Wheel Tracker Small Device – 1 & 2 Arms

CRT-WTEN1/2

> **The CRT-WTEN1 and CRT-WTEN2 are supplied with a UKAS certificate of accreditation validating conformance to EN 13108**

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-WTEN1 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. To speed up the testing process the CRT-WTEN2 was designed to test two specimens simultaneously.

Standards

- EN 12697-22 Small device
- AGPT/T231 (supersedes AST 01)
- BS 598-110:1998

Key Features

- Tests materials for roads with axle loads up to 13 tonnes
- Rigid test frame built from extruded aluminium section
- Integral temperature controlled cabinet with double glazed doors
- PID control of test temperature in the range 40°C to 62°C
- Rack for pre-test temperature conditioning of specimens
- The CRT-WTEN2 tests two specimens simultaneously
- Specimens compacted with the Cooper Technology Roller
- Compactor can be transferred directly to the wheel tracker without de-moulding
- Closed-loop speed control
- User-friendly Windows™ software
- Supplied with certification of a UKAS accredited calibration

Key Use

- Determination of the rut resistance of asphaltic paving materials

Cooper Research Technology Limited
Tel: +44 (0) 1773 512 174 | Email: info@cooper.co.uk | Web: www.cooper.co.uk

Software

- User friendly, intuitive and reliable Windows™ software developed using LabVIEW™
- Software is designed to perform EN 12697-22 Small device
- 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

Accessories

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

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-WTIMRCM-26060	Mould - 260x320x60 deep Stainless Steel
CRT-WTIMRCM-26060-150	Plastic Mould (6") inserted in Stainless Steel Mould
CRT-WTIMRCM-26050	Mould - 260x320x50 deep Stainless Steel
CRT-WTIMRCM-26050-150	Plastic Mould (6") inserted in Stainless Steel Mould
CRT-WH-IRHD20-80 (Replacement Part)	Rubber Wheel for EN 12697-22
CRT-WH-IRHD20 (Replacement Part)	Rubber Wheel for AST 01:2004

Specifications

Technical specifications are subject to change without notice.

Wheel Load	700/520N
Mould Dimensions mm	305 x 305mm (others available)
Wheel Speed	26.5 cycles per minute
Slab Thickness mm [1]	40 to 100mm
Rut Depth Transducer Range mm	50
Temperature Range	40 to 60°C
Electrical Supply	Single 220-240 Volts 50/60 Hz @ 13A (others available) Dual 220-240 Volts 50/60 Hz @ 16A (others available)
Compressed Air	Dual 7-10 bar @ 600 L/min
Dimensions mm (W x D x H)	Single 1579 x 840 x 1740 Dual 1750 x 1090 x 1970
Working space required mm (WxDxH)	Single 1680 x 1840 x 1940 Dual 1850 x 3090 x 2070
Weight (approx.) Kg	Single 448 Dual 500
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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Datasheet Version: 20.04/02

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