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

GB/T 27797.11-2011

**Fibre-reinforced plastics -- Methods of producing test plates --
Part 11: Injection moulding of BMC and other long-fibre
moulding compounds -- Small plates**

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Foreword

GB/T 27797 "fiber reinforced plastics test plates Preparation" is divided into 11 parts.

--- Part 1. General;

--- Part 2. the contact and injection molding;

--- Part 3. wet molding;

--- Part 4. prepreg molding;

--- Part 5. Filament winding;

--- Part 6. Pultrusion molding;

--- Part 7. resin transfer molding;

Part --- Article 8. SMC and BMC molding;

Part --- Article 9. GMT/STC molding;

--- Part 10. BMC and other long-fiber molding plastic injection molding and general principles common specimen molding;

--- Part 11. BMC and other long-fiber molding plastic injection molding small square pieces.

This section GB/T Part of 1,127,797.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method identical with ISO 1268-11. Part 11 2005 (E) "fiber reinforced plastics test plates Preparation

Points. BMC and other long-fiber molding plastic injection molding small square pieces. "

Consistency correspondence between this part of international documents and normative references of our files are as follows.

--- GB/T 2035-2008, plastics terms and their definitions (ISO 472.1999, IDT);

--- GB/T 27797.1 fiber reinforced plastic plate test preparation methods - Part 1. General (ISO 1268-1.2001, IDT).

This part made the following editorial changes.

--- Some of the statements apply to international standards to apply to our standard formulation;

--- Plus Article number 4.1, 4.2 and Appendix C.

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 drafted. Beijing glass Composite Material Co., Ltd., China North Industries Group fifty-three Institute, Changzhou Tianma Group has Limited.

1 Scope

This section GB/T 27797 specifies the type with D1 and D2 ISO dual-chamber type mold, injection size is 60mm x 60mm, thickness

It is 2mm (D1 type) or 4mm (D2 type) small square pieces for various tests (see Appendix A) approach. The mold may be increased

Insert, in order to study the impact on the mechanical properties of the weld line (see Appendix B).

GB/T 27797 and this part of GB/T 27797.1 used together.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein

Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 27797.10-2011 preparing fiber reinforced plastics test plates - Part 10. BMC and other long-fiber molding

Material injection molding the general principles and general molded samples (ISO 1268-10.2005, IDT)

ISO 472 Plastics term (Plastics-Vocabulary)

ISO 1268-1 fiber reinforced plastics test plates preparation methods - Part 1. General
(Fibre-reinforced plastics-

Methodsofproducingtestplates-Part 1. Generalconditions)

Determination of ISO 2577 Plastics thermosetting molding shrinkage
(Plastic-Thermosettingmouldingmaterials-

Determinationofshrinkage)

3 Terms and Definitions

ISO 472 terms and definitions and GB/T 27797.10-2011 defined in this document apply.

4.1 D1 and D2 type mold type ISO

4.1.1 D1 and D2 type of dual-chamber type die mold for injection test sheet size of 60mm x 60mm. Such injection molding mold

The test plate dimensions given in Figure 1.

4.1.2 a detailed description of D1 and D2 type ISO type mold shown in Figure 1 and Figure 2, and meet the following requirements.

a) with a side inlet nozzle diameter of at least (4.4 ± 0.5) mm;

b) the mold cavity inlet at one end as shown in FIG 2;

Tilt angle c) the flow channel is $(13 \pm 3)^\circ$, the inclination angle of the cavity is not greater than 2° ;

Sample size is consistent d) the size of the cavity should be specified in the relevant testing standards, since the injection molded parts with varying degrees of shrinkage, the

In the cavity of the sample size should be required dimensions and tolerances between the reference limit. The main dimensions of the mold cavity (see FIG. 1) as follows.

--- Length 60mm ~ 62mm;