"6. At a meeting of the Board one half of the members shall be the quorum and if the number so ascertained includes a fraction the nearest higher whole number of members but at any meeting at which it is resolved to impose a levy the said quorum of one half shall include one half of the members appointed as mentioned in paragraph 3(1)(a) of Schedule 1 to the Act."

Sealed with the Official Seal of the Ministry of Health and Social Services for Northern Ireland this 4th day of September 1967.

(L.S.)

W. G. H. Quigley, Assistant Secretary.

#### EXPLANATORY NOTE

(This Note is not part of the order, but is intended to indicate its general purport.)

This order, which is made under the Industrial Training Act (Northern Ireland) 1964 alters the number of members required to form a quorum at meetings of industrial training boards.

#### 1967. No. 237

[**C**]

#### WEIGHTS AND MEASURES

REGULATIONS, DATED 7TH SEPTEMBER 1967, MADE BY THE MINISTRY OF COMMERCE UNDER SECTIONS 4, 5, AND 8 OF THE WEIGHTS AND MEASURES ACT (NORTHERN IRELAND) 1967.

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The Ministry of Commerce, in exercise of the powers conferred upon it by sections 4(5), 5(1) and (3) and 8(1) of the Weights and Measures Act (Northern Ireland) 1967(a) and of all other powers enabling it in that behalf, hereby makes the following Regulations:-

(a) 1967. c. 6 (N.I.).

#### PART I

#### GENERAL

#### Citation, Commencement and Revocation

1.—(1) These Regulations may be cited as the Weights and Measures Regulations (Northern Ireland) 1967 and shall come into operation on 25th October 1967.

(2) The Regulations set out in Schedule 1 are hereby revoked.

#### Interpretation

2. In these Regulations the following expressions shall have the following meanings respectively:----

"the Ministry" means the Ministry of Commerce;

- "the Act" means the Weights and Measures Act (Northern Ireland) 1967; "approved pattern" means a pattern in respect of which a certificate of approval under section 6 of the Act is in force;
- "authorised modification" means an approved pattern modified in accordance with an authorisation for the time being in force under the said section 6.
- "automatic weighing machine" means a machine in which special self-acting machinery is introduced to effect an automatic feed, the rapid weighing of given loads, the registration and summation of loads, and other similar purposes or some of them; "beam scale" means any equal-armed weighing instrument, the pans
- of which are below the beam:

"capacity" means, in relation to a weighing instrument, the maximum load which the instrument is constructed to weigh; "counter machine" means any equal-armed weighing instrument of a

- capacity not exceeding 1 hundredweight, the pans of which are above the beam, and includes, together with the ordinary type, such instruments as are specially designed for counter use, and which do not exceed the said capacity;
- "dead-weight machine" means any weighing instrument similar in principle of construction to a counter machine but of a capacity of one hundredweight or more, and includes---
  - (a) such an instrument with the weighing platform near to the ground and with the connecting stays or hooks above the beam and commonly known as a low pattern machine or cotton machine;
  - (b) such an instrument with the weighing platform at any convenient height and with the connecting stays or hooks below the beam, and commonly known as a high pattern machine or single machine;
  - (c) such an instrument which combines the characteristics of the instruments in (a) and (b) above commonly known as a double .machine;
- "error" in relation to a weighing instrument includes, save where the
- context otherwise requires, deficency in sensitiveness; "the prescribed stamp" means the stamp prescribed by the Ministry by regulations made under the Act; and
- "weighing instrument" means any weighing equipment other than a weight or counterpoise.

#### Application and prescriptions under section 5

3.-(1) Subject to paragraph (2) of this regulation, these Regulations

shall apply to all weighing and measuring equipment for use for trade of the following classes:—

- (a) linear measures;
- (b) liquid capacity measures;
- (c) dry capacity measures;
- (d) weights;
- (e) beam scales;
- (f) balances;
- (g) counter machines;
- (h) spring balances;
- (i) steelyards;
- (j) dead-weight machines;
- (k) platform weighing machines;
- (l) weighbridges;
- (m) crane weighing machines;
- (n) automatic weighing machines;

and such equipment is hereby prescribed as equipment to which section 5 of the Act applies:

Provided that, in so far as they relate to the material of which any such equipment shall be made, these Regulations shall not apply to equipment for use in the manufacture of explosives.

(2) Nothing in these Regulations shall apply to any weighing or measuring equipment of the following descriptions:—

- (a) weighing equipment for use by the public for weighing a person;
- (b) weighing equipment for use only for weighing coins or currency notes for the purpose of determining their number.

Inspection and testing of weighing and measuring equipment for use for trade

4.—(1) Weighing and measuring equipment shall be submitted for testing and tested in a clean condition.

(2) Weighing or measuring equipment submitted for testing shall be complete in itself, and shall not bear a maker's mark or any trade mark which, in the opinion of the inspector, might reasonably be mistaken for the prescribed stamp.

#### Passing as fit for use for trade

5.—(1) No weighing or measuring equipment shall be passed as fit for use for trade unless—

- (a) subject to paragraph (2), it complies with the appropriate requirements of these Regulations: and
- (b) in the case of—
  - (i) a dry capacity measure with more than one purported value in terms of units of capacity measurement and commonly known as a double measure;
  - (ii) weighing or measuring equipment presenting any novel feature;
  - (iii) a weighing instrument with removable hooks (other than the hooks or bearings of swan-neck beams, or the hooks at the end of the steelyard indicators on weighing instruments constructed on the compound lever principle);
  - (iv) a counter machine with sliding counterpoises;
  - (v) a steelyard which is of the reversible type and has three hooks, or is constructed on the acclerating weighing instrument principle, or is of the counter type, or is constructed without a zero graduation or has a capacity of less than 56 pounds;

(vi) a price computing weighing instrument;

it is made in accordance with an approved pattern or authorised modification.

- (c) in the case of a weight or a capacity measure, it is not marked with an indication of its purported value in units of both the imperial system and the metric system;
- (d) it is sufficiently strong to withstand the wear and tear of ordinary use in trade.

(2) Nothing in paragraph (1)(a) of this regulation shall prohibit the passing as fit for use for trade of any avoirdupois weight of the bell type which bears a stamp applied prior to the coming into operation of these Regulations and which falls within the prescribed limits of error.

#### Stamping

**6.**—(1) Subject to paragraph (2), no weighing or measuring equipment shall be stamped unless it contains a plug or stud of soft metal for the reception of the prescribed stamp, such plug or stud being made irremovable by undercutting or otherwise.

- (2) Paragraph (1) shall not apply to:-
- (a) linear measures;
- (b) capacity measures made of glass, earthenware, enamelled-metal, plastic or vulcanite;
- (c) liquid capacity measures made of metal;
- (d) dry capacity measures made of material other than metal;
- (e) avoirdupois weights made of stainless steel;
- (f) metric weights other than weights made of iron;
- (g) grain weights, troy weights, apothecaries weights or pennyweights;
- (h) balances.

