



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Non-Computing Scale
 Bench Scale, Load Cell Electronic
 Model: EB Series
 n_{max} : 3 000
 e_{min} : (see below)
 Capacity: (see below)
 Platform: (see below)
 Accuracy Class: III

***Submitted By: Contact Info. Updated September 2015**

Cardinal Scale Manufacturing Company
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Standard Features and Options**XXX = Indicator Type:**

- 204 Cardinal Model 204 Weight Indicator (NTEP CC 02-016)
- 205 Cardinal Model 205 Weight Indicator (NTEP CC 01-011)
- 210 Cardinal Model 210 Weight Indicator (NTEP CC 01-011)
- LPAN No Indicating Element
- Construction: Mild Steel

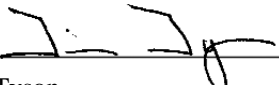
Load Cell Used:

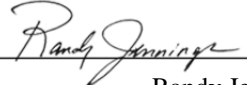
- Cardinal TSP Series strain gauge single point load cells (NTEP CC 97-136) and Cardinal TSSP-200KG single point strain gauge load cell (Model EB-300-XXX only) or approved metrological equivalent.

| Model No. | Capacity | Scale Interval | Platform Size | Load Cell |
|------------|-----------------|---------------------|---------------------------|---------------------|
| EB-15-XXX | 15 lb / 6 kg | 0.005 lb / 0.002 kg | 10 x 12 in / 250 x 300 mm | Cardinal TSP-10 kg |
| EB-30-XXX | 30 lb / 15 kg | 0.01 lb / 0.005 kg | 10 x 12 in / 250 x 300 mm | Cardinal TSP-20 kg |
| EB-60-XXX | 60 lb / 30 kg | 0.02 lb / 0.01 kg | 14 x 16 in / 350 x 400 mm | Cardinal TSP-50 kg |
| EB-150-XXX | 150 lb / 60 kg | 0.05 lb / 0.02 kg | 14 x 16 in / 350 x 400 mm | Cardinal TSP-100 kg |
| EB-300-XXX | 300 lb / 150 kg | 0.1 lb / 0.05 kg | 20 x 24 in / 500 x 600 mm | Cardinal TSP-200 kg |

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. *Editorial changes, not affecting the type or metrological content, corrected this certificate.


 Tim Tyson
 Chairman, NCWM, Inc.


 Randy Jennings
 Chairman, National Type Evaluation Program Committee
 Issued: October 19, 2010

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**Cardinal Scale Manufacturing Co.**

Non-Computing Scale / EB Series

Application: General purpose load-receiving element when connected to an approved and compatible indicating element.

Identification: The required information is on a label located on top of the weighbridge. Access to this identification label may be gained by lifting upward on the stainless steel top cover and removing it from its support.

Sealing: There are no metrological adjustments in the load-receiving element. All calibration adjustments take place within the indicating element.

Test Conditions: This Certificate supersedes Certificate of Conformance number 03-031 and was issued to add the Models EB-15-XXX and EB-30-XXX bench scales. The Model EB-15-LPAN, 15 x 0.005 lb (6 x 0.002 kg) was submitted for this evaluation. The device was interfaced with a Cardinal Model 210 (Certificate of Conformance Number 01-011A1) indicating element. The emphasis of the evaluation was on the device design, marking, operation and compliance with influence factor requirements. Several increasing/decreasing load 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 half capacity was applied to the base over 100 000 times, the scale was tested periodically during this time. Previous test conditions are listed below for reference.

Certificate of Conformance Number 03-031: The Model EB-60-LPAN, 60 x 0.02 lb (30 x 0.01 kg) bench scale and the Model EB-300-LPAN, 300 x 0.1 lb (150 x 0.05 kg) bench scale were submitted for this evaluation. The devices were interfaced with a Cardinal Model 210 (NTEP Certificate of Conformance Number 01-011A1) indicating element. The emphasis of the evaluation was on device design, markings, operation and compliance with influence factor requirements. Several increasing/decreasing load 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 half capacity was applied to the base over 100 000 times, the scale was tested periodically during this time.

Evaluated By: A. McCoy (OH) 03-031 and 03-031A1

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2003. NCWM, Publication 14: Weighing Devices, 2003.

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

Information Reviewed By: S. Patoray (NCWM), L. Bernetich (NCWM) 03-031, 03-031A1