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 STATUTORY INSTRUMENTS
 

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1986 No. 1682

## WEIGHTS AND MEASURES

**The Measuring Equipment (Measures of Length) Regulations  
1986**

<i>Made - - - -</i>	<i>29th September 1986</i>
<i>Laid before Parliament</i>	<i>3rd October 1986</i>
<i>Coming into Operation</i>	<i>27th October 1986</i>

The Secretary of State, in exercise of powers conferred on him by sections 11(1), (4) and (7), 15(1), 86(1) and 94(1) of the Weights and Measures Act 1985 (a) and of all other powers enabling him in that behalf, hereby makes the following Regulations:—

 PART I  
 GENERAL
*Citation, commencement and revocation*

1.—(1) These regulations may be cited as the Measuring Equipment (Measures of Length) Regulations 1986 and shall come into operation on 27th October 1986.

(2) The Regulations specified in the Schedule to these Regulations are hereby revoked to the extent specified in column 2 of the Schedule.

*Interpretation*

2. In these Regulations—

“the Act” means the Weights and Measures Act 1985;

“composite measure” means a measure of length where one of its principal scale marks is a surface and the other is a line, hole or mark;

“end measure” means a measure of length where its principal scale marks are formed by two surfaces;

“measure of length” means a linear measure set out in Part I of Schedule 1 to the Act;

“nominal length” means the maximum length in metric or imperial units which a measure of length is designed to measure in one measurement;

“prescribed limits of error” has the meaning set out in Regulation 24 below;

“principal scale marks” mean the two surfaces, lines, holes or marks (or combination thereof) on a measure of length the distance between which is the nominal length of the measure;

“the stamp” means the prescribed stamp (b); and

“terminal surface” means a surface forming one of the principal scale marks.

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 (a) 1985 c.72.

(b) See S.I. 1968/1615.

*Application*

3.—(1) Subject to paragraph (2) below, these Regulations apply to measuring equipment for use for trade of the following class namely measures of length, and such measures are hereby prescribed for the purposes of section 11(1) of the Act.

(2) Except for this paragraph, paragraph (3) and Regulation 20 below, these Regulations do not apply to measures of length which bear the mark of EEC initial verification.

(3) In this Regulation, “mark of EEC initial verification” means the mark described in paragraph 5 of Schedule 1 to the Measuring Instruments (EEC Requirements) Regulations 1980(a).

## PART II

MATERIALS AND PRINCIPLES OF CONSTRUCTION AND  
MARKING OF MEASURES OF LENGTH

4. Subject to Regulation 5 below, every measure of length shall be made of—

- (a) carbon steel, including matt chrome-plated carbon steel, steel protected by a clear film or rust-resisting steel;
- (b) brass;
- (c) aluminium alloy, including anodised and stained aluminium alloy;
- (d) glass-reinforced or opaque plastics;
- (e) wood; or
- (f) any other material of adequate stability.

5. Every measure of length shall be sufficiently strong and resistant to abrasion to withstand the wear and tear of ordinary use in trade.

6. Where an end measure or composite measure is made of wood or other material of durability equal to or less than that of wood, the terminal surfaces shall have metal tips which shall be securely fixed to the wood or other material.

7. The terminal surfaces of end measures and of composite measures shall be flat and perpendicular to the longitudinal axis of the measure.

8. Every rigid measure of length, including folding measures, shall be practically straight and free from flaws.

9. Every flexible measure of length shall be constructed so that when it is stretched out on a flat surface its edges are practically straight and parallel.

10. Winding devices for flexible measures of length shall be constructed so that they do not cause any permanent deformation of the measure.

11. Where a measure of length is marked with a reference temperature, it shall be constructed so that a change of not more than 8 degrees Celsius above or below that temperature does not cause in normal use a variation in length exceeding the prescribed limit of error.

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(a) S.I. 1980/1058; the relevant amending instrument is S.I. 1985/1871.

