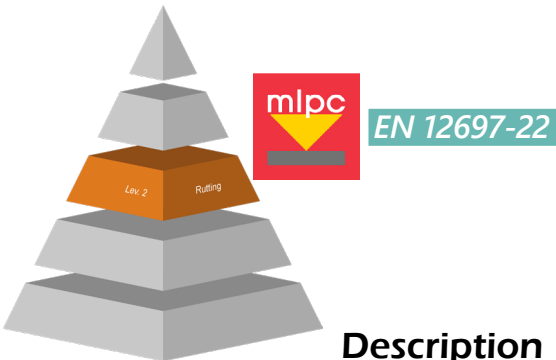


# **WHEEL TRACKER LARGE DEVICE WITH AUTOMATIC MEASUREMENT**

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



## **Description**

Reference laboratory equipment designed to study the rutting resistance of hydrocarbon asphalt mixes under conditions comparable to those encountered on roadways under traffic, in accordance with standard EN 12697-22.

Two asphalt specimens are simultaneously subjected to repeated passage of a wheel fitted with a tire, under a certain load and controlled temperature. The wheel can be fitted with or without an angle to introduce a lateral skidding effect.

Automation cuts test duration by a factor of three, and saves 50% of the lab technician's time. The equipment therefore quickly pays for itself in comparison with a traditional rounder.

The mlpc® rutting machine has been widely distributed throughout the world, and is an indispensable tool in asphalt mix design. The latest generation takes things a step further: higher temperature rise, hooding, control and ergonomics redesigned for the needs of today's laboratories.

MTQ LC 26-410  
Device qualified mlpc®  
CSA qualification  
NF P98-253-1



## **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**
  - 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 cowl 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 test parameters**
  - A cowl 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.
  - Optimized interface: large touch screen, numerous connectivities.
  - Reduced operating noise.
  - Supervision by light column.
- ◀ **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 cowl, 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
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

### Dimensions & weight

**weight**  
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 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

<b>1P77004</b>	Aluminium sample frame 500x180 mm h=100 mm
<b>147A1-50.2</b>	Aluminium sample frame 500x180 mm h=50 mm
<b>77C-4.1</b>	Sample bottom plate
<b>104769</b>	Manual lift table
<b>108034</b>	Electric lift table
<b>P77006</b>	Air temperature sensor
<b>P77005</b>	Rutting measurement system for the automated system
<b>P77001</b>	Manual rutting measurement kit with gauge
<b>77V0015</b>	Mounted complete wheel
<b>77V0014</b>	Rim
<b>103914</b>	Protection flap
<b>105392</b>	Inner tube
<b>100856</b>	Valve extension
<b>100634</b>	Tire

Contact us for the metrology kit.