

Product Name :
Astra Scientific Refrigerated Ductility Test System

Product Code :
ASTBATE-0020



Description :

Astra Scientific Refrigerated Ductility Test System

Technical Specification :

Specification: With refrigeration system and micro-processor based digital temperature controller. Ductility is defined as distance in cm to which a standard briquette of bitumen can be stretched before the thread breaks. The briquette is stretched at a rate of 50 mm/min. \pm 2.5mm per minute at a temperature of $27^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$. The machine is having built in refrigeration system to work a below ambient temperature up to 8°C in tropical conditions. The machine will operate at 27°C with control accuracy of $\pm 0.5^{\circ}\text{C}$ as per the requirement of IS. The apparatus consists of water bath with a heater, and a circulating pump to maintain uniform water temperature .

One half of the briquette moulds is fixed in 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 0-100 cm x 1mm fixed on the bath with "0" (zero) of the scale towards the fixed plates side. The rotating shaft has 2 speeds of travel for the bracket, 5 cm/min. And 1cm/min.

Selected by a clutch. Water bath inside is of stainless steel with insulation and water drain cock . A heater with is fitted inside the water bath. The temperature is controlled by dual display microprocessor based auto tuning PID digital temp. Indicator cum controller. Control switches for motor, stirrer, heater and indicator lamps are fixed at a convenient place on the water bath. Complete with three briquette moulds and one base plate, all supply single phase. As per IS 1208.



Astra Scientific

www.astrascientific.com, **Email:** info@astrascientific.com

Address: K-88, 20th Street, Annanagar, Chennai, India – 600040 **Phone:** +91-8860605265