

# Scope of Accreditation For McCann Equipment Ltd.

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In recognition of a successful assessment to ISO/IEC 17025:2005 and ANSI/NCSL Z540.3, accreditation is granted to **McCann Equipment Ltd.** to perform the following Calibrations:

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

## Calibration

### Mass – Torque

Calibration Parameter/Equipment <sup>1</sup>	Range	Calibration and Measurement Capability(+/-)	Remarks
Hand Torque Wrenches and Torque Limiting Screwdrivers	4 ozf-in to 2000 lbf-ft (0.028 to 2712) 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 Torque Wrenches	4 ozf-in to 2000 lbf-ft (0.028 to 2712) Nm	0.6 % of applied load	
Hand Torque Multipliers	(127 to 25 000) lbf-ft (172 to 33 900) Nm	0.59 % of applied load	
Torque Closure Meters	(1 to 100) lbf-in	0.5 % of applied load	
DC Electronic Torque Wrench	1.5 lbf-in to 5000 lbf-ft (0.17 to 6780) Nm	0.36 % of applied load	
Torque Transducers Torque Testers	4 ozf-in to 1200 lbf-ft (0.028 to 1630) Nm	0.04 % of applied load	
	250 lbf-ft to 5000 lbf-ft (339 to 6780) Nm	0.3 % of applied load	
	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 <sup>1</sup>	Range	Calibration and Measurement Capability(+/-)	Remarks
Tensionmeter	(10 to 2000) 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
	(2000 to 30 000) lbf	328 lbf	Skidmore J & RJ
Bolt Load Meter	(2000 to 126 000) lbf	650 lbf	Skidmore M, MS & MZ
	(4000 to 170 000) lbf	1252 lbf	Skidmore H & HS

**Mass – Pressure / Low Vacuum**

Calibration Parameter/Equipment <sup>1</sup>	Range	Calibration and Measurement Capability(+/-)	Remarks
Hydraulic Pressure Gauge	(300 to 30 000) psi	0.21 % of reading	Electronic – Dead Weight Tester FLUKE Model No. 3390864 per ASME B41
Pneumatic Pressure Gauge	(0.1 to 300) psi	0.43 % of reading	GE Druck Digital Pressure Indicator Model DPI 280 Pressure Transducer Model PDCR 4010 per ASME B40

**Electrical – Voltage**

Calibration Parameter/Equipment <sup>1</sup>	Range	Calibration and Measurement Capability(+/-)	Remarks
Torque Testers, Analyzers and Display Units	(0 to 11) V	0.01 % of applied load	Electronic Transducer and Display Unit per McCann procedures

Calibration and Measurement Capability (CMC) represents expanded uncertainties at approximately a 95% confidence level using a coverage factor of k=2.

**Notes:**

- 1) Laboratory offers calibration services at the laboratory's own facilities and at the client or other agreed upon facilities.

Approved by:   
R. Douglas Leonard  
Chief Technical Officer

Date: September 1, 2011