#### Obliteration of stamps

7.—(1) Stamps shall be obliterated by an inspector in accordance with the requirements of these Regulations, by means of punches or pincers of a six-pointed star design as shown in the following illustration:—



(2) Subject to paragraphs (4) and (5), an inspector shall obliterate the stamp on any weighing or measuring equipment which falls outside the prescribed limits of error or fails to comply with the appropriate requirements of these Regulations.

- (3) An inspector shall obliterate the stamp on—
- (a) any weight or measure if, owing to its being broken, much indented or otherwise damaged, it does not, in the opinion of the inspector, admit of proper adjustment;
- (b) any weight or measure which, since it was last stamped, has, in the opinion of the inspector, had its accuracy affected by reason of any alteration, addition, adjustment or repair;
- (c) any equal-armed weighing instrument which, since it was last stamped, has been altered, adjusted or repaired;

(d) any other weighing instrument which, since it was last stamped, has been so altered, adjusted or repaired that, in the opinion of the inspector, it has become necessary to ascertain that the indications of the instrument remain correct throughout its range.

(4) In the case of any weighing or measuring equipment found upon testing not to comply with the requirements of these Regulations by reason only that it falls outside the prescribed limits of error, an inspector may serve upon the person for the time being in possession of that equipment a notice requiring him to have the equipment corrected within a specified period not exceeding 28 days; and, without prejudice to the duty of the inspector under paragraph (2) to obliterate the stamp on that equipment on other grounds, the inspector shall not obliterate the stamp on that equipment for the reasons aforesaid unless upon the expiration of the said period the equipment is found upon testing to fall outside the prescribed limits of error.

(5) Nothing in paragraph (2) shall require an inspector to obliterate the stamp on any avoirdupois weight of the bell type which bears a stamp applied prior to the coming into operation of these Regulations and which falls within the prescribed limits of error.

#### PART II

#### LINEAR MEASURES

#### Materials and principles of construction

**8.**—(1) Linear measures shall be made of steel, brass, aluminium alloys, ivory, laminated bakelite, reinforced fibreglass, hardwood or woven tape, or of any other material approved by the Ministry.

(2) Such measures of a maximum purported value of 2 feet or more and made of wood shall have both ends tipped with metal and the tips shall be riveted through the wood.

(3) Linear measures shall be straight and free from flaws.

(4) In the case of measures with sliding or calliper arms, such arms shall have no more play than is necessary for easy movement.

(5) Linear measures which are subdivided shall be graduated clearly and indelibly, and the numbered graduations shall be marked by longer lines than the graduations which are not numbered;

(6) Linear measures which are not subdivided shall be clearly and indelibly marked with the words "not subdivided".

(7) Linear measures shall have their maximum purported value conspicuously, legibly and durably marked at one end of the measure, either in full or by means of one of the following abbreviations only:—

yd ft in m dm cm mm.

#### Testing

9. Linked measures and riband or tape measures shall be tested when subjected to a tension or pull as follows:—

(a) Riband or tape measures made of material other than metal

(b) Riband or tape m	easures	made	of me	tal		•••	10 pounds;
(c) Linked measures		•••	•••		•••	•••	15 pounds;

and the measure under test shall be supported throughout its whole length on a plane and even base.

#### Limits of error

10. Part I of Schedule 2 shall have effect for prescribing limits of error in relation to linear measures.

#### Stamping Stamping

11.—(1) Subject to paragraph (2), in the case of linear measures the prescribed stamp shall be placed near one end or, in the case of sub-divided measures, near the beginning of the scale on each graduated side.

(2) In the case of linked measures and riband and tape measures, the prescribed stamp may be placed on a metal label or disc permanently attached to the measure or on the handle thereof.

#### PART III

#### LIQUID CAPACITY MEASURES

#### Materials and principles of construction

12.—(1) Liquid capacity measures shall be made of aluminium alloys, copper, copper alloys, earthenware, enamelled-metal, glass, nickel alloys, plated, tinned or galvanised iron or steel, stainless steel, tin alloys, urea formaldehyde plastic or vulcanite, or of any other material approved by the Ministry.

(2) Liquid capacity measures made of pewter or of other tin alloys shall contain at least 80 per cent. by weight of tin, and shall not contain more than 10 per cent. by weight of lead.

(3) All such measures shall bear the name and address of the maker on the underside of the bottom of the measure.

(4) Liquid capacity measures made of copper or copper alloys shall be well tinned all over the inside; on plated measures the coating shall show no signs of peeling.

(5) On measures on which there are strengthening ribs or bands, such ribs or bands shall not take such a form as to show, by indentation or otherwise, any divisions on the measure which, in the opinion of the inspector, might reasonably be mistaken for graduations.

(6) Liquid capacity measures, if their maximum purported values are clearly defined, may have a top rim, lip or retaining edge to prevent spilling: provided that—

- (a) in the case of measures made of metal for the sale of milk and in the form of churns, the top rim, lip or retaining edge shall not increase the capacity of the measure by more than 25 per cent. of its maximum purported value;
- (b) in the case of other measures, the top rim, lip or retaining edge shall not increase the capacity of the measure by more than 10 per cent. of its maximum purported value.
- (7) No liquid capacity measure shall be so constructed that—
- (a) it has a false bottom; or
- (b) it does not completely empty when tilted to an angle of 120 degrees from the vertical.

(8) In the case of liquid capacity measures fitted with a tap, the tap shall completely empty the measure without tilting.

(9) Publicans' measures made of metal, glass, or earthenware may be provided with a spout or projecting mouth; they may also have a bottom rim but, in the case of measures of a maximum purported value not exceeding 1 pint, such rim shall not project more than half an inch below the bottom of the measure.

(10) Dipping measures made of metal of a maximum purported value not exceeding half a gallon for use for the sale of milk shall be of circular or elliptical section with vertical sides, and the height shall not be more or less by 10 per cent. than  $1\frac{1}{2}$  times the mean diameter of the section.

NETTERSTREET

(11) Liquid capacity measures made of glass, other than apothecaries measures, shall have their maximum purported values defined either—

- (a) by the brim of the measure; or
- (b) by a line not less than 2 inches in length, and distant not less than half an inch nor more than  $1\frac{1}{2}$  inches from the brim.

(12) Liquid capacity measures made of earthenware shall have their maximum purported values defined either—

- (a) by the brim of the measure; or
- (b) by an indelible line marked on the inside of the measure, so that—
  - (i) in the case of measures of a maximum purported value not exceeding 1 quart, the distance from the bottom of the line to the brim does not exceed three-eights of an inch;
  - (ii) in the case of measures of other maximum purported values, the said distance does not exceed three-quarters of an inch.

(13) Subject to paragraphs (14) and (15), any liquid capacity measure (other than a measure made of metal of a maximum purported value of half a gallon or less or  $2\frac{1}{2}$  litres or less) may be used for trade by means of any division or subdivision marked thereon as a capacity measure of any lesser quantity.

