0-10%	
Resolution	20 ppm	0.02%	0.02%	
Ассигасу	1% of range	2% of range	2% of range	
Operating Temperature	40-120 °F (4-49 °C)			
Relative Humidity	5% - 90% non-condensing			
Stability	<±2% over 12 months			
Repeatability	Zero ±0.3%, Span ±1.5%			
Power Requirements	Analyzer: 15VDC internal battery Charger: 10-220 VAC, 50-60 Hz			

CO [%]	20	O2 [mV]	1,143			
CO2 [%]	0.2	DPT [°F]	45			
CH4 [%]	1.1	CP atm [%]	1.21			
H2 [%]	40.0	C [%]	1.21			
°F	1,550	C+CH4 [%]	1.25			
Alloy Factor [%]	100	Sat.C [%]	1.000			
CH4 Factor [%]	0	O2 [%]	4.615E-20			
Calculation Method Set to:						
Use Gas Input						
CALCULATE Main Menu						

Handy Process Calculator



Operator Log Notes Screen



Example of a Log Screen

USA

+1 414 462 8200 sales.na@group-upc.com CANADA

+1 514 335 7191 sales.na@group-upc.com **CHINA**

+86 21 3463 0376 sales@mmichina.cn **FRANCE**

+33 3 81 48 37 37 sales.fr@group-upc.com **GERMANY**

+49 7161 94888 0 sales.de@group-upc.com **POLAND**

+48 32 296 66 00 sales.pl@group-upc.com









