National Conference on Weights and Measures

15245 Shady Grove Road, Suite 130 • Rockville, MD 20850

Certificate Number: 97-081 Page 1 of 2

National Type Evaluation Program Certificate of Conformance for Weighing and Measuring Devices

For:

Load Cell Rocker Column Stainless Steel Compression Model: 65114S n_{max}, Class III L, Multiple Cells: 10 000 Capacity: 20 000 lb to 200 000 lb

Submitted by:

Sensortronics Inc. 677 Arrow Grand Circle Covina, CA 91722 Tel: (818) 331-0502 Fax: (818) 332-3418 Contact: Larry Burrow

Standard Features and Options					
	Model	Capacity (lb)	v _{min} (lb)		
6	55114S-20K	20 000	0.8		
6	5114S-50K	50 000	2.0		
6	5114S-75K	75 000	3.0		
6	5114S-100K	100 000	4.0		
6	55114S-125K	125 000	5.0		
6	5114S-150K	150 000	6.0		
6	5114S-200K	200 000	8.0		
NOTE: v _{min} for capacities between	20 000 lb and 20	0 000 lb not listed al	bove may be c	computed by t	ne for

NOTE: v_{min} for capacities between 20 000 lb and 200 000 lb not listed above may be computed by the formula v_{min} capacity / 25 000

Excitation voltage: 10 VDC Nominal output: 2.0 mV/V Dead load: 0 lb Wire design: 4-wire design Material: Stainless steel

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

This device was evaluated under the National Type Evaluation Program (NTEP) and was found to comply with the applicable technical requirements of 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.

Effective Date: July 3, 1997

Louis & Straub

Louis E. Straub Chairman, NCWM, Inc.

& Weston &

G. Weston Diggs Chairman, National Type Evaluation Program Committee Issue date: June 30, 1998

Note: The National Conference on Weights and Measures does not "approve", "recommend", or "endorse" any proprietary product or material, either as a single item or as a class or group. Results shall not be used in advertising or sales promotion to indicate explicit or implicit endorsement of the product or material by the NCWM.

This is a reissuance by the NCWM of a Certificate of Conformance already issued by the National Institute of Standards and Technology.

Sensortronics Rocker Column Stainless Steel Compression Load Cell Model: 65114S

- **Application:** The load cells may be used in Class III L scales for 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 manufacturer may market the load cell with fewer divisions (n_{max}) and with larger v_{min} values than those listed on the certificate. However, the load cells must be marked with the appropriate n_{max} and v_{min} for which the load cell may be used.
- **Identification:** A pressure sensitive identification badge containing the manufacturer, model designation, and serial number is located on the load cell. All other required information must be on an accompanying document including the serial number of the load cell.
- <u>**Test Conditions:**</u> Two 50 000-lb capacity load cells were tested at NIST using dead weights as the reference standard. The data were analyzed for multiple load cell applications. The cells were tested over a temperature range of -10 °C 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 performed to determine the sensitivity of the load cell design to changes in barometric pressure.

Type Evaluation Criteria Used: NIST Handbook 44, 1997 Edition

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

Information Reviewed By: Thomas M. Ahrens (NIST)