

## CERTIFICATE OF ACCREDITATION

## The ANSI National Accreditation Board

Hereby attests that

Crescent Gage & Tool Sales
3809 Melcer Dr.
Rowlett, TX 75088
(and satellite as listed on the scope)

Fulfills the requirements of

ISO/IEC 17025:2017

and national standard

ANSI/NCSL Z540-1-1994 (R2002)

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 <a href="www.anab.org">www.anab.org</a>.

Jason Stine, Vice President

Expiry Date: 16 December 2024 Certificate Number: L2439









# SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 AND

ANSI/NCSL Z540-1-1994 (R2002)

## **Crescent Gage & Tool Sales**

3809 Melcer Dr. Rowlett, TX 75088 Marshall Carey 972-472-4265

#### CALIBRATION & DIMENSIONAL MEASUREMENT

Valid to: **December 16, 2024**Certificate Number: **L2439** 

#### **CALIBRATION**

#### **Length – Dimensional Metrology**

Version 009 Issued: February 27, 2024

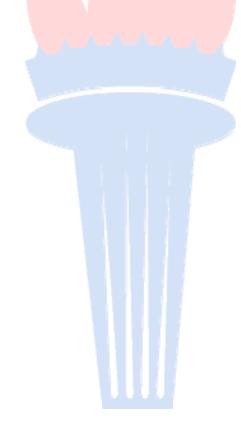
Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) <sup>2</sup>	Reference Standard, Method, and/or Equipment
Length Dimensional Measurement of fixtures, gauges, first article, etc.	X= Up to 1 200 mm Y= Up to 1 800 mm Z= Up to 1 000 mm	(1.7 + 0.003 6 <i>L</i> ) μm	Zeiss Accura Coordinate Measuring Machine Active Scanning Head
	X= Up to 1 200 mm Y= Up to 1 800 mm Z= Up to 1 000 mm	(2.1 + 0.003 6 <i>L</i> ) μm	Zeiss Accura Coordinate Measuring Machine Passive Scanning Head
	X= Up to 1 200 mm Y= Up to 3 000 mm Z= Up to 1 000 mm	(1.8 + 0.003 7 <i>L</i> ) μm	Zeiss Accura Coordinate Measuring Machine Active Scanning Head
	X= Up to 1 200 mm Y= Up to 3 000 mm Z= Up to 1 000 mm	(2.1 + 0.003 7 <i>L</i> ) μm	Zeiss Accura Coordinate Measuring Machine Passive Scanning Head
	X = Up to 900 mm Y = Up to 1 200 mm Z = Up to 800 mm	(1.5 + 0.003 6 <i>L</i> ) μm	Zeiss Contura Coordinate Measuring Machine Active Scanning Head
	X = Up to  900  mm Y = Up to  1  200  mm Z = Up to  800  mm	$(1.7 + 0.003 5L) \mu m$	Zeiss Contura Coordinate Measuring Machine Passive Scanning Head





#### **Length – Dimensional Metrology**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) <sup>2</sup>	Reference Standard, Method, and/or Equipment
Length Dimensional Measurement of fixtures, gauges, first article, etc.	X = Up to 500 mm Y = Up to 500 mm Z = Up to 500 mm	(2.3 + 0.003 6 <i>L</i> ) μm	Zeiss DuraMax Coordinate Measuring Machine
	X = Up to  500  mm Y = Up to  400  mm Z = Up to  300  mm	$(1.8 + 0.004 \ 2L) \ \mu m$	Zeiss O-Inspect Coordinate Measuring Machine
Video Measuring Systems <sup>1</sup>	X & Y up to 450 mm	(2.8 + 0.01 <i>L</i> ) μm	Comparison to glass scale
	Z up to 100 mm	(4.1 + 0.01 <i>L</i> ) μm	Step Gage or gage blocks







#### **DIMENSIONAL MEASUREMENT**

#### 3 Dimensional

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-) <sup>2</sup>	Reference Standard, Method, and/or Equipment
	X= Up to 1 200 mm Y= Up to 1 800 mm Z= Up to 1 000 mm	(1.7 + 0.003 6 <i>L</i> ) μm	Zeiss Accura Coordinate Measuring Machine Active Scanning Head
	X= Up to 1 200 mm Y= Up to 1 800 mm Z= Up to 1 000 mm	(2.1 + 0.003 6 <i>L</i> ) μm	Zeiss Accura Coordinate Measuring Machine Passive Scanning Head
	X= Up to 1 200 mm Y= Up to 3 000 mm Z= Up to 1 000 mm	(1.8 + 0.003 7 <i>L</i> ) μm	Zeiss Accura Coordinate Measuring Machine Active Scanning Head
Dimensional Measurement 3D	X= Up to 1 200 mm Y= Up to 3 000 mm Z= Up to 1 000 mm	(2.1 + 0.003 7 <i>L</i> ) μm	Zeiss Accura Coordinate Measuring Machine Passive Scanning Head
	X = Up to  900  mm Y = Up to  1  200  mm Z = Up to  800  mm	(1.5 + 0.003 6 <i>L</i> ) μm	Zeiss Contura Coordinate Measuring Machine Active Scanning Head
	X = Up to  900  mm Y = Up to  1  200  mm Z = Up to  800  mm	$(1.7 + 0.003 5L) \mu m$	Zeiss Contura Coordinate Measuring Machine Passive Scanning Head
	X = Up to 500 mm Y = Up to 500 mm Z = Up to 500 mm	$(2.3 + 0.003 6L) \mu m$	Zeiss DuraMax Coordinate Measuring Machine
	X = Up to 500 mm Y = Up to 400 mm Z = Up to 300 mm	(1.8 + 0.004 2 <i>L</i> ) μm	Zeiss O-Inspect Coordinate Measuring Machine
	$X = Up \text{ to } 4\ 000 \text{ mm}$ $Y = Up \text{ to } 4\ 000 \text{ mm}$ $Z = Up \text{ to } 4\ 000 \text{ mm}$	(47 + 0.081 <i>L</i> ) μm	Zeiss T-Scan Hawk
	$X = Up \text{ to } 4\ 000 \text{ mm}$ $Y = Up \text{ to } 4\ 000 \text{ mm}$ $Z = Up \text{ to } 4\ 000 \text{ mm}$	$(47 + 0.035L) \mu m$	Zeiss T-Scan Hawk 2





#### Services performed at satellite location

5040 SH 123 Bldg. 200, Suite 1 San Marcos, TX 78666

#### **CALIBRATION**

#### **Length – Dimensional Metrology**

Parameter/Equipment	Range	Expan <mark>ded U</mark> ncertainty of Measurement (+/-) <sup>2</sup>	Reference Standard, Method, and/or Equipment
Video Measuring Systems <sup>1</sup>	X & Y up to 450 mm	(2.8 + 0.01 <i>L</i> ) μm	Comparison to glass grids
	Z up to 100 mm	(4.1 + 0.01 <i>L</i> ) μm	Comparison to Z height standards

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. L2439.

Jason Stine, Vice President

Version 009 Issued: February 27, 2024

