



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Wheel-Load Weigher
Digital Electronic
Model: TXD and TXDi Series
 n_{max} : 455
Capacity: 20 000 x 50 lb; 9 080 x 20 kg
10 000 x 50 lb; 4 540 x 20 kg
Platform: 500 mm x 380 mm x 34 mm, 700 mm x 500 mm x 34 mm, 900 mm x 500 mm x 34 mm
Accuracy Class: IIII

Submitted By:

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Standard Features and Options

Model Series:

TXD Series: TXD-505F, TXD-705F, TXD-710F, TXD-910F
TXDi Series: TXDi-505F, TXDi-705F, TXDi-710F, TXDi-910F

- Automatic Zero tracking (AZT)
- Initial Zero Setting Mechanism (IZSM)
- Semi-Automatic Zero Setting Mechanism (Push Button)
- DC power (rechargeable Lithium battery)
- Liquid Crystal Display
- Wireless communication (ZigBee)
- Remote weight display with integral printer (Optional)
- External Unit conversion (lb to kg)

Load Cells Used: TMT Engineering Model: CCPA2-3T 3000 kg (Non-NTEP certified)

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: October 22, 2020

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TMT ENGINEERING CO., LTD
Wheel-Load Weigher / TXD and TXDi Series

Application: For use in law enforcement as a wheel-load weigher either individually or in pairs or for the collection of statistical information.

Identification: All required markings are on a plate riveted to the wheel load weigher above the weight display

Sealing: The device has a category 1 physical seal only. There is a plastic seal cover on the underneath side of the scale handle, removing the covering gives access to two drilled fillister head screws that you thread a wire security seal thru. This prevents removal of the screws and prevents access to the calibration switch opening.

Test Conditions: This certificate supersedes Certificate of Conformance Number 18-040PA1 and was issued to update device type in the For: Box to Wheel-Load Weigher and update the Application statement. Previous test conditions are listed below for reference. No additional testing deemed necessary.

Certificate of Conformance Number 18-040PA1: This certificate supersedes certificate of Conformance 18-040P and is issued to add a new battery style. The new battery is the same voltage and composition (lithium) as previously tested. We are also adding a new model, the TXDi Series, which is the model for the new battery style and a relocation of the weight display and buttons. All other components of the device are the same as previously tested during the evaluation of Certificate of Conformance 18-040P. Previous test conditions are below for reference.

Certificate of Conformance 18-040P: The emphasis of this evaluation was on the device design, operation, marking requirements, and performance. Two scales of model: TXD 910-F, 20 000 x 50 lb, platform size 900 mm x 500 mm x 34 mm and two scales of model: TXD 505-F, 10 000 x 50 lb platform size 500 mm x 380 mm x 34 mm were submitted and evaluated in the laboratory. A 10 in x 17 in x 2.75 in aluminum plate (manufacturer provided) was used to distribute and simulate pneumatic tire loads during the evaluation. Several increasing tests were performed with calibrated test weights and with a Morehouse proving ring. Out of level testing at 3 degrees/5% percent rise over run in four directions with 20 000 and 10 000 lb of known test weight was performed. The scales were tested in pairs using a Morehouse proving ring up to 40 000 lb. The scales were evaluated for DC voltage at 4.07 VDC and 3.21 VDC. The remote display with integral printer was evaluated along with unit conversion from lb to kg. The wireless communication, summing feature and zero function thru the remote display were evaluated and the wireless communication and summing feature thru the scales were evaluated. After laboratory performance testing, the scales were sealed for field permanence testing. When all of the NTEP permanence test requirements were met several increasing tests were repeated with 20 000 lb of known test weights. This certificate is based upon data provided by the manufacturer and test data collected at ambient temperature in the Ohio NTEP laboratory.

NOTE: This certificate is issued as a provisional NTEP Certificate of Conformance (CC). This evaluation is based on the current draft checklist, procedures and technical policy contained in NCWM Publication 14 for this Device type. When work on the NCWM Publication 14 section for this device is completed, the test report and this NTEP CC will be reviewed. If all current requirements have been met by this evaluation, the provisional status will be removed.

Evaluated By: T. Buck, K. Johnson, J. Gibson (OH) 18-040P; J. Gibson (OH) 18-040A1P; M. Manheim (NCWM) 18-040PA2

Type Evaluation Criteria Used: *Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2019 Edition. *NCWM Publication 14: Measuring Devices*, 2019 Edition.

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) 18-040P; D. Flocken (NCWM) 18-040PA1, 18-040PA2

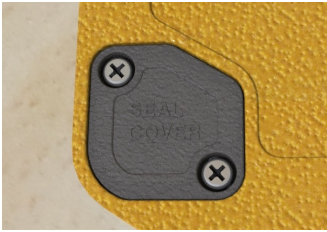


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Wheel-Load Weigher / TXD and TXDi Series

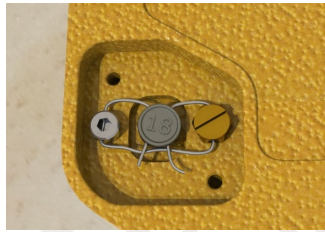
Example(s) of Device:

Sealing: All Models

Seal Cover



Wire Security Seal



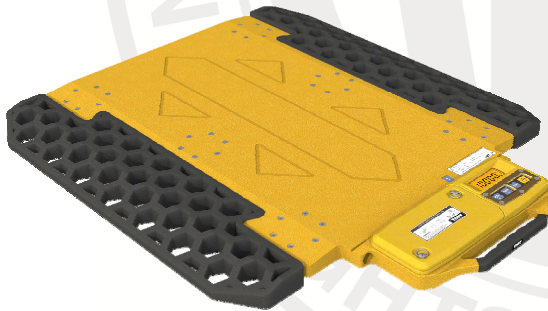
Model: TXD-505F



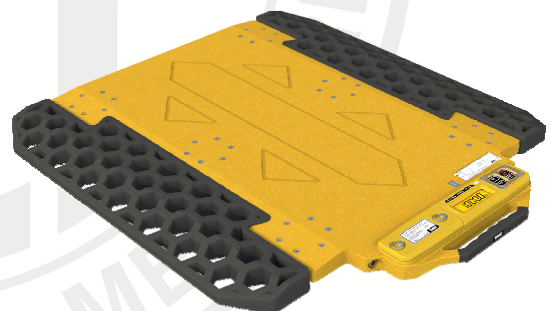
Model: TXDi-505F



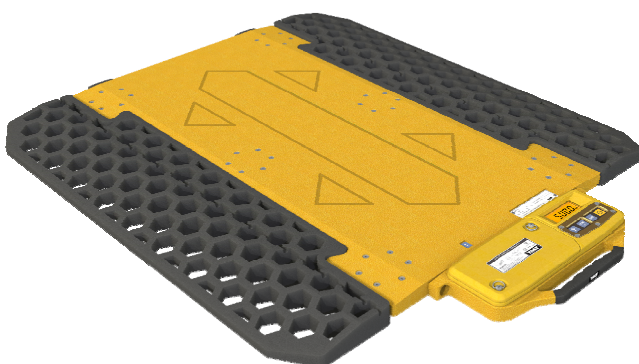
Model: TXD-705F , TXD-710F



Model: TXDi-705F , TXDi-710F



Model: TXD-910F



Model: TXDi-910F

