DIN EN ISO 178:2011-04 (E)

Plastics - Determination of flexural properties (ISO 178:2010)

Contents

Page

Foreword 3

1 Scope 4

2 Normative references 5

3 Terms and definitions 5

4 Principle 8

5 Test machine 8
5.1 General 8
5.2 Test speed 8
5.3 Supports and loading edge 9
5.4 Force- and deflection-measuring systems 9
5.5 Equipment for measuring the width and thickness of the test specimens 10

6 Test specimens 11
6.1 Shape and dimensions 11
6.2 Anisotropic materials 12
6.3 Preparation of test specimens 12
6.4 Specimen inspection 13
6.5 Number of test specimens 13

7 Atmosphere for conditioning and testing 13

8 Procedure 13

9 Calculation and expression of results 16
9.1 Flexural stress 16
9.2 Flexural strain 16
9.3 Flexural modulus 17
9.4 Statistical parameters 17
9.5 Significant figures 17

10 Precision 18

11 Test report 18

Annex A (informative) Precision statement 19

Annex B (informative) Influence of changes in test speed on the measured values of flexural properties 21

Bibliography 22