(14) In the case of measures made of glass which are subdivided by graduations, the total number of graduations on the measure shall be marked thereon and all graduations shall be marked by clearly defined lines, which shall—

- (a) in the case of measures of a maximum purported value of 1 gallon or less (other than an apothecaries measure), be not less than 1 inch in length; and
- (b) be not less than one-twelfth of an inch apart.

(15) In the case of measures made of metal which are subdivided by graduations, all graduations shall be marked by clearly defined lines and, if such measures are for use for the sale of milk and are—

- (a) of a maximum purported value not exceeding 5 gallons, the graduations shall be marked on two metal strips fixed opposite to each other inside the measure; or
- (b) of a maximum purported value exceeding 5 gallons, the graduations shall be marked either on a metal strip inside the measure and extending to the whole depth of the measure or on metal tablets securely soldered to the measure.

(16) Liquid capacity measures shall have their maximum purported value conspicuously, legibly and durably marked on the outside of the body of the

measure (and not upon the handle, bottom, rim or edges) either in full or by means of one of the following abbreviations only:---

gal qt pt fl.oz fl.dr min 1 dl cl ml.

(17) The maximum purported value shall be marked—

- (a) on measures made of glass on which the said value is defined by a line, at the line;
- (b) on measures made of enamelled-metal, in a distinctly different colour from that of the body of the measure;
- (c) on measures made of metal for use for the sale of milk and of a said value exceeding 5 gallons, on the graduated strip or the topmost tablet as well as on the outside of the measure;
- (d) on measures made of sheet metal, by means of embossing, engraving or impressing on the body of the measure or on a slip of tin or on a shield securely soldered to the measure.

(18) Apothecaries measures which are subdivided shall be made of glass and shall be of the conical or cylindrical type.

(19) If apothecaries measures are marked with an indication of their equivalent purported values in terms of weight, the words "of water" shall also be marked on the measure in close proximity to the said indication.

#### Testing

13.—(1) Liquid capacity measures of maximum purported values between 8 gallons and one-fifth of a gill inclusive, shall be tested by transferring water from the Northern Ireland local or working standard into the measure under test.

(2) Measures—

- (a) with a lip or rim, shall be tested to the bottom of the lip or rim;
- (b) on which the purported value is defined by a line, shall be tested to the bottom of the line and, in the case of measures made of glass, shall be so tested by taking the level of the water at the bottom of the meniscus.

#### Limits of error

14. Part II of Schedule 2 shall have effect for prescribing limits of error in relation to liquid capacity measures.

#### Stamping

15. The prescribed stamp shall be placed on liquid capacity measures as follows:—

- (a) on measures made of glass, earthenware, enamelled-metal, urea formaldehyde plastic or vulcanite, it shall be etched or sand-blasted beneath or near to the indication of the purported value on the outside of the measure;
- (b) on measures made of metal (other than enamelled-metal) which are subdivided, it shall be placed both on solder affixed to the inside strips or tablets near to the top-most graduation and also on the outside of the measure near to the indication of the purported value;
- (c) on measures made of metal which are not subdivided and which have no lip or rim, it shall be placed near to the indication of the purported value on the outside of the measure;

- (d) on measures made of metal (other than enamelled-metal) which are not subdivided but which have a lip or rim, it shall, as far as practicable, be placed on the bottom of the inside of the lip or rim;
- (e) on measures other than those specified in the preceding provisions of this regulation, it shall be placed on a plug or stud of soft metal provided for such use.

#### Part IV

#### DRY CAPACITY MEASURES

#### Materials and principles of construction

16.—(1) Dry capacity measures shall be made of aluminium alloys, copper, copper alloys, plated, tinned or galvanised steel or iron, stainless steel, or any other material approved by the Ministry.

(2) Measures of a maximum purported value of half a bushel (4 gallons) or more shall be provided with handles.

(3) Dry capacity measures of a maximum purported value not exceeding 1 bushel (8 gallons) shall be of cylindrical shape, with the internal diameter approximately equal either to the depth or to twice the depth, the difference between the internal diameter and the depth being not greater than 5 per cent. of the depth or twice the depth respectively.

(4) Dry capacity measures shall have their purported values marked thereon in like manner as they are marked on liquid capacity measures.

#### Testing

17. Dry capacity measures shall be tested with water.

#### Limits of error

18. Part II of Schedule 2 shall have effect for prescribing limits of error in relation to dry capacity measures.

#### Stamping

19. The prescribed stamp shall be placed on dry capacity measures made of metal near the brim in a vertical line with the indication of the purported value. Where necessary, such measures shall be provided with a plug of soft metal to receive the stamp.

#### Part V

#### WEIGHTS

Materials and principles of construction

20.—(1) Weights shall be made entirely of metal, other than lead or other soft metal or soft alloy:

Provided that lead may be inserted into a weight for the purposes of adjustment.

(2) No weight of a purported value of less than 4 ounces in the imperial system, or less than 100 grammes in the metric system, shall be made of iron.

(3) Avoirdupois weights shall not be made of aluminium or of any other metal or alloy of low density.

(4) Subject to paragraph (11), no weight shall be made of two or more different and unalloyed metals.

(5) Avoirdupois weights shall be of the flat-circular, bar or bell type or, if made of iron, may be of the ring type. All avoirdupois weights of a purported value of 50 pounds, 20 pounds, 10 pounds or 5 pounds, shall be of octagonal shape.

- (6) Avoirdupois weights of the flat-circular type shall-
- (a) if made of iron, only be made in purported values from 4 pounds to 4 ounces inclusive;
- (b) if not made of iron, only be made in purported values from 4 pounds to half a dram inclusive, and the weights in each set shall be of similar shape and proportional dimensions.

(7) Every avoirdupois weight of the bell type of a purported value set out in column 1 of the Table contained in Schedule 4 shall be so constructed that—

- (a) it is of such shape that a diagram of the figure of its vertical section taken through the centre from top to base would correspond to that contained in the said Schedule; and
- (b) the height of the said weight is that set out in column 2(a) of the said Table appropriate to a weight of that purported value, or approximate thereto within the appropriate limits set out in column 2(b) of that Table.

(8) Apothecaries weights and troy weights of a purported value of 1 ounce or more shall be made of stainless steel, brass, gunmetal or bronze and shall be of a cylindrical type and provided with carrying handles or knobs.

(9) Grain weights, apothecaries weights, troy weights and pennyweights of a purported value of less than 1 ounce shall be made of any of the metals aforesaid and may in addition be made of platinum, aluminium or aluminium alloys, and shall be of the flat or wire type.

(10) Metric weights (other than carat (metric) weights), including counter-

- (a) if made of iron shall be of the hexagonal type;
- (b) if not made of iron shall be of the cylindrical, hexagonal, flat or wire type;
- (c) if of the cylindrical type and of a purported value of 5 grammes or more, the height of the cylindrical portion shall be approximately equal to the diameter.

