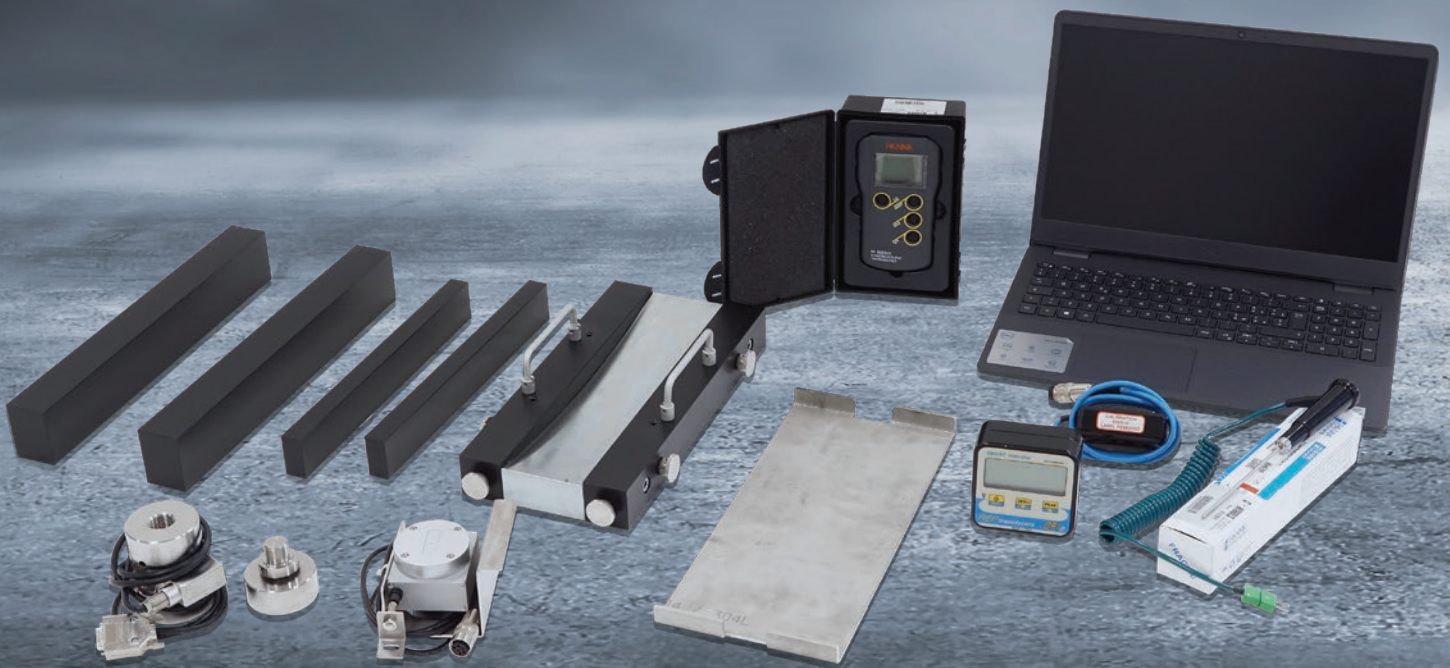


DWT Hamburg, EN and Universal Wheel Tracker Calibration Tool

AASHTO T324-2019 | EN 12697-22



DWT Hamburg, EN and Universal Wheel Tracker Calibration Tool

Standards: AASHTO T324-2019 | EN 12697-22

78-PV3/KIT DWT Wheel Tracker calibration tool is a verification and calibration device for your Double Wheel Tracker. It comes in one handy kit designed to make the calibration process simple and straight forward.

Included in the kit is a laptop PC with pre-installed calibration software that displays and records all the measurements as well as issues a verification and calibration certificate. The kit covers all the specifications included in AASHTO T324-2019 and EN 12697-22 Small Device (apart from wheel rubber hardness), while also being able to periodically check the performances of the Wheel Tracker machine.

Even though our kit has been designed to work with the IPC Global DWT Double Wheel Tracker, it can be easily adapted to verify and calibrate equipment from other manufacturers.

Benefits

- **One single kit** that comes with its own carrying case.
- **Complete calibration system** to verify and calibrate:
 - All parameters defined in AASHTO T324-2019, included the RMSE sinusoidal verification and the RMSE 11-points rut depth verification using the shaped metal specimen prescribed in the Appendix X2 of the Standard.
 - Wheel movement, load, temperature and rut depth.
- **Universal:** our kit can verify and calibrate any brand of Double Wheel Tracker.
- **Traceable:** All calibration tools included in the kit come with a traceable calibration certificate.

