



CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board

11617 Coldwater Road, Fort Wayne, IN 46845 USA

This is to certify that

McCann Equipment Ltd.

925, ave Newton, #107
Quebec, QC G1P 4M2

has been assessed by ANAB and meets the requirements of international standard

ISO/IEC 17025:2017

while demonstrating technical competence in the field of

CALIBRATION

Refer to the accompanying Scope of Accreditation for information regarding the types of activities to which this accreditation applies

L2097.06-1
Certificate Number


ANAB Approval

Certificate Valid Through: 06/29/2021
Version No. 003 Issued: 06/04/2019



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

McCann Equipment Ltd.

925, ave Newton, #107
 Quebec, QC G1P 4M2
 Kathy McCann-Quart 418-877-7718

CALIBRATION

Valid to: **June 29, 2021**

Certificate Number: **L2097.06-1**

Mass and Mass Related

| Parameter/Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method, and/or Equipment |
|--|--|--|--|
| Adjustable Hand Torque Wrenches | (0.6 to 100) lbf-in (8 to 50) lbf-ft (50 to 250) lbf-ft (250 to 750) lbf-ft (750 to 2 000) lbf-ft | 0.79 % of applied load 0.71 % of applied load 0.7 % of applied load 0.71 % of applied load 1.1 % of applied load | McCann procedure based on ISO 6789:2017 with Electronic Transducer and Display Unit with ISO loader. |
| Dial Hand Torque Wrenches | (0.6 to 15) lbf-in (15 to 600) lbf-in (50 to 250) lbf-ft (250 to 600) lbf-ft (600 to 2 000) lbf-ft | 0.66 % of applied load 0.64 % of applied load 0.59 % of applied load 0.78 % of applied load 0.84 % of applied load | |
| Digital Hand Torque Wrenches | (0.2 to 250) lbf-ft (250 to 600) lbf-ft (600 to 750) lbf-ft (750 to 1 000) lbf-ft | 0.68 % of applied load 0.61 % of applied load 0.55 % of applied load 0.52 % of applied load | |
| Torque Limiting Screwdrivers | (0.6 to 10) lbf-in (10 to 80) lbf-in (80 to 130) lbf-in | 1.2 % of applied load 0.82 % of applied load 0.88 % of applied load | |
| Pneumatic Torque Tools | (0.4 to 5 000) lbf-ft | 1.1 % of applied load | |
| Hydraulic Torque Tools | (127 to 5 000) lbf-ft | 0.79 % of applied load | Electronic Transducer and Display Unit per McCann procedures |
| Hand Torque Multipliers | (127 to 5 000) lbf-ft | 2.2 % of applied load | |
| Electronic Torque Tools (Clutch Type) | (1.5 to 110) lbf-in | 1.1 % of applied load | |
| Electronically Controlled Torque Tools | (100 to 4 500) lbf-ft | 0.87 % of applied load | Electronic Transducer and Display Unit per McCann procedures |


Mass and Mass Related

| Parameter/Equipment | Range | Expanded Uncertainty of Measurement (+/-) | Reference Standard, Method, and/or Equipment |
|----------------------------|------------------------|--|--|
| Bolt Tension Meter | (200 to 10 000) lbf | 0.54 % of applied load | Skidmore J: Load Cell and Display |
| | (1 000 to 110 000) lbf | 0.55 % of applied load | Skidmore J: Load Cell and Display |
| | (2 000 to 110 000) lbf | 0.66 % of applied load | Skidmore M, ML, RL, RJ: Load Cell and Display |
| | (1 000 to 126 000) lbf | 0.54 % of applied load | Skidmore MZ: Load Cell and Display |
| Torque Tester | (1.5 to 750) lbf-ft | 0.53 % of applied load | ISO Loader with Electronic Transducer and Display Unit per McCann procedures |
| Hydraulic Pressure Gauge | (3 to 16 000) psig | 0.23 % of reading | Dead Weight Tester per McCann Procedures |
| Pneumatic Pressure Gauge | (0.1 to 300) psig | 0.38 % of reading | Crystal Digital Tester per per McCann Procedures |

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. This scope is formatted as part of a single document including Certificate of Accreditation No. L2097.06-1.



Vice President

