



Conseil canadien des normes
Standards Council of Canada

SCOPE OF ACCREDITATION

Element Materials Technology Canada Inc.
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Accredited Laboratory No. 6
(Conforms with requirements of ISO/IEC 17025:2005)

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CLIENTS SERVED: All interested parties

FIELDS OF TESTING: Mechanical/Physical

INITIAL ACCREDITATION DATE: 1983-04-12

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METALLIC ORES AND PRODUCTS

Articles of Metal:

All Forms, Articles of Metal

Refer to minor sub-heading: **Cast, Forged, Welded or Processed Metal Components**

Cast, Forged, Welded or Pressed Metal Components

(Mechanical)

ASTM A370, ASTM B557/557M, ASTM E8/E8M	Standard Test Methods and Definitions for Mechanical Testing of Steel Products Except for: Annexes 2 and 10
ASTM A770	Standard Specification for Through-Thickness Tension of Steel Plates for Special Applications
ASTM B769	Standard Test Method for Shear Testing of Aluminum Alloys
ASTM E10	Standard Test Method for Brinell Hardness of Metallic Materials
ASTM E139	Standard Test Methods for Conducting Creep, Creep-Rupture and Stress-Rupture Tests of Metallic Materials Only for: Stress-Rupture
ASTM E23	Standard Test Methods for Notched Bar Impact Testing of Metallic Materials
ASTM E292	Standard Test Methods for Conducting Time-for-Rupture Notch Tension Tests of Materials
ASTM E517	Standard Test Method for Plastic Strain Ratio r for Sheet Metal
ASTM E646	Standard Test Method for Tensile Strain- Hardening Exponents (n -Values) of Metallic Sheet Materials
ASTM F519	Standard Test Method for Mechanical Hydrogen Embrittlement Evaluation of Plating/Coating Processes and Service Environments
ASTM F606/F606M	Standard Test Methods for Determining the Mechanical Properties of Externally and Internally Threaded Fasteners, Washers, Direct Tension Indicators and Rivets Except for: sections 5 and 6

(Metallography)

ASTM A247	Standard Test Method for Evaluating the Microstructure of Graphite in Iron Castings
ASTM A262	Standard Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels
ASTM A428	Standard Test Method for Weight [Mass] of Coating on

	Aluminum-Coated Iron and Steel Articles
ASTM A800, A799	Standard Practice for Steel Casting, Austenitic Alloy, Estimating Ferrite Content Thereof
ASTM A90, ASTM B767, FLTM AQ101-01	Standard Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings
ASTM A923/ASTM A1084	Standard Test Methods for Detecting Detrimental Intermetallic Phase in Duplex Austenitic/Ferritic Stainless Steels
ASTM B456 –X4	Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium
ASTM B487	Standard Test Method for Measurement of Metal and Oxide Coating Thickness by Microscopical Examination of a Cross Section
ASTM B499, ASTM B244, ASTM D1186, ASTM E376, ASTM D1400, ASTM D7091, ISO 2808	Standard Test Method for Measurement of Coating Thickness by the Magnetic Method: Nonmagnetic Coatings on Magnetic Basis Metals Only for: 5.4.4, 5.5.7 and 5.5.8
ASTM B504	Standard Test Method for Measurement of Thickness of Metallic Coatings by the Coulometric Method
ASTM B764	Standard Test Method for Simultaneous Thickness and Electrode Potential Determination of Individual Layers in Multilayer Nickel Deposit (STEP-Test)
ASTM B962	Standard Test Methods for Density of Compacted or Sintered Powder Metallurgy (PM) Products using Archimedes' Principle
ASTM B963	Standard Test Methods for Oil Content, Oil-Impregnation Efficiency and Surface-Connected Porosity of Sintered Powder Metallurgy (PM) Products using Archimedes' Principle
ASTM C1617	Standard Practice for Quantitative Accelerated Laboratory Evaluation of Extraction Solutions Containing Ions Leached from Thermal Insulation on Aqueous Corrosion of Metals
ASTM C692	Standard Test Method for Evaluating the Influence of Thermal Insulations on External Stress Corrosion Cracking Tendency of Austenitic Stainless Steel [only for procedure B drip test]
ASTM E1077, SAE J121, SAE J419	Standard Test Method for Estimating the Depth of Decarburization of Steel Specimens
ASTM E112	Standard Test Methods for Determining Average Grain Size
ASTM E1245	Standard Practice for Determining the Inclusion or Second Phase Constituent Content of Metals by Automatic Image Analysis
ASTM E18	Standard Test Methods for Rockwell Hardness of Metallic Materials
ASTM E3	Standard Guide for Preparation of Metallographic Specimens
ASTM E340	Standard Test Methods for Macroetching Metals and Alloys
ASTM E381	Standard Method of Macroetch Testing of Steel Bars, Billets,