(11) Weights made of iron shall be blacked, black-leaded, oxidised or protected by galvanisation or by any other process approved by the Ministry.

(12) No weight made of iron shall be fitted with removable or split rings.

(13) Weights shall be free from flaws and smooth on all their surfaces.

(14) Weights shall have their purported values conspicuously, legibly and durably marked thereon, either in full or by means of one of the following abbreviations only:—

kg lb oz dr oz.tr oz.apoth dŵt kilog kilogram gr milligram C.M.: gram g mg provided that-

(a) until 31st January 1969, metric weights which were first stamped prior to the said day may be marked with one of the following abbreviations:—

grm dg cg

(b) apothecaries weights may be marked by means of one of the following symbols:---

3 iv (4 drachms)	3 ij (2 drachms)	3 i (1 drachm)
) ij (2 scruples)	$\frac{1}{3}$ fs (1 $\frac{1}{2}$ scruples)	A i (1 scruple)
$f f s \left(\frac{1}{2} \text{ scruple}\right).$	-	<b>u</b>

(15) If the maker's name is stated on any weight, it shall be in letters not exceeding half the size of the letters or numerals indicating the purported value of that weight.

(16) Avoirdupois weights (other than those made of stainless steel) of a purported value of 1 ounce or more, shall be provided with one adjusting hole only.

(17) Avoirdupois weights made of stainless steel shall not be required to have an adjusting hole.

(18) The adjusting holes in all weights shall be in the under surface of the weight and shall not extend to the upper surface. They shall be undercut and plugged with lead, which shall cover the bottom of the hole and shall not project beyond the surface.

(19) No avoirdupois weight (other than one made of stainless steel) shall be adjusted otherwise than by means of an adjusting hole in accordance with paragraphs (16) and (18).

(20) In the case of weights of the flat-circular type made of iron, the lead inserted for adjustment shall be not less than one-eighth of an inch in thickness; the approximate depth of adjusting hole shall be equal to three-fifths of the centre thickness of the weight; and the approximate minimum distance of the lead from the surface of the weight shall, when new be one-fifth of the centre thickness of the weight.

(21) The adjusting holes in such weights shall be circular and their smallest diameter shall be approximately—

- (a) in the case of weights of a purported value of 4 pounds or 2 pounds, 1 inch;
- (b) in the case of weights of a purported value of 1 pound, three-quarters of an inch;
- (c) in the case of weights of a purported value of 8 ounces or 4 ounces, half an inch.

(22) The adjusting holes in weights made of iron other than those of the flat-circular type, shall be rectangular or circular, and shall not be greater in area than the area of a rectangle of the following approximate dimensions:—

Purported value of weight	Length	Width	Approximate minimum distance of lead from surface when new
	inches	inches	inches
56 pounds	$2\frac{1}{2}$	11	11/2
56 pounds	2	1	1
14 "	1½ 1¼	<u>अ</u> 	4 5 8
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	} 1	<u>1</u> 2	1 2
5 " 4 "	$\frac{3}{4}$	1/2	$\frac{1}{2}$
2 " 1 pound	58	1 2	1/2
8 ounces 4 "	581	3 8 8 16	14114

(23) The minimum distance of the lead (when new) from the surface of the weight shall correspond approximately to that specified in the fourth column of the foregoing Table.

(24) The adjusting holes in weights other than weights made of iron shall be circular and of the following approximate dimensions:—

Purported value of weight	Diameter	Depth	Approximate minimum distance of lead from surface when new
Other than flat-	inches	inches	inches
circular shape:	$\frac{1}{2}$	2	1
$20_{14}, \ldots$	1	112	<u>3</u> 4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1	<u>1</u> 2
9 annoaa	$\frac{1}{2}$	<u>3</u> 4	<u>3</u> 8
4 ,, 2 ,,	38	<u>5</u> 8	$\frac{1}{4}$ .
1 ounce		<u>3</u> 8	$\frac{3}{16}$
Flat-circular shape:—			
4 pounds 2 " 1 pound	$\frac{3}{4}$	} sths centre	} th centre
8 ounces 4 2	$\frac{1}{2}$	thickness of weight	thickness of weight
1 ounce	$\frac{1}{4}$	) <sup>(2)</sup> ,	]

(25) The minimum distance of the lead (when new) from the surface of the weight shall correspond approximately to that specified in the fourth column of the foregoing Table.

#### Testing

**21.**—(1) The inspector shall not test any weight unless his testing equipment is—

- (a) balanced in true equipoise;
- (b) free from any influences likely in his opinion to affect its accuracy.
- (2) In testing any weight the inspector shall—
- (a) place the appropriate Northern Ireland local or working standard on one pan of his testing equipment; and
- (b) place counterpoises on the other pan so that the pointer exactly indicates zero; and
- (c) replace the standard by the weight under test; and

(d) if the pointer does not then exactly indicate zero, add sufficient testing counterpoises to either pan to determine whether the weight falls within the prescribed limits of error:

provided that in any particular case the inspector may, if he considers it sufficient, test the weight by direct comparison with the appropriate Northern Ireland local or working standard.

#### Limits of error

22. Part III of Schedule 2 shall have effect for prescribing limits of error in relation to weights.

#### Stamping

23.—(1) Weights shall be stamped with the prescribed stamp on the lead in the adjusting hole, if any.

(2) Weights not provided with an adjusting hole shall be stamped on the under surface of the weight.

#### PART VI

#### ALL WEIGHING INSTRUMENTS

#### Marking of maker's name etc. on weighing instruments

24.—(1) Notwithstanding anything contained in Parts VII to XIV relating to weighing instruments of a particular type, class or description, the provisions of this Part shall have effect in relation to all weighing instruments to which these Regulations apply.

(2) New weighing instruments shall have their maker's name and their capacity conspicuously, legibly and durably marked thereon.

(3) Where units of measurement are marked on weighing instruments, they shall be marked either in full or by means of one of the following abbreviations only:—

gr cwt ct1 ar lb οz dr oz.tr đwt. oz.apoth milligram kg. kilogram kilog gram grm mg g C.M.

#### Materials and principles of construction

25.—(1) All knife-edges and bearings in weighing instruments shall be of hard steel or agate or of other material approved by the Ministry; they shall be so fitted as to allow the beam or steelyard indicator to move easily, and the knife-edges shall substantially bear upon the whole length of their working parts.

(2) All removable counterpoises weighing 1 ounce or more and all sliding poises on weighing instruments shall contain an undercut adjusting hole or other means of adjustment.

(3) Any loose material used in any such counterpoise or poise shall be securely enclosed therein.

(4) Weighing instruments with removable parts, the removal of which would affect their accuracy, shall be so constructed that they cannot be used if any of the said parts are removed.

(5) Where weighing instruments have interchangeable or reversible parts, the interchange or reversal thereof shall not affect the accuracy of the instrument.

