

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

NEL PRETECH CORPORATION  
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MECHANICAL

Valid To: March 31, 2012

Certificate Number: 2140.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following dimensional tests and calibrations<sup>1</sup>:

I. Dimensional Testing/Calibration<sup>3</sup>

Parameter/Equipment	Range	CMC <sup>2,4</sup> (±)	Comments
Length	Up to 4 in	0.0001 in	Micrometer
	Up to 6 in	0.0014 in	Caliper
Radius	(1 to 15) mm	0.5 mm	Radius gage
Diameter	(0.011 to 0.5) in	0.001 in	Pin gages
Area – (X, Y)	(300 × 300) mm	(14 + 1.0L) μm	RAM Optical CMM
	(300 × 600) mm	100 μm	Micro Vu Optical CMM
Volume – (X, Y, Z)	(700 × 1000 × 700) mm	(9.2 + 3.3L) μm	B&S Global CMM
	(400 × 500 × 400) mm	(15 + 1.8L) μm	B&S MicroVal PFX CMM
	(900 × 1500 × 900) mm	(22 + 2.9L) μm	B&S Xcel CMM

Parameter/Equipment	Range	CMC <sup>2,4</sup> (±)	Comments
Volume – (X, Y, Z) (cont)	(700 × 1000 × 500) mm	(15 + 2.2L) μm	B&S Xcel CMM
Angle	(0 to 360)°	1.9"/A 3"/A 4.5"/A 3"/A 4.5"/A 3.1"/A	B&S Global CMM B&S MicroVal PFx CMM B&S Xcel CMM RAM Optical CMM Micro Vu Optical CMM B&S Xcel CMM

## II. Dimensional Calibration<sup>3</sup>

Parameter/Equipment	Range	CMC <sup>2,4</sup> (±)	Comments
Gage Blocks	Up to 14 in	(4.8 + 7.5L) μin	P & W ULM
Pin Gages	Up to 14 in	(4.8 + 7.5L) μin	P & W ULM
Cylindrical Plugs	Up to 14 in	(4.8 + 7.5L) μin	P & W ULM
Ring Gages	Up to 12 in	(25 + 7L) μin	P & W ULM
Length Standard	Up to 14 in	(4.8 + 7.5L) μin	P & W ULM

<sup>1</sup> This laboratory offers commercial dimensional testing/calibration service.

<sup>2</sup> Calibration and Measurement Capability (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. Calibration and Measurement Capabilities represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of  $k = 2$ . The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

<sup>3</sup> This laboratory meets R205 – *Specific Requirements: Calibration Laboratory Accreditation Program* for the types of dimensional calibrations listed above. Accredited test reports issued containing appropriate statements of measurement results, measurement uncertainty, and traceability are considered equivalent to a “calibration” certificate.

<sup>4</sup> In the statement of best uncertainty,  $A$  is the numerical value of the shortest distance of the leg defining the angle in meters, and  $L$  is the measured length in meters.