

Methods of testing vulcanized rubber —

Part A49: Determination of temperature rise and resistance to fatigue in flexometer testing (basic principles)

[ISO title: Rubber, vulcanized — Determination of temperature
rise and resistance to fatigue in flexometer testing — Part 1: Basic
principles]

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Rubber Standards Committee (RUC/-) to Technical Committee RUC/36 upon which the following bodies were represented:

- British Railways Board
- British Rubber Manufacturers' Association
- ERA Technology Ltd.
- Institution of Mechanical Engineers
- Institution of Water Engineers and Scientists
- Malaysian Rubber Producers' Research Association
- Ministry of Defence
- National College of Rubber Technology
- Rubber and Plastics Research Association of Great Britain
- Satra Footwear Technology Centre
- Scientific Instrument Manufacturers' Association (BEAMA)
- Coopted member

This British Standard, having been prepared under the direction of the Rubber Standards Committee, was published under the authority of the Board of BSI and comes into effect on 31 January 1984

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National foreword

This British Standard has been prepared under the direction of the Rubber Standards Committee. It is identical with ISO 4666-1:1982 “*Rubber, vulcanized — Determination of temperature rise and resistance to fatigue in flexometer testing — Part 1: Basic principles*” published by the International Organization for Standardization (ISO).

The compression flexometer is described in BS 903-A50 which is identical with ISO 4666-3. ISO 4666-2, describing the rotary flexometer, has not been implemented as a British Standard because there is little interest in the UK in the particular test machine specified.

Terminology and conventions. The text of the International Standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is drawn especially to the following.

Wherever the words “International Standard” and “part of ISO 4666” appear, referring to this standard, they should be read as “British Standard” and “Part of BS 903” respectively.

Cross-references

International Standard	Corresponding British Standard
	BS 903 <i>Methods of testing vulcanized rubber</i>
ISO 132:1983	Part A10:1984 <i>Determination of flex cracking (De Mattia)</i> (Identical)
ISO 471:1977	Part A35:1978 <i>Standard temperatures, humidities and times for the conditioning and testing of test pieces</i> (Identical)
ISO 1826:1981	Part A35:1978 <i>Standard temperatures, humidities and times for the conditioning and testing of test pieces</i> (National appendix A is technically equivalent)
ISO 3383:1976	Part A32:1977 <i>General directions for achieving elevated or sub-normal temperatures</i> (Identical)
ISO 4666-3:1982	Part A50:1984 <i>Determination of temperature rise and resistance to fatigue in flexometer testing (compression flexometer)</i> (Identical)

There is no British Standard which corresponds exactly to ISO 133:1981; however this is referred to for information only (see clause 0) and is very similar to ISO 133:1975 which in turn is identical with BS 903 “*Methods of testing vulcanized rubber*” — Part A11:1976 “*Determination of resistance to cut growth (De Mattia-type machine)*”. A further revision of ISO 133 is in course of preparation and, when this is completed, it is intended to publish a revision of BS 903-A11 which will be identical with the new edition of ISO 133.

There is no corresponding British Standard for ISO 2856 but this is referred to for information only (see clause 3). There is no corresponding British Standard for ISO 4666-2 (see above) but this does not affect the application of the general principles for flexometer testing given in this British Standard.

Additional information. In UK practice, the standard laboratory temperature is 23 ± 2 °C (see 5.3).

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 6, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.