(6) All graduations on weighing instruments shall be so defined that the positions of all sliding poises or indicators are clearly readable.

#### Testing

26.—(1) Subject to paragraph (2), in testing any weighing instrument, the inspector shall satisfy himself that—

- (a) it is properly balanced when unloaded;
- (b) the beam (if any) has sufficient room for oscillation and returns to the position of equilibrium when load is removed;
- (c) the indicator (if any) returns to the zero mark or minimum graduation when the load is removed.

(2) Paragraph 1(a) shall not apply in the case of a weighing instrument of an approved pattern or authorised modification if such an instrument is not so constructed as to balance when unloaded.

(3) Movable weighing instruments provided with a base shall be tested on a level plane.

(4) Weighing instruments which are designed to be suspended when in use shall be suspended during testing.

(5) Weighing instruments used in any of the following transactions, that is to say, transactions—

(a) in gold, silver or other precious metals,

- (b) in precious stones,
- (c) in jewellery,
- (d) in silk,

(e) by retail in drugs or other pharmaceutical products, shall either—

- (i) be balances, or
- (ii) being instruments other than balances, fall within the prescribed limits of error for beam scales marked "Class B".

(6) Weighing instruments used in retail transactions in tobacco shall either—

(a) be balances, or

(b) being instruments other than balances, fall within the prescribed limits of error for beam scales marked "Class B" or "Class C".

(7) Unless otherwise provided in these Regulations, vibrating weighing instruments shall be tested for sensitiveness by loading the instrument with the maximum testing load (or as near thereto as, in the opinion of the inspector, circumstances permit) with the beam or steelyard indicator in a horizontal position, and ascertaining that it moves with the addition of the weight to be added to test sensitiveness as specified in Tables I, II, IV, V, VI, VIII or IX, as the case may be, of Schedule 3. No test for sensitiveness at a lower load shall be made.

(8) In the case of beam scales and balances, the addition of the said weight to either pan shall cause an appreciable movement of the beam.

(9) In the case of vibrating weighing instruments other than beam scales or balances, the addition of the said weight shall cause the beam or steelyard indicator to rise or fall to the limit of its range of movement.

(10) Vibrating weighing instruments shall be tested for error by ascertaining the weight to be added thereto or removed thereform in order to bring the beam or steelyard indicator of the instrument to a horizontal position when the instrument is loaded with the maximum testing load (or as near thereto as, in the opinion of the inspector, circumstances permit).

(11) Accelerating weighing instruments shall be tested for error by ascertaining the weight required just to keep the beam or steelyard indicator in a horizontal position on its stop or carrier and no more; and shall be further tested by ascertaining the weight required to bring back the beam or steelyard indicator from its position of greatest displacement to the horizontal position, the instrument being at all times fully loaded and truly balanced.

(12) In testing weighing instruments fitted with a price computing mechanism, the inspector shall in addition to testing at each numbered graduation satisfy himself that—

(a) they indicate the price correctly; and

(b) they comply with the requirements of these Regulations in so far as they are applicable to the particular type, class or description of weighing instrument concerned.

#### PART VII

#### BEAM SCALES AND BALANCES

#### Principles of construction

27.—(1) No beam scale shall—

- (a) if constructed with swan-neck ends, be of a capacity of 7 pounds or less or have a beam under 16 inches in length;
- (b) be fitted with loaded weight pans;
- (c) if of a capacity of less than 2 hundredweight, be fitted with wooden scale boards.

(2) Beam scales which are constructed with swan-neck ends shall have flat end bearings and swivel hooks.

(3) Any attachment for adjusting beam scales or balances shall be permanently affixed to the instrument and shall be so constructed that it cannot be readily tampered with.

(4) All beam scales with wooden scale boards shall be provided with an adjusting balance ball or box.

(5) All beam scales shall be indelibly marked either with the inscription "Class B" or with the inscription "Class C".

#### Testing

28.—(1) In testing beam scales and balances, the inspector shall satisfy himself that, when the pans are loaded to half the capacity of the instrument and the knife-edges or bearings are moved laterally or backwards and forwards within their limits of movement, there is no appreciable difference in the indications of weight shown by the instrument.

(2) Beam scales and balances shall fall within the prescribed limits of error whether the load is on the middle or near the edges of the pans.

Limits of error

29. Schedule 3 and Table I shall have effect for prescribing limits of error in relation to beam scales and balances.

#### Stamping

**30.**—(1) In the case of beam scales, the prescribed stamp shall be placed on the plug or stud provided for that purpose.

- (2) In the case of balances, the stamp shall be placed either—
- (a) on the plug or stud on the base of the pillar; or
- (b) upon a special plate permanently and irremovably attached to the base of the instrument.

#### PART VIII

#### COUNTER MACHINES

Materials and principles of construction

**31.**—(1) Counter machines shall not be constructed upon the accelerating weighing instrument principle.

(2) Where the beam of a counter machine has two side members, they shall be connected together by not less than two cross bars; and the supports for the pans shall be of suitably rigid structure, such as crosses strengthened by straps.

(3) The centre forks of counter machines shall be so fixed that they cannot twist or get out of place.

(4) The bearing surfaces and points of contact of all stays, hooks and loops of counter machines shall be of hard steel or agate or of other material approved by the Ministry.

(5) Where a counter machine is adjusted by means of a balancing box, the box shall be permanently fixed beneath the weights pans and shall only be large enough to contain loose material to an amount not exceeding 1 per cent. of the capacity of the machine.

(6) No other means of adjustment shall be fitted, except where the machine is of an approved pattern or authorised modification.

#### Testing

32.-(1) In testing counter machines, the inspector shall satisfy himself-

(a) in the case of non-self-indicating machines, that the minimum movement of the beam from the horizontal in either direction is as follows:—

Capacity of machine	Minimum movement of beam from the horizontal
Not exceeding 4 pounds	
, 7 , , , , , , 28 ,	$\frac{1}{16}$ ,, $\frac{3}{8}$ ,, $\frac{7}{16}$ ,, $\frac{1}{2}$ ,,
" 28 " " " " " 56 " Above 56 pounds	16 "
Above 56 pounds	1 2 >>

(b) that, when the pans are loaded to half the capacity of the machine (the load being uniformly distributed) and the knife-edges or bearings are moved laterally or backwards and forwards within their limits of movement, there is no appreciable difference in the indications of weight shown by the instrument.

(2) When the goods pan is not in the form of a scoop, the machine shall indicate the same weight within half the prescribed limits of error if the centre of a load equal to half the capacity of the machine is placed on the goods pan anywhere within a distance from the centre equal to one-third of the greatest length of the pan, or, if the pan has a vertical side, against the middle of that side; the load on the weights pan being entirely on that pan but in any position on it.

(3) Where the goods pan is in the form of a scoop, the machine shall fall within the prescribed limits of error when a load equal to half the capacity of the machine is placed against the middle of the back of the scoop and a like load is placed in any position on the scoop; the load on the weights pan being entirely on that pan but in any position on it.

