

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 and 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: Contact Info. Updated November 2020 Gravity Measurement, Inc. 4780 Hampton Village Drive Mason, OH 45040 Phone: 518-526-5942 Contact: Rick Pang Email: <u>pang@gravitymeasurement.com</u> Web site: <u>www.gravitymeasurement.com</u>

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

- Automatic Zero Tracking (AZT)
- AC Power Supply
- Initial Zero Setting Mechanism (IZSM)
- DC/Battery Power Supply
- Semi-Automatic Zero (Push Button)
- Customer Display (Dual) (CPTxx models)
- Semi-Automatic Tare (Push Button)
- Liquid Crystal Display (LCD)
- Keyboard Tare
- RS-232 Communication Port
- Programmable Tare
- Single Range
- Price Computing (CPTxx models)
- Multi (Dual) Range
- Weighing (CWTxx models)
- Counting (CWTxx models)

**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 *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.

Hal Prince Chairman, NCWM, Inc.

Craig VanBuren Chair, NTEP Committee Issued: May 2, 2017

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### Gravity Measurement, Inc.

Computing Scale / CWTxx and 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.

Identification: 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 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)

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

<u>Conclusion</u>: 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 / CWTxx and CPTxx

Sealing Method

# **Examples of Device:**

CWT22

