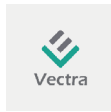
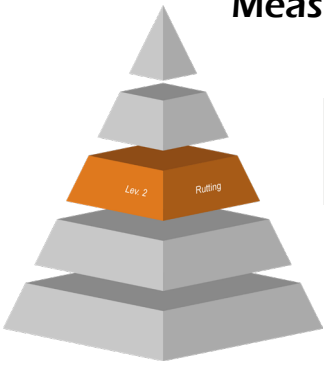


# 77F: AUTOMATED LARGE WHEEL TRACKER

Measurement of rutting sensitivity without operator intervention



EN 12697-22

MTQ LC 26-410

CSA qualification

NF P98-253-1

## 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.



## 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

h  
2.00 m

L  
1.77 m

W  
1.55 m

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

1P77004	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
P77006	Air temperature sensor
P77005	Rutting measurement system for the automated system
P77001	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.