#### Limits of error

33. Schedule 3 and Table II shall have effect for prescribing limits of error in relation to counter machines.

#### Stamping

34. The prescribed stamp shall be placed upon the plug or stud provided for that purpose on a conspicuous part of the counter machine.

#### PART IX

#### SPRING BALANCES

#### Principles of construction

**35.**—(1) The extremity of the pointer of a spring balance shall not exceed one-thirty-second of an inch in width, and shall not be more than one-tenth of an inch from the scale or dial.

(2) The scales of spring balances shall be subdivided into approximately equal parts, and the minimum width apart of the graduations shall be not less than one-sixteenth of an inch for spring balances of a capacity not exceeding 30 pounds, and not less than one-eighth inch for spring balances of a capacity of 40 pounds or more.

(3) The maximum weights corresponding to the interval between consecutive graduations shall be as follows:—

Capacity of spring	balance		Maximum weight corresponding to interval between consecutive graduations
1 pound 2 pounds to 7 pounds 10 ", ", 15 ", 20 ", ", 30 ", 40 ", ", 60 ",	• • • • • •	• • • • • •	2 drams 4 " 8 " 1 ounce
40 " " 60 " 100 " and over	••	•••	2 ounces 1/200th of capacity

. - .

(4) Where the graduations commence at any point of the scale or dial other than at the zero indication, the position of the pointer when there is no load shall be clearly indicated by a zero mark.

(5) Spring balances of capacities between 1 pound and 100 pounds inclusive shall only be made in capacities corresponding to those specified in the first column of the Table contained in paragraph (3).

(6) Where spring balances are provided with an adjustable pointer, the range of adjustment shall not exceed 1 per cent. of the capacity of the instrument, except that in the case of spring balances for use at a coal mine it shall not exceed 2 per cent. of the said capacity.

#### Testing

**36.**—(1) Spring balances shall be tested at each numbered graduation and may also be tested at intermediate graduations.

(2) Spring balances shall be tested by means of both increasing and decreasing loads, and the spring shall be allowed to vibrate before a reading is taken.

- (3) In the case of a spring balance the pan of which is above the spring-
- (a) if the pan is not in the form of a scoop, the instrument shall indicate the same weight within half the prescribed limits of error if the centre of a load equal to half the capacity of the instrument is placed on the pan anywhere within a distance from the centre equal to one-third of the greatest length of the pan, or, if the pan had a vertical side, against the middle of that side;
- (b) if the pan is in the form of a scoop, the instrument shall fall within the prescribed limits of error when a load equal to half the capacity of the instrument is placed against the middle of the back of the scoop and again when a like load is placed in any position on the scoop.

(4) In the case of a spring balance the pan of which is below the spring, the instrument shall fall within the prescribed limits of error when a load equal to the capacity of the instrument is placed in any position on the pan.

(5) Spring balances may be tested for efficiency or ability to recover by leaving on them for a period not exceeding 24 hours, a load equal to the capacity of the instrument; and then, after the expiration of a further period of 4 hours, by testing for accuracy.

(6) Spring balances shall not be tested for sensitiveness.

#### Limits of error

37. Schedule 3 and Table III shall have effect for prescribing limits of error in relation to spring balances.

#### Stamping

38. The prescribed stamp shall be placed upon the plug or stud provided for that purpose, which wherever practicable shall pass through the scale or dial and the frame of the spring balance. The plug or stud shall be so supported as to avoid risk of injury to the instrument by stamping.

#### PART X

#### STEELYARDS

#### Materials and principles of construction

**39.**—(1) Steelyards shall be made of wrought iron or of steel or of other material approved by the Ministry.

(2) In the case of every steelyard-

- (a) the shank shall be straight—
- (b) each set of notches or graduations on the shank shall be cut in one plane and shall be at right angles to the shank;
- (c) there shall be fitted a stop or other device to prevent excessive oscillation of the shank;
- (d) end fittings, sliding poises and suspending hooks shall not be readily removable;
- (e) the sliding poise shall be freely movable without risk of injury to the notches or graduations from constant use, and there shall be a stop to prevent it from travelling behind the zero mark or lowest graduation.

#### Testing

40. Steelyards shall be tested at each numbered graduation by means of both increasing and decreasing loads.

#### Limits of error

41. Schedule 3 and Table IV shall have effect for prescribing limits of error in relation to steelyards.

#### Stamping

42. The prescribed stamp shall be placed upon the plug or stud provided for that purpose on the shoulder of the steelyard.

#### PART XI

#### DEAD-WEIGHT MACHINES

#### Materials and principles of construction

43.—(1) The bearing surfaces and points of contact of all stays, hooks, loops and adjustable slides on dead-weight machines shall be made of hard steel, and the knife edges shall be so fitted as to be incapable of twisting.

(2) Adjustable slides shall be secured in position by means of lock nuts or other suitably secure devices.

(3) The goods platform of dead-weight machines shall not exceed in length the length of the beam, or in width double the width of the beam. Folding wings shall not increase such dimensions by more than one-third in either direction.

(4) The platforms shall be made of metal or hard wood.

(5) The minimum movement of the beam from the horizontal in deadweight machines, shall be as follows:—

- (a) if the machine is of the vibrating weighing instrument type, fiveeights of an inch in both directions;
- (b) if the machine is of the accelerating weighing instrument type, seveneights of an inch in one direction only.

(6) Loose balancing material for the adjustment of dead-weight machines shall be contained in a balancing box permanently fixed beneath one platform, and its weight shall not exceed three-quarter per cent. of the capacity of the machine. Any other balancing material shall be in one piece and shall be permanently attached to the machine.

#### Testing

44.—(1) Dead-weight machines shall indicate the same weight within half the prescribed limits of error when a load equal to one-quarter of the capacity of the machine is placed successively at the middle of the front and back of each platform and centrally over the knife edges on each side of each platform.

(2) Except in the case of double machines, dead-weight machines shall also fall within the prescribed limits of error when a load equal to the capacity of the machine is uniformly distributed over each platform.

(3) Double machines shall also fall within the prescribed limits of error when a load equal to half the capacity of the machine is uniformly distributed over both goods platforms, a load equal to the capacity of the machine being uniformly distributed over the weights platform.

#### Limits of error

45. Schedule 3 and Table V shall have effect for prescribing limits of error in relation to dead-weight machines.

#### Stamping

46. The prescribed stamp shall be placed upon the plug or stud provided for that purpose on a conspicuous part of the beam of the dead-weight machine.

#### PART XII

## PLATFORM WEIGHING MACHINES AND WEIGHBRIDGES

Materials and principles of construction

47.—(1) The steelyard indicator of a platform weighing machine or weighbridge shall not incorporate any readily removable parts, except the support for the counterpoises.

(2) There shall be a stop or stops to prevent any sliding poise from travelling behind the zero mark.

