

ISO 20505:2005-10 (E)

Fine ceramics (advanced ceramics, advanced technical ceramics) - Determination of the interlaminar shear strength of continuous-fibre-reinforced composites at ambient temperature by the compression of double-notched test pieces and by the losipescu test

Contents		Page
Foreword		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols and abbreviated terms	2
5	Principle	3
6	Interferences	5
6.1	Test environment	5
6.2	Preparation of test pieces	5
6.3	Bending	5
6.4	Failures outside gauge section	6
6.5	Notch separation	6
6.6	Specimen clamping	6
6.7	Friction	6
7	Apparatus	6
7.1	Testing machines	6
7.2	Data acquisition	6
7.3	Dimension-measuring devices	6
7.4	Test fixtures	7
8	Test piece	10
8.1	Test piece geometry	10
8.1.1	Double-notched test piece	10
8.1.2	losipescu test piece	10
8.2	Test piece preparation	11
8.2.1	Customary practices	11
8.2.2	Standard procedures	11
8.2.3	Handling precautions	12
8.3	Number of test pieces	12
9	Precautionary statement	12
10	Test conditions	12
10.1	Test modes and rates	12
10.1.1	Displacement rate	12
10.1.2	Load rate	12
11	Procedure	12
11.1	Test piece dimensions	12
11.2	Preparations for testing	13
11.3	Conducting the test	13

11.3.1	Mount the test piece in the test fixture	13
11.3.2	Begin data acquisition	13
11.4	Completion of testing	14
11.5	Post test	15
12	Calculation of results	15
12.1	Shear strength	15
12.1.1	Double-notched test piece	15
12.1.2	Iosipescu test piece	15
12.2	Statistics	16
13	Test report	16
Annex A (informative) Results of round-robin tests		18
Bibliography		20