



# CERTIFICATE OF ACCREDITATION

## ANSI National Accreditation Board

11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

**Ottawa Gage**  
**1271 Lincoln Avenue**  
**Holland, MI 49423**

has been assessed by ANAB and meets the requirements of international standard

## ISO/IEC 17025:2017

while demonstrating technical competence in the field of

## CALIBRATION and DIMENSIONAL MEASUREMENT

Refer to the accompanying Scope of Accreditation for information regarding the types of activities to which this accreditation applies

L1130-1

Certificate Number



ANAB Approval

Certificate Valid Through: 11/02/2021  
Version No. 003 Issued: 08/7/2019



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

**Ottawa Gage**  
 1271 Lincoln Avenue  
 Holland, MI 49423  
 Dana Hanson  
 616-396-4653

**CALIBRATION & DIMENSIONAL MEASUREMENT**

Valid to: November 2, 2021

Certificate Number: L1130-1

**Length – Dimensional Metrology**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) <sup>1</sup>	Reference Standard, Method, and/or Equipment
Plain Plug Gage	Up to 11.75 in (>11.75 to 23.5) in	(7.9 + 2.6D) μin (6.3+2.6D) μin	Comparison made with a Universal Comparator, Gage Blocks
Plain Ring Gage	Up to 4 in (>4 to 18) in (>18 to 24) in	(3.2 + 2.6D) μin (7.5 + 2.4D) μin (8.8 + 2.4D) μin	Comparison made with a Universal Comparator, Height Comparator / Gage Blocks
Bar Flush Pin	Up to 24 in	(9.3 + 2.4L) μin	Comparison made with a Surface Plate, Elec. Amp, Height Gage, Gage Blocks
Barrel Flush Pin	Up to 6 in	(12.5 + 2.4L) μin	
Tapered Plug	Up to 8 in	(69.1 + 2.4D) μin	Comparison made with Surface Plate, Gage Blocks, Micrometers, Gage Rolls
Tapered Ring	(0.062 to 3) in (>3 to 10) in	(15 + 2.6D) μin (13.1 + 2.4D) μin	
Countersink Flush Pin Gages	Up to 4 in	(18.5 + 2.6L) μin	Comparison made with Gage Rolls, Micrometers, Elec. Amp, Surface Plate, Gage Blocks, Height Gage
Special Length Gages	Up to 1 in (>1 to 3) in (>3 to 5) in	(9.1 + 2.6L) μin (7.8 + 2.6L) μin (8 + 2.6L) μin	Comparison made with a Universal Comparator, Gage Blocks
Plain Plug Gage	Up to 22 in	(7.7 + 2.5D) μin	LabMaster Universal

**Length – Dimensional Metrology**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) <sup>1</sup>	Reference Standard, Method, and/or Equipment
Plain Ring Gage	Up to 0.125 in (>0.125 to 0.25) in (>0.25 to 0.5) in (>0.5 to 1) in (>1 to 3) in (>3 to 5) in (>5 to 7) in (>7 to 9) in	(10.3 + 3.3 <i>D</i> ) μin (9.7 + 3.3 <i>D</i> ) μin (12.6 + 3.3 <i>D</i> ) μin (9.7 + 3.3 <i>D</i> ) μin (9.8 + 3.3 <i>D</i> ) μin (9.7 + 3.3 <i>D</i> ) μin (10.9 + 3.3 <i>D</i> ) μin (11.1 + 3.3 <i>D</i> ) μin	LabMaster Universal
	(>9 to 11) in (>11 to 14) in	(11.0 + 3.3 <i>D</i> ) μin (12.6 + 3.3 <i>D</i> ) μin	

**DIMENSIONAL MEASUREMENT**

**1 Dimensional**

Specific Tests and / or Properties Measured	Range	Expanded Uncertainty of Measurement (+/-) <sup>1</sup>	Reference Standard, Method and/or Equipment
Dimensional Measurement 1D - Outside Diameter Measurement	Up to 1 in (>1 to 4) in (>4 to 23.5) in	(6.1 + 2.6 <i>D</i> ) μin (5.9 + 2.6 <i>D</i> ) μin (9 + 2.4 <i>D</i> ) μin	Comparison made with a Height Master, Universal Comparator, Gage Blocks, Surface Plate, Elec. Amp, Optical Comparator
Dimensional Measurement 1D - Inside Diameter Measurement	(0.059 to 4) in (>4 to 24) in	(5.9 + 2.6 <i>D</i> ) μin (9.2 + 2.4 <i>D</i> ) μin	Comparison made with a Height Master, Universal Comparator, Gage Blocks, Surface Plate, Elec. Amp, Optical Comparator
Dimensional Measurement 1D - Height Measurement	Up to 30 in	(7.8 + 2.6 <i>D</i> ) μin	Comparison made with a Height Master, Universal Comparator, Gage Blocks, Surface Plate, Elec. Amp, Optical Comparator
Dimensional Measurement 1D - Angle Measurement	(0 to 46) °	14 s	Sine Plate, Indicator and V-Block utilized for the Dimensional Inspection



2 Dimensional

Specific Tests and / or Properties Measured	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Dimensional Measurement 2D Radius Measurement	(0.005 to 0.336) in 20x Magnification (0.337 to 0.672) in 10x Magnification	620.5 $\mu$ in	Comparisons made with Optical Comparator, Gage Rolls

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. D = diameter in inches, L = length in inches.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. L1130-1.



Vice President