

## Scope of Accreditation For Graftel, LLC

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In recognition of a successful assessment to ISO/IEC 17025:2005, accreditation is granted to **Graftel, LLC** to perform the following **Calibrations**:

Accreditation granted through: **March 28, 2014**

### Calibration

#### Mass – Flow

Calibration Parameter/Equipment	Range	Calibration and Measurement Capability(+/-) <sup>2</sup>	Remarks
Gas Flow Rate	1 sccm to 24 slm	0.28% of reading	Flow Tubes
	(24 to 141 584) slm	0.21% of reading	Sonic Nozzles
Gas Flow Rate <sup>1</sup>	1 sccm to 1 500 slm	0.5% of reading	Laminar Elements
	(205 to 1 415) slm	0.46% of reading	Coriolis Flow Systems
	(566 to 4 247) slm	0.46% of reading	
	(3 029 to 17 546) slm	0.46% of reading	
Liquid Flow Rate	1 ccm to 300 lpm	0.06% of reading	Weighing Method
	(300 to 1 800) lpm	0.1 % of reading	Coriolis Flow System
Liquid Flow Rate <sup>1</sup>	(0.06 to 400) lpm	0.1% of reading	Coriolis Flow System
	(2 to 48) in lines	1% of reading	Ultra Sonic Flow Meters
Air Velocity	(2 to 50) m/s	0.5% of reading	Wind Tunnel Pitot Tube
	(0.5 to 50) m/s	1% of reading	Ultra Sonic Anemometer

#### Thermodynamic – Humidity

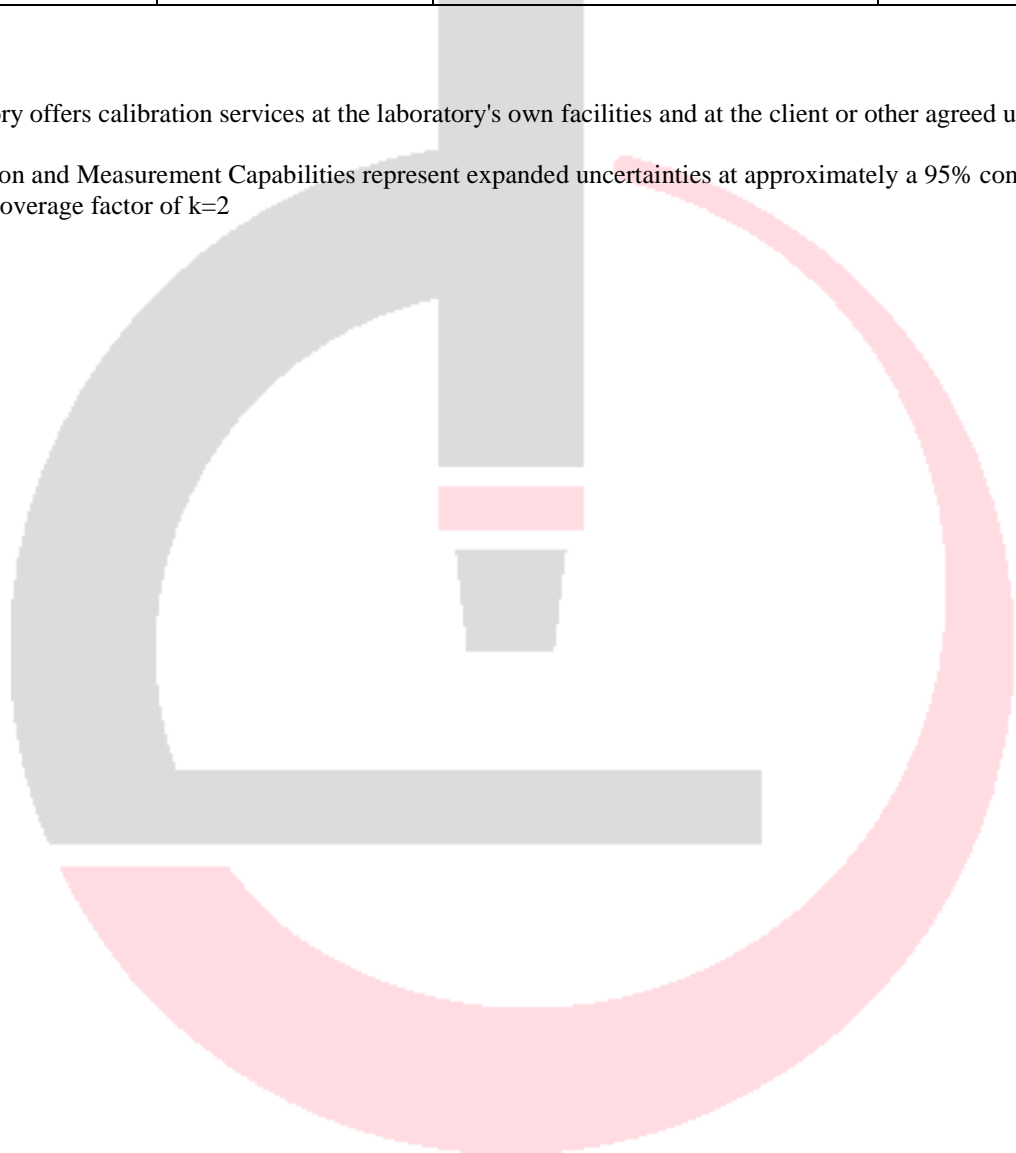
Calibration Parameter/Equipment	Range	Calibration and Measurement Capability(+/-) <sup>2</sup>	Remarks
Relative Humidity	(1 to 60) % RH (61 to 95) % RH	0.5 %RH 1.09 %RH	Chilled Mirror Hygrometer PRT


**Thermodynamic – Thermocouples**

Calibration Parameter/Equipment	Range	Calibration and Measurement Capability(+/-) <sup>2</sup>	Remarks
Temperature <sup>1</sup>	(-100 to 180) °C	0.02 °C	Temperature Baths PRT
Dew Point Temperature	(-80 to 20) °C	0.22 °C	Two Temperature Generator PRT

Notes:

- 1) Laboratory offers calibration services at the laboratory's own facilities and at the client or other agreed upon facilities.
- 2) Calibration and Measurement Capabilities represent expanded uncertainties at approximately a 95% confidence level using a coverage factor of k=2



Approved by:   
R. Douglas Leonard  
Chief Technical Officer

Date: October 21, 2010

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