



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

HYTORC, Division UNEX Corp

UNEX/HYTORC, 333 Route 17 North, Mahwah, NJ 07430

HYTORC, 100 Wesley Street, South Hackensack, NJ 07606

HYTORC, 4118 Vine St., Abilene, TX 79602

HYTORC, 11501 Columbia Park Drive West, Suite 204, Jacksonville, FL 32258

HYTORC, 2010 East Francis Street, Ontario, CA 91761

HYTORC, 5915 4th Street SW, Unit 101, Cedar Rapids, IA 52404

HYTORC, 4250 Salazar Way, Unit J, Frederick, CO 80504

(Hereinafter called the Organization) and hereby declares that Organization 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 (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Calibration of Mechanical Devices (As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen
President

Initial Accreditation Date:

September 18, 2010

Issue Date:

January 04, 2023

Expiration Date:

March 31, 2025

Accreditation No.:

66167

Certificate No.:

L23-8

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjilabs.com



Certificate of Accreditation: Supplement

HYTORC, Division UNEX Corp

See page 1 for all locations associated with this supplement.

Contact Name: Pietro Barcia Phone: 201-512-9500

Accreditation is granted to the facility to perform the following calibrations:

HYTORC, 100 Wesley Street, South Hackensack, NJ 07606

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE OR NOMINAL DEVICE SIZE AS APPROPRIATE	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Pressure Gage ^F	Up to 100 psi	0.3 % of reading	Crystal Engineering Gauge Model 300PSIXP2I, HY-WI 03-007
	Up to 10 000 psi	0.3 % of reading	AKO Pressure Transducer TSD 10KPT, Display TSD 6500-2, -3, HWI 301
	27 psi to 3 000 psi	0.3% of reading	Fluke Electric Dead Weight Tester RPM4-E-DWT
	3 001 psi to 30 000 psi	0.29% of Reading	A200Me-L with E-DWT HWI-329
Hydraulic Torque Wrench ^F	Up to 40 000 lbf·ft	0.6 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD40011, TSD20011, Pressure Transducer TSD 10KPT, Display TSD6500-2, -3,-4 HWI 319
Pneumatic Torque Wrench ^F	Up to 10 000 lbf·ft	2.1 % of reading	Honeywell 1607-126 Torque Transducer; Omega Pressure Transducer PX319-200GS5V, HWI 342, 330
	Up to 2 000 lbf·ft	1.2 % of Reading	AKO Torque Master Calibration System: Torque Transducer TSD40011, TSD20011, Pressure Transducer TSD 10KPT, Display TSD6500-2, -3,-4 HWI 333
	Up to 1 000 lbf·ft	1.2 % of Reading	
Electric Torque Wrench ^F	Up to 10 000 lbf·ft	1.8 % of reading	Honeywell 1607-126 Torque Transducer, HWI 334
	Up to 2 000 lbf·ft	1.2 % of Reading	AKO Torque Master Calibration System: Torque Transducer TSD40011, TSD20011, Pressure Transducer TSD 10KPT, Display TSD6500-2, -3,-4 HWI 333
	Up to 1 000 lbf·ft	1.2 % of Reading	
Manual Torque Wrench ^F	601 lbf·ft to 1 000 lbf·ft	1.2 % of Reading	AKO 20K TSD 20011 Torque Stand ASME B107.300 supported by HWI-328
	1 lbf·in to 50 lbf·in	1.8 % of Reading	CDI Suretest System 500-3 ASME B107.300 supported by HWI-328
	51 lbf·in to 400 lbf·in	1.8 % of Reading	
	401 lbf·in to 1 000 lbf·in	1.8 % of Reading	
	20 lbf·ft to 250 lbf·ft	1.3 % of Reading	
	251 lbf·ft to 600 lbf·ft	1.3 % of Reading	



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HYTORC, Division UNEX Corp

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Contact Name: Pietro Barcia Phone: 201-512-9500

Accreditation is granted to the facility to perform the following calibrations:

