



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Hytorc of Texas, Inc.

12420 Texaco Rd., Houston, TX 77013 Van 25, Van 40, Van 41

4802 Baldwin Blvd., Corpus Christi, TX 78408, Van 63

2484 West Cardinal Drive, Suite #4, Beaumont, TX 77705

3508 South Country Rd., Odessa, TX 79765

8988 FM 2011, Longview, TX 75603

*(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 Hydraulic, Pneumatic, Electric and Manual Torque Wrenches & Pressure Gauges for Hydraulic and Pneumatic Torque Wrenches (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:

December 8, 2013

Issue Date:

February 7, 2022

Expiration Date:

March 31, 2024

Accreditation No.:

72544

Certificate No.:

L22-130

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.pjlab.com*



Certificate of Accreditation: Supplement

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3508 South Country Rd., Odessa, TX 79765
8988 FM 2011, Longview, TX 75603
Contact Name: Keith Davis Phone: 713-453-6677

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

12420 Texaco Rd., Houston, TX 77013, Van 25, Van 40, Van 41

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 Gauges ^{FO}	14 psi to 10 000 psi	0.29 % of Reading	AKO Pressure Transducer TSD 10KPT Display TSD 6500 Procedure no. 303, 344
	18 psi to 10 000 psi	0.3 % of Reading	Crystal Engineering Pressure Calibrator XP2 Procedure no. 302
	0.18 psi to 100 psi	0.29 % of Reading	Crystal Engineering Pressure Calibrator M1-300PSI Procedure no. 302
	13.8 psi to 10 000 psi	0.3% of reading	Additel 927 Pressure Gauge Calibrator Procedure no. 354
Manual Torque Wrench ^{FO}	6.4 lb·ft to 1 000 lb·ft	1.2 % of Reading	Norbar 1000 ft lb Torque Tool Tester with TTT Display Procedure no. 351, 352
Manual Torque Wrench ^{FO}	1.8 lb·ft to 800 lb·ft	1.3 % of Reading	AKO Torque Calibration System, TSD821, TSD6500, TSD6000 Procedure no. 351
Pneumatic Torque Wrench ^{FO}	9.2 lb·ft to 8 500 lb·ft	1.0 % of Reading	AKO Torque Master Calibration System, TSD40011, TSD20011, TSD6500 Procedure no. 333
Electric Torque Wrench ^{FO}	15.6 lb·ft to 8 500 lb·ft	1.1 % of Reading	AKO Torque Master Calibration System, TSD40011, TSD20011, TSD6500 Procedure no. 339
Hydraulic Torque Wrench ^{FO}	5.9 lb·ft to 40 000 lb·ft	0.9 % of Reading	AKO Torque Master Calibration System, TSD40011, TSD20011, TSD6500 Procedure no. 319



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4802 Baldwin Blvd., Corpus Christi, TX 78408, Van 63

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 Gauges ^{FO}	17 psi to 10 000 psi	0.31 % of Reading	AKO Pressure Transducer TSD 10KPT Display TSD 6500 Procedure no. 303, 344
	13 psi to 10 000 psi	0.3 % of Reading	Crystal Engineering Pressure Calibrator XP2 Procedure no. 302
	0.19 psi to 100 psi	0.3 % of Reading	Crystal Engineering Pressure Calibrator M1-300PSI Procedure no. 302
Manual Torque Wrench ^{FO}	3.4 lb·ft to 800 lb·ft	1.6 % of Reading	AKO Torque Calibration System, TSD821, TSD6500, TSD6000 Procedure no. 351
Pneumatic Torque Wrench ^{FO}	15 lb·ft to 8 500 lb·ft	1.9 % of Reading	AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure no. 333
Electric Torque Wrench ^{FO}	18.1 lb·ft to 8 500 lb·ft	1 % of Reading	AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure no. 339
Hydraulic Torque Wrench ^{FO}	7.1 lb·ft to 20 000 lb·ft	1.1 % of Reading	AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure no. 319



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3508 South Country Rd., Odessa, TX 79765

Mechanical

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Pressure Gauges ^F	30 psi to 10 000 psi	0.36 % of Reading	AKO Pressure Transducer TSD 10KPT Display TSD 6500 Procedure no. 303, 344
	0.3 psi to 100 psi	0.3% of reading	FRL Pressure Gauge Calibrator Procedure no. 355
Manual Torque Wrench ^F	2 lb·ft to 800 lb·ft	1.2 % of Reading	AKO Torque Calibration System, TSD821, TSD6500, TSD6000 Procedure no. 351
Pneumatic Torque Wrench ^F	20.8 lb·ft to 8 500 lb·ft	2.8 % of Reading	AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure no. 333
Electric Torque Wrench ^F	42.6 lb·ft to 8 500 lb·ft	3.4 % of Reading	AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure no. 339
Hydraulic Torque Wrench ^F	5.4 lb·ft to 20 000 lb·ft	0.99 % of Reading	AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure no. 319



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Mechanical

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Pressure Gauges ^F	40 psi to 10 000 psi	0.38 % of Reading	AKO Pressure Transducer TSD 10KPT Display TSD 6500 Procedure no. 303, 344
	25 psi to 10 000 psi	0.33 % of Reading	Crystal Engineering Pressure Calibrator XP2 Procedure no. 302
	0.36 psi to 100 psi	0.31 % of Reading	
Manual Torque Wrench ^F	5 lb ft to 800 lb ft	1.5 % of Reading	AKO Torque Calibration System, TSD821, TSD6500, TSD6000 Procedure no. 351
Pneumatic Torque Wrench ^F	11.8 lb ft to 8 500 lb ft	1.5 % of Reading	AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure no. 333
Electric Torque Wrench ^F	17.1 lb-ft to 8 500 lb-ft	1.2 % of Reading	AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure no. 339
Hydraulic Torque Wrench ^F	6.5 lb-ft to 20 000 lb-ft	1.1 % of Reading	AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure no. 319



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Mechanical

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Pressure Gauges ^F	25 psi to 10 000 psi	0.34 % of Reading	AKO Pressure Transducer TSD 10KPT Display TSD 6500 Procedure no. 303, 344
Manual Torque Wrench ^F	2 lb·ft to 800 lb·ft	1.3 % of Reading	AKO Torque Calibration System, TSD821, TSD6500 Procedure no. 351
Pneumatic Torque Wrench ^F	18.1 lb·ft to 8 500 lb·ft	1.2 % of Reading	AKO Torque Master Calibration System, TSD40011, TSD6500 Procedure no. 333
Electric Torque Wrench ^F	27.5 lb·ft to 8 500 lb·ft	1.4 % of Reading	AKO Torque Master Calibration System, TSD40011, TSD6500 Procedure no. 339
Hydraulic Torque Wrench ^F	8.8 lb·ft to 40 000 lb·ft	0.95 % of Reading	AKO Torque Master Calibration System, TSD40011, TSD6500 Procedure no. 319

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.



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

4. 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.
5. 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.