What's in the kit

The kit includes a full range of calibration and verification devices, including:

- **High resolution encoder*** with a Data Acquisition module, connection to a PC, PC software and laptop.
- **Shaped metal specimen** conforming to AASHTO T324-2019 Section X2 and Figure X1.1 for the verification and calculation of the 11-point RMSE rut measurement.
- **3,500 N capacity load cell**, with spherical seat and readout unit* to verify and calibrate the load on the wheel.
- **Digital thermometer with probe*** to measure the temperature of water or air.
- **Adapters and spacers** for use with the IPC Global Double Wheel Tracker.
- **Laptop PC with a dedicated software.**
- **Sturdy carrying case** made of hard plastic.



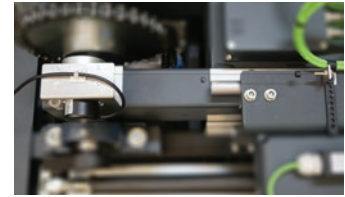
* With traceable calibration certificate

How does the recorder work

The high-resolution recorder is designed to measure and record:

- All wheel movement parameters, such as the RMSE (Root-Mean Square Error) that assess the real sinusoidal movement (based on the specifications from NCHRP Project 20-07 Task 361, now included in AASHTO T324-2019)
- Wheel position and speed
- Wheel speed at center.

The calibration software translates the above wheel movement data into intuitive visual graphs that are then put together into a comprehensive verification report with all the data required for further verifications.



Detail of the encoder in operation



Temperature verification

Technical Specifications

LOAD VERIFICATION DEVICE

| | |
|--------------------|---------|
| Capacity: | 3500 N |
| Resolution: | 0.1 N |
| Accuracy: | ± 0.1 N |

WHEEL SINUSOIDAL MOVEMENT, SPAN, CENTER AND POSITION DEVICE

| | |
|-------------------------|-----------|
| Span: | 1000mm |
| Resolution: | 0.01mm |
| Accuracy: | ± 0.01 mm |
| RMSE resolution: | 0.01mm |

TEMPERATURE VERIFICATION DEVICE

| | |
|---------------------------|--|
| Ranges: | from -50°C to 199.9°C (from -58°F to 399.9 ° F) |
| Resolution: | 0.1°C (0.1°F) |
| Accuracy: | ±0.2% full scale |
| Battery life/type: | 3x1.5 V/ approx. 1600 hours of continuous use |
| Probe length: | 120mm |

WEIGHT AND DIMENSIONS

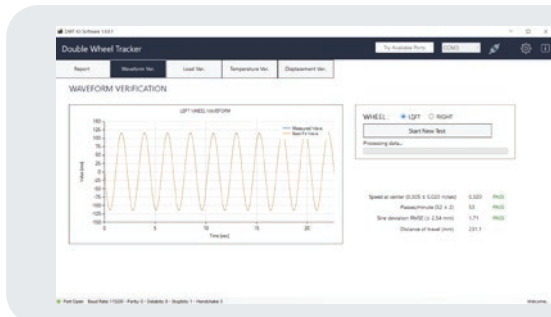
| | |
|----------------------|--------------------|
| Total weight: | 20 kg |
| Dimensions: | 550 x 420 x 220 mm |



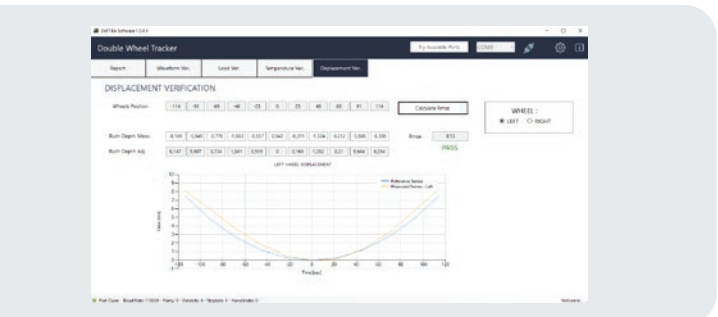
Shaped metal specimen

Carrying case with full kit

Load cell, spherical seat and readout unit



Sinusoidal movement verification



Rut depth verification with shaped specimen

IPC Global Customer Care

IPC Global is the Advanced Pavement Testing Division of CONTROLS. As one of the longest established manufacturing companies in the world of Construction Materials Testing solutions, we are dedicated to supplying high quality, accurate, affordable, easy to use systems.

As a valued customer of CONTROLS, you will receive continuous, expert support and advice for your IPC Global equipment. Furthermore, we can offer full installation and training in the correct operation of your equipment.

For support from our expert Customer Care Team, contact your local CONTROLS office / distributor or email support@controls-group.com.

For more information, please visit www.controls-group.com.

CONTROLS

CONTROLS

T +39 02 92184 1

F +39 02 92103 333

E sales@controls-group.com

www.controls-group.com

Italy (HEAD OFFICE)

info@controls-group.com

France

info-fr@controls-group.com

Poland

info-pl@controls-group.com

Spain

infosp@controls-group.com

Mexico

info-mx@controls-group.com

UK

info-uk@controls-group.com

USA

info-usa@controls-group.com