



Fast and accurate results

Determines the susceptibility of polyolefin geomembrane material to stress-cracking.

The Wira Stress Crack Apparatus subjects Polyolefin geomembrane sheet material to a constant tensile load under accelerated environmental conditions. The dumbbell shaped test specimens are notched using the Precision Notching Device supplied. The samples are then placed on the test apparatus and a load is applied by means of canisters containing lead shot on a lever mechanism. The samples are then immersed in a tank containing a surface-active reagent, which is maintained at an elevated temperature of 50°C. The tank is lowered and raised by means of an electric motor. The time to failure is recorded by means of individual timers for each of the specimens. The bath and the sample mounting rig are manufactured from stainless steel.

The temperature of the reagent is maintained at the correct temperature by a means of a solid state temperature controller and a heater in the bottom of the tank. Covers fitted over the tank reduce the evaporation from the tank.

The reagent is circulated within the tank by means of a pump, this maintains uniform temperature and uniform concentration.

The level switch inside the tank ensures that the heater and pump are switched off if the level fluid drops below a specified level.

An additional level switch can be added as an option to control a top up pump to maintain the level inside the tank.

Key Features

- ✓ Can test 20 specimens at a time
- ✓ Stainless steel bath
- ✓ Solid state temperature controller
- ✓ Circulating pump
- ✓ Automatic switch off if fluid level drops
- ✓ Cover on bath to reduce evaporation
- ✓ Removable weight canisters
- ✓ Digital timers and micro switches
- ✓ Motorised lifting mechanism for the bath

Standards: ASTM D5397-20,
EN 14576:2005

Order Code SCA:001

Dimensions: 1600 x 1400 x 520 mm

Power consumption: 220 – 240 Volts AC, 50 Hz, 2.5 kW