



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

NEL PRETECH CORPORATION
8420 183rd Place
Tinley Park, IL 60487
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MECHANICAL

Valid To: March 31, 2026

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^{1,5}:

I. Dimensional Testing

Parameter/Equipment	Range	CMC ^{2, 4, 6} (\pm)	Comments
Length ³ (1D) – Measure	Up to 25 mm	2.7 μ m	Micrometer
	Up to 150 mm	28 μ m	Caliper
Radius ³ – Measure	(1 to 15) mm	0.16 mm	Radius gage
	(1/64 to 0.5) in	0.01 in	
Volume ³ – (X, Y, Z) Measure	(700 \times 270 \times 270) mm	(3.7 + 13L) μ m	Zeiss Metrotom 800 CT
	(1150 \times 300 \times 600) mm	(5.6 + 25L) μ m	Zeiss Metrotom 1500 CT
	(100 \times 70 \times 60) mm	16 μ m	ATOS Q255, MV 100
	(350 \times 260 \times 260) mm	37 μ m	ATOS Q255, MV350
	(700 \times 1000 \times 700) mm	(9.0 + 0.8L) μ m	B&S Global Image CMM
	(900 x 1500 x 900) mm	(21 + 0.6L) μ m	B&S Xcel CMM
	(700 x 1000 x 500) mm	(15 + 0.6L) μ m	B&S MicroXcel CMM
	(400 x 400 x 300) mm	(2.5 + 2.5L) μ m	Mycrona Altera S/L CMM

Parameter/Equipment	Range	CMC ^{2, 4, 6} (\pm)	Comments
Diameter ³ – Measure	(0.011 to 0.5) in	0.000 65 in	Pin gages
Area ³ – (X, Y) Measure	(300 × 300) mm	(14 + 0.3L) μ m	RAM optical CMM
Angle ³ – Measure	(0 to 360) ^o	(0.0002 ^o /A) + 0.000 72 ^o (0.000 32 ^o /A) + 0.0014 ^o (0.000 92 ^o /A) + 0.0 ^o (0.0021 ^o /A) + 0.0 ^o (0.0008 ^o /A) + 0.000 017 ^o (0.000 52 ^o /A) + 0.000 046 ^o (0.0012 ^o /A) + 0.000 034 ^o (0.000 84 ^o /A) + 0.000 034 ^o (0.000 14 ^o /A) + 0.000 14 ^o	Zeiss Metrotom 800 CT Zeiss Metrotom 1500 CT ATOS Q255, MV100 ATOS Q255, MV350 RAM optical CMM B&S Global Image CMM B&S Xcel CMM B&S MicroXcel CMM Mycrona Altera S/L CMM
Fixture Gages ³	(700 × 1000 × 700) mm (900 × 1500 × 900) mm (700 × 1000 × 500) mm	(9.0 + 0.8L) μ m (21 + 0.6L) μ m (15 + 0.6L) μ m	B&S Global CMM B&S Xcel CMM B&S MicroXcel CMM
Surface Finish of Parts ³ – Measure	Ra (5 to 200) μ in Rq (5 to 200) μ in Rz (40 to 1200) μ in	(0.4 + 0.06S) μ in (0.4 + 0.06S) μ in (4.3 + 0.06S) μ in	Mahr MarSurf M400

¹ This laboratory offers commercial dimensional testing.

² Calibration and Measurement Capability Uncertainty (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. CMCs 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.

³ This test is not equivalent to that of a calibration.

⁴ In the statement of CMC, A is the numerical value of the shortest distance of the leg defining the angle in meters, S is the surface finish in the parameter in question in μin , and L is the measured length in meters.

⁵ This scope meets A2LA's *P112 Flexible Scope Policy*.

⁶ The type of instrument or material being tested is defined by the parameter. This indicates the laboratory is capable of testing instruments that measure or generate the values in the ranges indicated for the listed measurement parameter.



Accredited Laboratory

A2LA has accredited

NEL PRETECH CORPORATION

Tinley Park, IL

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of any additional program requirements in the Mechanical field. 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*).



Presented this 6th day of March 2024.

A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2140.01
Valid to March 31, 2026

For the types of tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.