



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

METAL INDUSTRIES RESEARCH & DEVELOPMENT CENTRE (MIRDC)

Testing Laboratory  
1001 Kaonan Highway, Nantzu  
81160, Kaohsiung, Taiwan, R.O.C.  
Ms. I-Hua Wang Phone: 011 886 7 351 3121  
FAX: 011 886 7 353 3581  
Email: [siohwa@mail.mirde.org.tw](mailto:siohwa@mail.mirde.org.tw)

MECHANICAL

Valid until: June 30, 2023

Certificate Number: 0589.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following metals and fastener tests:

<b><u>Test(s):</u></b>	<b><u>Test Method(s):</u></b>
Hardness	
Brinell (3000 kgf)	ASTM E10, ASTM F606/F606M; ISO 898-1, ISO 898-2, ISO 6506-1; JIS Z2243-1
Rockwell (HRBW, HRC)	ASTM E18, ASTM F606/F606M; ISO 898-1, ISO 898-2, ISO 6508-1; JIS Z2245
Vickers (0.1/0.3/0.5/10/30 kgf)	ASTM E92, ASTM E384; ISO 898-1, ISO 898-2, ISO 6507-1; JIS B1051, JIS Z2244
Impact (Charpy)	ASTM E23
Proof (Up to 1000 kN) (Internally and Externally Threaded, Cone Method Included)	ASTM F606/F606M; ISO 898-1, ISO 898-2
Tensile (Up to 1000 kN)	
Machined Specimen (Elongation, Reduction of Area, Yield Strength, Tensile Strength)	ASTM E8/E8M, ASTM F606/F606M; ISO 898-1; JIS Z2241
Wedge & Axial - Full Size	ASTM F606/F606M; ISO 898-1

**Test(s):**

**Test Method(s):**

Metallographic Evaluation

Case Depth

JIS G0557, JIS G0559, JIS G0562; SAE J78, SAE J423

Depth of Decarburization

ASTM E1077, ASTM F835, ASTM F912, ASTM F2328, ASTM F2328M; ISO 898-1; JIS B1051, JIS B1053; SAE J121 (Apr. 1997)<sup>1</sup>, SAE J121M (Apr. 1997)<sup>1</sup>

Grain Size (Comparison)

ASTM E112; JIS G0551, JIS H0501

Macroetch

ASTM E340, ASTM E381

Plating and Coating Thickness

Optical

ASTM B487

Weight

ASTM A90/A90M

X-Ray (Absorption)  
(Zn/Fe, Cd/Fe, Cr/Fe, Ni/Fe)

ASTM B568

Salt Spray

ASTM B117; ISO 9227

Chemical Testing

Determination of Carbon and Sulfur

ASTM E1019

Vacuum Optical Emission Spectroscopy  
on Carbon, Low Alloy, and Stainless  
Steel  
(B, C, Cr, Cu, Mn, Mo, Nb, Ni, P, S, Si,  
V, W)

ASTM E415, ASTM E1086

<sup>1</sup>*This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.*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

# METAL INDUSTRIES RESEARCH & DEVELOPMENT CENTRE (MIRDC)

*Kaohsiung, Taiwan, R.O.C.*

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 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 27<sup>th</sup> day of April 2021.

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

Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 0589.01  
Valid to June 30, 2023

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