

## NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance for Weighing and Measuring Devices

For:

Non-Computing Scale Electronic Bench/Counter

Model: Bench Pro BP Series (See table for all models)

n<sub>max</sub>: 5600

emin: 0.005 lb (0.002kg) Single Interval

e<sub>min</sub>: 0.05 oz (0.001 kg) for Multiple range/Multiple Interval

Capacity: 15 to 300 lb (6 to 150 kg)

Platform: See Table Accuracy Class: III

## **Submitted By:**

Rice lake Weighing Systems

230 Coleman St. Rice lake, WI 54868 Tel: 715-234-9171 Fax: 715-234-6967

Contact: Jan Konijnenburg

Email: jkonijnenburg@ricelake.com

Web site: www.ricelake.com

### **Standard Features and Options**

#### **Standard Features:**

Platform size: 6 in x 10 in to 24 in x 24 in

Length or width of the platform can be increased by 125% not to exceed the maximum platform area of 576 sq. in.

Semi-Automatic (Push Button) Zero Setting Mechanism (SAZSM)

Automatic Zero Tracking (AZT) Initial Zero Setting Mechanism (IZSM)

Semi-Automatic (push button) Tare Battery Saving Feature (Auto Shut-off)

USB HID interface

Multiple Range / Multiple interval (35 kg model only)

AC to DC power supply

Liquid Crystal Display (LCD)

Gross/Net Display

External unit key (kg, g, lb, and oz.) RS 232 Serial communication port

lb/oz. units postal scale only

#### **Options:**

Plastic flat Platter Stainless steel flat platter Roller conveyor Platter Mild steel flat platter Tower/Pedestal display Battery Power Supply Ball conveyor Platter

#### **Load Cells Used:**

Rice Lake 1521A(non-NTEP)Zemic L6D8(non-NTEP)Rice Lake SP4(non-NTEP)True-Tec PA06(non-NTEP)Rice Lake PWM16(non-NTEP)True-Tec PA06M(non-NTEP)

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.

**U**mes Cassidy

Chairman, NCWM, Inc.

✓ Kristin Macey

Committee Chair, National Type Evaluation Program Committee

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## 1135 M Street, Suite 110 / Lincoln, Nebraska 68508

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# **Rice Lake Weighing Systems**

Non-Computing Scale / Bench Pro (BP series)

Model	Platter Size (in)	Capacity x Division Size	n <sub>max</sub>
BP 0610-6R	6 x 10	6 kg / 15 lb x 0.002 kg / 0.005 lb	3000
BP 0610-15R	6 x 10	15 kg / 30 lb x 0.005 kg / 0.010 lb	3000
BP 1010-6R	10 x 10	6 kg / 15 lb x 0.002 kg / 0.005 lb	3000
BP 1010-15R	10 x 10	15 kg / 30 lb x 0.005 kg / 0.010 lb	3000
BP 1214-6R	12 x 14	6 kg / 15 lb x 0.002 kg/ 0.005 lb	3000
BP 1214-15R	12 x 14	15 kg / 30 lb x 0.005 kg / 0.010 lb	3000
BP 1214-35P	12 x 14		
Single interval		35 kg x 0.01 kg, 70 lb x 0.02 lb or 70 lb x 0.5 oz	5000 / 3500 / 2240
Dual-range/interval		5/35 kg x 0.001/0.01 kg or 7/70 lb x 0.05/0.5 oz	5000 / 2240
Triple-range/interval		5/10/35 kg x 0.001/0.002/0.01 kg	5000
BP 1214-75S	12 x 14	75 kg / 150 lb x 0.020 kg / 0.050 lb	3000
BP 1216-15R	12 x 16	15 kg / 30 lb 0.005 kg / 0.010 lb	3000
BP 1216-35S	12 x 16	35 kg / 70 lb 0.010 kg / 0.020 lb	3500
BP 1216-50S	12 x 16	50 kg / 100 lb 0.010 kg / 0.020 lb	5000
BP 1216-75S	12 x 16	75 kg / 150 lb 0.020 kg / 0.050 lb	3750 / 3000
BP 1618-50S	16 x 18	50 kg / 100 lb 0.010 kg / 0.020 lb	5000
BP 1618-75S	16 x 18	75 kg / 150 lb 0.020 kg / 0.050 lb	3750 / 3000
BP 1618-150S	16 x 18	150 kg / 300 lb 0.050 kg / 0.100 lb	3000
BP 1818-50S	18 x 18	50 kg / 100 lb 0.010 kg / 0.020 lb	5000
BP 1818-75S	18 x 18	75 kg / 150 lb 0.020 kg / 0.050 lb	3750 / 3000
BP 1818-150S	18 x 18	150 kg / 300 lb 0.050 kg / 0.100 lb	3000
BP 1820-75S	18 x 20	75 kg / 150 lb 0.020 kg / 0.050 lb	3750 / 3000
BP 1820-150S	18 x 20	150 kg / 300 lb 0.050 kg / 0.100 lb	3000
BP 2020-150S	20 x 20	150 kg / 300 lb 0.050 kg / 0.100 lb	3000
BP 1822-150S	18 x 22	150 kg / 300 lb 0.050 kg / 0.100 lb	3000
BP 2222-150S	22 x 22	150 kg / 300 lb 0.050 kg / 0.100 lb	3000
BP 2224-150S	22 x 24	150 kg / 300 lb 0.050 kg / 0.100 lb	3000
BP 2424-150S	24 x 24	150 kg / 300 lb 0.050 kg / 0.100 lb	3000



