



# PERRY JOHNSON LABORATORY ACCREDITATION, INC.

## Certificate of Accreditation

*Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:*

***American Welding & Gas, Inc.***  
***664 Magnolia Avenue, Lexington, KY 40505***

*(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:*

**ISO/IEC 17025:2017**

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

***Chemical Calibration***  
***(As detailed in the supplement)***

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen  
President

*Initial Accreditation Date:*

November 06, 2011

*Issue Date:*

November 17, 2022

*Expiration Date:*

November 17, 2024

*Accreditation No.:*

76514

*Certificate No.:*

L22-769

Perry Johnson Laboratory  
Accreditation, Inc. (PJLA)  
755 W. Big Beaver, Suite 1325  
Troy, Michigan 48084

*The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: [www.pjlabs.com](http://www.pjlabs.com)*



# Certificate of Accreditation: Supplement

## American Welding & Gas, Inc.

664 Magnolia Avenue, Lexington, KY 40505  
 Contact Name: John Schoolcraft Phone: 317-536-5590

Accreditation is granted to the facility to the following calibrations:

### Chemical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY ( $\pm$ )	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Calibration Gas Cylinder – Trace Moisture Concentration <sup>F</sup>	0.6 $\mu\text{mol/mol}$ to 1 000 $\mu\text{mol/mol}$	$(1.70 \times 10^{-1} + 4.98 \times 10^{-2}\text{C}) \mu\text{mol/mol}$	Electrolytic Hygrometer -Manufacturer Calibration – Standard: Moisture Generator
Calibration Gas Cylinder – Trace Moisture Concentration <sup>F</sup>	0.1 $\mu\text{mol/mol}$ to 450 $\mu\text{mol/mol}$	$(4.03 \times 10^{-4} + 4.10 \times 10^{-2}\text{C}) \mu\text{mol/mol}$	Cavity Ring Down Spectroscopy (CRDS) -Manufacturer Calibration- Procedure: M7700
Calibration Gas Cylinder – Trace Hydrocarbon Concentration <sup>F</sup>	0.2 $\mu\text{mol/mol}$ to 100 000 $\mu\text{mol/mol}$	$(5.70 \times 10^{-2} + 1.50 \times 10^{-2}\text{C}) \mu\text{mol/mol}$	Flame Ionization Detector -NIST traceable calibration gas- Procedure: 143-151
Calibration Gas Cylinder – Trace Oxygen Concentration <sup>F</sup>	0.2 $\mu\text{mol/mol}$ to 250 000 $\mu\text{mol/mol}$	$(3.19 \times 10^{-2} + 1.56 \times 10^{-2}\text{C}) \mu\text{mol/mol}$	Electrochemical Oxygen Analyzer -NIST traceable calibration gas- Procedure: LWI 5.57
Calibration Gas Cylinder – Gas Mixture Concentration <sup>F</sup>	400 $\mu\text{mol/mol}$ to 1 000 000 $\mu\text{mol/mol}$	$(122.45 + 1.89 \times 10^{-2}\text{C}) \mu\text{mol/mol}$	Gas Chromatograph with Thermal Conductivity Detector (TCD) -NIST traceable calibration gas- Procedure: LWI 5.33
Calibration Gas Cylinder – Gas Mixture Concentration <sup>F</sup>	0.1 $\mu\text{mol/mol}$ to 1 000 $\mu\text{mol/mol}$	$(1.75 \times 10^{-2} + 1.90 \times 10^{-2}\text{C}) \mu\text{mol/mol}$	Gas Chromatograph with Discharge Ionization Detector (DID) -NIST traceable calibration gas- Procedure: LWI 5.16
Calibration Gas Cylinder – Percent Oxygen Concentration <sup>F</sup>	990 $\text{mmol/mol}$ to 1 000 $\text{mmol/mol}$	$(9.50 \times 10^{-1}) \text{mmol/mol}$	Paramagnetic Oxygen Analyzer -NIST traceable calibration gas- Procedure: LWI 5.58
Calibration Gas Cylinder – Gas Mixture Concentration <sup>F</sup>	1.9 $\text{cmol/mol} (\%)$ to 59.89 $\text{cmol/mol} (\%)$	$(3.53 \times 10^{-1} + 1.41 \times 10^{-2}\text{C}) \text{cmol/mol} (\%)$	Binary Gas Analyzer Thermal Conductivity Detector (TCD) -NIST traceable calibration gas- Procedure: LWI 5.59
	0.000 001 $\text{mol/mol}$ to 1 $\text{mol/mol}$	$(9.2 \times 10^{-3}\text{C}) \text{mol/mol}$	Gravimetric Balance -NIST traceable mass- Procedure: QTC-WI-025



## Certificate of Accreditation: Supplement

### American Welding & Gas, Inc.

664 Magnolia Avenue, Lexington, KY 40505

Contact Name: John Schoolcraft Phone: 317-536-5590

*Accreditation is granted to the facility to the following calibrations:*

1. The CMC (Calibration and Measurement Capability) stated for calibrations included on this scope of accreditation represent the smallest measurement uncertainties attainable by the laboratory when performing a more or less routine calibration of a nearly ideal device under nearly ideal conditions. It is expressed at a confidence level of 95 % using a coverage factor  $k$  (usually equal to 2). The actual measurement uncertainty associated with a specific calibration performed by the laboratory will typically be larger than the CMC for the same calibration since capability and performance of the device being calibrated and the conditions related to the calibration may reasonably be expected to deviate from ideal to some degree.
2. The laboratories range of calibration capability for all disciplines for which they are accredited is the interval from the smallest calibrated standard to the largest calibrated standard used in performing the calibration. The low end of this range must be an attainable value for which the laboratory has or has access to the standard referenced. Verification of an indicated value of zero in the absence of a standard is common practice in the procedure for many calibrations but by its definition it does not constitute calibration of zero capacity Measurement uncertainties achieved at customer sites can be expected to be larger than the measurement uncertainties obtained in the laboratory for similar calibrations. This is due to the effects of transportation of the standards and equipment and environmental effects which are typically not controlled as closely as at the laboratories fixed location.
3. The presence of a superscript F means that the laboratory performs calibration of the indicated parameter at its fixed location. Example: Outside Micrometer<sup>F</sup> would mean that the laboratory performs this calibration at its fixed location.
4. The term C represents concentration in moles or micromoles appropriate to the uncertainty statement.
5. This location is linked to 5353 West Southern Ave, Indianapolis, IN 46241 due to a share quality management system.