CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Precision Calibration and Testing Corporation
3799 Concord Road
York, PA 17402-0658

Fulfills the requirements of

ISO/IEC 17025:2017

In the fields of

CALIBRATION and **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: 08 April 2024
Certificate Number: ACT-3088

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

Precision Calibration and Testing Corporation

3799 Concord Road
York, PA 17402-0658
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CALIBRATION AND TESTING

Valid to: **April 8, 2024** Certificate Number: **ACT-3088**

CALIBRATION

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Thermocouple Simulation and Measure	Type K (-200 to 300) °C Type J (-200 to 200) °C Type T (-200 to 400) °C	1.5 °C	Fluke 724 Process Calibrator

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Outside Micrometers	Up to 6 in (6 to 12) in (12 to 20) in	89 µin 130 µin 190 µin	Gage Blocks
Inside Micrometers	Up to 6 in (6 to 12) in (12 to 80) in	89 µin 180 µin 210 µin	Gage Blocks
Bore Gages, Internal Micrometers, Intrimiks	Up to 6 inches	90 µin	Plain Rings
Micrometer Depth	Up to 12 inches	130 µin	Gage Blocks
Calipers	Up to 24 inches	810 µin	Gage Blocks
Height Gages	Up to 18 inches	635 µin	Gage Blocks

Length – Dimensional Metrology

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Indicators	Up to 3 in	960 µin	Gage Blocks
Gage Blocks [2]	Up to 20 inches	(16 + 4.8*L*) µin	Gage Block Comparators Master Gage Blocks
Length Standards	Up to 100 inches	626 µin	Measurement Machine Gage Blocks
Cylindrical Plug Gages	Up to 6 inches	33 µin	Measurement Machine Gage Blocks
Thread Plug Gages	Up to 6 inches	120 µin	Measurement Machine Thread Wires
Plain Rings	Up to 6 inches	28 µin	Master Ring Measurement Machine
Solid Thread Rings	Up to 6 in	120 µin	Measuring Machine, Master Ring
Adjustable Thread Rings Pitch Diameter Setting (tactile fit)	Up to 6 in	181 µin	Thread Setting Plug
Radius Gages	Up to 1/2 in	0.001 in	Optical Comparator
Fillet Gages	Up to 1 in	0.001 in	Optical Comparator
Digital Protractors	0° 45° 180°	0.14° 0.14° 0.2°	Sine Plate, Surface Plate, Gage Blocks

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Torque Testers	(1 to 100) lbf·in	0.67 lbf·ft in	Torque Arms, Weights

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Torque Tools	(1 to 10) lbf·in (10 to 100) lbf·in (100 to 1 000) lbf·in (0-20) lbf·ft (20-50) lbf·ft (50-100) lbf·ft (100-150) lbf·ft (150-200) lbf·ft (200-250) lbf·ft (250-350) lbf·ft (350-450) lbf·ft (450-550) lbf·ft (550-650) lbf·ft (650 to 2 500) lbf·ft	0.16 lbf·in 1.3 lbf·in 13 lbf·in 0.6 lbf·ft 0.7 lbf·ft 0.7 lbf·ft 0.7 lbf·ft 1 lbf·ft 1.4 lbf·ft 1.7 lbf·ft 1.6 lbf·ft 1.7 lbf·ft 1.6 lbf·ft 33 lbf·ft	Torque Tester
Pressure Gages	Up to 100 psi	0.28 psi	Pressure Calibrator
Pressure Gages	(100 to 200) psi (200 to 1 000) psi (1 000 to 2 000) psi (2 000 to 4 000) psi (4 000 to 6 000) psi (6 000 to 8 000) psi (8 000 to 10 000) psi (10 000 to 20 000) psi	3 psi 2 psi 2 psi 5 psi 7 psi 10 psi 12 psi 15 psi	Dead Weight Tester, Weight Set

TESTING

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Hardness Testing (HRC)	ASTM E18	Machined Components	Wilson Hardness Machine Rockwell C Test Blocks

Non-Destructive

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
NDT Direct Visual Examination [3]	AWS D9.1, AWS D1.1, 1.2, 1.6 ASME BPVC Sec V & VIII	Machined Components, Weldments	Fillet Gages, V-WAC, Bridge Cam, AWS Gage, Mirrors, White Light
NDT Liquid Penetrant Examination [3]	ASTM E1417-21, ASTM E1209, ASTM E1316, GE P3TF2-S29 ASME BPVC Sec V & VIII NAVSEA T9074-AS-IB-010-271 Rev. 1 ASTM E165, MIL-STD-1907	Machined Components, Weldments	Pressure Gage Temperature Gage UV & White Light
NDT Magnetic Particle Examination [3]	ASME BPVC Sec V & VIII ASTM E1444-21, ASTM A275, ASTM E709, ASTM E543 NAVSEA T9074-AS-IB-010-271 Rev. 1 MIL-STD-1907	Machined Components, Weldments	Magna-Flux Magnetizer UV & White Light Hall Effect Probe
NDT Ultrasonic Thickness Measurement [3]	ASTM E797 ASME BPVC Sec V	Machined Components, Weldments	Ultrasonic Digital Thickness Gage, Step Wedge
NDT Radiography	ASTM E1030, ASTM E1742 ASME BPVC Sec V & IX AWS D1.1 NAVSEA T9074-AS-GIB-010-271 Rev. 1 SAE AMS 2175	Machined Components, Weldments	Seifert 320 KV X Ray Machine
Hardness Testing (HRC)	ASTM E18	Machined Components	Wilson Hardness Machine Rockwell C Test Blocks

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 (k=2), corresponding to a confidence level of approximately 95%.

Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
2. L length in inches.
3. On-site testing service is available for this parameter.
4. This scope is formatted as part of a single document including Certificate of Accreditation No. ACT-3088.

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