	Blooms and Forgings
ASTM E384	Standard Test Method for Microindentation Hardness of Materials
ASTM E407	Standard Practice for Microetching Metals and Alloys
ASTM E45	Standard Test Method for Determining the Inclusion Content of Steel (Manual and Automated Methods)
ASTM E562	Standard Test Method for Determining Volume Fraction by Systematic Manual Point Count
ASTM E92	Standard Test Methods for Vickers Hardness and Knoop Hardness of Metallic Materials
ASTM G28	Standard Test Methods of Detecting Susceptibility to Intergranular Corrosion in Wrought, Nickel-Rich chromium Bearing Alloys
ASTM G48	Standard Test Methods for Pitting and Crevice Corrosion Resistance of Stainless Steels and Related Alloys by Use of Ferric Chloride Solution
ASTM G87	Standard Practice for Conducting Moist SO ₂ Tests
AWSD1.1 (Only for sections 6.9 and 7.8), AWS D1.2 (Only for section 3, 5.14, 6.4.5.2, 6.4.5.4, and 6.4.5.5), AWS D17.1 (Only for sections 5, 7.1.2 and 7.3), FPS 15.08, PS-9472, ISO 5817	Structural Welding Code-Steel
SAE ARP 1947	Dendritic Arm Spacing Structural Aircraft Quality D357 Aluminum Alloy Castings. Determination and Acceptance of
(Weld Properties)	
ASME Section II Part A, Section II Part B, Section VIII, Section IX	Boiler and Pressure Vessel Code Sections II Only for , SA-193/SA193M, SA-194/SA194M, SA-213/SA-213M, SA-240/SA-240M, SA-325, SA-370,SA450/SA450M, , SA-530/SA-530M, SA-540/SA-540M, , SA-962/SA-962M, III, Section VIII Only for: UG-84 and Section IX Only for: QW-144, QW-150, QW-160, , QW-184, QW-194, QW-462.1, QW-462.4, QW-462.5, QW-462.12
ASTM A370, A450, A53	Standard Test Methods and Definitions for Mechanical Testing of Steel Products
ASTM E190	Standard Test Method for Guided Bend Test for Ductility of Welds
AWS D1.1	Structural Welding Code-Steel Only for: sections 6.9 and 7.8

AWS D1.2	Structural Welding Code-Aluminum Only for: 3, 5.14, 6.4.5.2, 6.4.5.4, and 6.4.5.5
CSA-W47 .1	Certification of Companies for Fusion Welding of Steel Only for: 9.9, 9.10, 9.11, 9.14, 11.6, 11.7
CSA-W47 .2	Certification of Companies for Fusion Welding of Aluminum Only for: Sections 10.4, 10.5, 10.6, 10.7

Other

(Environmental)

ASTM B117, FLTM BI103-01, ISO 9227, JISZ2371, NES M0140, SAE USCAR-1 TSH 1552G, DIN 50021, ISO 7253, GMW3286,	Standard Test Methods of Salt Spray Testing
ASTM B368, , BQ 105-01, GMW 14458	Standard Test Method for Copper Accelerated Acetic Acid Salt Spray (Fog) Testing (CASS Test)
ASTM B858	Standard Test Method for Ammonia Vapour Test for Determining Susceptibility to Stress Corrosion Cracking in Copper Alloys
ASTM D1654, GMW15282	Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
ASTM D1735, , ISO 6270-1, GMW14729	Standard Testing Practice for Water Resistance of Coatings Using Water Fog Apparatus
ASTM D2244	Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates
ASTM D2247, FLTM BI-104-02, FLTM BJ 107-03, DIN 50017, ISO 6270-1, ASTM D4585	Standard Practice for Testing Methods of Condensing Water Resistance of Coatings in 100% Relative Humidity
ASTM D3170, , SAE J400, GMW14700	Standard Test Method for Chipping Resistance of Coatings
ASTM D3359, FLTM BI 106-01, , GMW14829, ASTM D522, ISO 2409	Standard Test Methods for Measuring Adhesion by Tape Test
ASTM D3363	Standard Test Method for Film Hardness by Pencil Test
ASTM D4060	Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser
ASTM D523	Standard Test Method for Specular Gloss
ASTM D610 D714 GMW15356, GMW15357, GMW15358, GMW15359	Standard Practice for Evaluating Degree of Rusting on Painted Steel Surfaces

ASTM D870, FLTM BI 104-01	Standard Practice for Testing Water Resistance of Coatings Using Water Immersion
ASTM E1164	Standard Practice for Obtaining Spectrometric Data for Object-Colour Evaluation (Only for Reflectance)
Chrysler 463PB-31-01, GMW14333, GMW14334	Resistance to Fuels of Exteriors Automotive Materials and Components Except for: Technology Approvals using fuel EDS-T-7014
Chrysler LP-463PB-52-01, ASTM D870, FLTM BI104-01, LP463PB-22-01, ASTM D5894, ASTM D2803, FLTM BI123-01, FLTM BI123-03, GMW14872, Ford CETP 00.00-L-467, GMW 14124, SAE J2334 GMW 14671	Standard Test Method for Conducting Manual Cycling Corrosion Test Except for: cycle T Organic Coating Performance for Underhood and Underbody Components (Only for sections 3.9.1 and 3.9.3)
GMW 15288 HES D6501	Scab Corrosion Creepback of Paint Systems on Metal Substrates General Test Methods for Coatings
NES M0158 CCT#1, #2, #4, ASTM G85, SAE J2334, VDA621-415, MIL-STD-810 Only For: Method 509.6, FLTM BI123-01, FLTM BI123-03, TSH 1555G, GMW14872, GMW14124 SAE J1545	Standard Test Method for Conducting Automatic Cycle Testing of Coated Alloys Except for: cycle T Instrumental Colour Difference Measurement for Exterior Finishes, Textiles and Coloured Trim (Except for section 4.4.2 Multiangle Measurements)

Notes:

ISO/IEC 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories

Elias Rafoul, Vice President
Accreditation Services

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SCC 1003-15/12

Partner File #0
Partner: None