

Scope of Accreditation For McCann Equipment LTD.

10255 Côte de Liesse
Dorval, Québec Canada H9P 1A3
Daniel M. McCann
514-636-6344

In recognition of a successful assessment to ISO/IEC 17025:2005 and ANSI Z540.3 (sub-clause 5.3) accreditation is granted to **McCann Equipment Ltd.** to perform the following **Calibrations**:

Accreditation granted through: **June 29, 2013**

Calibration

Mass – Torque

Calibration Parameter/Equipment ¹	Range	Calibration and Measurement Capability(+/-) ²	Remarks
Hand Torque Wrenches and Torque Limiting Screwdrivers	4 ozf-in to 2 000 lbf-ft (0.028 to 2 712) Nm	0.48% of applied load	ISO 6789
Pneumatic Torque Wrenches	(0.4 to 25 000) lbf-ft (0.04 to 33 900) Nm	1.52% of applied load	Electronic transducer and display unit per McCann procedures
Hydraulic Torque Wrenches	(127 to 25 000) lbf-ft (172 to 33 900) Nm	1.17% of applied load	Electronic transducer and display unit per McCann procedures
Electronic Torque Wrenches	4 ozf-in to 2 000 lbf-ft (0.028 to 2 712) Nm	0.6% of applied load	Electronic transducer and display unit per McCann procedures
Hand Torque Multipliers	(127 to 25 000) lbf-ft (172 to 33 900) Nm	0.59% of applied load	Electronic transducer and display unit per McCann procedures
Torque Closure Meters	(1 to 100) lbf-in	0.5% of applied load	Electronic transducer and display unit per McCann procedures
DC Electronic Torque Wrench	1.5 lbf-in to 5 000 lbf-ft (0.17 to 6 780) Nm	0.36% of applied load	Electronic transducer and display unit per McCann procedures
Torque Transducers Torque Testers	4 ozf-in to 1 200 lbf-ft (0.028 to 1 630) Nm	0.04% of applied load	Dead Weight Test Unsupported Beams
	250 lbf-ft to 5 000 lbf-ft (339 to 6 780) Nm	0.3% of applied load	Dead Weight Test Supported Beams

Calibration Parameter/Equipment ¹	Range	Calibration and Measurement Capability(+/-) ²	Remarks
Torque Transducers Torque Testers	500 lbf-ft to 25 000 lbf-ft (378 to 33 900) Nm	0.59% of applied load	Hydraulic Activated Supported Beam

Mass – Force

Calibration Parameter/Equipment ¹	Range	Calibration and Measurement Capability(+/-) ²	Remarks
Tensiometer	(10 to 2 000) lbf	1.85% of applied load	Electronic transducer and display unit per McCann procedures
Bolt Load Meter	(200 to 10 000) lbf	180 lbf	Skidmore J
Bolt Load Meter	(2 000 to 30 000) lbf	328 lbf	Skidmore J & RJ
Bolt Load Meter	(2 000 to 126 000) lbf	650 lbf	Skidmore M, MS & MZ
Bolt Load Meter	(4 000 to 170 000) lbf	1 252 lbf	Skidmore H

Mass – Pressure

Calibration Parameter/Equipment ¹	Range	Calibration and Measurement Capability(+/-) ²	Remarks
Hydraulic Pressure Gauge	(400 to 10 000) psi	0.08% of applied load	Dead Weight Tester Pressurements Model No. M2200 / 3H Per ASME B40
Pneumatic Pressure Gauge	(0.1 to 300) psi	0.15% of applied load	GE Druck Digital Pressure Indicator Model DPI 280 Pressure Transducer Model PDCR 4010 per ASME B40

Electricity and Magnetism

Calibration Parameter/Equipment ¹	Range	Calibration and Measurement Capability(+/-) ²	Remarks
Torque Testers, Analyzers and Display Units	(0 to 11) V	0.01% of applied load	Electronic transducer and display unit per McCann procedures

Notes:

- 1) Laboratory offers calibration services at the laboratory's own facilities and at the client or other agreed upon facilities.
- 2) Calibration and Measurement Capability represents expanded uncertainties at approximately a 95% confidence level using a coverage factor of k=2.

Approved by:  Date: July 22, 2010

R. Douglas Leonard
Chief Technical Officer

Re-Issued: 7/22/10