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.

Jason Stine, Vice President

Expiry Date: 18 January 2027

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
Jeff Reimer 260-244-3591

CALIBRATION & DIMENSIONAL MEASUREMENT

Valid to: January 18, 2027 **Certificate Number:** L2049-1

CALIBRATION

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Cylindrical Plug Gages, Pin Gages [1]	Up to 50 mm	(0.17 + 0.77*L*) µm	Comparison to Outside Micrometer

DIMENSIONAL MEASUREMENT

1 Dimensional

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Dimensional Measurement – 1D [1]	Up to 305 mm	(40 + 0.63*L*) µm	Calipers utilized as the reference standard for 1D Measurements.
	Up to 50 mm	(0.17 + 0.77*L*) µm	Micrometers utilized as the reference standard for 1D Measurements.
	Up to 15 mm	(59 + 0.000 57*L*) µm	Radius Gage utilized as the reference standard for 1D Measurements.

3 Dimensional

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Dimensional Measurement – 3D [1]	X-axis: Up to 1 828 mm Y-axis: Up to 1 828 mm Z-axis: Up to 1 371 mm	(1.3 + 0.005*L*) µm	Coordinate Measuring Machine utilized as the reference standard for 3D Measurements. (DEA)
	X-axis: Up to 1 455 mm Y-axis: Up to 2 156 mm Z-axis: Up to 267 mm	(0.9 + 0.003 3*L*) µm	Coordinate Measuring Machine utilized as the reference standard for 3D Measurements. (Advantage)
	X-axis: Up to 660 mm Y-axis: Up to 990 mm Z-axis: Up to 457 mm	(0.97 + 0.005 3*L*) µm	Coordinate Measuring Machine utilized as the reference standard for 3D Measurements. (Mistral)

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. L = length in millimeters.
2. Unless otherwise specified in the far-right column, the calibration method/procedure was written internally.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. L2049-1.

Jason Stine, Vice President