



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

GLOBAL TUNGSTEN & POWDERS LLC
MATERIALS ANALYSIS LABORATORIES
1 Hawes Street
Towanda, PA 18848
Janet Otis Phone: 570 268 5536

CHEMICAL

Valid To: December 31, 2024

Certificate Number: 0342.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests for Refractory Powders, Parts and Wire, especially Tungsten and Molybdenum, Ceramics, other Inorganic Materials, including Waste Water and Solid Wastes:

Test Technology

Test Methods

Chromatography

Ion (Fluoride, Chloride, Nitrate, Sulfate, Phosphate) TCQ0587; SM 4100 B

Electron Microscopy

SEM/EDS TEQ0462; ASTM E1508

Miscellaneous

Combustion (C <2%, S <2%) TCQ0455; ASTM E1019 Method A
Inert Gas Fusion (H₂, N₂, O₂) TCQ0446; ASTM E1019, ASTM E1447
Free Carbon (C-free) TCQ0482; ASTM E1019
Ignition Loss TCT1095

Wet Chemistry Measurements

Specific Ion Electrode (Ammonia) TCW1004; SM 4500-NH3 D
Titrimetric TCQ0090
(CN, CL, KOH, HCl, Ammonia, Normality,
Alkalinity, Carbonate, Na₂CO₃ assay)
pH TCQ0221; TCP1042, TCP1043; EPA9045;
SM4500-H+B
Conductivity TCW1043

Test Technology

Test Methods

Spectroscopy

Atomic Absorption - Flame (Ag, Al, Au, Ba, Ca, Cd, Co, Cr, Cu, Eu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, Re, Si, Sr, V, W, Zn)	TCQ0014
Atomic Absorption - Graphite Furnace (As, Se)	TCQ0023; EPA7060, EPA7740
Cold Vapor Mercury Liquids	TCQ0311; EPA245.1, EPA7470
Cold Vapor Mercury Solids	TCQ0473; EPA7471
DC Arc Optical Emission (Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Nb, Ni, P, Pb, Sb, Si, Sn, Sr, Ta, Th, Ti, V, W, Zn, Zr)	TSQ0160, TSQ0198
ICP Optical Emission (Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pd, Re, S, Sb, Sc, Se, Si, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tl, V, W, Y, Zn, Zr)	TCQ0572; EPA200.7, EPA6010
Mass Spectrometry - Glow Discharge (All elements from Li – U by Atomic number)	TMQ0022, TMQ0225
Thermogravimetric Analysis (TGA)	TCT1078
Ultraviolet/Visible (Nitrite, Total Phosphate)	TCQ0518; SM 4500-NO2-B; EPA365.3
X-ray Fluorescence - Wavelength Dispersive (All elements from Na – U by Atomic number)	TFQ0011
X-ray Diffraction	TDQ0022, TDQ0013

Chromatography

GC	TCT1097
GC (Gas Analyzer)	TCD1015



Accredited Laboratory

A2LA has accredited

GLOBAL TUNGSTEN & POWDERS LLC

Towanda, PA

for technical competence in the field of

Chemical 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 23rd day of March 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 0342.01
Valid to December 31, 2024
Revised March 30, 2023

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