



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Quality Inspection & Gage
225 South Towerview Drive
Columbia City, IN 46725

Fulfills the requirements of

ISO/IEC 17025:2017

In the fields of

CALIBRATION
and
DIMENSIONAL MEASUREMENT

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: 18 January 2023

Certificate Number: L2049-1



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

Quality Inspection & Gage

225 South Towerview Drive
Columbia City, IN 46725
Alex Habben
260-244 3591

CALIBRATION & DIMENSIONAL MEASUREMENT

Valid to: **January 18, 2023**

Certificate Number: **L2049-1**

CALIBRATION

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method, and/or Equipment
Cylindrical Plug / Pin Gages	(0 to 50) mm	(0.17 + 0.77L) μm	Micrometers

DIMENSIONAL MEASUREMENT

1 Dimensional

Parameter	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method, and/or Equipment
Dimensional Measurement 1D	(0 to 305) mm	(39.8 + 0.63L) μm	Calipers
	(0 to 50) mm	(0.17 + 0.77L) μm	Micrometers
	(0 to 15) mm	(59 + 0.000 57L) μm	Radius Gage
	(0 to 356) mm	(41 + 0.67L) μm	Digital Height Gage / Surface Plate

3 Dimensional

Parameter	Range	Expanded Uncertainty of Measurement (+/-) ²	Reference Standard, Method, and/or Equipment
Dimensional Measurement 3D	X = (0 to 1 828) mm	(32 + 0.001 1L) μm	Coordinate Measuring Machine (DEA)
	Y = (0 to 1 828) mm		
	Z = (0 to 1 371) mm		
	X = (0 to 1 455) mm	(0.92 + 0.77L) μm	Coordinate Measuring Machine (Advantage)
	Y = (0 to 2 156) mm		
	Z = (0 to 267) mm		
	X = (0 to 660) mm	(14 + 0.001 1L) μm	Coordinate Measuring Machine (Mistral)
	Y = (0 to 990) mm		
	Z = (0 to 457) mm		

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 millimeters.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. L2049-1.



R. Douglas Leonard Jr., VP, PILR SBU