

**DETERMINATION OF THE ABRASION RESISTANCE OF ANTI-FRICTION
COATINGS APPLIED TO DOOR SEALS AND SLIDING GLASS SEALS****Application**

The two test procedures described are used to determine the abrasion resistance of anti-friction coatings applied to body closure seals and sliding glass seals. Method A determines the abrasion resistance in a "Slam" mode and is applicable to body closure seals only. Method B determines the abrasion resistance in a sliding mode and is applicable to body closure and sliding glass seals.

Apparatus Required**Slam Test Rig**

As shown schematically in Figure 1 capable of applying a vertical stroke of 75 +/- 5 mm to the test seal at a rate of 5 Hz to bring it into contact with the mounted painted panel at the specified compression as described in Method A.

Vibration Test Rig

As shown schematically in Figure 2 capable of applying a vertical stroke of 3 mm to the mounted painted test panel at a frequency of 4 to 17 Hz and allowing lateral adjustment of the seal to achieve the required compression as described in Method B.

Conditioning and Test Conditions

All test values indicated herein are based on material conditioned in a controlled atmosphere of 23 +/- 2 °C and 50 +/- 5 % relative humidity for not less than 24 h prior to testing and tested under the same conditions unless otherwise specified.

METHOD A: SLAM TEST**Procedure**

Mount a steel panel, painted per FLTM BI 103-02, onto the movable platform of the Slam test rig and similarly mount a 50 mm length of seal under test onto the fixed platform of the test rig (see Figure 1). Adjust the height of the fixed platform so that the test seal is compressed at the end of the up-stroke by the amount specified on the Engineering Drawing.

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Page 1 of 4

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Test the seal for the number cycles specified in the relevant Materials Specification or Engineering Drawing.

Evaluation

After the specified number of cycles, examine the test specimen and the painted panel for wear-through of the coating and/or transfer of black rubber onto the painted panel

METHOD B: VIBRATION TEST

Procedure

Mount a steel panel, painted per FLTM BI 103-02, onto the movable platform of the Vibration test rig and similarly mount a 50mm length of seal under test onto the fixed platform of the test rig. (See Figure 2). Adjust the lateral position of the fixed platform until the test specimen has been compressed by 1 mm. Test the seal for the number cycles specified in the relevant Materials Specification or Engineering Drawing.

Evaluation

After the specified number of cycles, examine the test specimen and the painted panel for wear-through of the coating and/or transfer of black rubber onto the painted panel

Chemicals, materials, parts, and equipment referenced in this document must be used and handled properly. Each party is responsible for determining proper use and handling in its facilities.