CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

HyCAL Met Lab
27800 West Jefferson Avenue
Gibraltar, MI 48173

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 09 November 2023
Certificate Number: AT-2518

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. 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).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

HyCAL Met Lab

27800 West Jefferson Avenue
Gibraltar, MI 48173
Mark Blankenau 734 561 2000
mblankenau@hycalcorp.com www.hycalcorp.com

TESTING

Valid to: **November 9, 2023** Certificate Number: **AT-2518**

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Ultimate Tensile Strength (Up to 33 750) lbs	ASTM E8, A370; DIN EN ISO 6892-1 JIS-Z-2241	Metal Plate, Sheet and Strip	Instron Tensile Machine
Yield Strength (Up to 33 750) lbs	ASTM E8, A370; DIN EN ISO 6892-1 JIS-Z-2241	Metal Plate, Sheet and Strip	Instron Tensile Machine
Elongation	ASTM E8, A370, D3953; DIN EN ISO 6892-1 JIS-Z-2241	Metal Plate, Sheet and Strip	Instron Tensile Machine
Hardness B, C Scale	ASTM E18	Metal Plate, Sheet and Strip	Hardness Tester
Superficial Hardness 15T, 30T, 15N, 30N Scales	ASTM E18	Metal Plate, Sheet and Strip	Hardness Tester
n-Value Strain Hardening Exponent	ASTM E646; DIN EN ISO 6892-1 JIS-Z-2241	Metal Plate, Sheet and Strip	Instron Tensile Machine
Break Strength	ASTM D3953	Metal Plate, Sheet and Strip	Instron Tensile Machine
Bend Check	ASTM D3953	Metal Plate, Sheet and Strip	ASTM D3953 Bend Fixture

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Metallographic Specimen Preparation	ASTM E3	Metal Plate, Sheet and Strip	Automatic and Manual Metallographic Mounting and Polishing
Microetching Metals	ASTM E407	Metal Plate, Sheet and Strip	Manual Chemical Etchants
Grain Size	ASTM E112	Metal Plate, Sheet and Strip	Optical Microscopy; Digital Photography and Software
Inclusion Content of Steel	ASTM E45 Method A	Metal Plate, Sheet and Strip	Optical Microscopy; Digital Photography and Software
Depth of Decarburization	ASTM E1077	Metal Plate, Sheet and Strip	Optical Microscopy; Digital Photography and Software
Photomicrography	ASTM E883	Metal Plate, Sheet and Strip	Optical Microscopy; Digital Photography and Software

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AT-2518.

R. Douglas Leonard Jr., VP, PILR SBU