ISO 18437-3:2005-04 (E)

Mechanical vibration and shock - Characterization of the dynamic mechanica l properties of visco-elastic materials - Part 3: Cantilever shear beam method

Contents

Page

1 Scope 1

2 Normative references 2

3 Terms and definitions 2

4 Test equipment (see Figure 1) 3
4.1 Electro-dynamic vibration generator 3
4.2 Force measurement 3
4.3 Displacement transducer 4
4.4 Clamping system 4
4.5 Environmental chamber 5
4.6 Computer 5

5 Operating procedure 5
5.1 Sample preparation and mounting 5
5.2 Conditioning 6
5.3 Cantilever shear beam analysis 7
5.4 Calibration and measurement 8
5.5 Number of test pieces 8
5.6 Temperature cycle 8

6 Analysis of results 9
6.1 Time-temperature superposition 9
6.2 Data presentation 9
6.3 Test report 10

Annex A (informative) Linearity of resilient materials 11

Annex B (informative) Time-temperature superposition 12

Bibliography 14