**12.** Where a measure of length is marked with a tractive force, it shall be constructed so that a change of 10 per cent. above or below that force does not cause a variation in length exceeding the prescribed limit of error.

**13.—(1)** Every measure of length which is graduated shall be graduated clearly, indelibly and, subject to paragraph (2) below, regularly, so as to enable unambiguous readings to be made easily.

(2) Certain sections of a graduated measure of length may be subdivided more finely than other sections.

**14.** Where the scale marks on a measure of length are lines these shall be straight, perpendicular to the longitudinal axis of the measure of length and all of the same thickness, constant throughout their length.

**15.** The numbering of graduated measures of length shall be—

- (a) (i) continuous; or
- (ii) partly continuous and partly repetitive; and
- (b) (i) parallel to the longitudinal axis of the measure of length; or
- (ii) perpendicular to the longitudinal axis of the measure of length, depending on how the measure is designed to be read.

**16.** Where a graduated measure of length is a folding measure, some of its numbering in close proximity to the joints may be omitted.

**17.** Every measure of length shall be conspicuously, legibly and durably marked (in the case of a flexible measure, near the beginning of the measure) with the following items—

- (a) on each graduated side, its nominal length expressed in one only of the following units of measurement in full or by means of one of the following abbreviations or symbols only:—

metre	m
centimetre	cm
millimetre	mm
yard	yd
foot	ft
inch	in;

- (b) the name or trade mark of the manufacturer of the measure; and
- (c) its tractive force, if it is a flexible measure with a nominal length exceeding five metres in metric units or ten feet in imperial units.

**18.** Every measure of length which is not graduated or subdivided shall be marked conspicuously, legibly and durably with the words “not graduated” or “not subdivided”.

**19.—(1)** Every measure of length may be marked (in the case of a flexible measure, near the beginning of the measure) with one or more of the following items—

- (a) the reference temperature;
- (b) where not required to be marked under Regulation 17 above, the tractive force;
- (c) the number of the British Standard published by the British Standards Institution that specifies requirements for the measure or other specification reference;

- (d) a model designation;
- (e) the country of manufacture; and
- (f) the material from which the measure has been made.

(2) Nothing in paragraph (1) above shall prohibit other markings on a measure of length, which do not cause confusion in use.

### PART III

#### MANNER OF USE FOR TRADE

20. No person shall use a measure of length for trade in such a manner as to expose it to environmental or other influences which will adversely affect its accuracy or function.

### PART IV

#### TESTING

21. Every measure of length submitted for testing shall be in a clean condition.

22. Every measure of length shall be tested by comparison with an appropriate local or working standard linear measure using equipment and under conditions which are appropriate to the degree of accuracy required, taking the following factors into account—

- (a) the ambient temperature, when the standard and the measure of length being compared are of different materials;
- (b) the tensioning and support of flexible measures of length; and
- (c) the method of magnification for viewing.

23. The inspector shall test the nominal length and, in the case of a graduated measure, such other graduations as he considers necessary.

### PART V

#### SUPPLEMENTARY PROVISIONS

##### *Prescribed limits of error*

24. The prescribed limits of error relating to measures of length shall be as follows:—

- (a) where the measure is designed to measure in metric units, 0.6 millimetre plus 0.4 millimetre per metre (rounded up to the next whole metre) of nominal length; and
- (b) where the measure is designed to measure in imperial units, 0.025 inch plus 0.015 inch per yard (rounded up to the next whole yard) of nominal length.

*Passing as fit for use for trade*

25. No measure of length shall be passed as fit for use for trade unless on testing—

- (a) it complies with all the appropriate requirements of these Regulations;
- (b) it falls within the prescribed limits of error; and
- (c) the inspector is of the opinion that it is not constructed in a manner which facilitates fraudulent use.

*Stamping*

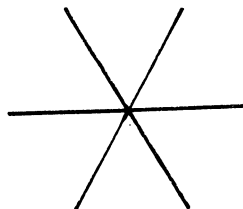
26.—(1) Subject to paragraphs (2) and (3) below, measures of length shall be stamped with the stamp near one end or, in the case of graduated measures, near the beginning of the measure on each graduated side.

