



HUMBOLDT

Hamburg Wheel Tracker

Hamburg Wet and Dry Wheel Tracker

AASHTO T324; EN 12697-22; Various State standards

The Hamburg (Immersion) wheel tracking test is used to evaluate the resistance to rutting and moisture susceptibility of asphalt mixtures. AASHTO-T324 is the generally referred to test standard, although many states modify this procedure to meet their specific requirements. Outside of the U.S. both AASHTO-T234 and EN12697-22 are followed.

What differentiates the Hamburg from other wheel tracking methods is the use of water to condition the temperature of the specimens rather than air. It is believed that the water, in some tests, strips the aggregate which creates a tertiary phase that is distinct from the permanent deformation which occurs in dry wheel tracking tests. The use of stainless steel wheels on a weighted cantilevered arm, in conjunction with water has led some people to refer to Hamburg wheel tracking as a 'torture test'. Certainly it is the case that less well constructed machines will shake to pieces due to the aggressive nature of the test. The Cox Hamburg is manufactured in California from thick solid stainless steel. Painted steel panels and parts are not an option for the Hamburg test. Our Hamburg is built to last decades not just a couple of years, which is why it comes with a five year warranty.

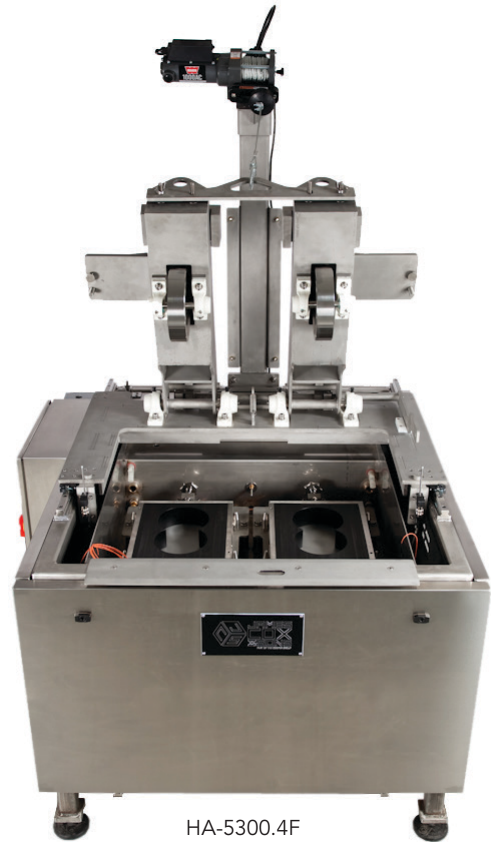
A rigid frame construction is also essential for accurate results. Cheaply produced machines will flex machine and quality of test results go hand in hand. and vibrate with deeper rut depths. The Cox Hamburg will output more precise and accurate results than any other Hamburg machine – guaranteed.

Features:

- Full super rigid stainless steel construction
- The most rugged, precise and accurate Hamburg wheel tracker available
- Auto arm lift for fully automated test procedure and user safety
- True sinusoidal motion
- Mechanical recirculating water bath for accurate control of the water temperature to better than $\pm 0.5C$
- Two displacement transducers with a resolution of 0.01mm, positioned in line with the wheel to ensure accurate measurement of the rut
- Continuous rut and rut profile measurement throughout the test
- Analysis software to automatically pick the inflection point and analyse the output data
- Air hood option for dry tests
- Stainless steel and rubber wheels available
- Built-in timer to start tests automatically
- AASHTO T324, a variety of DOT methods and EN12697-22
- Anytime remote access support
- Quality built in the USA

Software:

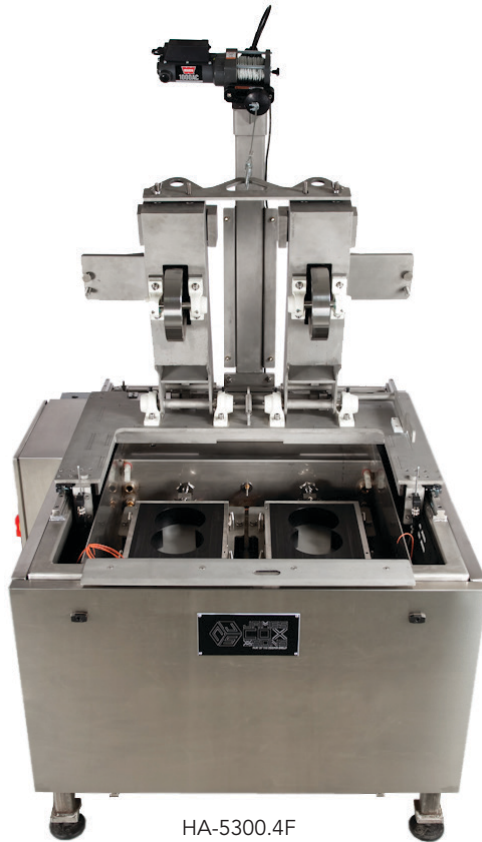
- User friendly, intuitive and reliable Windows® software developed using LabVIEW™
 - Specifically written to meet AASHTO and ASTM standards
 - The user interface can be translated into the user's preferred language – please inquire
 - Stored test data can be analyzed and compared with other test data utilizing a spreadsheet package
 - Utilities are included for curve fitting of acquired data; testing of system's inputs and outputs; phase correction and a transducer database for storing calibration factors
- Includes full software control of arms individually at outset 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



HA-5300.4F

Hamburg Wheel Tracker

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	2-4" (50 - 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, 1 Ph (single phase with a neutral and ground)
Dimension (WxDxH)	57" x 55" x 50" (1430 x 1380 x 1260mm)
Desktop PC	Included



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Accessories	Model
*Stainless steel molds 12.6" x 10.2" x 2.4" (320 x 260 x 60mm)	HA-5300.1
Stainless Steel molds: 12.6" x 10.2" x 4" (320 x 260 x 100mm) deep	HA-5300.2
Stainless steel molds 12" x 12" x 2" (305 x 305 x 50mm)	HA-5300.3
Stainless steel molds 12" x 12" x 4" (305 x 305 x 100mm)	HA-5300.4
*Plastic mold for double cores 6" tested simultaneously to be inserted in stainless steel mold 12.6" x 10.2" x 4" (320 x 320 x 260mm)	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
Stainless steel base and working parts option	HA-5300.9
Guarding, powder coated steel	HA-5300.10
Guarding, stainless steel	HA-5300.11
Chiller assembly	HA-5300.12
Air Heating hood	HA-5300.13

Testing Equipment for



Construction Materials

HUMBOLDT

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