

Product Name :
Ductility Testing Apparatus

Product Code :
Soil Testing0055



Description :

Ductility Testing Apparatus

Technical Specification :

In flexible pavement construction, bitumen binders are used. It is important that bituminous material forms ductile film around the aggregates. Which serves as a binder? The development of cracks. Therefore it is important to carry out the ductility tests on bituminous material. Ductility is defined as distance in cms to which a standard briquette of bitumen can be stretched before the thread breaks. The briquette is stretched at a rate of 30cms/minute $\pm 5\%$ mm per minute at a temperature of $25\text{C} \pm 0.5^{\circ}\text{C}$.

Specifications:

The apparatus consists of a water bath with a heater, and a circulating pump to maintain uniform water temperature. One half of the briquette mould is fixed on a fixed plate in the water bath, the other half of the briquette mould is fixed to a carrier which slides over a rotating threaded shaft with a clutch. The motor and gears to rotate the shaft are housed in a cabinet fixed above the other end of the bath. A pointer fixed to the carrier moves over a scale graduated from 0-110 cms. A form fixed on the bath with 12 (twelve) of the scale towards the fixed plate side. The rotating shaft has 2 speeds of travel for the bracket, 300mm and 1 minute, selected by a clutch. Water bath made in Stainless Steel, it is an insulated water bath. Water bath is provided with a drain. A heater with thermostat control is fixed inside the water bath. Control switches for motor, heater and indicator lamps are fixed at a convenient place on the water bath, complete with two briquette moulds and one base plate, all made of brass. Operates on 230 volts A.C. single phase.

