

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

For:

Indicating Element
 Digital Electronic
 Models: TI Series
 n_{max}: 5000 and 10 000

Accuracy Class: III

Submitted by:

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Standard Features and Options

Model	TI-2200	TI-2100	TI-500E	TI-500	TI-600E	TI-600
Display type	Light Emitting Diode (LED)	LED	LED	Liquid Crystal Display (LCD)	LED	LCD
Housing type	Stainless Steel	Stainless Steel	Stainless Steel or Plastic	Stainless Steel or Plastic	Stainless Steel or Plastic	Stainless Steel or Plastic
n _{max}	10 000	10 000	5000	5000	5000	5000
Semi-automatic zero and tare	X	X	X	X	X	X
External lb/kg	X	X	X	X	X	X
RS 232 Interface	X	X	X	X	X	X
Programmable set points for batching	Four	Two	--	--	--	--
Keyboard tare	X	--	--	--	X	X
Power: AC adapter	X	X	X	X	X	X

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.

Effective Date: July 8, 1996

Louis E. Straub

Louis E. Straub
 Chairman, NCWM, Inc.

G. Weston Diggs

G. Weston Diggs
 Chairman, National Type Evaluation Program Committee

Issue date: August 8, 1996

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.

This is a reissuance by the NCWM of a Certificate of Conformance already issued by the National Institute of Standards and Technology.

Transcell Technology, Inc.
Indicating Element
Model: TI Series

Application: These indicators may be used with any approved and compatible weighing elements for general purpose weighing.

Identification: The identification plate is on top of the indicator. The indicator is mounted on a swivel mount that may be turned to view the identification information.

Sealing: Calibration and configuration parameters are accessed by toggling an internal switch or jumper to the setup mode. A security seal prevents access to the internal calibration switch.

Models TI-2200 and TI-2100 can be sealed using a wire security seal through two adjacent screws that secure the back cover.

Models TI-600E, TI-600, TI-500 and TI-500E, with a plastic case, can be sealed using a wire security seal through two screws that secure a cover plate over the opening of the calibration switch and a third screw in the right corner that secures the case cover. The stainless steel cases can be sealed using a wire security seal through two adjacent screws that secure the back cover.

Test Conditions: This certificate supersedes Certificate of Conformance No. 94-080A1 and is issued to add the TI-600E and TI-600 to the TI series. Models TI-600E and TI-600 are metrologically similar to models TI-500E and TI-500, with the addition of a numerical keypad used to enter keyboard tares. Model TI-600E was submitted for evaluation. The emphasis of the evaluation was on the entry of keyboard tare compliance with tare requirements and its interaction with other indicator functions. Additionally, a new type of metal foil identification badge was evaluated for compliance with permanence of markings and durability requirements. The previous test conditions are repeated for reference.

Certificate of Conformance 94-080A1: This certificate supersedes Certificate of Conformance No. 94-080 and is issued to add model TI-2200 to the TI Series. Model TI-2200 is metrologically similar to model TI-2100, with the addition of some keys and software functions such as keyboard tare. The operation and functions of these keys were tested in the laboratory.

Certificate of Conformance 94-080: The emphasis of this evaluation was on device design, operation, and compliance with the influence factor requirements. Models TI-2100 and TI-500 were selected for evaluation. The indicating elements were interfaced to load cell simulators and tested for accuracy over a temperature range of -10 °C to 40 °C and 100 VAC and 130 VAC. Additionally, the indicating elements were attached to weighing elements and tested for compliance with zone of uncertainty, AZSM, width of zero and discrimination requirements. One indicator was attached to a printer to check print format.

The results of these evaluations and information provided by the manufacturer, indicate that the devices comply with the applicable requirements of NIST Handbook 44.

Type Evaluation Criteria Used: NIST Handbook 44, 1996 Edition

Tested By: Bill Fishman (NY) and Ed Szesnat (NY) (94-080); Bill Fishman (NY) (94-080A1 and 94-080A2)