

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

For:

Floor or Livestock Scale
Weighing/Load Receiving Element
Model: 135-XXYY-Z
Nmax: 5,000
Capacity: 2,000 to 30,000 lb
Platform: 2' x 2' to 8' x 10'
CLC: See below

Submitted by:

Holtgreven/Loadmaster Scale
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Findlay, OH 45840
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Standard Features and Options

Specific Models and Capacities:

135 prefix in the model represents the series of the scale "XX" in the model represents capacity:

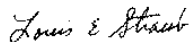
Floor Scales Class III		Livestock Scale Class III L		
Model	Capacity (lb)	Model	Capacity (lb)	CLC
135-32	2,000 x 1 lb	135-41	10,000 x 5 lb	5,000 lb
135-35	5,000 x 2 lb	135-42	20,000 x 5 lb	10,000 lb
		135-43	30,000 x 10 lb	10,000 lb

Additional Model designation information and load cells used are 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 (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: June 8, 1992



Louis E. Straub
Chairman, NCWM, Inc.



G. Weston Diggs
Chairman, National Type Evaluation Program Committee

Issued Date: January 21, 1993

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.

Holtgreven/Loadmaster Scale
Floor or Livestock Scale Weighing/ Load-Receiving Element
Model: 135-XXYY-Z

Application: For use in general purpose weighing interfaced with an approved and compatible indicator. Floor scale models are Class III; livestock scales are Class III L.

Identification: Identification badge is attached to the side of the weighing element adjacent to the cable port.

Additional Model Designations:

135-XX		YY	Z
Model Designations	Capacity (lb)	Represents Numbers from 01 to 99, indicating a manufacturers I.D.	Type of platform or load cell used
135-32	2,000		0 = SSB model load cell
135-35	5,000		1 = stainless steel platform
135-41	10,000		2 = galvanized platform
135-42	20,000		9 = 5123 model load cell
135-43	30,000		

Load Cells:

Revere Transducer Model SSB (CC No. 86-041A), or
 Revere Transducer Model 5123 (CC No. 86-037)

n_{\max} (the maximum number of divisions for a scale) is 3,000 when the Model SSB cells are used;
 n_{\max} is 5000 when the Model 5123 cells are used.

Sealing: A junction box separate from the weighing element must be sealed. To seal the box, use a wire security seal attached to the cover clasp and a small hole in the box.

Test Conditions: This Certificate supersedes Certificate of Conformance No. 91-093A1 and is issued to include Class III L livestock scales. This certificate covers floor scales for Class III and livestock scales for Class III L.

This Certificate supersedes Certificate of Conformance No. 91-093. The Certificate is issued to correct the maximum number of divisions. The original test conditions are repeated below.

The emphasis of the evaluation was on the device design, marking, performance, and compliance with influence factor requirements.

A 2000-lb capacity weighing element was evaluated in the laboratory. Several increasing/decreasing load tests and shift tests were performed. The device was tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). A load of approximately one-half scale capacity was applied to the scale 100,080 times. Additionally, tests were conducted using 100 and 130 VAC.

**Holtgreven/Loadmaster Scale
Floor/Livestock Scale Weighing/Load-Receiving Element
Model: 135-XXYY-Z**

Test Conditions (Cont.):

A 30,000-lb capacity weighing element was evaluated at a field installation site. The scale was tested initially by placing 8000 lb over each main load support and 16,000 lb in the center of each quarter of the load receiving element. Several increasing/decreasing load tests were performed using 30,000 lb of known test weight. The scale was then used and then tested again. The increasing/decreasing load tests and shift tests were repeated again using the same amount of test weight.

The results of the evaluations indicate the device complies with the applicable requirements of Handbook 44.

Type Evaluation Criteria Used: NIST Handbook 44, 1992 Edition

Tested By: B. Badenhop (OH)

Update Reviewed By: H. Oppermann, T. Grimes (NIST)