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

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**Carbon-fibre-reinforced plastics - Determination of the size and
aspect ratio of crushed objects**

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents" drafted.

This document is equivalent to ISO 30012:2016 "Determination of Size and Aspect Ratio of Carbon Fiber Reinforced Plastic Crushed Materials".

The following minimal editorial changes have been made to this document.

--- Incorporated the amendments to ISO 30012:2016/Amd.1:2018, and the outer margins of the clauses involved use vertical

Double lines (||) are marked.

Please note that some content of this document may involve patents, and the issuing organization of this document does not undertake the responsibility for identifying patents.

1 Scope

This document specifies the method for the determination of the size and aspect ratio of carbon fiber reinforced plastic (CFRP) pulverized materials, mainly applicable to recycling CFRP used. This document treats the shape of CFRP pulverized material fragments as rectangles, and specifies the measurement methods for length and width. Book

Files are suitable for fragments of the following average sizes.

---Length. 5mm~50mm;

---Width. 1mm~10mm.

This document provides 3 measurement methods, two are manual testing methods using a microscope and a scale bar, and the third is using a measuring instrument

automatic test method.

This document applies to CFRP pulverized materials made of thermosetting resins or thermoplastic resins.

Note. If the CFRP pulverized material contains a large amount of small fragments and fine particles, it is recommended to sieve it out with a 1mm sieve before measurement.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

ISO 472 Plastics-Vocabulary

Note. GB/T 2035-2008 Plastic terms and their definitions (ISO 472:1999, IDT)

3 Terms and Definitions

Terms and definitions defined in ISO 472 apply to this document.

4 symbols

The following symbols apply to this document.

W. The width of the CFRP fragment, represented by the short side of the rectangle.

L. The length of the CFRP fragment, represented by the long side of the rectangle.

W. Average width of CFRP fragments.

L. Average length of CFRP fragments.

The aspect ratio of RA.CFRP fragments, calculated from the ratio of length to width of CFRP fragments.

$\sigma(L)$. Standard deviation of CFRP fragment lengths.

$\sigma(W)$. Standard deviation of CFRP fragment width.