HYTORC, 4118 Vine St., Abilene, TX 79602

Van #38, #55, #62, #74, #85, #87, & #88

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Pressure Gage ^{FO}	Up to 10 000 psi	0.3 % of reading	AKO Pressure Transducer TSD 10 KPT, Display TSD6500-2, HWI 303
	Up to 30 000 psi	0.5 % of reading	Fluke DHI Electric Dead Weight Tester Model RPM4-E-DWT A200Me-L with E-DWT-H, HWI 329
Hydraulic Torque Wrench ^{FO}	Up to 40 000 lbf-ft	0.6 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD40011, TSD20011, Pressure Transducer TSD 10KPT, Display TSD6500-2, HWI 319
Manual Torque Wrench ^{FO}	Up to 600 lbf-ft	1.2 % of reading	CDI Suretest 5000-3 Torque Calibration System: Torque Transducer 2000-12-02, Display 5000-ST, HWI 328
Pneumatic Torque Wrench ^{FO}	Up to 8 500 lbf-ft	1.4 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, 0-100 psi Pressure Gauge, HWI 332, 345
Torque Multiplier ^{FO}	Input: 25 lbf-ft to 250 lbf-ft	1.5 % of reading	Snap-On Electronic Torque Instrument TECH3FR250, HWI 332
	Output: 103 lbf-ft to 20 000 lbf-ft		AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, HWI 332
Electric Torque Wrench ^{FO}	Up to 8 500 lbf-ft	1.2 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, HWI-339



Certificate of Accreditation: Supplement

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See page 1 for all locations associated with this supplement.

Contact Name: Pietro Barcia Phone: 201-512-9500

Accreditation is granted to the facility to perform the following calibrations:

**HYTORC, 11501 Columbia Drive West, Suite 204, Jacksonville, FL 32258
Van #50, #64, #66, #70, #71, #75, #78, #89, & #93**

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Pressure Gage ^{FO}	Up to 10 000 psi	0.3 % of reading	AKO Pressure Transducer TSD 10KPT, Display TSD6500-2, HWI 303
Hydraulic Torque Wrench ^{FO}	Up to 20 000 lbf·ft	0.5 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD20011, Pressure Transducer TSD 10KPT, Display TSD6500-2, HWI 319
Manual Torque Wrench ^{FO}	Up to 600 lbf·ft	1.2 % of reading	CDI Suretest 5000-3 Torque Calibration System: Torque Transducer 2000-12-02, Display 5000-ST, HWI 328
Pneumatic Torque Wrench ^{FO}	Up to 8 500 lbf·ft	1.1 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, 0-100 psi Pressure Gauge, HWI 333, 345
Electric Torque Wrench ^{FO}	Up to 8 500 lbf·ft	1 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, HWI 339
Torque Multiplier ^{FO}	Input: 25 lbf·ft to 250 lbf·ft	1.3 % of reading	Snap-On Electronic Torque Instrument TECH3FR250, HWI 332
	Output: 35 lbf·ft to 20 000 lbf·ft		AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, HWI 332



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HYTORC, Division UNEX Corp

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Contact Name: Pietro Barcia Phone: 201-512-9500

Accreditation is granted to the facility to perform the following calibrations:

HYTORC, 2010 East Francis Street, Ontario, CA 91761
Van #37, #39, #52, #61, #81, #83, #90, & #92

