



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

GTI TESTING LABORATORIES
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MECHANICAL

Valid To: January 31, 2012

Certificate Number: 2139.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests and failure analyses on solids, automotive components, fasteners and metals, pipeline coatings, plastics and polymers, pressure vessels, rubber, tools, liquids, coal, coke, and gases:

<u>Test Method(s)</u>	<u>Test Description</u>
<u>Mechanical Testing</u>	
ASTM D638	Tensile Properties of Plastics
ASTM D790	Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
ASTM D1238	Melt Flow Rates of Thermoplastics by Extrusion Plastometer
ASTM D3417	Enthalpies of Fusion and Crystallization of Polymers by Differential Scanning Calorimetry (DSC)
ASTM D3418	Transition Temperatures of Polymers by Differential Scanning Calorimetry
ASTM D3895	Oxidation Induction Time of Polyolefins by DSC
ASTM E8/E8M	Tension Testing of Metallic Materials
ASTM E10	Brinell Hardness of Metallic Materials
ASTM E18	Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials (B, C, 15N, 30N, 45N)
ASTM E384	Microindentation Hardness of Materials (Knoop and Vickers)

Test Method(s) Test Description

Mechanical Testing (cont'd)

ASTM E831	Standard Test Method for Linear Thermal Expansion of Solid Materials by Thermomechanical Analysis (TMA)
ASTM E1131	Standard Test Method for Compositional Analysis by Thermogravimetry (TGA)
ASTM F606/F606M	Fasteners Tensile, Wedge, Axial, and Proof Load

Metallographic Evaluation

ASTM B487	Measurement of Metal and Oxide Coating Thickness by Microscopical Examination of a Cross Section
ASTM E3	Preparation of Metallographic Specimens
ASTM E112	Determining Average Grain Size
ASTM E986	Scanning Electron Microscope (SEM)
ASTM E1077	Estimating the Depth of Decarburization of Steel Specimens
ASTM E1508	Energy Dispersive Spectroscopy (EDS)
ASTM F812	Surface Discontinuities of Nuts, Inch and Metric Series

Chemical Properties

ASTM D792 (Method A)	Specific Gravity
ASTM D1945 ASTM D1946 ASTM D3588	Analysis of Fuel Gas by Gas Chromatography
ASTM D1971 (Method B)	Digestion of Samples for ICP Analysis
ASTM D1976	Analysis of Elements in Water by ICP
ASTM D3246	Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry
ASTM D3677	Rubber – Identification by Infrared Spectrophotometry
ASTM D4309	Sample Digestion Using Microwave Heating Technique
ASTM D6228	Analysis of Sulfur Compounds in Gases by Gas Chromatography
ASTM E1019	Determination of Carbon and Sulfur in Steel and in Iron, Nickel, and Cobalt Alloys (LECO)

Test Method(s) Test Description

Chemical Properties (cont'd)

ASTM E1252	Standard Practice for General Techniques for Obtaining Infrared Spectra for Qualitative Analysis
ASTM D4239	Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High-Temperature Tube Furnace Combustion Methods
ASTM D5016	Standard Test Method for Sulfur in Ash from Coal, Coke, and Residues from Coal Combustion Using High-Temperature Tube Furnace Combustion Method with Infrared Absorption
ASTM D5142	Standard Test Methods for Proximate Analysis of the Analysis Sample of Coal and Coke by Instrumental Procedures
ASTM D5373	Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Laboratory Samples of Coal and Coke (LECO)
ASTM D5630	Ash Content in Thermoplastics

Coatings and Corrosion

ASTM G14	Impact Resistance of Pipeline Coatings (Falling Weight Test)
ASTM G17	Penetration Resistance of Pipeline Coatings (Blunt Rod)
ASTM G31	Laboratory Immersion Corrosion Testing of Metals
ASTM G62	Holiday Detection in Pipeline Coatings
NACE RP0188	
NACE RP0490	
NACE RP0274	

Failure analyses performed using methods listed above (GTI Procedure 3.0, 6.0)



The American Association for Laboratory Accreditation

World Class Accreditation

Accredited Laboratory

A2LA has accredited

GTI TESTING LABORATORIES

Des Plaines, IL

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *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 8 January 2009*).

Presented this 30th day of April 2010.



A handwritten signature in black ink, appearing to read "Peter Abney".

President & CEO
For the Accreditation Council
Certificate Number 2139.01
Valid to January 31, 2012

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