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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 40340-2021

Composites and metal assemblies - Galvanic corrosion tests of carbon fibre reinforced plastics (CFRPs) related bonded or fastened structures in artificial atmospheres - Salt spray tests

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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"

Drafting.

This document adopts the translation method equivalent to ISO 21746.2019 ``Carbon fiber reinforced polymer matrix composites of composite materials and metal assemblies

Galvanic corrosion test of material bonding or fastener connection structure under artificial environment salt spray test".

The Chinese documents that have consistent correspondence with the normatively cited international documents in this document are as follows.

---GB/T 9271-2008 paint and varnish standard test board (ISO 1514.2004, MOD);

---GB/T 10123-2001 Basic terms and definitions of corrosion of metals and alloys (eqv, ISO 8044.1999);

---GB/T 13452.2-2008 Determination of paint film thickness of paints and varnishes (ISO 2808.2007, IDT);

---GB/T 16545-2015 Corrosion of metals and alloys. Removal of corrosion products on corrosion samples (1SO8407.2009,

IDT);

---GB/T 30786-2014 Paint and varnish corrosion test of metal plate coating scratch marking guidelines (ISO 17872.2007,

IDT).

This document was proposed and managed by the National Carbon Fiber Standardization Technical Committee (SAC/TC572).

Drafting organizations of this document. Nanjing Fiberglass Research and Design Institute Co., Ltd., China Automotive Technology Research Center Co., Ltd., Anhui Jiali

Qi Advanced Composites Technology Co., Ltd., Shanghai Aircraft Manufacturing Co., Ltd., Sinopec Shanghai Petrochemical Co., Ltd., Anhui Hong

Changxin Materials Co., Ltd., Changzhou Dams Testing Technology Co., Ltd., Jiangsu Jicui Carbon Fiber and Composite Materials Application Technology Research Institute Co., Ltd.

Company, Changzhou Qifu Antai Composite Material Technology Co., Ltd.

1 Scope

This document specifies the equipment and test equipment used for neutral salt spray (NSS), acetic acid salt spray (AASS) and copper accelerated acetic acid salt spray (CASS) tests.

Agents and methods used to evaluate carbon fiber-reinforced polymer matrix composites (CFRPs) in the presence of temporary or temporary insulation currents

Galvanic corrosion resistance at joints and glued structures between metal materials.

2 Normative references

The contents of the following documents constitute the indispensable clauses of this document through normative references in the text. Among them, dated quotations

Only the version corresponding to that date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document.

ISO 1514 Paints and varnishes-Standard panels for testing

ISO 2808 Paints and varnishes-Determination of filmthick-

ness)

ISO 3574 Commercial grade and stamping grade cold-rolled carbon steel sheet (Cold-reduced carbonsteel sheet of commercial and

drawingqualities)

ISO 6361-2 Wrought aluminum and aluminum alloy sheet, strip and plate Part 2.Mechanical properties (Wroughtaluminiumand

aluminiumaloys-Sheets, stripsandplates-Part 2.Mechanicalproperties)

ISO 8044 Corrosion of metals and alloys basic terms and definitions (Corrosionofmetalsandaloys-Basicterms

anddefinitions)

ISO 8407 Corrosion of metals and alloys. Removal of corrosion products on corrosion samples (Corrosionofmetalsandaloys-Re-

movalofcorrosionproductsfromcorrosiontestspecimens)

ISO 17872 Paints and varnishes corrosion test of metal plate coating scratch marking guidelines (Paints and varnishes-

Guidelinesfortheintroductionofscribemarksthroughcoatingsonmetalicpanelsforcorrosiontes-

ting)

3 Terms and definitions

The following terms and definitions defined in ISO 8044 apply to this document.

3.1

Reference material

Materials with known test performance.

3.2

Reference specimen

A certain amount of reference material used to check the reproducibility and repeatability of the salt spray chamber test results.