



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

GREENE, TWEED & CO.
(CENTRAL ENGINEERING, MATERIALS LABORATORY & PRODUCT TESTING LABORATORY)
2075 Detwiler Rd.
Kulpsville, PA 19443
David Shields Phone: 267 932 5692

MECHANICAL

Valid To: August 31, 2025

Certificate Number: 3187.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on manufactured components, rubber, PTFE, and composites:

| <u>Test:</u> | <u>Test Method(s):</u> |
|---|--|
| Compressive Properties of Rigid Plastics | ASTM D695 |
| Corrosion and Adhesion | SAE AMS-P-5516 Section 4.5.4, SAE AMS-P-83461 Section 4.6.3, SAE AMS-P-25732 (Withdrawn 2003) ¹ Section 4.6.3; NAS 1613 Section 4.3.3.9; MIL-PRF-25732 |
| Deformation Under Load | ASTM D621-1988 (Withdrawn) ¹ |
| Density and Specific Gravity (Relative Density) of Plastics by Displacement | ASTM D792 |
| Dynamic Cycling, Corrosion and Adhesion | MIL-PRF-25732; SAE AMS-P-25732 (Withdrawn 2003) ¹ Section 4.7, SAE AMS-P-83461 Section 4.7 |
| Enthalpies of Fusion and Crystallization by Differential Scanning Calorimetry | ASTM E793 |
| Evaluating Rubber Property – Retraction at Lower Temperatures (TR Test) | ASTM D1329 |
| Flex Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials | ASTM D790 |
| Infrared Spectrophotometry | ASTM E1252 |
| Liquid Penetrant Examination | ASTM E165 Except Sections A.2 to A.4 |

Test:**Test Method(s):**

| | |
|--|--|
| Polytetrafluoroethylene (PTFE) Molding and Ram Extrusion Materials | ASTM D4894 Section 10.7 |
| Rubber – Compositional Analysis by Thermogravimetry (TGA) | ASTM D6370 |
| Rubber – Deterioration in an Air Oven | ASTM D573 |
| Rubber – O-Rings | ASTM D1414, <i>Except section 17</i> |
| Rubber – Materials, Equipment, and Procedures for Mixing Standard Compounds and Preparing Standard Vulcanized Sheets | ASTM D3182 <i>Except Sections 7.2 and 7.3</i> |
| Rubber Properties – Measurement of Cure and After – Cure Dynamic Properties using RPA | ASTM D6601 |
| Rubber – Measurement of Unvulcanized Rheological Properties using Rotorless Shear Rheometers | ASTM D6204 |
| Rubber Products – Chemical Analysis (Specific Gravity) | ASTM D297 Section 16.3 |
| Rubber Property – Adhesion to Rigid Substrates | ASTM D429 Method A |
| Rubber Property – Compression Set | ASTM D395 Method B |
| Rubber Property – Durometer Hardness (Types A, D and M) | ASTM D2240 Method A |
| Rubber Property – Effect of Liquids | ASTM D471 |
| Rubber Property – International Hardness | ASTM D1415 |
| Rubber Property – Vulcanization using Rotorless Cure Meters | ASTM D5289 |
| Rubber – Viscosity, Stress Relaxation, and Pre-Vulcanization Characteristics (Mooney Viscometer) | ASTM D1646 |
| Conditioning Plastics for Testing | ASTM D618 |
| Shear Strength of Plastics by Punch Tool | ASTM D732 |
| Standard Test Method for Assignment of the DSC Procedure for Determining Tg of a Polymer or an Elastomeric Compound | ASTM D7426 |
| Standard Test Method for Linear Thermal Expansion of Solid Materials by Thermomechanical Analysis | ASTM E831 |

| <u>Test:</u> | <u>Test Method(s):</u> |
|---|-------------------------------------|
| Static and Kinetic Coefficients of Friction of Plastic Film and Sheeting | ASTM D1894 |
| Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers, Die B and Die C | ASTM D624 |
| Tensile Properties of Plastics | ASTM D638 <i>Except Section A.3</i> |
| Tensile Properties of Polymer Matrix Composite Materials | ASTM D3039 |
| Transition Temperatures and Enthalpies of Fusion and Crystallization of Polymers by Differential Scanning Calorimetry | ASTM D3418 |
| Vulcanized Rubber and Thermoplastic Elastomers Tension | ASTM D412 Procedure A |
| Water Absorption of Plastics | ASTM D570 |
| Compressive Properties of Polymer Matrix Composites | ASTM D6641 |
| Shear Properties of Composites | ASTM D7078 |
| Filled Compounds of Polytetrafluoroethylene (PTFE) Molding and Extrusion Materials (Tensile Only) | ASTM D4745 Section 11.4 |
| Tensile Properties of Plastics | ASTM D1708 |

¹ This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.



Accredited Laboratory

A2LA has accredited

GREENE, TWEED & CO.

Kulpsville, 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 28th day of August 2023.

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 3187.01
Valid to August 31, 2025

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