



Auto Lift Arm ECO Wheel Tracker

CRT-WTECO-A

The Auto Lift Arm ECO Wheel Tracker saves energy, is space efficient and can double daily testing output

Wheel tracking is used to assess the resistance to rutting of asphaltic materials under conditions which simulate the effect of traffic. A loaded wheel tracks a sample under specified conditions of load, speed and temperature while the development of the rut is monitored continuously during the test. Test specimens can be either slabs prepared with a laboratory compactor or 200mm Ø cores cut from the highway. The CRT-WTECO-A™ wheel tracker performs both procedures A and B specified for the small scale device in EN 12697-22. Procedure A requires that six specimens are tested. For procedure B only two specimens need to be tested, but rut depth must be measured at more points along the longitudinal rut profile and the tests are longer. To speed up the testing process the CRT-WTECO-A™ was designed to test two specimens within one working day via a pre-programmable unique lift arm mechanism (European Community registered design #: 001699042).

Standards

- EN 12697-22 Small device
- AGPT/T231 (supersedes AST 01)
- T 0719

Key Features

- Tests materials for roads with axle loads up to 13 tonnes
- Fully programmable automated lift arm, enables up to twice the normal test throughput
- Automated pre programmable sample conditioning
- Small and compact for maximum energy efficiency
- Integral temperature controlled cabinet with fully glazed doors
- PID control of test temperature in the range 40°C to 62°C
- Specimens compacted with the Cooper Technology Roller Compactor can be transferred directly to the wheel tracker without de-moulding
- User-friendly Windows™ software
- Supplied with UKAS accredited calibration certification
- CE marked

Key Use

- Determination of the rut resistance of asphaltic paving materials

Software

- User friendly, intuitive and reliable Windows™ software developed using LabVIEW™
- Programmable for auto start, enabling up to double daily testing output
- Programmable sample conditioning to enable test to start prior to the working day
- Software automatically starts the wheel tracker, maintaining the speed at the specified 26.5 cycles per minute
- Measures rut depth and sample temperature automatically at regular intervals
- The rut profile is captured automatically by the software and analysed to calculate the rut depth
- A continuously updated on-screen graph shows rut depth versus time, along with the rut profile and temperature
- Software stops the wheel tracker on completion of a test and prints a test report if required
- Stored test data can be analysed and compared with other test data utilising a spreadsheet package
- Utilities are included for transducer check, diagnostic routines and RTD calibration
- USB PC link
- Excel import data output

Accessories

Accessories are not included in the price of main device (unless stated otherwise) and may be purchased separately if required.

CRT-WTECO-MCS	Mould Conditioning Shelf
CRT-WTRCM-50	Mould - 305x305x50mm deep
CRT-WTRCM-100	Mould - 305x305x100mm deep
CRT-INSERT-10	Mould - Insert 305x305x10mm
CRT-WTM-DIAM200	Split Wooden Holder with Steel Base-plate Ø200mm
CRT-WTIMRCM-50	Mould - 305x305x50 deep Stainless Steel
CRT-WTIMRCM-100	Mould - 305x305x100 deep Stainless Steel
CRT-WH-WTECO-A-EN (Replacement Part)	Rubber Wheel for EN 12697-22
CRT-WH-WTECO-A-BS (Replacement Part)	Rubber Wheel for BS

Specifications

Technical specifications are subject to change without notice.

Wheel Load	700N
Mould Dimensions mm	305 x 305
Wheel Speed	26.5 cycles per minute
Slab Thickness mm	35 to 100
Rut Depth Transducer Range mm	50
Temperature Range	40°C to 62°C.
Electrical Supply	240V 16A 50Hz (1 Phase)
Dimensions (W x D x H)	1450 x 540 x 2000
Working space required mm (WxDxH)	2450 x 540 x 2000
Estimated Weight Kg	380
PC	Included

Calibration & Maintenance

Calibration, Annual Service and Maintenance Contracts are available for this device. Please enquire for further details. Note: This device should be checked and calibrated annually.

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