



HUMBOLDT

Hamburg Wheel Tracker

Hamburg Wet and Dry Wheel Tracker

AASHTO T324 (previous, current and proposed); CT, TX; EN 12697-22

The Hamburg test, or immersion wheel tracking has become an extremely popular test method over the last few years.

The Hamburg wheel tracker is built to withstand the demands of the busiest test labs. It is made of high quality stainless steel, uses the standard cantilevered arm system of loading the specimens and produces fully sinusoidal motion.

In the NCHRP report - Hamburg Wheel-Track Test Equipment Requirements and Improvements to AASHTO T 324, the Cox/Cooper Hamburg was clearly the best performing machine. Since then the heaters and water flow have been upgraded, resulting in more rapid heating and improved temperature control.

A number of Hamburg wheel trackers do not correctly meet current AASHTO requirements and may fall further behind when the norm is updated. The Cox/Cooper machine meets all the requirements of the standards.

Features:

- Full rigid stainless-steel construction made in America for heavy duty
- The most rugged, precise and accurate Hamburg wheel tracker available
- True sinusoidal motion from Scotch Yoke drive which is much more durable and accurate than crank arm
- Measures 220 data points along the wheel path for standard and research analysis
- Auto arm lift for fully automated test procedure and user safety
- Mechanical recirculating water bath for accurate control of the water temperature to better than $\pm 0.9^\circ\text{F}$ (0.5°C)
- Two high accuracy transducers with an accuracy better than $\pm 0.03\text{mm}$, positioned in line with the wheel to ensure accurate measurement of the rut
- Real-time rut, rut profile, temperature \times 3 and speed measurement throughout the test
- Accurate analysis software to automatically pick the inflection point and analyze the output data
- Air hood option for dry tests. The only reliable hood option for dry testing on the market with temperature precision across the whole sample of $\pm 0.7^\circ\text{F}$ (0.4°C).
- Built-in timer to start tests automatically
- Anytime remote access support



HA-5300.4F

Hamburg Wheel Tracker, 220V 50/60Hz

HA-5300A.4F



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Software:

- Specifically written to meet AASHTO and DOT standards
- Stored test data can be analyzed and compared with other test data in Excel
- Data storage can adjust up to every cycle
- Any combination of data points can be analyzed
- Utilities are included for calibration and trouble shooting
- Includes full software control of arms individually at out-set and completion of test, with stainless steel frame, includes full software package, traceable calibration certificate and desk PC to perform testing according to AASHTO T324
- The user interface can be translated into the user's preferred – please inquire



INSTALLATION

Installation Verification and on-site Training are available for the Wheel Tracker please inquire.

Specifications	
Wheel Speed	Variable between 15 and 30 cycles (30 to 60 passes) per minute
Wheel Load	158 ± 1.0lbf (705 ± 4.5N)
Variable Speed Range	15 to 30 RPM
Slab Thickness	2 to 4" (50 to 100mm), different thicknesses can be tested with spacers
Rut Depth Transducer Range	2" (50mm)
Temperature Range	Ambient to 158°F (70°C)
Electrical Supply	220-240V 15 A, 50/60Hz, 1 Ph (single phase with a neutral and ground)
Dimension (W x D x H)	57" x 55" x 50" (1430 x 1380 x 1260mm)
Desktop PC	Included



ACCESSORIES

Accessories are not included and should be ordered separately.

Accessories	Model
Stainless steel molds 12.6" x 10.2" x 2.4" (320 x 260 x 60mm)	HA-5300.1
Plastic mold for double cores 6" tested simultaneously to be inserted in stainless steel mold 12.6" x 10.2" x 2.4" (320 x 260 x 60mm)	HA-5300.5
Stainless steel wheel AASHTO T324-02	HA-5300.6
Rubberized Stainless steel wheel EN 12697-22	HA-5300.7
Powered winch and stainless steel mast	HA-5300.8
Guarding, stainless steel	HA-5300.11
Dry Hood	HA-5300.13

* Other mold sizes available, please inquire.

Testing Equipment for



Construction Materials

HUMBOLDT

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