C11 Compression Stress Relaxometer

- Discontinuous method, only one instrument for any number of jigs
- Simple measurement of force/relaxation
- Forces to 2.2kN measured
- · Over-range protection for load cells and jigs

The test sample is compressed by a known amount in a Wallace jig for the duration of the test (for info on Wallace jigs, see pages 20 and 21).

The resulting force at the interface between the sample and the jig is measured using Wallace's force measuring instrument, the C11 Compression Stress Relaxometer.

Only one Relaxometer is needed for any number of jigs.

The C11 is easy to use with a simple operator interface, allowing a test to be initiated quickly and simply. The force, measured at intervals defined by the relevant standard, is displayed on the instrument and can be transferred to a PC for processing..

Instrument Operation

The principle of the C11 is based on an electrical contact being made between the load cell and the head of the jig. The contact is only broken when the force applied by the Relaxometer marginally exceeds the counterforce exerted by the test sample. The Relaxometer features an air cylinder to apply the force and a load cell to measure it.

At the start of the test cycle the measuring head moves quickly to the jig. At a pre set force value, the measuring head reduces speed to allow the load cell to more accurately read the force. When the applied force just exceeds the counterforce the test is halted and the result is displayed digitally or transferred to a PC software..

Specification C11 Relaxometer	
Weight	55Kg
Dimensions	380 x 365 x 665mm (w x d x h)
Air Supply	300kPa, 4.5l free air per min or 1.51 per cycle
Standard Load Range	0-2.2kN (0-225 kgf), 0-500 lbf)
Alternative load range	0 – 220N (0 – 22 kgf, 0 – 50 lbf), 0 – 440N (0 – 44 kgf, 0 – 100 lbf), 0 – 1.1kN (0 – 112 kgf, 0 – 250 lbf),
Operating speeds	Fast approach = 2mm/sec max. Min rate of load increase = 0.25N/sec
Standards	BS ISO 3384, ASTM D6147



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