



## PORTÉE D'ACCRÉDITATION

**Element Materials Technology Canada Inc.  
Element Montreal  
104, avenue Nordic  
Pointe-Claire, QC  
H9R 3Y2**

Laboratoire accrédité n°288  
(Est conforme aux exigences de ISO/IEC 17025:2017)

PERSONNE-RESSOURCE:	Kamran Balouchestani
TÉL :	+1 514 694 5400
TÉLÉC. :	+1 514 695 0659
COURRIEL :	<a href="mailto:kamran.balouchestani@element.com">kamran.balouchestani@element.com</a>
SITE WEB :	<a href="http://www.element.com/">www.element.com/</a>
CLIENTÈLE :	Services offerts à tous les clients
DOMAINE(S) DES ESSAIS :	Examen Non Destructif, Mécanique et Physique
DATE DE LA PREMIÈRE ACCRÉDITATION :	1999-04-29
ÉMIS CE :	2019-03-24
VALABLE JUSQU'AU :	2023-04-29

**Note:** This scope of accreditation is also available in English as a separately issued document

**Remarque:** La présente portée d'accréditation existe également en anglais, sous la forme d'un document distinct.

### **MINÉRAIS ET PRODUITS MÉTALLIQUES**

#### **Articles de métal**

**Éléments métalliques coulés, forgés, soudés ou matrices**

**(Corrosion)**



ASTM A262	Standard Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels
ASTM B117	Standard Practice for Operating Salt Spray (Fog) Apparatus
ASTM D1654	Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments Sauf pour : Paragraphs 8.1.4 and 8.1.5
ASTM D610	Test method for evaluating degree of rusting on painted steel surface
ASTM D714	Standard Test Method for Evaluating Degree of Blistering of Paints
ASTM G110	Standard Practice for Evaluating Intergranular Corrosion Resistance of Heat Treatable Aluminum Alloys by Immersion in Sodium Chloride + Hydrogen Peroxide Solution
ASTM G48	Standard Test Methods for Pitting and Crevice Corrosion Resistance of Stainless Steels and Related Alloys by Use of Ferric Chloride Solution Seulement pour : <i>Method A &amp; Method C</i>

**(Mécanique)**

AREMA Chapter 30, Part 4	Concrete Ties Seulement pour : <i>Section 4.9 (Monoblock Ties)</i>
AREMA Chapter 4, Part 2	Specifications for Steel Rail Seulement pour : <i>Dimensions</i>
ASTM A370	Standard Test Methods and Definitions for Mechanical Testing of Steel Products; Tensile, Steel Bars, Tube: Free and Guided Bend. Steel Fasteners. Seulement pour : <i>Sections 5 à 14 et 19 à 28 et annexes 1 et A2, excepté pour A2.3 et annexes A3 et 9</i>
ASTM A48	Standard Specification for Gray Iron Castings Seulement pour : <i>Sections 12, 13 et 14</i>
ASTM B557/B557M	Standard Test Methods of Tension Testing Wrought and Cast Aluminum- and Magnesium-Alloy Products
ASTM D522	Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings
ASTM E10	Standard Test Method for Brinell Hardness of Metallic Materials
ASTM E208	Standard Test Method for Conducting Drop-Weight Test to Determine Nil-Ductility Transition Temperature of Ferritic Steels Seulement pour : <i>échantillons P2 et P3</i>
ASTM E23	Standard Test Methods for Notched Bar Impact Testing of Metallic Materials
ASTM E290	Standard Test Methods for Bend Testing of Material for Ductility
ASTM E384	Standard Test Method for Knoop and Vickers Hardness of Materials Sauf pour : dureté Knoop
ASTM E8/E8M	Standard Test Methods for Tension Testing of Metallic Materials



ASTM E92	Standard Test Methods for Vickers Hardness and Knoop Hardness of Metallic Materials Sauf pour : <i>Knoop Hardness</i>
ASTM F519	Standard Test Method for Mechanical Hydrogen Embrittlement Evaluation of Plating/Coating Processes and Service Environments Seulement pour : <i>sections 6, 10 et 11</i>
ASTM F606/F606M	Standard Test Methods for Determining the Mechanical Properties of Externally and Internally Threaded Fasteners, Washers, Direct Tension Indicators, and Rivets Sauf pour : <i>Sections 4 et 7</i>
CN12-16	CN Specification for the Manufacture of Steel rail Seulement pour : <i>Sections 8.0 (excluant 8.1 et 8.4), 13.0, 19.0 (excluant 19.6, 19.7 et 19.10), 20.0, 21.0 (excluant 21.3 et 21.4), 22.0 (excluant 22.6 et 22.7) et 23.0 (excluant 23.5)</i>
SAE J429	Mechanical and Material Requirements for externally Threaded Fasteners

