
Draft Jamaican Standard

Method of Test

for

Mandrel Bend Test of Attached Organic Coatings



BUREAU OF STANDARDS JAMAICA

NON-OBJECTION PERIOD:

30 JUNE 2024 – 29 JULY 2024

DRAFT JAMAICAN STANDARD

DRAFT JAMAICAN STANDARD

IMPORTANT NOTICE

Jamaican standards are subjected to periodic review. The next amendment will be sent without charge if you cut along the dotted line and return the self-addressed label. If we do not receive this label we have no record that you wish to be kept up-to-date. Our address:

Bureau of Standards Jamaica
6 Winchester Road
P.O. Box 113
Kingston 10
Jamaica W.I.

-----([cut along the line])-----

JS ASTM D522/D522M-17: 202X

NAME OR DESIGNATION.....

ADDRESS.....

JBS CERTIFICATION MARK PROGRAMME

The general policies of the JBS Certification Mark Programme are as follows:

- The JBS provides certification services for manufacturers participating in the programme and licensed to use the gazetted JBS Certification Marks to indicate conformity with Jamaican Standards.
- Where feasible, programmes will be developed to meet special requirements of the submitter. Where applicable, certification may form the basis for acceptance by inspection authorities responsible for enforcement of regulations.
- In performing its functions in accordance with its policies, JBS will not assume or undertake any responsibility of the manufacturer or any other party.

Participants in the programme should note that in the event of failure to resolve an issue arising from interpretation of requirements, there is a formal appeal procedure.

Further information concerning the details of the JBS Certification Mark Programme may be obtained from the Bureau of Standards, 6 Winchester Road, Kingston 10.

CERTIFICATION MARKS



Product Certification Marks



Plant Certification Mark



Certification of Agricultural Produce
(CAP) Mark



Jamaica-Made Mark

Draft Jamaican Standard
Method of Test
for
Mandrel Bend Test of Attached Organic Coatings

Bureau of Standards Jamaica
6 Winchester Road
P.O. Box 113
Kingston 10
Jamaica W. I.
Tel: (876) 926 -3140-5, (876) 618 – 1534 or (876) 632-4275
Fax: (876) 929 -4736
E-mail: info@bsj.org.jm
Website: www.bsj.org.jm

Month 202X

© 202X Bureau of Standards Jamaica

All rights reserved. Unless otherwise specified, no part of a Bureau of Standards publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including, photocopying microfilm or scanning, without permission in writing.

ISBN XXX.XXXX.XXX

Declared by the Bureau of Standards to be a standard Method of Test pursuant to section 7 of the Standards Act 1969.

First published Month 202X

This standard was circulated in draft form for thirty (30) days non-objection under the reference DJS ASTM D522/D522M-17: 2024.

Jamaican Standards establish requirements in relation to commodities, processes and practices, but do not purport to include all the necessary provisions of a contract.

The attention of those using this specification is called to the necessity of complying with any relevant legislation.

Amendments

No.	Date of Issue	Remarks	Entered by and date

Contents

	Page
National foreword	ii
Committee representation	iii
Acknowledgement	iii
1.Scope	1
2. Referenced Documents.....	1
3. Summary of Test Method.....	1
4. Significance and Use.....	1
5. Test Specimen.....	2
6. Conditioning and Number of Tests.....	2
<u>Test Method A – Conical Mandrel Test</u>	
7. Apparatus.....	2
8. Procedure.....	3
9. Calculation.....	3
10. Report.....	4
11. Precision and Bias.....	4
<u>Test Method B – Cylindrical Mandrel Test</u>	
12. Apparatus.....	4
13. Procedure.....	5
14. Calculation.....	6
15. Report.....	6
16. Precision and Bias.....	6
17. Keywords.....	6
Tables	
TABLE 1 Elongation.....	2
TABLE 2 Correction for Film Thickness.....	5
Figures	
FIG. 1 Conical Mandrel Test Apparatus.....	2
FIG. 2 Distance Along Cone and Corresponding Mandrel Size versus Percent Elongation for Specimens on Cold-Rolled Steel 0.8 mm [$1/32$ in.] in Thickness.....	3
FIG. 3 Correction for Thickness of Film.....	4
FIG. 4 An Illustration of a Cylindrical Mandrel Test Apparatus.....	5
Appendix (Nonmandatory Information)	
X1. RELATIONSHIP BETWEEN ELONGATION AND MANDREL SIZE.....	6

National foreword

This standard is an adoption and is identical to ASTM D522/D522M-17(Reapproved 2021) Standard Test Method for Mandrel Bend Test of Attached Organic Coatings published by ASTM International (ASTM).

Scope of the standard

1.1 These test methods cover the determination of the resistance to cracking (flexibility) of attached organic coatings on substrates of sheet metal or rubber-type materials.

1.2 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system are not necessarily exact equivalents; therefore, to ensure conformance with the standard, each system shall be used independently of the other, and values from the two systems shall not be combined.

1.3 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.

1.4 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

Where the words 'International Standard' appear, referring to this standard, they should be read as 'Jamaican Standard'.

Where reference is made to informative and normative annexes the following definitions should be noted:

- Informative Annex – gives additional information intended to assist in the understanding or use of the document. They do not contain requirements.
- Normative Annex – gives provisions additional to those in the body of a document. They contain requirements.

Users should note that all standards undergo revision from time to time and that any reference made herein to any standard implies its latest edition, unless otherwise stated.

This standard is voluntary.

Committee representation

The preparation of this standard for the Standards Council, established under the Standards Act of 1969, was carried out under the supervision of the Paints and Surface Coatings Technical Committee which at the time comprised the following members:

Acknowledgment

Acknowledgement is made to ASTM International (ASTM) for permission to adopt ASTM D522/D522M-17(Reapproved 2021).

DRAFT JAMAICAN STANDARD