(3) The indicating mechanism may be confined in a locked box or case, provided that the indications or graduations are clearly visible.

(4) The minimum movement from the horizontal of the steelyard indicator shall be as follows:—

- (a) in the case of platform weighing machines—
  - (i) if they are of the vibrating weighing instrument type, three-eighths of an inch in both directions;
  - (ii) if they are of the accelerating weighing instrument type, fiveeights of an inch in one direction only;
- (b) in the case of weighbridges-
  - (i) if they are of the vibrating weighing instrument type, half an inch in both directions;
  - (ii) if they are of the accelerating weighing instrument type, threequarters of an inch in one direction only.

(5) If a movable hutch, barrow, frame or bucket is used instead of an ordinary platform on platform weighing machines and weighbridges, it shall form an essential part of the instrument without which the instrument cannot be balanced.

(6) Loose counterpoises for platform weighing machines and weighbridges shall be identified with the instrument to which they relate by a number or other sufficient mark of identification, which shall be indelible. They shall also be marked with the weight which they represent; for example:—

" = 1 cwt".

(7) Loose counterpoises which are marked in units in the imperial system shall not be of hexagonal shape.

(8) In the case of small portable platform weighing machines for use in the weighing of coal and commonly known as bob-up weighing machines, the counterpoises shall not be threaded on to a pin rigidly attached to one end of the main lever, but shall either be used in a tray or pan suspended from a knife-edge bearing or be placed on a loose shackle.

(9) The balancing arrangement for platform weighing machines and weighbridges to compensate for daily wear and tear shall have a range not exceeding one-half per cent. of the capacity of the instrument and not less than one-eighth per cent. in each addition, and it shall be securely attached to the instrument and actuated by a detachable key.

(10) In the case of platform weighing machines and weighbridges which are fitted with dials—

- (a) all racks and pinions shall be made of hard metal;
- (b) the extremity of the pointer shall not be a greater distance than threesixteenths of an inch from the dial, and shall meet but not obscure the graduations;
- (c) the indicating mechanism and any cylinders or tanks containing liquid shall be protected from dust and from excessive variations of temperature;
- (d) if the instrument is of a type commonly known as a self-indicating pitbank weighing machine, the pendulous lever, suspension rod and water box shall be suitably enclosed.

(11) Platform weighing machines and weighbridges for use in weighing in units of both the imperial system and the metric system shall bear a clear inscription to that effect.

#### Testing

**48.**—(1) Platform weighing machines which are to be permanently fixed in the position in which they are to be used and weighbridges shall be tested, passed as fit for use for trade and stamped only when completely erected ready for use and installed at the place where they are to be used.

(2) In testing platform weighing machines and weighbridges, the inspector shall where practicable—

- (a) test the instrument at each numbered graduation up to and including 1 ton, or such smaller amount as the last graduation on the steelyard indicator or dial may show; and
- (b) test all loose counterpoises, if any, relating to the instrument; and

(c) either test the instrument ton by ton, or load it with heavy material to within 1 ton of its capacity and ascertain that an additional ton is correctly indicated to within the prescribed limits of error.

(3) In testing platform weighing machines fitted with relieving gear, the inspector shall satisfy himself that—

- (a) the machine falls within the prescribed limits of error when it is put steadily out of and into gear;
- (b) the plate or platform is entirely disengaged from its bearings when the machine is in relief.

(4) Platform weighing machines and weighbridges shall indicate the same weight within half the prescribed limits of error when a load equal to onequarter (or as near thereto as is practicable) of the capacity of the instrument is placed successively in the centre and near each end or corner of the platform.

(5) Platform weighing machines and weighbridges shall fall within the prescribed limits of error when a load equal to the capacity of the machine (or as near thereto as is practicable) is uniformly distributed over the platform.

#### Limits of error

49. Schedule 3 and the Tables specified hereunder shall have effect for prescribing limits of error—

- (a) Table VI, in relation to platform weighing machines (other than selfindicating pit-bank weighing machines);
- (b) Table VII, in relation to self-indicating pit-bank weighing machines;
- (c) Table VIII, in relation to weighbridges.

#### Stamping

50.—(1) On platform weighing machines and weighbridges fitted with dials, the prescribed stamp shall be placed on the plug or stud provided for that purpose on the housing of the instrument.

(2) On platform weighing machines and weighbridges not fitted with dials, the stamp shall be placed on the said plug or stud in a conspicuous position either on the shoulder or on the opposite end of the steelyard indicator.

(3) Loose counterpoises for platform weighing machines and weighbridges shall not be stamped.

#### PART XIII

#### CRANE WEIGHING MACHINES

#### Materials and principles of construction

51.—(1) All working parts of crane weighing machines shall be protected from damp and dust.

(2) The steelyard indicator on crane weighing machines constructed upon the lever principle shall be rigid and may be made of special metal to resist atmospheric influences.

(3) The rack and pinion on machines fitted with dials shall be made of hard metal.

(4) The range of any balancing or adjusting arrangement for crane weighing machines shall not exceed 2 per cent. of the capacity of the machine.

#### No. 237

(5) Crane weighing machines constructed upon the hydraulic principle, in the use of which it is necessary to twist the load hook in order to get a correct indication of weight, shall have a prominent notice to that effect permanently affixed to the machine.

#### Testing

**52.**—(1) Crane weighing machines shall, if practicable, be tested at each numbered graduation up to the capacity of the machine.

(2) Crane weighing machines fitted with dials shall not be tested for sensitiveness.

(3) The steelyard indicator or pointer on a crane weighing machine shall move freely, and the pointer shall return to its initial starting point after the load has been removed.

#### *Limits* of error

53. Schedule 3 and Table IX shall have effect for prescribing limits of error in relation to crane weighing machines.

#### Stamping

54. The prescribed stamp shall be placed upon the plug or stud provided for that purpose on a conspicuous part of the crane weighing machine.

#### PART XIV

#### AUTOMATIC WEIGHING MACHINES

#### Principles of construction

55.—(1) Subject to the following provisions of this Part, every automatic weighing machine and its integral parts shall, as far as practicable, satisfy those requirements of these Regulations which are applicable to the type, class or description of weighing instrument to which the machine most nearly relates.

(2) All beams of automatic weighing machines shall be identified with the machines to which they relate by means of a number or other sufficient mark of identification, which shall be indelible.

(3) Any adjusting mechanism on automatic weighing machines shall be so secured and protected that it cannot readily be tampered with.

#### Testing

56.—(1) Subject to paragraph (2), every automatic weighing machine shall be subjected to the following test (hereinafter referred to as "test A"), that is to say—

(a) by weighing consecutively on the machine 20 separate loads (hereinafter referred to as "test loads") selected for the purpose by the inspector, and then re-weighing the same loads on another weighing instrument:

Provided that, if the inspector thinks fit, he may so weigh and re-weigh more than 20 separate loads of which any 20 separate loads consecutively so weighed and re-weighed may be treated as the test loads; or

(b) in any case where the aforementioned testing procedure is not practicable, by directly applying to the machine the appropriate Northern Ireland working standard weights.

