

## **Pavement Engineering Laboratory**

The pavement engineering discipline is responsible for designing and maintaining both flexible (asphalt) and rigid (concrete) pavements. In addition to new construction, pavement engineering also includes repairing and maintaining old pavements. The pavement engineering laboratory in the department is equipped with the most modern sophisticated equipment such as Corelok, an Asphalt mixer, a Gyrotory compactor, and Digital Marshal Stability testing machines for bituminous mix design. The viscosity properties of the bitumen/asphalt can be tested with the Brookfield viscometer and the rheological characteristics can be assessed using the Dynamic shear rheometer (MCR102). To study the short-term aging of bitumen the laboratory has a Rolling Thin-Film Oven (RTFO). Evaluate the pavement performance there are Roughomet There are Roughometer, Portable Light Weight Deflectometer (LWD), MERLIN, and Portable skid resistance tester to evaluate the pavement performance from other institutes to utilize the most modern facilities available in the Pavement Engineering Laboratory.

### **PAVEMENT ENGINEERING LABORATORY FACILITIES AND EQUIPMENT**

<b>SL.NO</b>	<b>Name of the equipment</b>	<b>MAKE &amp;MODEL</b>	<b>Cost in Rs.</b>	<b>Year purchased</b>
1.	DIGITAL MARSHAL STABILITY EQUIPMENT	AIMIL	216558	2013
2.	GYRATORY COMPACTOR	COOPER	2991267	2013
3.	ROLLING THIN FILM OVEN	M/S UTEST TURKEY	598794	2016
4.	BROOKFIELD VISCOMETER	HADV2T	692725	2013
5.	CORELOK	INSTROTEK	994781	2016
6.	ROUGHOMETER	ARRB	1896875	2013

7.	PORTABLE FALLING WEIGHT DEFLECTOMETER	TERRATEST	675000	2013
8.	MERLIN		58419	2022
9.	DYNAMIC SHEAR RHEOMETER	MCR-102	2896000	2016
10.	PENDULUM SKID RESISTANCE TESTER	-	305465	2016
11.	ASPHALT MIXER	-	126850	2022
12.	ASPHALT BLENDING OVEN	-	45000	2016



Dynamic Shear Rheometer



Rolling Thin Film Oven (RTFO)



Core Lok



Brookfield Viscometer



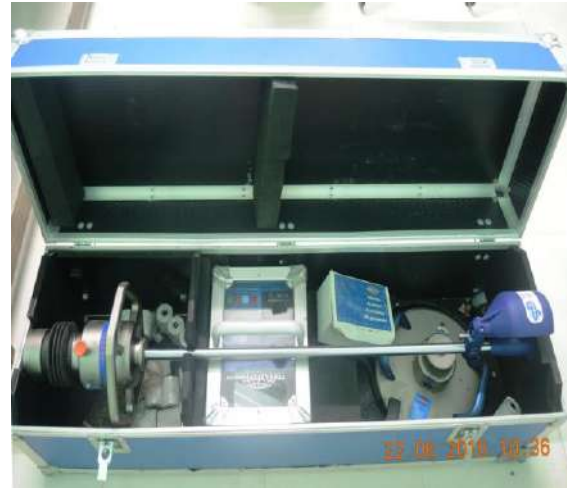
Gyratory Compactor



Pendulum skid-resistant tester



Roughometer



Portable lightweight deflector



Bitumen Blending Oven



MERLIN Apparatus



Asphalt mixer