



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

SMALL TUBE PRODUCTS, LLC
200 Oliphant Drive
Duncansville, PA 16635
Elizabeth Malone Phone: 814 693 6024

MECHANICAL

Valid To: April 30, 2021

Certificate Number: 0372.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on metals and alloys:

<u>Test</u>	<u>Test Method(s)</u>
Conductivity	ASTM E1004
Expansion	ASTM B153; ISO 8493
Flattening	ASTM B111, B968
Hardness: Vickers (500 gf) Rockwell (B, C, F, 15T, 30T)	ASTM E384; EN 6507-1 ASTM E18
Metallography: Grain Size Comparison Method Planimetric Method	ASTM E112; ISO 2624
Residual Stress	ASTM B154
Tensile Testing: Tensile Strength, Yield Strength, % Elongation	ASTM E8/E8M
Chemical O.E.S. (Ag, Al, As, Bi, C, Cu, Fe, Mg, Mn, Ni, P, Pb, S, Si, Sn, Zn)	ASTM E478

I. Dimensional Testing¹

Parameter	Range	CMC ² (±)	Technique / Standard
Length - 1D ³	Up to 6 in Up to 40 in	0.0018 in 0.0025 in	Caliper / MIL-STD-120
	Up to 1 in (1 to 3) in	0.0004 in 0.0014 in	Micrometer / MIL-STD-120
	Up to 1 in	0.0012 in	Plug gage / MIL-STD-120

¹ This laboratory offers limited commercial dimensional testing services.

² 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 measurements 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 measurement 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 measurement.

³ These tests are not equivalent to that of a calibration.



Accredited Laboratory

A2LA has accredited

SMALL TUBE PRODUCTS, LLC

Duncansville, PA

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 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 11th day of March 2019

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0372.01
Valid to April 30, 2021

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