

**SPECIFICATION
FOR
WORKING STANDARDS
OF
LENGTH

FLEXIBLE LINE STANDARDS**

In accordance with the provisions of section 5(5) of the Weights and Measures Act 1985, the Secretary of State hereby approves the material and form of working standards of length conforming with this specification.

This specification supersedes WM 64(May 1946) and WM 246 (March 1971), but any working standard already in use may continue in use until further notice.

**M D Koch
National Weights and Measures Laboratory
Stanton Avenue
Teddington
Middlesex
TW11 0JZ**

Department of Trade & Industry

STD 5243

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SPECIFICATION FOR WORKING STANDARDS OF LENGTH**FLEXIBLE LINE STANDARDS****NOMINAL LENGTHS**

1 Working standard flexible line measures shall have nominal lengths of:

Imperial: 4, 5, 6, 8, 10, 20, 33, 50, 66 or 100 feet
Metric : 1.5, 2, 3, 5, 10, 20, 30 or 50 metres.

MATERIAL

2 The measures shall be of material which is stable, hard wearing and suitable for the purpose. Suitable materials include steel tapes and glass fibre reinforced tapes. Steel tapes shall be protected from rusting. Other tapes shall not be susceptible to 'creep' when the tension specified on the tape is maintained for a period of 24 hours.

CONSTRUCTION

3 When stretched on a flat surface, the edges of the tape shall be practically straight and parallel.

The measure shall be housed in a suitable case or frame.

GRADUATION AND NUMBERING

4 The nominal length shall be between two scale marks or between an end and one scale mark. All scale marks shall be clear, permanent, straight, at right angles to the tape, all of the same thickness and constant throughout their length. Scale marks may be produced by engraving, etching or printing. The scale marks shall be in a contrasting colour to the background of the tape.

- (a) In the case of the printed tapes, the printing shall be protected by a clear plastic film or clear varnish.
- (b) The thickness of the scale marks should be appropriate to the accuracy of measurement required and shall not exceed 50% of the spacing.
- (c) Metric tape measures shall be graduated to allow any length up to the nominal length to be measured to a millimetre. The tape may be graduated in millimetres throughout its length, or part of the tape may be more finely graduated.
- (d) Imperial tape measures shall be graduated to allow any length up to the nominal length to be measured to one sixteenth of an inch. The tape may be graduated in sixteenths of an inch throughout its length, or part of the tape may be more finely graduated.
- (e) The numbering may be consecutive or repetitive and may be in different colours to indicate different scale intervals.

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INSCRIPTIONS

- 5 The following shall be marked on the measure:
- (a) The nominal length
 - (b) The name of the local authority
 - (c) The serial number
 - (d) The reference temperature: 20 °C
 - (e) The tension (on tapes longer than 10 metres)
 - (f) The maker's or supplier's name or trade mark.

LIMITS OF ERROR

6 The permissible errors in length at 20 °C under the appropriate tension on a flat surface shall not exceed the amount specified in Regulations made under section 5(9) of the Weights and Measures Act 1985, as shown below.

Metric: Limits of error (\pm)
0.3 mm plus 0.2 mm per metre of length

Imperial: Limits of error (\pm)
0.012 in plus 0.008 in per yard of length.