



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

Ewing Tool Company LLC dba Hytorc Louisiana / Mississippi
631 Old Highway 49 S, Richland, MS 39218
202 Hulco Drive, Scott, LA 70583

(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/Operations Manager

Initial Accreditation Date:

February 06, 2020

Issue Date:

February 06, 2020

Expiration Date:

May 31, 2022

Accreditation No.:

107927

Certificate No.:

L20-75

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

Ewing Tool Company LLC dba Hytorc Louisiana / Mississippi

631 Old Highway 49 S, Richland, MS 39218
202 Hulco Drive, Scott, LA 70583
Contact Name: Chris Ewing Phone: 225-933-1911

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

202 Hulco Drive, Scott, LA 70583

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 ^{FO}	30 psi to 10 000 psi	0.33 % of Reading	AKO Pressure Transducer TSD 10KPT Display TSD 6500 Procedure No. 303, 304
	10 psi to 30 000 psi	0.29 % of Reading	Additel 949 pressure Calibrator Procedure No. 353
Pressure Gage ^F	10 psi to 300 psi	0.31 % of Reading	Crystal Engineering Pressure Calibrator GaugeCalX Procedure No. 302
	10 psi to 10 000 psi	0.3 % of Reading	
Hydraulic Torque Wrench ^{FO}	6.2 lb ft to 40 000 lb ft	0.92 % of Reading	AKO Torque Master Calibration System, TSD40011, TSD 20011, TSD6500 Procedure No. 319
Manual Torque Wrench ^{FO}	3.5 lb ft to 800 lb ft	1.4 % of Reading	AKO Torque Calibration System, TSD821, TSD1250 Procedure No. 351
Pneumatic Torque Wrench ^{FO}	17.6 lb ft to 8 500 lb ft	1 % of Reading	AKO Torque Master Calibration System. TSD40011, TSD 20011, TSD6500 Procedure No. 333, 345
Electric Torque Wrench ^{FO}	16.2 lb ft to 8 500 lb ft	1.1 % of Reading	AKO Torque Master Calibration System, TSD40011, TSD20011, TSD6500 Procedure No. 339



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Pressure Gage ^{FO}	9 psi to 25 000 psi	0.29 % of Reading	Additel 949 Pressure Calibrator Procedure No. 353 with Additel 25 000 capacity gauge
	0.21 psi to 500 psi		Additel 949 Pressure Calibrator Procedure No. 353 with Additel 500 capacity gauge
Hydraulic Torque Wrench ^{FO}	5 lb ft to 20 000 lb ft	0.92 % of Reading	AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure No. 319
Manual Torque Wrench ^{FO}	1.8 lb ft to 600 lb ft	1.2 % of Reading	CDI Suretest 500-3 Torque Calibration System: Torque Transducer 200-12-02, Display 5000-ST
Pneumatic Torque Wrench ^{FO}	10 lb ft to 8 500 lb ft	1 % of Reading	AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure No. 333, 345
Electric Torque Wrench ^{FO}			AKO Torque Master Calibration System, TSD20011, TSD6500 Procedure No. 339

- 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.
- 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.



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

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 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.

