



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

HOLO-KROME
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Wallingford, CT 06492
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MECHANICAL

Valid To: September 30, 2020

Certificate Number: 1046.06

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

| <u>Test:</u> | <u>Test Methods:</u> |
|--|---|
| Case Depth | ISO 2639; SAE J423 |
| Decarburization | ASTM F835, F912, F912M, F2328; ISO 898-1, 898-5 |
| Discontinuity (Visual) | ASTM F788 (6.5.1.4); ISO 6157-1, ISO 6157-3 |
| Hex Socket Strength | ASTM F912, F912M; ISO 898-5, 3506-3 |
| Microhardness Vickers (200 gf and 500 gf) | ASTM E384, E92 |
| Proof (Bolts/Screws) | ASTM F606 (3.2.3), F606M (3.2.3); F606/F606M; ISO 898-1 |
| Rockwell Hardness (A, B, C, 30N) | ASTM E18, A370, F606/F606M (3.1); ISO 898-1 |
| Sampling | ASME/ANSI B18.18; ASTM F1470; Per customer specification |
| Straightness | ASME B18.2.9 |
| Stress Durability (Hydrogen Embrittlement) | NASM-1312-5; ASTM F606/F606M |
| Tensile (Axial/Wedge, Machined) | ASTM A370, F606/F606M, E8; ISO 898-1 |
| Visual Inspection | ASME B18.18 |
| Salt Spray | ASTM B117 |

I. Dimensional Testing¹

| Parameter | Range | CMC ² (±) | Technique/Method |
|-------------------------------|---------------------|----------------------|--|
| Internal Socket ³ | (0.050 to 1.00) in | N/A | Hex Go/No-Go/ASME B18.3 |
| | (1.5 to 32) mm | N/A | Hex Go/No-Go/ASME B18.3.1M |
| Linear ³ – | | | |
| 1D | Up to 1 in | 0.00015” | Digital micrometer |
| | 6 in | 0.0017” | Calipers |
| | 8 in | 0.0016” | Calipers |
| | 12 in | 0.0017” | Calipers |
| 2D | X axis: Up to 12 in | 0.00073” | Optical comparator/manufacturer’s manual |
| | Y axis: Up to 8 in | 0.00068” | |
| Threads (Sys 21) ³ | #0 to 2 in | N/A | Rings/ANSI/ASME B1.2, B1.3 |
| | M2 to M42 | N/A | Rings/ANSI/ASME B1.16M |

¹ This laboratory does not offer commercial dimensional testing service.

² Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine measurements of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of $k = 2$. The actual measurement uncertainty of a specific measurement performed by the laboratory may be greater than the CMC due to the behavior of the customer’s device and to influences from the circumstances of the specific measurement.

³ This test is not equivalent to that of a calibration.



Accredited Laboratory

A2LA has accredited

HOLO-KROME

Wallingford, CT

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *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 14th day of September 2018.

A handwritten signature in black ink, written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 1046.06
Valid to September 30, 2020