

### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

SUZHOU Q-LAB INC. No.7 Dongwang Road Loufeng East District,Suzhou Industrial Park ,JiangSu, China Plum Yin Phone: +86 0512 6593 6588-38540 E-mail:plum.yin@qlabinc.com.cn

#### MECHANICAL

Valid To: July 31, 2025

Certificate Number: 0871.03

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests <u>on fasteners<sup>1</sup></u>:

Test	Test Method(s)
Hardness & Superficial Hardness (Rockwell B, C, 15N, 30N)	ASTM E18; F606/F606M; ISO6508-1
Microhardness, Vickers (300 to 30000) gf	ASTM E384, E92; ISO6507-1
Tensile (Axial Wedge)	ASTM F606/ F606M; ISO 898-1, ISO3506-1; SAE J429
Proof (Internally Threaded, Non-Locking, Cone Method)	ASTM F606/ F606M; ISO 898-2, ISO3506-2; SAE J995
Ductility	ASME B18.6.3, B18.6.5M; FIP1000
Torque Strength	ASME B18.6.3; FIP1000; ISO 7085,898-7; SAE J78, J81, J933
Drive Torque	FIP1000; SAE J81, J1237; DIN7500-1
Hydrogen Embrittlement	ASTM F606/ F606M; FIP1000; ISO 15330; SAE J81, J1237
Case Depth	ISO 2702, 7085; SAE J78, J81, J423, J1237
Drive Test	FIP1000; SAE J81, J933, J1237
Carburization/Decarburization	ISO 898-1; ASTM F2328, F2328M

(A2LA Cert. No. 0871.03) 05/30/2023

Page 1 of 3

Test	Test Method(s)
Surface Discontinuities	ASTM A574/A574M, E340, F788/F788M, F812/F812M; ISO 6157-1, 6157-2, 6157-3; SAE J122, J123
Plating Thickness – X-Ray	ASTM B568
Plating Thickness – Microscopic Method	ASTM B487
Salt Spray Test	ASTM B117; ISO9227
Chemical Component Analysis	ASTM E415,E1086 (Al, C,Cu, Cr, Mn,Mo, Ni, P,S,Si)
Chromate Conversion Coating	ISO 3613 (only certified 5.5.1)
Torque/Tension and Coefficient of Friction	ISO 16047

### I. Dimensional Testing<sup>1</sup>

Parameter/Equipment	Range	Comments
Angle <sup>2</sup>	(0 to 360)°	Optical comparator/CNS B6086
Radius <sup>2</sup>	Up to 14 mm	Optical comparator/CNS B6086
Protrusion Height <sup>2</sup>	(#2 to 3/8) in (M2 to M10)	Protrusion height gage/ASME B18.6.3, B18.6.5M
Threads <sup>2</sup> (System 21&22) –	(#4 to 2~1/2) in (M2 to M36)	Thread ring gage/ASME B1.2; ISO 1502
	(#4 to 2~1/4) in (M3 to M36)	Thread plug gage/ASME B1.2; ISO 1502
	(#4 to 2~1/4) in (M3 to M36)	Plain plug gage/ASME B1.2; ISO 1502
External Thread	(M3 to M6)	External thread indicator gage/ASME B1.2;ISO 1502
Internal Thread	(1/4 to 1/2) in (M3 to M6)	Internal thread indicator gage/ASME B1.2;ISO 1502

Parameter/Equipment	Range	Comments
Linear <sup>2</sup> – 1D	Up to 75 mm Up to 300 mm Up to 150 mm	Outside micrometers/CNS B6025 Calipers/CNS B6026 Digital length gage/product specifications
Linear <sup>2</sup> – 2D	Up to 100 mm Up to 1.25 mm	Optical comparator/CNS B6086 Microscope/product specifications
Recess Check <sup>2</sup>	<ul> <li>(No.1 to 4) Phillips</li> <li>(No.1 to 4) Pozi.</li> <li>(T5 to T50)</li> <li>6-Lobe</li> <li>(M4 to M12;</li> <li>9/64~1/2) Hex</li> </ul>	Recess penetration/ASME B18.6.5M, B18.6.3 6-Lobe driver bit gage/ISO 10664; Recess penetration & hex plug gage/ASME B18.3 B18.3.1M; DIN 912, 916; ISO 23429
Concentricity, Run Out & Perpendicularity <sup>2</sup>	Up to 10 mm	Dial indicator & fixtures/JIS B1071;ISO 4759

<sup>1</sup>This laboratory offers commercial dimensional testing service.

<sup>2</sup>This test is not equivalent to that of a calibration.

(A2LA Cert. No. 0871.03) 05/30/2023





# **Accredited Laboratory**

A2LA has accredited

## **SUZHOU Q-LAB INC.** Suzhou Industrial Park, Jiangsu, CHINA

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 30<sup>th</sup> day of May 2023.

Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 871.03 Valid to July 31, 2025

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