

Scope of Accreditation

For

Holtgreven Scale & Electronics Corporation

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In recognition of a successful assessment to ISO/IEC 17025:2005, accreditation is granted to **Holtgreven Scale & Electronics Corporation** to perform the following Calibrations:

Accreditation granted through: **September 23, 2011**

Calibration

Mass – Scale and Balances

Calibration Parameter/Equipment ¹	Range	Best Measurement Capability(+/-) ³	Remarks
Lab Balance and High Precision Scales – Class I (.0001 g resolution) (0.001 g resolution) (0.01 g resolution) (0.02 g resolution) (0.05 g resolution)	0 g to 210 g 0 g to 1 000 g 0 g to 1 000 g 0 g to 2 000 g 0 g to 5 000 g	0.63 mg 3.01 mg 13.19 mg 26.44 mg 65.73 mg	ASTM E617 Class 1 weights and NIST Handbook 44 utilized for the calibration of the weighing system.
Lab Balance and High Precision Scales – Class II (0.01 g resolution) (0.1 g resolution)	0 g to 5 kg 0 kg to 11 kg	129.65 mg 132.14 mg	
Industrial Scales ² (0.05 g resolution) (0.1 g resolution) (0.2 g resolution) (0.5 g resolution) (1 g resolution) (2 g resolution) (5 g resolution) (0.01 kg resolution) (0.02 kg resolution) (0.05 kg resolution) (0.1 kg resolution) (0.2 kg resolution) (0.5 kg resolution) (1 kg resolution) (2 kg resolution)	 0 g to 500 g 0 kg to 1 kg 0 kg to 2 kg 0 kg to 5 kg 0 kg to 10 kg 0 kg to 20 kg 0 kg to 50 kg 0 kg to 100 kg 0 kg to 200 kg 0 kg to 500 kg 0 kg to 1 000 kg 0 kg to 2 000 kg 0 kg to 5 000 kg 0 kg to 10 000 kg 0 kg to 20 000 kg	 0.120 g 0.22 g 0.37 g 0.83 g 1.7 g 3.3 g 9 g 0.016 kg 0.029 kg 0.080 kg 0.16 kg 0.29 kg 0.89 kg 1.8 kg 3.5 kg	NIST Class F weights and NIST Handbook 44 utilized for the calibration of the weighing system.

Calibration Parameter/Equipment ¹	Range	Best Measurement Capability(+/-) ³	Remarks
Industrial Scales ²			
(0.001 lb resolution)	0 lb to 10 lb	0.0017 lb	NIST Class F weights and NIST Handbook 44 utilized for the calibration of the weighing system.
(0.002 lb resolution)	0 lb to 20 lb	0.0028 lb	
(0.005 lb resolution)	0 lb to 50 lb	0.0077 lb	
(0.01 lb resolution)	0 lb to 100 lb	0.015 lb	
(0.02 lb resolution)	0 lb to 200 lb	0.031 lb	
(0.05 lb resolution)	0 lb to 500 lb	0.072 lb	
(0.1 lb resolution)	0 lb to 1 000 lb	0.17 lb	
(0.2 lb resolution)	0 lb to 2 000 lb	0.33 lb	
(0.5 lb resolution)	0 lb to 5 000 lb	0.76 lb	
(1 lb resolution)	0 lb to 10 000 lb	1.8 lb	
(2 lb resolution)	0 lb to 20 000 lb	3.5 lb	
(5 lb resolution)	0 lb to 50 000 lb	8.7 lb	
(10 lb resolution)	0 lb to 100 000 lb	17.9 lb	
(20 lb resolution)	0 lb to 200 000 lb	35 lb	
(50 lb resolution)	0 lb to 400 000 lb	86.7 lb	

Notes:

- 1) Laboratory provides commercial in-house and field calibration services.
- 2) Industrial Scales include Bench, Counting, Crane/Hanging, Floor, Forklift, Tank, Hopper, Vehicle and other types of industrial Weighing applications.
- 3) Best Measurement Capabilities are expressed as expanded uncertainties at approximately the 95 % level of confidence using a coverage factor of $k = 2$.

Approved by:  Date: December 22, 2008

R. Douglas Leonard
Chief Technical Officer

Re-Issued: 12/22/08