

#### NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance for Weighing and Measuring Devices

For:

Computing Scale

Non-computing Scale, Load Cell Electronic,

Multi-Range, Single-Range Model: CWTxx & CPTxx

n<sub>max</sub>: 3000

e<sub>min</sub>: See table on page 2 Capacity: See table on page 2

Platform: 320 X 230 mm Stainless Steel

Accuracy Class: III

**Submitted By:** 

Gravity Measurement, Inc. 17 Sterling Heights Drive Clifton Park, NY 12065 Phone: 518-526-5942

Contact: Z. Rick Pang

Email: Pang@gravitymeasurement.com
Web site: www.gravitymeasurement.com

#### **Standard Features and Options**

Automatic Zero Tracking (AZT)
Initial Zero Setting Mechanism (IZSM)
Semi-Automatic Zero (Push Button)
Semi-Automatic Tare (Push Button)
Keyboard Tare
Programmable Tare
Price Computing (CPTxx models)
Weighing (CWTxx models)

Counting (CWTxx models)

AC Power Supply
DC/Battery Power Supply
Customer Display (Dual) (CPTxx models)
Liquid Crystal Display (LCD)
RS-232 Communication Port
Single Range
Multi (Dual) Range

Load Cells Used: ZEMIC Model L6D Series (NTEP Certificate of Conformance number 11-012) or other metrological equivalent and NTEP certified

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.

Kristin Maeey

Chairman, NCWM, Inc.

Jerry Buendel Chairman, National Type Evaluation Program Committee

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

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## Gravity Measurement, Inc.

#### Computing Scale / Models CWTxx & CPTxx

| Model | Capacity      | e/d <sub>min</sub> | n <sub>max</sub> | Model | Capacity           | e/d <sub>min</sub>       | n <sub>max</sub> |
|-------|---------------|--------------------|------------------|-------|--------------------|--------------------------|------------------|
|       | Single Range  |                    |                  |       | Multi-Range        |                          |                  |
|       | 3 kg (6 lb)   | 1 g (0.002 lb)     |                  |       | 1.5/3 kg (3/6 lb)  | 0.5/1 g (0.001/0.002 lb) |                  |
| CWT7  | 6 kg (15 lb)  | 2 g (0.005 lb)     | 3000             | CWT7  | 3/6 kg (6/15 lb)   | 1/2 g (0.002/0.005 lb)   | 3000             |
|       | 15 kg (30 lb) | 5 g (0.01 lb)      |                  |       | 6/15 kg (15/30 lb) | 2/5 g (0.005/0.01 lb)    |                  |
|       | 30 kg (60 lb) | 10 g (0.02 lb)     |                  |       | 15/30 kg (30/60lb) | 5/10 g (0.01/0.02 lb)    |                  |
|       | 3 kg (6 lb)   | 1 g (0.002 lb)     |                  |       | 1.5/3 kg (3/6 lb)  | 0.5/1 g (0.001/0.002 lb) |                  |
| CWT22 | 6 kg (15 lb)  | 2 g (0.005 lb)     | 3000             | CWT22 | 3/6 kg (6/15 lb)   | 1/2 g (0.002/0.005 lb)   | 3000             |
|       | 15 kg (30 lb) | 5 g (0.01 lb)      |                  |       | 6/15 kg (15/30 lb) | 2/5 g (0.005/0.01 lb)    |                  |
|       | 30 kg (60 lb) | 10 g (0.02 lb)     |                  |       | 15/30 kg (30/60lb) | 5/10 g (0.01/0.02 lb)    |                  |
|       | 3 kg (6 lb)   | 1 g (0.002 lb)     |                  |       | 1.5/3 kg (3/6 lb)  | 0.5/1 g (0.001/0.002 lb) |                  |
| CPT10 | 6 kg (15 lb)  | 2 g (0.005 lb)     | 3000             | CPT10 | 3/6 kg (6/15 lb)   | 1/2 g (0.002/0.005 lb)   | 3000             |
|       | 15 kg (30 lb) | 5 g (0.01 lb)      |                  |       | 6/15 kg (15/30 lb) | 2/5 g (0.005/0.01 lb)    |                  |
|       | 30 kg (60 lb) | 10 g (0.02 lb)     |                  |       | 15/30 kg (30/60lb) | 5/10 g (0.01/0.02 lb)    |                  |
|       | 3 kg (6 lb)   | 1 g (0.002 lb)     |                  |       | 1.5/3 kg (3/6 lb)  | 0.5/1 g (0.001/0.002 lb) |                  |
| CPT20 | 6 kg (15 lb)  | 2 g (0.005 lb)     | 3000             | CPT20 | 3/6 kg (6/15 lb)   | 1/2 g (0.002/0.005 lb)   | 3000             |
|       | 15 kg (30 lb) | 5 g (0.01 lb)      |                  |       | 6/15 kg (15/30 lb) | 2/5 g (0.005/0.01 lb)    |                  |
|       | 30 kg (60 lb) | 10 g (0.02 lb)     |                  |       | 15/30 kg (30/60lb) | 5/10 g (0.01/0.02 lb)    |                  |

**Application:** For use in general purpose weighing applications, computing or non-computing.

<u>Identification</u>: The required information is on a label affixed to the left side of the scale base.

<u>Sealing</u>: These devices require 2 (two) physical seals, a wire seal and an adhesive paper seal. The wire seal is threaded through a metal rod that protrudes through the bottom of the device and also through a hole in the scale base adjacent to the metal rod. The paper seal is placed over a plastic cap on the bottom of the device which provides access to the calibration switch. (see example photo)

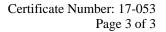
<u>Test Conditions</u>: This certificate is issued based upon the following tests and upon information provided by the manufacturer. For the purposes of this evaluation, a model CPT10 1.5/3 kg capacity and a model CWT22 15/30 kg were submitted. The emphasis of the evaluation was on the design, marking, operation and compliance with influence factor requirements. Several increasing/decreasing load tests and shift tests were performed on each device. The devices were tested with an AC power supply from 102 VAC to 132 VAC and a DC power supply from 4 VDC to 6.6 VDC. The devices 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 the units over 100,000 times (each) and the scales were tested periodically during this time.

**Evaluated By:** E. Morabito (NY)

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

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

**Information Reviewed By:** J. Truex (NCWM)







# **Gravity Measurement, Inc.**

Computing Scale / Models CWTxx & CPTxx

## **Examples of Device:**

CWT22



Sealing Method





CPT 10