**(Métallographie)**

ASTM A247	Standard Test Method for Evaluating the Microstructure of Graphite in Iron Castings
ASTM B487	Standard Test Methods for Measurement of Metal and Oxide Coating Thickness by Microscopical Examination of a Cross Section
ASTM E1077	Standard Test Method for Estimating the Depth of Decarburization of Steel Specimens Sauf pour : <i>Section 7.5 Chemical Analysis Methods</i>
ASTM E112	Standard Test Method for Determining the Average Grain Size (McQuaid Ehn Test) Sauf pour : <i>paragraphe 11</i>
ASTM E18	Standard Test Method for Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials
ASTM E3	Standard Test Methods of Preparation of Metallographic Specimens
ASTM E340	Standard Test Methods for Macroetching Metals and Alloys
ASTM E381	Standard Method of Macroetch Testing Steel Bars, Billets, Blooms and Forgings
ASTM E407	Standard Test Methods for Microetching Metals and Alloys
ASTM E562	Standard Test Method for Determining Volume Fraction by Systematic Manual Point Count
ASTM F2111	Practice for measuring intergranular attack or end grain pitting metal caused by aircraft chemical process Sauf pour : <i>6, 7.1 et 7.3</i>
SAE J423	Methods of Measuring Case Depth



**(Propriétés de la soudure ASME Boiler and Pressure Vessel Code - Sections II, III, VIII and IX Section)**

ASME IX (QB-150)	Brazing General Requirements - Tension Tests
ASME IX (QB-160)	Brazing General Requirements - Guided Bend Tests
ASME IX (QB-170)	Brazing General Requirements - Peel Tests
ASME IX (QB-180)	Brazing General Requirements - Sectioning Tests and Workmanship Coupons
ASME IX (QW-150)	Welding General Requirements - Tension Tests
ASME IX (QW-160)	Welding General Requirements - Guided Bend Tests
ASME IX (QW-170)	Welding General Requirements - Notch Toughness Tests
ASME IX (QW-180)	Welding General Requirements - Fillet Weld Tests
ASTM EI90	Standard Test Method for Guided Bend Test for Ductility of Welds
AWS D1.1	Welding Procedures of Steel Structural Seulement pour : : <i>Section 3 part B et Section 4 part B</i>
AWS D1.2	Welding Procedures of Aluminum Structure
AWS D17.1	Specification for Fusion Welding for Aerospace Application Seulement pour : <i>sections 5.3.8 et 7, excepté 7.4</i>
CSA-W47 .1	Welding Procedures of Steel Structures Seulement pour : <i>sections 9.9 à 11.9.5</i>
CSA-W47 .2	Welding Procedures of Aluminum Alloys Seulement pour : <i>sections 8.4 à 8.8 et 9.1 à 9.7.5</i>

**(Revêtement et placage)**

ASTM A90 & A90M	Standard Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings
ASTM B137	Standard Test Method for Measurement of Coating Mass Per Unit Area on Anodically Coated Aluminum
ASTM B244	Standard Test Method for Measurement of Thickness of Anodic Coatings on Aluminum and of Other Nonconductive Coatings on Nonmagnetic Basis Metals with Eddy-Current Instruments
ASTM D2794	Standard test method for resistance of organic coatings to the effects of rapid deformation (Impact)
ASTM D3359	Standard Test Methods for Measuring Adhesion by Tape Test
ASTM D3363	Standard Test Method for Film Hardness by Pencil Test
ASTM D7091	Standard Practice for Nondestructive Measurement of Dry Film Thickness of Nonmagnetic Coatings Applied to Ferrous Metals and Nonmagnetic, Nonconductive Coatings Applied to Non-Ferrous Metals
ASTM D968	Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive



**Notes:**

**AREMA:** American Railway Engineering and Maintenance-of-Way Association  
**ASME:** American Society of Mechanical Engineers  
**ASTM:** ASTM International  
**AWS:** American Welding Society  
**ISO/IEC 17025:** Exigences générales concernant la compétence des laboratoires  
d'étalonnages et d'essais  
**CN:** Canadian National Standard  
**CSA:** Canadian Standards Association  
**SAE:** Society of Automotive Engineers

---

Elias Rafoul, Vice-président  
Services d'accréditation  
Date: 2019-07-08

CCN 1003-15378  
Dossier du partenaire n°: 30122  
Partenaire : BNQ-EL