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Pressure Gage ^{FO}	Up to 100 psi	0.3 % of reading	Crystal Engineering Pressure Calibrator 300PSIX2I, HY-WI03-007
	Up to 500 psi	0.3 % of reading	Crystal Engineering Pressure Calibrator 500PSIXP2I, HY-WI03-007
	Up to 10 000 psi	0.3 % of reading	AKO Pressure Transducer TSD 10KPT, Display TSD6500-2, HWI 303
0.1 % of reading		Crystal Engineering Pressure Calibrator 10KPSIXP2I, HWI 302	
Pressure Gage ^F	27 psi to 3 000 psi	0.3 % of reading	Fluke Electric Dead Weight Tester RPM4-E-DWT, A200Me-L with E-DWT, HWI-329
	3 001 psi to 30 000 psi	0.29 % of reading	
Hydraulic Torque Wrench ^{FO}	Up to 40 000 lbf·ft	0.9 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD40011, TSD20011, Pressure Transducer TSD 10KPT, Display TSD6500-2, HWI 319
Manual Torque Wrench ^{FO}	Up to 600 lbf·ft	1.2 % of reading	CDI Suretest 5000-3 Torque Calibration System: Torque Transducer 2000-12-02, Display 5000-ST, HWI 328
Manual Torque Wrench ^F	601 lbf·ft to 1 000 lbf·ft	1.2 % of Reading	AKO 20K TSD 20011 Torque Stand ASME B107.300 supported by HWI-328
Pneumatic Torque Wrench ^{FO}	Up to 8 500 lbf·ft	0.72 % of reading	AKO Torque Master Calibration System: Torque Transducer, TSC40011, TSD20011, Display TSD6500-2, 0-100 psi Pressure Gauge, HWI 333, 345
Electric Torque Wrench ^{FO}	Up to 8 500 lbf·ft	1.2 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, HWI 339
Torque Multiplier ^{FO}	Input: 25 lbf·ft to 250 lbf·ft	1 % of reading	Snap-On Electronic Torque Instrument TECH3FR250, HWI 332
	Output: 33 lbf·ft to 20 000 lbf·ft		AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, HWI 332
Torque Transducer ^{FO}	10 lbf·ft to 1 000 lbf·ft	1.1 % of reading	TSD6500-3, TSD1011, TSD 10KPT, HWI 319
	200 lbf·ft to 20 000 lbf·ft	1.2 % of reading	TSD6500-3, TSD20011, TSD 10KPT, HWI 319
Torque Transducer ^{FO}	500 lbf·ft to 40 000 lbf·ft	1.6 % of reading	TSD6500-3, TSD40011, TSD 10KPT, HWI 319



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Contact Name: Pietro Barcia Phone: 201-512-9500

Accreditation is granted to the facility to perform the following calibrations:

HYTORC, 5915 4th Street, Unit 101, Cedar Rapids, IA 52404
Van #58, #59, #60, #65, #72, #80, & #94

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (\pm)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Pressure Gage ^{FO}	10 psi to 100 psi	0.5 % of reading + 0.1 psi	Crystal Engineering, 300PSIXP2I, HWI 302
	100 psi to 500 psi	0.5 % of reading + 0.1 psi	Crystal Engineering, 500PSIXP2I, HWI 302
	500 psi to 2 000 psi	0.6 % of reading + 2 psi	Crystal Engineering 10KPSIXP2I, HWI 302
	2 000 psi to 10 000 psi	0.6 % of reading + 2 psi	
	Up to 100 psi	0.3 % of reading	Crystal Engineering Gauge 300PSIXP2I , HY-WI03-007
	Up to 10 000 psi	0.3 % of reading	AKO Pressure Transducer TSD 10KPT, Display TSD6500-2, HWI 303
Hydraulic Torque Wrench ^{FO}	Up to 40 000 lbf-ft	0.5 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD40011, Pressure Transducer TSD 10KPT, Display TSD6500-2, HWI 319
Manual Torque Wrench ^O	Up to 600 lbf-ft	1.2 % of reading	CDI Suretest 5000-3 Torque Calibration System: Torque Transducer 2000-12-02, Display 5000-ST, HWI 328
Pneumatic Torque Wrench ^{FO}	Up to 8 500 lbf-ft	1.3 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, 0-100 psi Pressure Gauge, HWI 339, 345
Electric Torque Wrench ^{FO}	Up to 8 500 lbf-ft	1.5 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, HWI 339
Torque Multiplier ^O	Input: 25 lbf-ft to 250 lbf-ft	1.1 % of reading	Snap-On Electronic Torque Instrument TECH3FR250, HWI 332
	Output: 43 lbf-ft to 20 000 lbf-ft		AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, HWI 332



