

WHEEL TRACKER LARGE DEVICE WITH AUTOMATIC MEASUREMENT

Pavement rutting tester

Test methods for determining the susceptibility of bituminous materials to deform under load.





EN 12697-22

Level 2 of the French mix design procedure

Description

Laboratory equipment designed to study the rutting of asphalt mixes under conditions comparable to the stresses on pavements under traffic, according to standard EN 12697-22.

Two asphalt specimens are simultaneously subjected to repeated passages of a wheel equipped with a tire, under a certain load and under controlled temperature. It is possible to integrate or not to the wheel an angle allowing to introduce a lateral skidding effect.

Automation cuts the testing time by a factor of three and saves 50% of the laboratory worker's time. The equipment therefore quickly pays for itself compared to a traditional rutting machine.

Many copies of Orniéreur mlpc® have been distributed throughout the world, it is an essential tool for the formulation of asphalt mixes. The latest generation allows you to go further: higher temperature rise, new cowling, control and ergonomics redesigned for the needs of today's laboratories.



Highlights



Full automatic testing

- → At each measurement step, without human intervention and in compliance with the standard;
- → Uninterrupted sequence of the different steps with improved repeatability of the measurement points positioning.



Optimized operator time

- ightarrow With automatic measurement, no more need to monitor and intervene at each measurement level. Focus on the essentials !
- \rightarrow Can be paused at any time.



Energy efficiency

- → A cowling with its reinforced insulation, which limits the heating cycles for the rise of temperature, but also to maintain it throughout the test.
- → The opening of the doors during the test is avoided thanks to the automatic measurement.



User comfort

- → Easy use thanks to sliding doors, reduced operating noise, large touch screen, numerous connections.
- → Optimal visibility of the test.



Configurable

- → Developed to carry out the normative test
- → Possibility of research-type tests thanks to the many parameters included (temperature up to 80°C, number of measurement levels, position of the measurement points, modification of the thresholds, etc.).



Durability

→ Units with service lives in excess of 20 years in heavy conditions.



Ease of maintenance

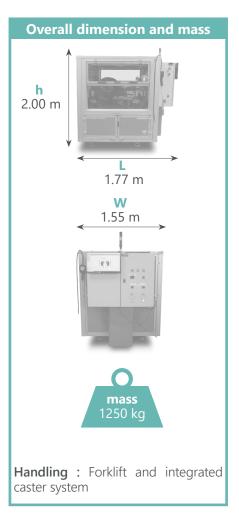
→ Thanks to the cowling, which can be partially or completely dismantled.





Features

Electric power supply	
Power supply	Three-phase 400 V, 50 Hz ou 60 Hz - 16A
Installed capacity	6 kW
Electric heating	
Power supply	Three-phase 400 V 50Hz or 60Hz - 16A
Power	3 kW
Test temperature	Ambiant to 80°C
Warm-up time	~4h to 60°C - programmable
Temperature monitoring	4 probes, mix and air for each specimen
Carriage translation	
Motor	3 kW
Rated frequency	1Hz
Pneumatic supply	
Nominal pressure	0.7 MPa (7 bar)
Maximum pressure	1 MPa (10 bar)
Flow rate	8 NI/min continuous (tables loaded, system in control mode) 300 NI/min peak
Max load	5.5 kN
Interface	
Languages	English French
Graphical touch interface	Integrated
Sample loaded	Facilitated by the translation system
Rutting measurement	15 points: automatic with 3 sensors for each specimen



Standard equipment

This Wheel Tracker large device enables to test 2 samples in simultaneous and includes:

- · 2 complete wheels;
- · 2 bottom plates for samples;
- 2 temperature sensors to control the air near the samples;
- 2 temperature sensors to control and regulate the two samples;
- An inflation system enables to control and adjust the tyre pressure;
- · A control system for the autonomous test;
- A large touch sensing device connected to a computer (Windows 10 or later), used as interface to the machine:
- The wifi network usb connectivity;
- · An automated system to measure rutting;
- Metrology: compliance test report (COFRAC connected);
- · User manual, electric and pneumatic plans.

Accessories and spare parts

147A1-100.2	Aluminium sample frame 500x180 mm h=100 mm
147A1-50.2	Aluminium sample frame 500x180 mm h=50 mm
77C-4.1	Sample bottom plate
104769	Manual lift table
108034	Electric lift table
107861	Air temperature sensor
107902	Rutting measurement system for the automated system
77D1-60	Manual rutting measurement kit with gauge
77V0015	Mounted complete wheel
77V0014	Rim
103914	Protection flap
105392	Inner tube
100856	Valve extension
100634	Tire

Contact us for the metrology kit.







The mlpc® equipment designed for asphalt mix design are developed by UGE (previously LCPC), Cerema and Vectra.