

DIN EN 17129:2019-02 (E)

Continuous-fibre-reinforced plastic composites - Pultruded unidirectional rods - Determination of tensile properties in parallel to the fibre direction

Contents		Page
European foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Principle and methods	9
4.1	Principle	9
4.2	Method	9
5	Apparatus	10
5.1	Testing machine	10
5.1.1	General	10
5.1.2	Test speed	10
5.1.3	Grips	10
5.1.4	Force indicator	10
5.1.5	Strain indicator	10
5.1.6	Recording of data	11
5.2	Devices for measuring the diameters of the test specimens	11
6	Test specimens	11
6.1	Types and dimensions	11
6.2	Preparation of specimens	13
6.2.1	General	13
6.2.2	End tabs	13
6.2.3	Application of end tabs	15
7	Number of test specimens	15
8	Conditioning	15
9	Procedure	15
9.1	Test atmosphere	15
9.2	Measurement of test specimen dimensions	15
9.3	Gripping	16
9.4	Prestresses	16
9.5	Test speed	16
9.6	Recording of data	16
9.7	Validation of the failure mode	16
10	Calculation and expression of results	16
10.1	Tensile strength	16
10.2	Strains determined with an extensometer	17
10.3	Tensile modulus of elasticity	17
10.3.1	General	17
10.3.2	Chord slope	17
10.3.3	Regression slope	17

11	Precision	18
12	Test report	18
DIN EN 17129:2019-02 EN 17129:2018 (E) Annex A (informative) Example of alternative test fixture		19
Annex B (informative) Specimen preparation with bonded end tabs		20
Bibliography		22