B038A

SMARTRACKER™

NEW

MULTI WHEELS HAMBURG WHEEL TRACKER; TEST ENVIRONMENT: DRY+WET

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.
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.

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SMART FEATURES:

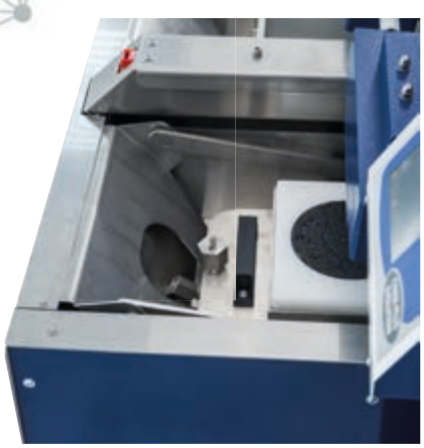
- Comply with **EN 12697-22** and **AASHTO T324**.
- **No lifting of heavy wheel assemblies**. Wheels retract automatically away from samples and park into rest position.
- **Sturdy machine**, designed for the rugged construction laboratory environment stainless steel sample tanks.
- **Two independent loaded wheel systems each capable of conducting wet or dry sample tests simultaneously**.
- **Sliding sample positioning mechanism** for easy mould handling and placement in the machine.
- Does not require lifting of heavy wheel components.
- **Fully Automatic machine**. Detects and stops the test when the target rut depth is reached.
- **Touch-screen control unit based on Windows operating system** for user friendly execution of the test, management of the data and visualization of the results.
- Each of the two wheel assemblies is equipped with displacement transducers for rut measurement.
- Mechanical recirculating water bath for temperature control within ± 1 °C.
- **Easy to load, unload, drain water and clean the unit after each test**.
- Small footprint to accomodate small construction labs.

SmarTracker™

ITS INTELLIGENT DESIGN IS JUST THE BEGINNING

WHEELS INNOVATIVE ROLL OFF MECHANISM

SIMULTANEOUS TESTING OF WET AND DRY SAMPLES



UNIQUE SYSTEM TO LOAD-UNLOAD THE MOULD

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The SMARTRACKER™ combines smart features with the solid construction needed for the rugged laboratory environment.

TOP FEATURES:

- Meets and exceeds **AASHTO** and **EN** Standards
- **Simultaneous testing of wet and dry samples**
- **Indipendent motors for each wheel** assure separate rutting analysis of each specimen
- **High performance components**
- **Rugged machine** with ample use of stainless steel

SAFETY 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

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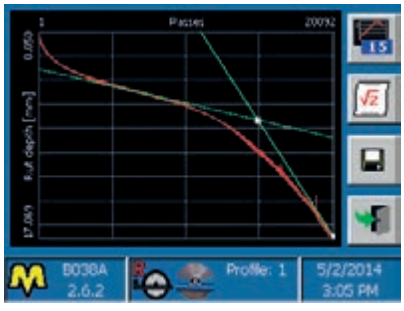
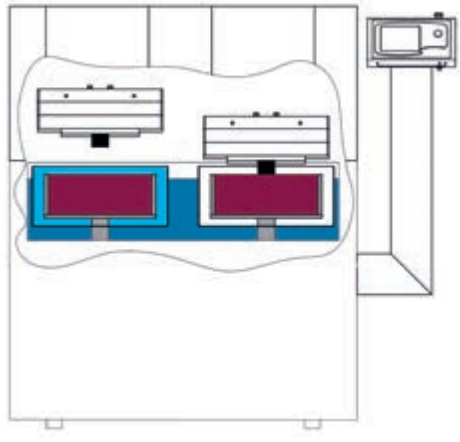
TESTING SOFTWARE

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, ruth depth... can be monitored in real time.
The software also allows exporting test data to an Excel compatible format.



Real time results plot of the Rut Depth along with the no. of passes.

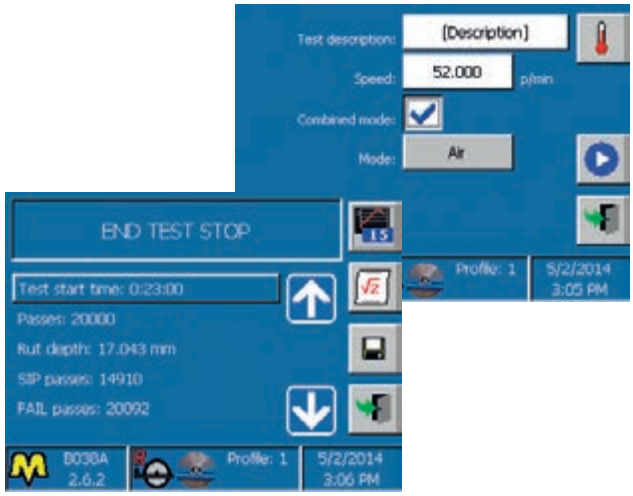


Smartracker while performing a dry test (right tank) + wet test (left tank) at the same time.

TECHNICAL DETAILS:

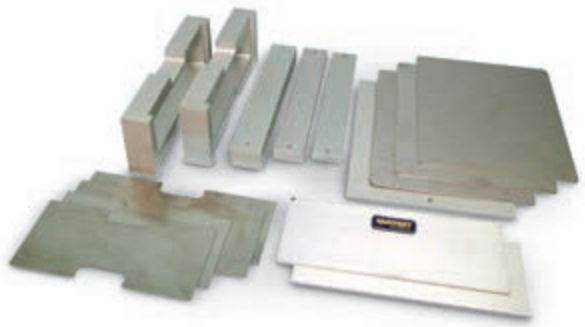
- Wheel load: 705 N
- Wheel speed: from 20 to 30 cycles/minute.
- Temperature control:
  EN 12697-22: 2500 W heaters for air temperature control, ventilation for temperature uniformity, probe for air temperature, all controlled by the electronic system.
  AASHTO T324: 4000 W heaters, recirculating pump, automatic feed and controls level.
- Temperature control range: from ambient up to 75° ±1° C
- Table travel: 230 mm
- Rut depth transducers range: 25 mm ± 0,1 mm accuracy.
- Slab thickness: adjustable from 38 to 120 mm

Power supply: 220V 50 Hz - 110V 60 Hz
Dimensions: 1400x1300x1300 mm
Weight: 450 kg

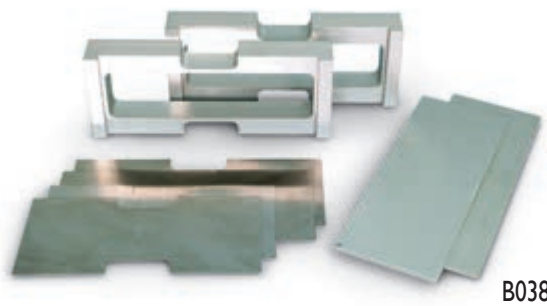


B038A-01
Rubber wheel for
EN 12697-22

B038A-02
Steel wheel for
AASHTO T324



B038A-13
Horizontal adaptors for EN moulds



B038A-12
Vertical adaptors for EN moulds

NEEDED ACCESSORIES:

EN 12697-22

- **B038A-01** Rubber wheel 203x50 mm
- **B038A-11** EN Mould 400x305xH120 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 260x230 mm and 305x305mm

AASHTO T324

- **B038A-02** Steel wheel 203x47 mm
- **B038A-10** AASHTO Mould (2 cylinders dia. 150x60 mm)
- **B038A-03** Tool for AASHTO positioning

B038A-10 AASHTO mould

B038A-11 EN mould

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-14 Verification KIT for the calibration of the wheel load