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Contact Name: Pietro Barcia Phone: 201-512-9500

Accreditation is granted to the facility to perform the following calibrations:

HYTORC, 4250 Salazar Way Unit J, Frederick, CO 80504

Van #26, #46, #56, #76 & #79

Mechanical

MEASURED INSTRUMENT, QUANTITY OR GAUGE	RANGE (AND SPECIFICATION WHERE APPROPRIATE)	CALIBRATION AND MEASUREMENT CAPABILITY EXPRESSED AS AN UNCERTAINTY (±)	CALIBRATION EQUIPMENT AND REFERENCE STANDARDS USED
Pressure Gage ^{FO}	Up to 10 000 psi	0.3 % of reading	AKO Pressure Transducer TSD 10KPT, Display TSD6500-2, HWI 303
Hydraulic Torque Wrench ^{FO}	Up to 20 000 lbf·ft	1 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD20011, Pressure Transducer TSD 10KPT, Display TSD6500-2, HWI 319
Manual Torque Wrench ^{FO}	Up to 600 lbf·ft	1.2 % of reading	CDI Suretest 5000-3 Torque Calibration System: Torque Transducer 2000-12-02, Display 5000-ST, HWI 328
Pneumatic Torque Wrench ^{FO}	Up to 8 500 lbf·ft	0.7 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, 0-100 psi Pressure Gauge, HWI 333, 345
Electric Torque Wrench ^{FO}	Up to 8 500 lbf·ft	1.7 % of reading	AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, HWI 339
Torque Multiplier ^{FO}	Input: 25 lbf·ft to 250 lbf·ft	1 % of reading	Snap-On Electronic Torque Instrument TECH3FR250, HWI 332
	Output: 34 lbf·ft to 20 000 lbf·ft		AKO Torque Master Calibration System: Torque Transducer TSD20011, Display TSD6500-2, HWI 332



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Contact Name: Pietro Barcia Phone: 201-512-9500

Accreditation is granted to the facility to perform the following calibrations:

1. The CMC (Calibration and Measurement Capability) stated for calibrations included on this scope of accreditation represents the smallest measurement uncertainty attainable by the laboratory when performing a more or less routine calibration of a nearly ideal device under nearly ideal conditions. It is typically expressed at a confidence level of 95 % using a coverage factor k (usually equal to 2). The actual measurement uncertainty associated with a specific calibration performed by the laboratory will typically be larger than the CMC for the same calibration since capability and performance of the device being calibrated and the conditions related to the calibration may reasonably be expected to deviate from ideal to some degree.
2. The laboratories range of calibration capability for all disciplines for which they are accredited is the interval from the smallest calibrated standard to the largest calibrated standard used in performing the calibration. The low end of this range must be an attainable value for which the laboratory has or has access to the standard referenced. Verification of an indicated value of zero in the absence of a standard is common practice in the procedure for many calibrations but by its definition it does not constitute calibration of zero capacity.
3. The presence of a superscript F means that the laboratory performs calibration of the indicated parameter at its fixed location. Example: Outside Micrometer^F would mean that the laboratory performs this calibration at its fixed location.
4. The presence of a superscript O means that the laboratory performs calibration of the indicated parameter onsite at customer locations. Example: Outside Micrometer^O would mean that the laboratory performs this calibration onsite at the customer's location.
5. The presence of a superscript FO means that the laboratory performs calibration of the indicated parameter both at its fixed location and onsite at customer locations. Example: Outside Micrometer^{FO} would mean that the laboratory performs this calibration at its fixed location and onsite at customer locations
6. Measurement uncertainties obtained for calibrations performed at customer sites can be expected to be larger than the measurement uncertainties obtained at the laboratories fixed location for similar calibrations. This is due to the effects of transportation of the standards and equipment and upon environmental conditions at the customer site which are typically not controlled as closely as at the laboratories fixed location.
7. The main office is located at 333 Route 17 North, Mahwah, NJ 07430. This facility does not perform any calibrations.