

# ISO 20975-2:2018 (E)

## Fibre-reinforced plastic composites — Determination of laminate through-thickness properties — Part 2: Determination of the elastic modulus, the strength and the Weibull size effects by flexural test of unidirectional laminate, for carbon-fibre based systems

---

### Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Conditioning
5.1	Conditioning of test specimen
5.2	Temperature and humidity in testing
6	Apparatus
7	Test specimens
7.1	Shape and dimensions
7.2	Preparation of specimens
7.2.1	General
7.2.2	Test plate
7.3	Specimen inspection
7.4	Number of specimens
8	Procedure
9	Calculations
9.1	Through-thickness tensile stress
9.2	Through-thickness tensile strength
9.3	Weibull modulus by flexural test
9.4	Effective volume of flexural specimen
9.5	Through-thickness tensile strain
9.6	Through-thickness tensile strain at failure
9.7	Through-thickness tensile modulus
9.8	Significant figures of stress and elastic modulus
9.9	Expression of results
10	Precision
11	Test report
Annex A	(informative) Precision data obtained from an interlaboratory test
A.1	General
A.2	Procedure
A.3	Results