



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Northern Gauge LLC
#202 Tideland Road
Broussard, LA, USA 70518

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to read 'R. Douglas Leonard Jr.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 25 March 2023

Certificate Number: L2350.01



This laboratory 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 (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Northern Gauge LLC
 #202 Tideland Road
 Broussard, LA, USA 70518
 Peter Laurensse
 780-628-0844

CALIBRATION

Valid to: **March 25, 2023**

Certificate Number: **L2350.01**

Length – Dimensional Metrology

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Gauge Blocks: Central Length	(0.05 to 4) in	$(5.4 + 5.9L) \mu\text{in}$	ISO 3650 / ASME B89.1.9 Gauge Block Comparator Grade 0 Gauge Blocks
Plain Plug Gauges	(0.06 to 7) in	$(62 + 9.1D) \mu\text{in}$	ANSI/ASME B89.1.5 Trimos Horizon Premium
Plain Ring Gauges	(0.50 to 7) in	$(65 + 6.7D) \mu\text{in}$	ANSI/ASME B89.1.6 Trimos Horizon Premium
Thread Plug Gauges: (4-80TPI) Pitch Diameter Major Diameter	Diameter: (0.16 to 7.125) in (0.16 to 7.125) in	$(99 + 11.7D) \mu\text{in}$ $(78 + 12.4D) \mu\text{in}$	ANSI/ASME B1.1-B1.2, ANSI/ASME B1.5-B1.8 Trimos Horizon Premium
Thread Ring Gauges:(4-80 TPI) Pitch Diameter Major Diameter	Diameter: (0.25 to 7) in (0.25 to 7) in	$(81 + 19.3D) \mu\text{in}$ $(82 + 19.1D) \mu\text{in}$	ANSI/ASME B1.1-B1.2, ANSI/ASME B1.5-B1.8 Trimos Horizon Premium
NPT/NPTF Tapered Threads: Standoff	(0.062 5 to 6) in	0.000 5 in	ASME B1.20.1:2013 TRIMOS V5-400
API 5B/7-2 Tapered Threads: Standoff	(1 to 10.75) in	0.000 7 in	API 5B/API 7-2 TRIMOS V5-400
Length Standards	(0 to 38) in	$(46 + 15.3L) \mu\text{in}$	Trimos Horizon Premium
Calipers: OD, ID and Depth	(0 to 40) in	$(579 + 25.9L) \mu\text{in}$	Grade 0 Gauge Blocks Caliper Checker
	(0 to 24) in	$(591 + 3.1L) \mu\text{in}$	Grade 0 Gauge Blocks Trimos Horizon Premium

Length – Dimensional Metrology

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Micrometers	(0 to 24) in	$(85 + 13.7L) \mu\text{in}$	Grade 0 Gauge Blocks Length Bars
Dial/Digital Indicators	(0 to 1) in	$(70 + 26L) \mu\text{in}$	Trimos Horizon Premium
Thread Profile – Comparison Method	(2 to 20) pitch	500 μin	API 7-2 / API 5B ANSI B1.5, B1.8, B1.9 Thread Profile Overlays using Optical Comparator
Surface Plates ¹ : Flatness Overall Flatness Local	Length/Width/Diameter: Up to 48 in Any (250 mm x 250 mm)	90 μin 39 μin	ISO 8512-2 using: Wylar Electronic Blue Level System

Mass and Mass Related

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Pneumatic Pressure Gages	(0 to 1 000) psig (0 to 3 000) psig (0 to 10 000) psig (0 to 15 000) psig (0 to 40 000) psig	0.6 psig 0.9 psig 2.4 psig 10 psig 53 psig	API/ISO 14313:10.2.3 ADDITEL Digital Pressure Modules & ADT223A Process Calibrator
Pressure Transducers	(0 to 30 000) psig	39 psig	EURAMET CG-17 ADDITEL Digital Pressure Modules & ADT223A Process Calibrator
Torque Wrenches	(50 to 150) lbf·in	1.2 % of Reading	ISO 6789:2003 using NORBAR Torque Transducers & Readout
	(20 to 100) lbf·ft	2 % of Reading	
	(50 to 250) lbf·ft	2 % of Reading	
	(200 to 1 000) lbf·ft	2.9 % of Reading	

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
2. L = length in inches, D = diameter in inches.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. L2350.01.



R. Douglas Leonard Jr., VP, PILR SBU

