

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

**For:**

Non-Computing, Counter/Bench Scale  
Digital Electronic  
Model: PC400  
 $n_{max}$ : \* (See Below)  
 $e_{min}$ : \* (See Below)  
Capacity: \* (See Below)  
Platform: 6.5" x 6.5"  
Accuracy Class: III

**Submitted by:**

Doran Scales, Inc.  
1315 Paramount Parkway  
Batavia, IL 60510  
Tel: (630) 879-1200  
Fax: (630) 879-0073  
Contact: Mark Podl

**Standard Features and Options**

\*Specific capacities covered by this certificate include:

Model	Capacity in lb	$e_{min}$ in lb	Capacity in kg	$e_{min}$ in kg	Capacity in g	$e_{min}$ in g	Capacity in oz	$e_{min}$ in oz	$n_{max}$
PC400	2.2	0.001	1.0	0.0005	1000	0.5	35	0.02	2200
	5	0.002	2.3	0.001	2300	1.0	80	0.05	2500
	10	0.005	4.5	0.002	4500	2.0	160	0.1	2250
	20	0.01	9.07	0.005	9070	5.0	320	0.2	2000

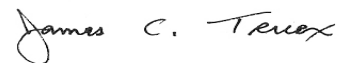
Semi-automatic zero (SAZSM)  
Automatic zero setting mechanism (AZSM)  
Initial zero setting Mechanism (IZSM)  
RS-232 bi-directional serial interface  
External Printer  
Internal Battery  
AC/DC Adapter  
Unit conversion button (lb, kg, oz, g)

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.



Don Onwiler  
Chairman, NCWM, Inc.



James C. Truex  
Chairman, National Type Evaluation Program Committee  
Issue date: August 29, 2005

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.

**Doran Scales, Inc.**  
**Bench Scale**  
**Model: PC-400**

**Application:** General purpose bench scale.

**Identification:** The manufacturer name, Model number, Class and capacity by division are silk-screened around the display on the front of the device. The other required markings are located on a self-destructive badge located under the device.

**Sealing:** A wire security seal can be threaded through the two-drilled head screws located under the device at the lower left as looking at it when turned over. This prevents access to the calibration button located behind the closest drilled head screw to the bottom lower left corner.

**Test Conditions: Certificate of Conformance Number 04-039A1:** This Certificate supersedes Certificate of Conformance Number 04-039 and is issued to add a larger capacity. The emphasis of the evaluation was on the device design, marking, performance and compliance with the influence factor requirements. A Model Doran PC-400 20 lb x 0.1 lb was submitted for the purpose of this evaluation. Several increasing/decreasing load and shift tests were conducted. The device was tested over a temperature range of  $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  ( $14^{\circ}\text{F}$  to  $104^{\circ}\text{F}$ ). A load of approximately one-half scale capacity was applied to the scale 100 000 times. The scale was tested periodically during this time. Additionally, tests were conducted using 100 VAC & 130 VAC, 6.3 VDC & 8.4 VDC power supplies.

**Certificate of Conformance Number 04-039:** The emphasis of the evaluation was on the device design, marking, performance and compliance with the influence factor requirements. Three Doran PC-400 Models were submitted for evaluation. 2.2 lb x 0.001 lb, 5 lb x 0.002 lb and 10 lb (4.5 kg) x 0.005 lb (0.002 kg) capacity scales were submitted for evaluation. Several increasing/decreasing load and shift tests were conducted. The devices were tested over a temperature range of  $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  ( $14^{\circ}\text{F}$  to  $104^{\circ}\text{F}$ ). A load of approximately one-half scale capacity was applied to the 2.2 lb and 10 lb scale 100000 times. The scales were tested periodically during this time. Additionally, tests were conducted using 100 VAC & 130 VAC, 6.3 VDC & 8.4 VDC power supplies. Permanence testing was waived on the 5 lb capacity scale since the range of capacities for the model PC400 is narrow.

**Evaluated By:** A. McCoy (OH) 04-039A1; T. Lucas (OH) & W. West (OH) 04-039

**Type Evaluation Criteria Used:** NIST Handbook 44, 2005 Edition, NCWM Publication 14, 2005 Edition

**Conclusion:** The results of the evaluations and information provided by the manufacturer indicate the devices comply with applicable requirements.

**Information Reviewed By:** S. Patoray (NCMW), L. Bernetich (NCWM) 04-039, 04-039A1