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# Methods of testing vulcanized rubber —

## Part A51: Determination of resistance to tension fatigue

[ISO title: Rubber, vulcanized — Determination of tension  
fatigue]

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# Committees responsible for this British Standard

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

- British Railways Board
- British Rubber Manufacturers' Association
- ERA Technology Ltd.
- GAMBICA (BEAMA 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

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 October 1986

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The following BSI references relate to the work on this standard:  
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## Amendments issued since publication

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# National foreword

This Part of BS 903, which has been prepared under the direction of the Rubber Standards Committee, is identical with ISO 6943:1984 “*Rubber, vulcanized — Determination of tension fatigue*” published by the International Organization for Standardization (ISO).

**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.

The comma has been used as a decimal marker. In British Standards it is current practice to use a full point on the baseline as the decimal marker.

Wherever the words “International Standard” appear, referring to this standard, they should be read as “Part of BS 903”.

**Cross-references**

| International Standard | Corresponding British Standard                                                                                                                 |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | BS 903 <i>Methods of testing vulcanized rubber</i>                                                                                             |
| ISO 37:1977            | Part A2:1971 <i>Determination of tensile stress-strain properties</i><br>(Technically equivalent)                                              |
| ISO 132:1983           | Part A10:1984 <i>Determination of flex cracking</i><br>( <i>De Mattia</i> )<br>(Identical)                                                     |
| ISO 133:1983           | Part A11:1985 <i>Determination of crack growth</i><br>( <i>De Mattia</i> )<br>(Identical)                                                      |
| ISO 471:1983           | Part A35:1985 <i>Temperatures, humidities and times for conditioning and testing of test pieces</i><br>(Identical)                             |
| ISO 4648:1978          | Part A38:1978 <i>Determination of dimensions of test pieces and products for test purposes</i><br>(Identical)                                  |
| ISO 4661:1977          | Part A36:1978 <i>Preparation of test pieces</i><br>(Identical)                                                                                 |
| ISO 4666-1:1982        | Part A49:1984 <i>Determination of temperature rise and resistance to fatigue in flexometer testing (basic principles)</i><br>(Identical)       |
| ISO 4666-3:1982        | Part A50:1984 <i>Determination of temperature rise and resistance to fatigue in flexometer testing (compression flexometer)</i><br>(Identical) |

The Technical Committee has reviewed the provisions of ISO 1826:1981, to which reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard.

There is no corresponding British Standard for ISO 4666-2 but this is referred to for information only (see clause 1).

**Additional information.** In UK practice, the standard laboratory temperature is  $23 \pm 2$  °C (see **6.3** and **7.3**).

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 12, 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.

