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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 14208.2-2009

Replacing GB/T 14208-1993

**Textile-glass-reinforced plastics -- Determination of mechanical
properties on rods made of roving-reinforced resin -- Part 2:
Determination of flexural strength
(English Translation)**

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Foreword

GB/T 14208 "glass fiber reinforced plastic roving - reinforced resin rod measuring mechanical properties" is divided into four parts.

- Part 1. General considerations and preparation of rods;
- Part 2. Determination of flexural strength;
- Part 3. Determination of compression strength;
- Part 4. apparent interlaminar shear strength was measured.

This section GB/T 14208 Part 2, this part identical with ISO 3597-2:2003 "Textile glass fiber reinforced plastics Roving-reinforced resin rod mechanical properties - Part 2. Determination of flexural strength "(in English).

This section is equivalent translation ISO 3597-2:2003, identical in technical content.

For ease of use, this section made the following editorial changes.

- a) to the "international standards" to the "standard" to "this part of ISO 3597" with the words "GB/T 14208 this part" or "the section";
- b) Remove the preface international standards;
- c) increase the national standard foreword;
- d) the "Normative references" international standards with the corresponding equivalent international standards in place of national standards listed chapter.

This Part replaces GB/T 14208-1993 "textile glass fiber roving rod composites - Determination of flexural strength." Section compared with the GB/T 14208-1993 The main changes are as follows.

- Preparation of rods relevant details in GB/T 14208.1 is given, remove the GB/T

14208-1993 stick prepared contents;

--- Sample measurement accuracy by a 0.01mm to 0.1mm;

--- Loading ram speed from 10mm/min to 5mm/min;

--- Increased destruction of the sample type.

This part is proposed by the China Building Materials Federation.

The fiber-reinforced plastic part by the National Standardization Technical Committee (SAC/TC39) centralized.

This section is responsible for drafting unit. Beijing glass Composite Material Co., Ltd.

1 Scope

GB/T 14208 in this part of the provisions of the circular cross-section made of roving-reinforced resin rod (hereinafter referred to as stick) Determination of flexural strength. test Stick to the original sample (untreated) or handle bars for some time in boiling water (or other medium).

This section applies to the inspection and quality control of glass fiber rovings, assess matching glass fiber rovings and resin system.

The test results can not be used as design data.

2 Normative references

The following documents contain provisions which, through reference GB/T 14208 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 14208.1 Textile glass fiber reinforced plastic roving - reinforced resin rod measuring mechanical properties - Part 1. General Bar preparation (2003, IDT GB/T 14208.1-2009, ISO 3597-1) and Determination of flexural properties of plastic composites reinforced fiber ISO 14125

3.1 Bending test machine

Tester shall comply with the requirements of ISO 14125, load and indenter holder shall comply with the following requirements.

a) load bearing indenter and intermediate reduced diameter steel rod to ensure a reasonable distribution of stress; the radius of curvature R necking at the trial should be

greater than Like radius, and the difference between the two is not greater than 0.25mm.
Diameter loading indenter and sample holder shown in Figure 1 of 6mm used.

b) the span between the two seats is 16 times the diameter of the specimen.

3.2 Micrometer or caliper

Precision of 0.1mm.

Millimeters

Note: samples of different diameters, require the use of different size and indenter load bearing.

1 m1 m1 diameter of 6 samples used in load bearing and pressure head GB/T
14208.2-2009/ISO 3597-2:2003