STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

METHODS FOR TESTING ANODIC OXIDATION COATINGS ON ALUMINIUM AND ALUMINIUM ALLOYS

PART 3—CORROSION TESTS

AS 2039.3.1

NEUTRAL SALT SPRAY TEST (NSS TEST) OF ANODIC OXIDATION COATINGS

1 SCOPE. This standard describes procedures for conducting the neutral salt spray test for testing the resistance to corrosion of anodic oxidation coatings on aluminium and aluminium alloys.

NOTES:

1. The method does not specify the type of test item, the exposure period or the assessment criteria. Such details are normally specified in the relevant product standard or determined by agreement.
2. Results obtained from the test should not be regarded as having a direct correlation with all environments in which items may be exposed or the relative corrosion resistance of different coatings.

2 APPLICATION. The method is suitable for testing all anodic oxidation coatings on metallic items including coatings that have subsequently received supplementary treatments.

3 PRINCIPLE. Coatings are exposed to a corrosive atmosphere under controlled conditions for different durations of time.

Resistance to corrosive attack is used to assess the quality of the coating against the conditions of the test.

4 APPARATUS. The following apparatus shall be used:

(a) *Spray cabinet.* The spray cabinet shall be made of, or lined with, material resistant to corrosion by the test solution. The cabinet shall have a capacity of not less than 0.2 m^3 and preferably not less than 0.4 m^3 since, with smaller volumes, difficulties are experienced in ensuring even distribution of spray.

The size and shape of the cabinet shall be such that the quantity of solution collected in the cabinet is within the limits stated in Clause 1.5. The upper parts of the cabinet shall be so shaped that drops of accumulated test solution do not drip onto test pieces.

b

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