



WESTMORELAND

MECHANICAL TESTING & RESEARCH

CHEMICAL ANALYSIS TEST EXPERTS

**Expedited
Services
Available**

**Extensive
Scope**

**Customizable
Analysis**

Do You Need To...

- Perform chemical overchecks?
- Have alloy development?
- Verify unknown materials?
- Determine lot release?
- Check specification lots?
- Outsource Quality Assurance or Quality Control?

Services

- Material-Overchecks
- Hydrogen Overchecks
- Referee Testing
- Lot Release
- Combustion
- Inert Gas Fusion
- Specification Conformance
- Unknown Material Identification
- Chemical Composition for Welding
- Carburization Conformance
- Homogeneity Verification
- And Much More

Why Westmoreland?

Westmoreland Mechanical Testing & Research is a family owned and operated, independent testing and research laboratory that provides all-inclusive testing for a wide variety of non-metallic and metallic materials, offering standardized and customized testing solutions.

- ✓ Over 50 Years of Materials Testing Expertise
- ✓ Accredited, High-Quality Testing and Analyzation
- ✓ Extensive Scope and Customized Data to Each Test
- ✓ On-Site Machining and Specimen Preparation
- ✓ Mass Spectrometry (ICP), Graphite Furnace
- ✓ Entrusted by Thousands of Companies Worldwide
- ✓ Ability to Measure One Part-Per-Million to Five Percent
- ✓ Powder Sieve Analysis



USA

(1)724 537 3131
us.sales@wmtr.com
www.wmtr.com

UK

+44(0)1295 261211
salesuk@wmtr.com
www.wmtr.co.uk

CHEMICAL ANALYSIS

Standardized Testing List



LECO	
ASTM E1447	Standard Test Method for Determination of Hydrogen in Titanium and Titanium Alloys by Inert Gas Fusion Thermal Conductivity/Infrared Detection Method
ASTM E1409	Standard Test Method for Determination of Oxygen and Nitrogen in Titanium and Titanium Alloys by Inert Gas Fusion
ASTM E1941	Standard Test Method for Determination of Carbon in Refractory and Reactive Metals and Their Alloys by Combustion Analysis
ASTM E1019	Standard Test Method for Determination of Carbon, Sulfur, Nitrogen, and Oxygen in Steel, Iron, Nickel, and Cobalt Alloys by Various Combustion and Fusion Techniques
ASTM B170	Standard Specification for Oxygen-Free Electrolytic Copper-Refinery Shapes
OES	
ASTM E1251	Standard Test Method for Analysis of Aluminum and Aluminum Alloys by Spark Atomic Emission Spectrometry
ASTM E415	Standard Test Method for Analysis of Carbon and Low-Alloy Steel by Spark Atomic Emission Spectrometry
ASTM E1086	Standard Test Method for Analysis of Austenitic Stainless Steel by Spark Atomic Emission Spectrometry
ICP	
ASTM E2371	Standard Test Method for Analysis of Titanium and Titanium Alloys by Direct Current Plasma and Inductively Coupled Plasma Atomic Emission Spectrometry (Performance-Based Test Methodology)
ASTM E1479	Standard Practice for Describing and Specifying Inductively-Coupled Plasma Atomic Emission Spectrometers
ASTM E2823	Standard Test Method for Analysis of Nickel Alloys by Inductively Coupled Plasma Mass Spectrometry (Performance-Based Method)
GFAA	
ASTM E1184	Standard Practice for Determination of Elements by Graphite Furnace Atomic Absorption Spectrometry