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Non-Computing Scale / Bench Pro (BP series)

<u>Application</u>: Non-Computing portable scale for general purpose weighing applications, Model BP-1214-35P Multiple Range/Multi-interval in lb/oz. units is for postal use only.

<u>Identification</u>: The required markings are on a self-adhesive tamper evident label attached to the base under the platter on the front side of the scale. The word "Void" is displayed if an attempt is made to remove the markings label.

<u>Sealing</u>: Category 1 physical seal no audit trail all models. There is a round push button switch located on the corner of the circuit board under the cover that allows access to the calibration and configuration parameters. Sealing is accomplished either by:

- A lead and wire seal threaded thru a drilled fillister head screw and a fixed point on the stainless-steel cover preventing access to the calibration switch.
- Or a self-destructing seal over a plastic plug that covers the hole that allows access to the calibration switch.

All models of scales automatically return to the weighing mode after exiting the calibration or configuration menu.

<u>Test Conditions</u>: This certificate supersedes Certificate of Conformance Number 17-002 and is issued to increase the Bench Pro series capacities and the design, size and material used for the platters. Eight models from the Bench Pro (BP) series were submitted for evaluation. The emphasis of the evaluation was on the device design, marking, operation, performance, and compliance with influence factor requirements. For the purpose of the evaluation the following models were submitted, 150 kg x 0.050 kg, 75 kg x 0.02, 50 kg x 0.010 kg (two models), 35 kg x 0.01, 15 kg x 0.005 kg (two models) and a 6 kg x 0.002. All optional platters were submitted and evaluated on a 50 kg x 0.010 kg model. Several increasing/decreasing load tests, shift tests, and discrimination tests were performed on each scale. The scales were tested with an AC power supply at 85 VAC and 265 VAC. A warm up test, power interruption test, and suitability of level indicator tests were also performed. The scales were tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). A load of approximately one-half capacity was applied to each scale over 100 000 times. The scales were tested periodically during this time. Previous test conditions are listed below for reference.

Certificate of Conformance 17-002: Four models from the BP-1214 series were submitted for evaluation. The emphasis of the evaluation was on the device design, marking, operation, performance, and compliance with influence factor requirements. For the purpose of the evaluation a 75 kg x 0.02, a 70 lb /oz x 0.02 oz, a 35 kg x 0.01 and a 6 kg x 0.002 were submitted. Several increasing/decreasing load tests, shift tests, and discrimination tests were performed on each scale. The scales were tested with an AC power supply at 85 VAC and 265 VAC then a DC power supply at 4.3 VDC and 13.2 VDC. A warm up test, power interruption test, and suitability of level indicator tests were also performed. The scales were tested over a temperature range of -10°C to 40°C (14° F to 104°F). A load of approximately one-half capacity was applied to each scale over 100 000 times. The scales were tested periodically during this time.

Evaluated By: J. Gibson (OH) 17-002, 17-002A1

<u>Type Evaluation Criteria Used:</u> NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2017 Edition. NCWM Publication 14 Weighing Devices, 2017 Edition.

<u>Conclusion</u>: The results of the evaluation and information provided by the manufacturer indicate the device complies with all applicable requirements.

Information Reviewed By: J. Truex (NCWM) 17-002, 17-002A1

#### **Examples of Device:**





# **Rice Lake Weighing Systems**

Non-Computing Scale / Bench Pro (BP series)





Stainless Steel Platter / Pedestal Display

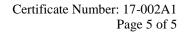
Plastic Platter





Stainless Steel Platter









# **Rice Lake Weighing Systems**

Non-Computing Scale / Bench Pro (BP series)







Stainless Steel Platter



Calibration switch BP Series 1214 Models



Sealing / Calibration Switch BP Series



