

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT CLEVELAND
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MECHANICAL

Valid To: September 30, 20

Certificate Number: 0100.01

In recognition of the successful completion of the A2LA evaluation accreditation is granted to this laboratory to perform the following types of tests on metals, threaded fasteners, wire, tube, lifting gear, welded chain, wire rope and fittings, springs, and energy absorbing devices and products

Test	Test Method(s)
Coatings Conversions and Platings	ASTM B487, B748
Coating Thickness	EN ISO 1463; NASM 131-2
Coating Weight	ASTM A90, A428, B137 MIL-DTL-16232
Conductivity	ASTM E1004
Hydrostatic Pressure Tests (0 to 40,000 psi)	SOP 44.00
Mechanical Tests of Metals and Metal Products	
Bend	ASTM E190, E290; AWS B4.0, D1.1, D1.2, D1.5 DIN EN 910
Compression	SOP 39.50
Creep	ASTM E139

Test	Test Method(s)
Mechanical Tests of Metals and Metal Products cont'd Hydrogen Embrittlement	ASTM F606, F606M; NASM 1312, 131214;

Test	Test Method(s)
Metallography and Micrography of Ferrous and Nonferrous Materials cont'd	
Case & Core Hardness	ASTM F606/F606M; SAE J78, J429; NASM 13126
Case Depth	SAE J423
Corrosion Resistance	ASTM A262 (Methods A, C & E), A923 (Methods A & C), G48, G28 (Method A); AMS 5656; DIN 50914; EN ISO 3651, 6957
Decarburization	ASTM E1077, F835 F2328; F5-85 ; SAE J121(Withdrawn Jan 2013)J419; GM 6104M; ISO 8981,8985
Delta Ferrite	AMS 2315; ASTM E562
Grain Size	ASTM E112, E930, E1181
Graphite Type and Distribution	ASTM A247
Macroscopic Preparation/Examination	ASTM A561, A604, E381, E340; AMS 2433; GM4460P
Specimen Preparation	ASTM E3, E407
Microcleanliness	ASTM E45 (Method A & D), E766; DIN 50602; SAE J422
Photomicrography	ASTM E883
Surface Discontinuities	ASTM F788; SAE J122, J123, J1061
Surface Finish	ASME B46.1
Pneumatic Pressure Tests (0 to 6000) psi	SOP 44.00

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

Scope of Accreditation.