

B038AM SMARTRACKER™

MULTI WHEELS HAMBURG WHEEL TRACKER - **PATENTED**

STANDARDS: EN 12697-22 | AASHTO T-324

The Hamburg wheel tracking device can be used to determine the resistance of Hot Mix Asphalt (HMA) to rutting and moisture sensitivity. Matest model "SmarTracker™" meets and exceeds EN and AASHTO.

It is intelligently designed with innovative features and the needs of the end users in mind.

The most versatile wheel tracker on the market has independent motors for each wheel which assure separate rutting analysis of each specimen. **Now you can perform wet or dry test with both wheels or run one wheel under dry and one wheel under wet condition simultaneously during a single test.**

Determine the creep slope, stripping inflection point and stripping slope with this state of the art and user friendly machine.

Equipped with the latest Cyber Plus Progress, Matest Smartracker controls the movement of the wheels in order to obtain a perfect sinusoidal wave. The measurement points for defining the rut depth are completely customizable according to EN or AASHTO Standard and for research purposes. MATEST SmarTracker™ has been developed by our R&D engineers and scientific in association with some of the most experienced and reputable industry experts in the USA and the world.



Unique system to
Load-unload the mould



Innovative wheels roll off Mechanism
(patented)



Real time results plot of the rut
depth along with the no. of passes.

TECHNICAL SPECIFICATIONS

- Wheel load: 705 N
- Wheel speed: from 20 to 30 cycles/minute.
- Temperature control:
EN 12697-22: 2500W heaters for air temperature control, ventilation for temperature uniformity, probe for air temperature, all controlled by the electronic system.
AASHTO T324: 4000W heaters, recirculating pump, automatic feed and controls level.
- Temperature control range: from ambient up to 75°±1 °C
- Table travel: 230, 260, 280 mm
- Rut depth transducers range: 25 mm ± 0.1 mm accuracy.
- Slab thickness: adjustable from 38 to 120 mm

Power supply: 220V 50-60Hz

Dimensions: 1400x1300x1300 mm

Weight: 450 kg approx.

MAIN FEATURES

- No added stress to operators back from lifting heavy wheel assemblies.
- Sample holders slide into position and eliminate demanding lifting and placement of samples into the unit.
- Hood keeps technicians away from moving parts and provides better temperature control while the test is being conducted.

**B038AM-15
SMARTTRACKER HAMBURG VERSION AASHTO T324
(WATER TEST ONLY)**

STANDARDS: AASHTO T324, AMAAC Mex Protocol

Same as model B038A but without cover, it allows water test only.



B038AM-15

TESTING SOFTWARE

The user-friendly software is integrated into the on-board digital control unit based on Windows operating system. The software is fully customizable by the operator according to EN and AASHTO Standards, and the personal needs. Automatic calculation of stripping inflection point (AASHTO). Test execution and all parameters, such as water/air temperature, specimen temperature, rut depth can be monitored in real time. The software also allows exporting test data to an Excel compatible format.



B038A-16 SOFTWARE HWT-REPORT TO AASHTO T324

The Unique HWT-Report software allows the user to analyze the results from the SmarTracker to generate a report and a graph strictly conforming to AASHTO T324. The features of the software include the ability to analyze different locations along the wheel pass, graph maximum and average rut depths, stripping inflection point and detailed reports (selecting all the wheel passes or different sampling rates) that can be presented, printed or emailed.



Passes	Rut Depth	SIP	RAIL
0	0.0	0.0	0.0
5000	1.5	1.5	1.5
10000	2.5	2.5	2.5
15000	3.5	3.5	3.5
20000	4.5	4.5	4.5
25000	5.5	5.5	5.5
30000	6.5	6.5	6.5



TABLE OF ACCESSORIES TO PERFORM DRY (AIR) AND WET (WATER) TEST FOLLOWING EN 12697-22 AND AASHTO T324 SPECIFICATIONS

Standards	EN 12697-22		AASHTO T324	
Testing mode	Dry (air)	Wet (water)	Wet (water)	* Dry (air)
	2x B038A-01 Rubber wheel	2x B038A-01 Rubber wheel	2x B038A-02 Steel wheel	2x B038A-02 Steel wheel
	2x B038A-11 EN Mould	2x B038A-11 EN Mould	2x B038A-06 Probe (optional)	2x B038A-10 or 2x B038A-11 Mould
	B038A-12 B038A-13 Adaptors	B038A-12 B038A-13 Adaptors	FOR CYLINDRICAL SPECIMENS: 2x B038A-10 AASHTO Mould	2x B038A-03 Tool
	B038A-05 Air heating	B038A-06 Probe (optional)	2x B038A-03 Tool	B038A-12 + B038A-13 Adaptors
	2x B038A-06 Probe (optional)		B038A-10D Adaptors	B038A-05 Air heating
			FOR SLAB SPECIMENS: 2x B038A-11 Mould	2x B038A-06 Probe (optional)
			B038A-12+B038A-13 Adaptors	

B038A-01

Rubber wheel for EN 12697-22

**B038A-11** EN mould**B038A-13** Horizontal adaptors for EN moulds**NEEDED ACCESSORIES****EN 12697-22**

- B038A-01** RUBBER WHEEL 203x50 mm
B038A-11 EN MOULD 400x305x120 mm
B038A-12 SET OF VERTICAL ADAPTORS for EN mould to allow the positioning of specimens lower than 120 mm (up to a minimum specimen thickness of 20 mm)
B038A-13 SET OF HORIZONTAL ADAPTORS for EN mould to allow the positioning of specimens 260x320 mm and 305x305 mm

AASHTO T324

- B038A-02** STEEL WHEEL 203x47 mm
B038A-10 AASHTO MOULD (2 cylinders Ø 150x60 mm)
B038A-03 TOOL for AASHTO positioning
or
B038A-07 STAINLESS STEEL TOOL for AASHTO positioning
B038A-10D VERTICAL ADAPTORS for AASHTO mould to allow the positioning of specimens with a thickness of 40 mm

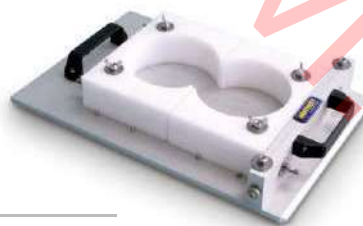
Note: *AASHTO T324 does not require air test.

B038A-02

Steel wheel for AASHTO T324

**B038A-10**

AASHTO mould

**B038A-14****OPTIONAL ACCESSORIES**

- B038A-04** ELECTROVALVE group for hot water
B038A-05 AIR HEATING SYSTEM for air conditioning test EN 12697 -22
B038A-06 PROBE for specimen's temperature determination
B038A-09 HPDE mould specimen holder.
B038A-14 VERIFICATION KIT for the calibration of the wheel load. The calibration kit is designed to facilitate the calibration or to check the machine's wheel load. The device is composed of a support block with a calibrated load cell and complete with a digital readout. Max. load 1000 N, accuracy 0.05%.