

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Load Cell Tension S-Cell Model: CGSB

 n_{max} : Single Cell, Class III, 3 000 n_{max} : Single Cell, Class III L, 10 000

Capacity: 100 to 10 000 lb Accuracy Class: III / III L

Submitted By: Contact Info. Updated Oct. 2014

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Standard Features and Options

The specific load cell capacities, $v_{\text{min}},$ and minimum dead loads are listed on page 2.

Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Randy Jennings

Chairman, NCWM, Inc.

Judy L. Cardin Judy Cardin

Chairman, National Type Evaluation Program Committee
Issued: December 23, 2009

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Coti Global Sensors, Inc.

Load Cell / CGSB

Application: The load cells may be used in both Class III and III L scales for both single and multiple cell applications consistent with the model designations, number of scale divisions, and parameters specified in this certificate. Load cells of a given accuracy class may be used in applications with lower accuracy class requirements provided the number of scale divisions, the v_{min} values, and temperature range are suitable for the application.

The following parameters are indicated in pounds.

Capacity		Class III v _{min}	Class III I v	Minimum Dead Load
Code	lb	Class III V _{min}	Class III L v _{min}	Millinum Dead Load
100	100	0.01	0.003	2
200	200	0.02	0.006	2
300	300	0.03	0.01	2
500	500	0.05	0.016	5
750	750	0.08	0.025	5
1K	1000	0.10	0.033	10
1.5K	1500	0.15	0.050	10
2K	2000	0.20	0.066	10
3K	3000	0.30	0.10	10
5K	5000	0.50	0.16	10
10K	10 000	1.00	0.33	10

The following parameters are indicated in kilograms.

Capacity Code	Class III v _{min}	Class III L v _{min}	Minimum Dead Load
50 kg	.006	.002	.9
0.1t	.011	.003	.9
.25t	.028	.008	2.3
0.5t	.055	.017	4.5
1.0t	.110	.033	4.5
2.5t	.275	.083	4.5
5.0t	.550	.165	4.5

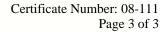
<u>Test Conditions</u>: This certificate supersedes Certificate of Conformance number 03-041 and is issued to indicate transfer of the NTEP Certificate of Conformance from Coti, Inc. to Coti Global Sensors, Inc. and the change of model numbers. Previous test information and documentation provided by the company was reviewed. The test conditions for the original type evaluation are listed below for reference.

<u>Certificate of Conformance Number 03-041</u>: This certificate is issued based upon the following tests and upon information provided by the manufacturer. One 500-lb and one 100-lb capacity load cell were each tested using known test weights to collect the data for Certificate of Conformance Number 87-063 (dated December 10, 1987). One 3,000-lb capacity load cell was tested using dead weights as the reference standard. The data were analyzed for both single and multiple load cell applications. The cells were tested over a temperature range of -10 to 40 °C. Three tests were run on each cell at each temperature. The temperature effect on zero was measured and a time dependence (creep) test was performed. The barometric pressure test was waived due to the insensitivity of the load cell design to changes in barometric pressure. The manufacturer's laboratory was used to collect the test data.

Evaluated By: NIST Force Group, NIST Office of Weights and Measures

<u>Type Evaluation Criteria Used:</u> NIST, <u>Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices</u>, 1991. NCWM, Publication 14: Weighing Devices, 1991.

Conclusion: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.







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Load Cell / CGSB

Information Reviewed By: J. Truex (NCWM)

Example of Device:



