DYNA-TRACK SINGLE WHEEL TRACKER

The wheel tracking apparatus consists of a loaded wheel, which bears on a sample held on a moving table. The table reciprocates with simple harmonic motion through a distance of 230 ± 5 mm with a frequency of 53 passes (± 1%) per minute. For reasearch purposes the test speed can be adjusted by inverter control. The wheel is fitted with a solid rubber tyre of outside diameter 200 mm. The wheel load under standard conditions is 700 ± 10 N. The wheel tracker is fitted with a temperature controlled cabinet with a temperature range from environment to 65°C ± 1.0°C.The sample may be either a 200 mm diameter core or a 300 x 400 mm slab of asphaltic mixture from 25mm to 100 mm thick. A 25 mm stroke LVDT transducer is included for monitoring rut depth in the centre of a sample during a test to better than 0.1 mm.
The deformation and sample temperature is recorded by the internal data acquisition and control system, then sent to the Windows® compatible software.

The **Dyna - Track Single Wheel Tracker** can be used as part of your **Superpave performance based testing** program.

DYNA-TRACK SINGLE WHEEL TRACKER

SPECIFICATION

Wheel Tracker:

- Conforming to EN 12697-22 Small scale device
- Table displacement with adjustable speed by inverter
- Motorized vertical adjustment of the loading arm
- Wheel with solid rubber tyre 200 mm external dia.
- Wheel weight 700 N (900 N available on request)
- Suitable for large core specimens and slabs up to 400x300 mm.

- Slab thickness from 25 to 100 mm
- 25 mm stroke transducer with resolution better than 0.1 mm
- Integral temperature controlled cabinet
- Test temperature range adjustable from environment to 65°C
- Double glazed doors for test monitoring

Hardware

- 16 bit microprocessor.
- One CPU card to control both test data visualization, temperature control, database and internal functions management control.
- Large permanent memory to store test results.
- 10 key membrane touch keyboard.
- 240 x 128 pixel graphical display.
- RS 232 output for PC connection.

Firmware

- Language selection.
- Clock/Calendar system.
- Fully automatic test control
- Test setting menu, complete with descriptive sample parameters.
- Calibration menu to set and check temperature, table speed and displacement, and featuring a special function for manual control of the test performance.
- Test performance menu with simultaneous display of all the test data (including real time table speed).
- Internal database up to 100 tests. Each test can be downloaded to a PC, displayed, printed or deleted.
- Download to PC via RS 232 serial port.
- Data processing to EN 12697-22 Small scale device, procedure A and B, and customised test
- Windows XP® compatible software, for printing of test certificates and multiple test processing (mean values).

SAFETY FEATURES

- Automatic stop of climatic chamber and moving table when opening the door

STANDARDS

- EN 12697-22

FEATURES

- Automatic test control by data acquisition and processing system
- Large permanent memory to store test data and results
- RS 232 ports for connection to PC and printer
- Real time display of number of cycles, rut depth and temperatures
- Tracks for specified number of passes or to specific rut depth
- Adjustable load cycle frequency
- Double temperature measurement: inside the specimen and in the cabinet
- Test temperature range from ambient to 65°C
- Motorized loading arm for easy positioning
- Double glazed doors for observation of testing cycle
- Testing software included for procedures EN, A and B, and custom defined

ACCESSORIES

78-PV3502/L100

Sample confinement frame made of sheet steel for 77-B350x DYNA TRACK, size 400x300mm, 100mm high.

78-PV3502/L25

Sample confinement frame made of sheet steel for 77-B350x DYNA TRACK, size 400x300mm, 25mm high.

78-PV3502/L60

Sample confinement frame made of sheet steel for 77-B350x DYNA TRACK, size 400x300mm, 60mm high.

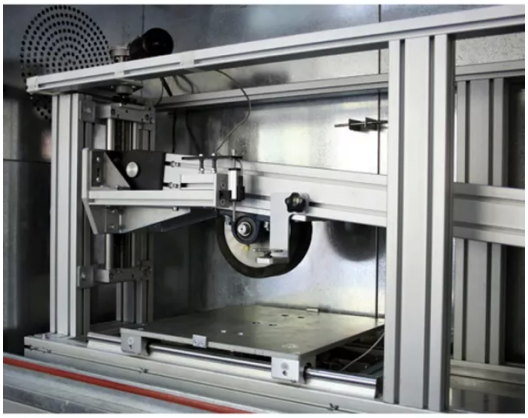
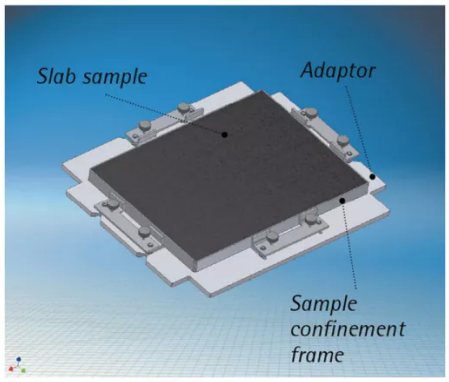
77-PV3502/11

Replacement wheel with rubber tyre

ORDERING CODE

78-PV3502

DYNA-TRACK, Wheel Tracker Machine, single wheel model, conforming to EN 12697-22, test in air up to 65°C. Fully automatic test performance. 230V/50-60Hz/1Ph.

78-PV3504

DYNA-TRACK, Wheel Tracker Machine, single wheel model, conforming to EN 12697-22, test in air up to 65°C. Fully automatic test performance. 110V/60Hz/1Ph.