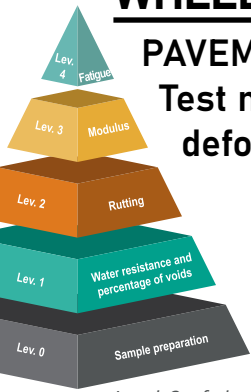


# WHEEL TRACKER LARGE DEVICE WITH AUTOMATIC MEASUREMENT

## PAVEMENT RUTTING TESTER: Ornièreur

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



Level 2 of the French Mix Design procedure



EN 12697-22 (Large device)

MTQ LC 26-410

Device qualified mlpc®

CSA qualification rutting test

NF P98-253-1

### Description

Reference 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.

The tire load is focused to the maximum, since the wheel always passes through the same place. It is possible to integrate or not to the wheel an angle allowing to introduce a lateral skidding effect.

Many units of Ornièreur mlpc® have been widely distributed throughout the world, it is an essential tool for the asphalt mix design. The latest generation allows you to go further: higher temperature rise, new body, control and ergonomics redesigned for the needs of today's laboratories.



### Highlights

- **Automatic measurement**
  - At each level, without human intervention and in accordance with the standard.
  - The chain of the different measurement steps without waiting, with greater repeatability of the measurement point positioning.
- **Optimized operator time**
  - With automatic measurement, no more need to monitor and intervene at each measurement level. Focus on the essentials !
  - Can be paused at any time.
- **Energy efficiency**
  - A body 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.
- **Monitoring of test parameters**
  - The system monitors the elements that can impact the results (pressure, temperatures, punctures, test of the measurement system, possible faults, etc.) throughout the duration of the test.
- **User comfort**
  - Optimized interface: large touch screen, numerous connectivities.
  - Ergonomic access: sliding doors, high access, simplified sample transfer.
  - Reduced operating noise.
  - Optimal visibility while testing.
  - Three-color-light system follow-up.
- **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.).
- **Ease of maintenance**
  - Thanks to the bodying with removable panels, which can be partially or completely dismantled.
- **Durability**
  - Units of this traffic simulator that exceed life cycles of over 20 years life spans.



## Features

Electric power supply	
Power supply	Three-phase 400 V, 50 Hz or 60 Hz - 16 A
Power	6 kW
Electric heating	
Power supply	Three-phase 400 V 50 Hz
Power	3 kW
Test temperature	Ambiant to 80 °C
Warm-up time	~4h to 60 °C - programmable
Temperature monitoring	2 asphalt mix and 2 air probes
Carriage translation	
Motor	3 kW
Rated frequency	1 Hz
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

### Overall dimension and mass

**h**  
2.00 m

**L**  
1.77 m

**W**  
1.55 m

**mass**  
1250 kg

**Handling** : Forklift and integrated caster system.

## Standard equipment

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

- 2 full assembled 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
- Inflation system enables to control and adjust the tyre pressure
- Control system for the autonomous test
- Three-color indicator light, visible from a distance, which indicates the device status
- Large touch sensing device connected to a computer (Windows 10 or later), used as interface to the machine
- Wifi network, usb connectivity
- Automated system to measure rutting
- Metrology: compliance test report
- 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
107944	Asphalt mix temperature sensor
107902	Rutting measurement system for the auto- mated system
77D1-60	Manual rutting measurement kit with gauge
77V0015	Full assembled wheel
77V0014	Rim
103914	Protection flap
105392	Inner tube
100856	Valve extension
100634	Tire

Metrology accessories on request.