



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

MODERN INDUSTRIES, INC
613 West 11th Street
Erie, PA 16501
Abhijit Deokar Phone: 814 455 8061
Abhijitd@modernind.com

MECHANICAL

Valid To: January 31, 2022

Certificate Number: 2949.01

In recognition of the successful completion of the A2LA evaluation process (including compliance to R223 – Specific Requirements – GE Aviation S-400 Accreditation Program), accreditation is granted to this laboratory at the location listed above, as well as the one satellite laboratory location listed below¹, to perform the following tests on steel, stainless steel, cast iron, copper alloys, aluminum, nickel & cobalt alloys, titanium, miscellaneous metals, forgings, castings, machined components, billets, bars, ingot, powdered metals, fasteners, chain, and cable:

Test:

Test Methods:

Physical Testing:

Bend Testing (Less Tubing)

Compression

Density

Flattening / Flaring

Hardness Testing

Brinell Hardness (500 kgf, 3000 kgf)

Rockwell (A, B, C, F, 15N, 30N, 30T)

Impact (Charpy) (-423 to +1000)°F

Jominy

Proof (No Cone Proof)

Shear, Single & Double

Stress Rupture

Tensile

Ambient Temperature to 1800 °F

Tensile (Axial / Wedge)

Metallographic Evaluation:

Preparation

Conductivity

Decarburization

Case Depth

ASME Sec IX; ASTM A370, A489, D790, E190;
AWS B2.1/B2.1M, D1.1/D1.1M, D1.5/D1.5M

ASTM E9

ASTM B311, B328-96(2003)e1 (Withdrawn 2009)²;
MPIF Standard 42

ASTM A530/A530M, A1016/A1016M

ASTM E10

ASTM E18; MIL-STD-1312-6² (Withdrawn 1997,
replaced by NASM 1312-6); NASM 1312-6

ASTM A370, E23; AWS D1.5/D1.5M

ASTM A255

ASTM F606/F606M

ASME QW196; NASM 1312-13

ASTM E139, E292

ASTM A370, D638/D638M, E8/E8M, E21,
F606/F606M

ASTM A370, F606/F606M

ASTM E3

AMS 2658

ASTM E1077, ASTM F2328

SAE J423

Test:

Metallographic Evaluation (cont'd)

Ferrite Rating
Grain Size (Comparison Method Only)
Inclusion Rating / Cleanliness

Intergranular Attack
Macroetch

Microhardness
 Knoop (100-1000g)
 Vickers (100-1000g)
Microstructure
Microstructure in Cast Iron Graphite
Evaluation
Permeability
Pitting and Crevice Corrosion and
Intergranular Corrosion
Photomicrograph
SEM (Semi-quantitative, Material
Identification)
Weld Operator and Procedure Qualification
Testing (less Radiography)

Test Methods:

AMS 2315; ASTM E562
ASTM E112
ASTM E45 Methods A & D; SAE J422;
SAE AMS2301, AMS2303
ASTM A262 Methods A & E
ASTM A561, A604/A604M, E340, E381;
AWS D1.1/D1.1M
ASTM E384, E92

ASTM E1268; ASM Metals Handbook, Volume 9
ASTM A247

ASTM A342/A342M Method 3
ASTM G28, G48

ASTM E883
ASTM E1508

ASME Sec IX; AWS D1.1/D1.1M, D1.2/D1.2M,
D1.5/D1.5M, D11.2

ASTM E165/E165M, E1417/E1417M; MIL-STD-
6866² (Canceled 1996, Replaced by ASTM E1417),
MIL-STD-271F² (Canceled 1998, Replaced by
NAVSEA T9074-AS-GIB-010/271)
ASTM E709, E1444/E1444M; MIL-STD-271F²
(Canceled 1998, Replaced by NAVSEA T9074-AS-
GIB-010/271), MIL-STD-1949² (Canceled 1993,
Replaced by ASTM E1444)

Nondestructive Testing Methods:

Liquid Penetrant Examination
 Visible
 Fluorescent

Magnetic Particle Examination
 Yoke – Visible (Dry)
 Bench (Fluorescent)



MODERN INDUSTRIES, INC
1325 Ranchers Legacy Trail,
Fort Worth, TX 76126
kevin.polito@modernind.com
844-603-6105

Test:

Physical Testing:

Compression
Brinell Hardness (500 kgf, 3000 kgf)
Rockwell (B, C, 15N, 30N, 30T)
Impact (Charpy) -320°F to Ambient
Tensile Ambient Temperature

Test Methods:

ASTM E9
ASTM E10
ASTM E18
ASTM A370, E23; AWS D1.5/D1.5M
ASTM A370, E8/E8M

Metallographic Evaluation:

Preparation
Decarburization
Case Depth
Ferrite Rating
Grain Size (Comparison Method Only)
Inclusion Rating / Cleanliness
Microhardness
 Vickers (100g, 500g, 1000g)
Microstructure
Microstructure in Cast Iron Graphite
Weld Operator and Procedure Qualification
Testing (Tensile and Charpy Only)

ASTM E3
ASTM E1077; SAE J121
SAE J423
AMS 2315; ASTM E562
ASTM E112
ASTM E45 Methods A & D; SAE J422
ASTM E384, E92

ASTM E1268; ASM Metals Handbook, Volume 9
ASTM A247
ASME Sec IX; AWS D1.1/D1.1M, D1.2/D1.2M,
D1.5/D1.5M, D11.2

¹This accreditation covers testing performed at all laboratory locations listed on this scope of accreditation.

²This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.





Accredited Laboratory

A2LA has accredited

MODERN INDUSTRIES, INC.

Erie, PA

for technical competence in the field of

Mechanical 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 laboratory also meets the requirements of R223 – Specific Requirements: GE Aviation S400 Accreditation Program. 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 20th day of March 2020.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2949.01
Valid to January 31, 2022

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