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

GB/T 14208.3-2009

Replacing GB/T 14209-1993

**Textile-glass-reinforced plastics -- Determination of mechanical
properties on rods made of roving-reinforced resin -- Part 3:
Determination of compressive 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 3, this part identical with ISO 3597-3:2003 "woven glass fiber reinforced plastic Material roving reinforced resin - Part 3 Determination of mechanical properties on rods. Determination of strength "(in English) compression.

This section is equivalent translation ISO 3597-3:2003, 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 14209-1993 "textile glass fiber roving rod composites - Determination of compressive strength." Section compared with the GB/T 14209-1993 The

main changes are as follows.

- Preparation of rods relevant details in GB/T 14208.1 is given, remove the GB/T 14209-1993 stick prepared contents;
- Sample measurement accuracy by a 0.01mm to 0.1mm;
- 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 compressive 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.

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

3.1 Compression testing machine

Maintain 1mm/min compression rate.

3.2 Test Fixture

Test fixture shown in Figure 1, Number 2, each comprising.

- a) the base plate;
- b) elastic pad (available polyamide production);
- c) the support ring.

Suitably the support ring can surround the sample in order to obtain stable results, the support ring inside diameter larger than the diameter of the specimen, and the difference between the two can not be Greater than 0.1mm. The fixture base plate and the support ring bolted to prevent falling, as shown in FIG.

3.3 Micrometer or caliper

Precision of 0.1mm.

4 Sample preparation and conditioning

The ends should be parallel and perpendicular to the axis of the specimen. When the specimen diameter of 6mm, the sample length is 22.5mm.

Where.

Each type of test (untreated sample and the sample treated) requires at least eight samples; consensus by the parties concerned, for GB/T 14208.3-2009/ISO 3597-3:2003