(2) In the case of flexible measures of length the stamp may be placed on a metal plug, disc or label permanently secured to the measure.

- (3) No measure of length shall be stamped with the stamp if it bears—
- (a) any mark which, in the opinion of the inspector, might reasonably be mistaken for the stamp;
  - (b) any indication of a class of accuracy to which the measure belongs; or
  - (c) any other statement or mark (other than the stamp) which purports to be or, in the opinion of the inspector, might reasonably be mistaken for an expression of approval or guarantee of accuracy by any body or person.

*Obliteration of stamps*

27. The stamp shall be obliterated on any measure of length by an inspector, in accordance with the requirements of these Regulations, by means of punches or pincers of suitable sizes of a six-pointed star design as shown in the following illustration:—



28.—(1) An inspector shall obliterate the stamp on any measure of length which—

- (a) fails upon testing to fall within twice the prescribed limits of error; or
- (b) fails to comply with any other appropriate requirement of these Regulations:

Provided that an inspector shall not obliterate the stamp on any measure of length which falls within twice the prescribed limits of error and which was first stamped before 27th October 1986, notwithstanding that it fails to comply with the appropriate requirements of these Regulations.

(2) Where any measure of length has, since it was last stamped, been the subject of any adjustment, alteration, addition, damage or repair which could, in the opinion of the inspector, have affected its accuracy or function, he may obliterate the stamp on that measure.

*Michael Howard,*  
Parliamentary Under-Secretary of State,  
Department of Trade and Industry.

29th September 1986.

## SCHEDULE

Regulation 1(2)

## REVOCATIONS

Regulations	Extent of Revocation
The Weights and Measures Regulations 1963 (a) .	In Regulation 1, paragraph (1) (a). In Regulation 6, paragraph (2) (a). Regulations 9 to 14. In Schedule 1, Part I.
The Weights and Measures (Amendment) Regulations 1970 (b).	In the Schedule, paragraph 2.

(a) S.I. 1963/1710.

(b) S.I. 1970/1711.

## EXPLANATORY NOTE

*(This Note is not part of the Regulations.)*

These Regulations prescribe measures of length, which do not bear the mark of EEC initial verification, for the purposes of section 11(1) of the Weights and Measures Act 1985, so that it is unlawful to use such measures for trade purposes unless they have been tested, passed as fit for such use and stamped by an inspector of weights and measures. They replace the provisions of Part II of the Weights and Measures Regulations 1963, under which measures of length were formerly prescribed. Measures bearing the mark of EEC initial verification have to comply with the Measuring Instruments (EEC Requirements) Regulations 1980.

These Regulations make provision as to—

- (a) the materials and principles of construction of measures of length and their marking (Regs 4–19);
- (b) their manner of use for trade (Reg 20);
- (c) their testing (Regs 21–23);
- (d) the prescribed limits of error (Reg 24); and
- (e) their passing as fit for use for trade, stamping and obliteration of such stamps (Regs 25–28).

The Regulations make the following changes of substance:—

- (a) the principles of construction have been revised and expanded;
- (b) the limits of error are now expressed by means of formulae, rather than a table, and those applicable on obliteration of the stamp are only twice, instead of four times, those applicable on passing as fit for use for trade; and
- (c) provision has been included to prohibit the use of a measure of length in such a manner that it is exposed to environmental or other influences which will adversely affect its accuracy or function.

Where a measure has been stamped under the provisions of Part II of the Weights and Measures Regulations 1963, it may continue in use for trade without the stamp being obliterated, provided it falls within twice the prescribed limits of error, even though it does not comply with the requirements of these Regulations.

Copies of British Standards (see Regulation 19(1)(c)) can be obtained from any of the sales outlets operated by the British Standards Institution (BSI) or by post from the BSI at Linford Wood, Milton Keynes MK14 6LE.

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