



Test method T232

Average texture depth of road surface
using the textural depth meter

OCTOBER 2012



Revision Summary

Ed/Rev Number	Clause Number	Description of Revision	Authorisation	Date
		Reformatted and Revision Summary Added	D.Dash	May 1999
		Date on Test Method Revised to Agree with Date on Revision Summary	D.Dash	Feb 2001
Ed 1/ Rev 0	All	Reformatted RMS template	J Friedrich	October 2012

Note that Roads and Maritime Services is hereafter referred to as 'RMS'.

The most recent revision to Test method T232 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

Test method T232

Average texture depth of road surface using the textural depth meter

1. Scope

This test method sets out the procedure for determining the average textural depth of an asphaltic concrete road surface using the Textural Depth Meter.

2. Apparatus

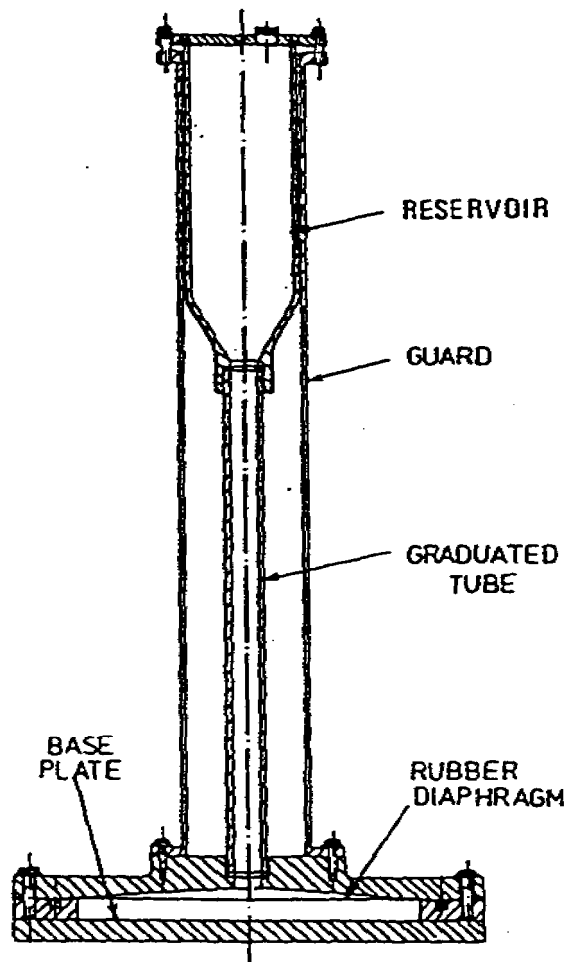
- (a) Textural Depth Meter as illustrated in the appended diagram. The meter consists of a metal base with a 206 mm recess covered by thin rubber diaphragm 125 μm thick. Attached vertically to the centre of the base plate is a measuring tube graduated in millilitres. The measuring tube is closed at the top by a valve and is also fitted with a rubber hand bellows and a mercury manometer.
- (b) A removable plane metal base plate which may be firmly fixed to the base of the meter for transport and for obtaining zero readings in the field. The measuring tube and recessed base are filled with water when the meter is firmly seated on the base plate.
- (c) Four anchor weights each weighing approximately 11.5 kilograms and shaped to fit round the measuring tube and rest on the upper surface of the base.
- (d) A hand barrow with a shaped foot to hold the anchor weights in such a manner that the anchor weights may be placed in position on the meter base with the barrow remaining in position.

3. Procedure

- (a) Place the texture meter on its base plate on the pavement surface in close proximity to the position where the texture measurement is to be made making sure it is standing firmly on the pavement. Remove the holding clips. Where the readings are being taken on a sloping site, position the meter so that the readings will be taken from the lower side.
- (b) By means of the hand barrow carefully place the anchor weights in position on top of the diaphragm head leaving the barrow in position. When the readings are being taken on a sloping site the weights must be placed in position from the higher side.
- (c) Release the vacuum by opening the valve at the top of the measuring tube and adjust the manometer tube so that the mercury rests at the zero points.
- (d) With the rubber hand bellows raise the level of the mercury in the manometer to a height of 25 mm above the zero level. (A total pressure in the measuring tube of 50 mm of mercury)
- (e) Record the heights of the water in the measuring tube as the zero level.
- (f) Release the pressure in the measuring tube, reverse the rubber hand bellows and apply a slight vacuum to the measuring tube and close the valve.
- (g) Remove the anchor weights by means of the hand barrow.
- (h) Place the texture meter on the selected section of pavement to be tested orientating it in the same position with respect to any slope as it was on the zero plate. Place the weights carefully in position as before making sure that the meter is resting firmly on the pavement.
- (i) Proceed as in steps (c), (d) and (e) above.
- (j) Replace the meter on the zeroing base and check the zero.

4. CALCULATIONS AND REPORTING

- (a) The volume of water in mL required to fill in the texture of the pavement - Reading on the pavement-zero reading.
- (b) Textural Depth in mm = Volume of water displaced \times .03.



TEXTURAL DEPTH METER