



# National Voluntary Laboratory Accreditation Program



## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

### Midwest Calibration & Repair

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### CALIBRATION LABORATORIES

NVLAP LAB CODE 200920-0

NVLAP Code: 20/A01

ANSI/NCSL Z540-1-1994; Part 1

Compliant

### DIMENSIONAL

NVLAP Code: 20/D03

Gage Blocks

**Range**

(0 to 4) Inch

**Best Uncertainty** ( $\pm$ ) <sup>note 1</sup>

(3.7 + 1.8L)  $\mu$ inch <sup>note 3</sup>

**Remarks**

Comparison to Steel Masters

NVLAP Code: 20/D05

Length

**Range**

(0.50 to 39.000) inch

**Best Uncertainty** ( $\pm$ ) <sup>note 1</sup>

(4.9 + 2.1L)  $\mu$ inch <sup>note 3</sup>

**Remarks**

Mahr 828 CiM

Micrometers <sup>note 2</sup>

(0 to 5) inch

(28 + 16L)  $\mu$ inch <sup>note 3</sup>

Gage Blocks

Calipers <sup>note 2</sup>

(0 to 36) inch

(280 + 3.3L)  $\mu$ inch <sup>note 3</sup>

Gage Blocks

2010-09-21 through 2011-09-30

Effective dates

*Sally S. Bruce*

For the National Institute of Standards and Technology



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## CALIBRATION LABORATORIES

NVLAP LAB CODE 200920-0

<i>Range</i>	<i>Best Uncertainty</i> ( $\pm$ ) <sup>note 1</sup>	<i>Remarks</i>
<i>Drop Indicators</i> <sup>note 2</sup>		
(0 to 0.002) inch	18 $\mu$ inch	Gage Blocks
(> 0.002 to 2) inch	70 $\mu$ inch	Gage Blocks
<i>Test Indicators</i> <sup>note 2</sup>		
0.00005 inch resolution	38 $\mu$ inch	Gage Blocks
0.0005 inch resolution	300 $\mu$ inch	Gage Blocks
<i>Height Gages</i> <sup>note 2</sup>		
(0 to 24) inch	(59 + 2.4L) $\mu$ inch <sup>note 3</sup>	Gage Blocks
<i>Height Masters</i> <sup>note 2</sup>		
(0 to 24) inch	(22 + 1.2L) $\mu$ inch <sup>note 3</sup>	Mahr Amplifier/ Transfer Stand
<i>Outside Diameters</i>		
(0.10 to 5.000) inch	(7.2 + 1.2L) $\mu$ inch <sup>note 3</sup>	Mahr 828 CiM
<i>Z, ZZ Class Pins</i> <sup>note 2</sup>		
(0.011 to 1.000) inch	32 $\mu$ inch	Fowler Mini Horizontal
<i>NVLAP Code: 20/D07</i>		
<i>Thread Wires</i>		
<i>Range</i>	<i>Best Uncertainty</i> ( $\pm$ ) <sup>note 1</sup>	<i>Remarks</i>
4 to 80 TPI	10 $\mu$ inch	Mahr 828 CiM

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## CALIBRATION LABORATORIES

NVLAP LAB CODE 200920-0

**NVLAP Code:** 20/D11  
Plain Rings

<b>Range</b>	<b>Best Uncertainty (<math>\pm</math>)</b> <sup>note 1</sup>	<b>Remarks</b>
(0.050 to 5) inch	(6.2 + 1.4L) $\mu$ inch <sup>note 3</sup>	Mahr 828 CiM

**NVLAP Code:** 20/D12  
Surface Plates <sup>note 2</sup>

(0 to 200) arc seconds	(42 + 12L) $\mu$ inch <sup>note 4</sup>	Mahr Electronic Levels
(0 to 0.002) inches	26 $\mu$ inch	Rahn Repeat-o-Meter

**NVLAP Code:** 20/D14  
Threaded Plugs & Rings

Threaded Plugs

(0 to 5) inch pitch diameter	68 $\mu$ inch	Mahr 828 CiM
(0 to 5) inch major diameter	19 $\mu$ inch	Mahr 828 CiM

Straight Adjustable Thread Rings

(0 to 2) inches	270 $\mu$ inch	Set to various set plugs
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Tapered Threaded Plugs

(0 to 3) inch pitch diameter	73 $\mu$ inch	Mahr 828 CiM/ Alameda Block
(0 to 3) inch major diameter	31 $\mu$ inch	Mahr 828 CiM/ Alameda Block
(0 to 0.5) standoff	70 $\mu$ inch	Drop Indicator

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**CALIBRATION LABORATORIES**

**NVLAP LAB CODE 200920-0**

**MECHANICAL**

**NVLAP Code:** 20/M06

Torque <sup>note 2</sup>

(5 to 50) in-lbf	0.84 %	CDI Torque Unit
(40 to 400) in-lbf	0.41 %	CDI Torque Unit
(25 to 250) ft-lbf	0.43 %	CDI Torque Unit

- 
1. Represents an expanded uncertainty using a coverage factor, k=2, at an approximate level of confidence of 95 %.
  2. On-site service is available for these parameters.
  3. Where L is the measured value in inches.
  4. Where L is the measured value in feet.

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