

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

**For:**

Portable Axle-Load Weighing Element/Indicating  
Element, Digital Electronic  
Models: AX900 (Weighing Element\*)  
PT 20 (Indicating Element)  
 $n_{\max}$ : 1200  $e_{\min}$ : 50 lb  
Capacity: 30 000 lb (single weighing element)  
60 000 lb (per pair)  
Platforms: 7' x 32", 5.5' x 32", and 3.5' x 32"  
Weighing Element Class III/Indicator Class III

**Submitted by:**

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**Standard Features and Options**

**PT 20 Indicating Element:**

Semi-automatic (push-button) zero  
Initial zero setting mechanism (IZSM)  
AC/DC power adapter  
6 – Multi-channel inputs (for additional weighing elements)  
Integrated tape printer  
Automatic zero setting mechanism (AZSM)  
12 VDC battery operation (rechargeable)  
Multi-point calibration

**AX900 Weighing Element:**

Aluminum or steel construction  
A/D converter or optional analog output  
Four load cells per module

Load cells: Sensortronics Model 65023A10K-10K (Certificate of Conformance Number 86-044A2)  
or certified equivalent

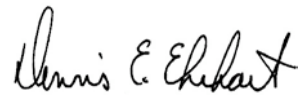
Optional Model: AX920 (pit installation device)

\* This certificate does not include mechanically coupled devices manufactured before November 30, 2001  
(S/N 23152370 and lower).

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.



G. Weston Diggs  
Chairman, NCWM, Inc.



Dennis E. Ehrhart  
Chairman, National Type Evaluation Program Committee  
Issue date: September 29, 2004

**Intercomp Corporation**  
**Portable Axle-Load Weighing Element/Indicating Element**  
**Models: AX900 and PT 20**

**Application:** For use in law enforcement as an axle-load weigher either individually or in pairs with approved and compatible indicating element. The Model PT 20 may be used to  $n_{max}$  1200 with other approved and compatible weighing elements.

**Identification:** The indicator identification badge can be found on the front panel. The identification badge for each weighing element can be found on the side of each element.

**Sealing:** Each Model AX900 weighing element is equipped with an enclosed junction box that contains metrological components and must be sealed. The junction box has an access panel located on the right side of the weighing element and is held in place by two drilled head screws. Sealing is accomplished with a security seal threaded through the two drilled head screws. This prevents access to the metrological components inside.

The Model PT 20 calibration switch is located inside the device. Access to the switch is prevented with a security seal threaded through two drilled head screws located on the front panel. The drilled head screws are on the right side of the device.

The Model GP1000/2000 calibration switch is located inside the device and is accessed by removing the side panel mounting screws and sliding the front cover panel away from the device. Access to the switch is prevented with a security seal threaded through two drilled head screws located on the front panel. The drilled head screws are on the left side of the device.

**Operation:** Axle-load weighing elements may be electronically connected to the Intercomp Model PT 20 or the GP 1000/2000 indicating element (Certificate of Conformance Number 97-035A1), or a certified and compatible indicating element. The Intercomp Model PT 20 with the multi-channel inputs and printer is the electronic equivalent of the Intercomp Model GP 1000/2000 indicating element. However, the Model PT 20 has a detached A/D converter board that is physically located in the weighing element. Multiple weighing elements may be mechanically coupled together to form more than one pair [refer to asterisk (\*) on page 1].

**Test Conditions:** This Certificate supersedes Certificate of Conformance Number 01-053A1 and is issued to correct the Standard Features and Options section and update and clarify the Sealing section of the certificate. No further testing was required. The previous test conditions are listed below for reference.

**Certificate of Conformance Number 01-053A1:** This Certificate supersedes Certificate of Conformance Number 01-053 and is issued to allow additional pairs of weighing elements to be attached. Six Model AX900 (four 3.5' x 32" and two 5.5' x 32") aluminum weighing elements were evaluated interfaced to an Intercomp Model PT 20 digital indicating element. Several increasing/decreasing and shift load tests were conducted on each weighing element using 24 000 lb of known test weights. Combination tests were conducted by distributing 36 000 lb of known test weights over each pair of weighing elements and then distributing 36 000 lb of known test weights over all six weighing elements. The permanence test was waived based on the previous test conditions. The previous test conditions are repeated below for reference.

**Intercomp Corporation**  
**Portable Axle-Load Weighing Element/Indicating Element**  
**Models: AX900 and PT 20**

**Test Conditions (Continued):**

**Certificate of Conformance Number 01-053:** Two Model AX900 (7' x 32", 30 000 lb x 50 lb) steel weighing elements were evaluated electronically attached to an Intercomp Model PT 20 digital indicating element. Several increasing/decreasing and shift load tests were conducted using 44 000 lb of known test weights. Each weighing element was tested to capacity (30 000 lb). The Model PT 20 indicating element was evaluated for device design, performance, multi-channel input capability, summing capabilities, print format, and compliance with influence factor requirements. The device was also tested over a voltage range of 7.2 vdc to 13.2 vdc. The separate A/D converter module was interfaced to a load cell simulator and the Model PT 20 indicating element, and tested over a temperature range of -10 °C to 40 °C (14 °C to 10 °F). A permanence test was performed using the minimum use criteria requirements and re-tested as described above.

The results of the evaluation and a review of technical information supplied by the manufacturer indicate the devices comply with applicable requirements.

**Type Evaluation Criteria Used:** NIST Handbook 44, 2002 Edition, NCWM Publication 14, 2002 Edition

**Tested By:** G. Castro (CA) and K. Jones (CA) 01-053, R. Norman Ingram (CA) 01-053A1, 01-053A2

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

**Reviewed By:** S. Patoray (NCWM), L. Bernetich (NCWM) 01-053A1, 01-053A2