

ISO 17140:2014-06 (E)

Fine ceramics (advanced ceramics, advanced technical ceramics) - Mechanical properties of ceramic composites at room temperature - Determination of fatigue properties at constant amplitude

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
3.1 General	1
3.2 Cyclic fatigue phenomena	3
4 Principle	5
5 Significance and use	5
6 Apparatus	6
6.1 Fatigue test machine	6
6.2 Load train	6
6.3 Extensometer	7
6.4 Data recording system	7
6.5 Micrometers	7
7 Test specimens	7
8 Test specimen preparation	8
8.1 Machining and preparation	8
8.2 Number of test specimens	8
9 Test procedure	8
9.1 Measurement of test specimen dimensions	8
9.2 Testing technique	9
9.3 Test validity	9
10 Calculation of results	10
10.1 Time to failure, t_f	10
10.2 Damage parameters	10
10.3 Residual properties	10
11 Test report	12
Annex A (informative) Schematic evolution of E	14