(2) In the case of a totalising weighing machine, the provisions of subparagraph (a) of the preceding paragraph shall apply as if for any reference to "20 separate loads" there were substituted a reference to "40 separate loads"; and in such case the said test loads shall be made up as follows:---

- (a) 10 loads each equal to the minimum load which the machine is constructed to weigh;
- (b) 10 loads each equal to the capacity of the machine;
- (c) 20 loads each equal to the mean between the said minimum load and the load equal to the capacity of the machine.

(3) Subject to paragraph (5), in the case of an automatic weighing machine of an approved pattern or authorised modification, if, in the course of carrying out test A in the manner specified in Regulation 56(i)(a), the weight of any of the test loads exceeds the purported weight of that load by more than one half per cent. of the said purported weight, the machine shall, when appropriate, be subjected to the further test (hereinafter referred to as ", test B") described in paragraph (4).

(4) For the purposes of test B, there shall be extracted from each of those test loads used in test A (the weight of which was found to exceed the relevant amount specified in paragraph (3)) that single piece or item appearing to the inspector to be the largest single piece or item in that test load; and the machine shall then be subjected to test by re-weighing each such test load as so modified on another weighing instrument.

(5) This regulation shall not apply to automatic weighing machines of a capacity of 10 pounds or more, or to automatic weighing machines for use only for weighing solid fuel or for use only for weighing potato crisps, or to totalising weighing machines.

#### Limits of error

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57. Schedule 3 and Table X shall have effect for prescribing limits of error in relation to automatic weighing machines.

#### Stamping

58. The prescribed stamp shall be placed on the plug or stud provided for that purpose on a conspicuous part of the automatic weighing machine.

Sealed with the Official Seal of the Ministry of Commerce for Northern Ireland this 7th day of September 1967.

(L.S.)

K. R. Shimeld,

Senior Assistant Secretary.

#### SCHEDULE 1

الجاري المراجع ال

Regulation 1(2)

#### **Regulations Revoked**

The Weights and Measures Regulations, 1907 (S.R. & O. 1907, No. 698). Weights and Measures (Leather Measurement) Regulations, 1921 (S.R. & O. 1921, No. 942).

Regulation dated 15th March 1927 Extending Period for Use of certain Weights, Measures or Instruments (S.R. & O. (N.I.) 1927, No. 27). Additional Regulation dated 1st June 1928 Prescribing Allowance for Error

on Self-indicating Weighing Machines (S.R. & O. (N.I.) 1928, No. 44). Weights and Measures (Amendment No. 2) Regulations (Northern Ireland) 1932 (S.R. & O. (N.I.) 1932, No. 87).

SCHEDULE 2 Regulations 10, 14, 18 and 22

#### Prescribed Limits of Error upon the Testing of Measures and Weights

#### PART I

#### Linear Measures

- 1. The prescribed limits of error for linear measures shall be-(a) in relation to the passing of any such measure as fit for use for trade, the
  - appropriate amount specified in paragraph 2 or 3, as the case may be;
    (b) in relation to the obliteration of the stamp on any such measure, an amount equal to four times the appropriate amount specified in paragraph 2 or 3, as the case may be.

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2. Imperial system

Measures made of metal:	End m	leasures	Line measures		
purported value	Error in excess	Error in deficiency	Error in	Error in deficiency	
Under 1 foot	inches 0.01 0.03 	inches 0 01 0 015 	inches 0.005 0.02 0.05 0.2 0.2 0.3	inches 0.002 0.01 0.05 0.2 0.3	

1.1

In the case of measures made of material other than metal, the foregoing amounts of error shall be increased to double the said amounts.

3. Metric system

Measures made of metal:			End n	neasures	Line measures	
purpor	ted value		Error in excess	Error in deficiency	Error in excess	Error in deficiency
1 millimetre 1 centimetre 1 decimetre 1 metre	··· ·· ·· ··	•••	milli- metres 0.05 0.2 0.5 1	milli- metres 0.025 0.1 0.25 0.5	milli- metres 0.05 0.1 0.2 0.5	milli- metres 0.025 0.05 0.1 0.5
2 and 3 metres 10 metres 20 metres	•• ••	••	2		1 5 7·5	1 5 7•5

In the case of measures made of material other than metal, the foregoing amounts of error shall be increased to double the said amounts.

#### PART II

#### **Capacity Measures**

4.—(1) The prescribed limits of error for capacity measures in relation to the passing of any such measure as fit for use for trade shall be the appropriate amount specified in paragraph 5 or 6, as the case may be.

(2) The prescribed limits of error for capacity measures in relation to the obliteration of the stamp on any such measure shall be---

- (a) in the case of a capacity measure other than an apothecaries measure—
  - (i) if the error found on testing is in deficiency, an amount equal to half the corresponding amount prescribed in relation to the passing of such measure as fit for use for trade;
  - (ii) if the error so found is in excess, an amount equal to the corresponding amount prescribed in relation to the passing of such measure as fit for use for trade;
- (b) in the case of an apothecaries measure (and whether the error found on testing is in deficiency or excess), an amount equal to the corresponding amount prescribed in relation to the passing of such measure as fit for use for trade.

5. Imperial system

(a) Liquid measures, other than apothecaries measures

Pu	irported	value	;		Error in excess only
gill	••	••	••	··	$\frac{1}{2}$ fluid drachm $\frac{1}{2}$ " "
· · ·	• •.	••	••	••	1 2 22 22 22
"	••	• •	••	••	1 " "
"», ··	••	••	••	••	1 32 23
fluid ounces	• •.	••	۰.	••	1 ,, ,,
gill	••	••	••	••	2 " drachms
fluid ounces	• •	••	••	••	2 " "
pint	••	••	••	•• 1	2 " " 2 " " 3 " " 3 " "
fluid ounces		••	••	••	3 ,, ,,
pint	• •.	• •.	••	••	
" · ·	• •.	••	••	••	4 ,, ,,
quart	••	••	••	••	1 "ounce
gallon		• •	••	••	1 ,, ,,
to 3 gallons	inclusive	••	••	••	2 " ounces
to 7 "	"	••	••	••	2 ,, ounces 3 ,, ,, 5 ,, ,,
8 to 19 "	"	••	••	••	
20 to 32 "	"	••	••	••	10 " "
33 to 64 . "	**	• •	••	••	15 " "

- (i) In the case of conical-shaped measures made of metal, the foregoing amounts of error (as tabulated) shall be decreased to half the said amounts.
- (ii) In the case of milk churns of purported values of 4 to 32 gallons inclusive, the foregoing amounts of error (as tabulated) shall be increased to double the said amounts.
- (iii) In the case of measures made of enamelled-metal, glass or earthenware where the purported value is defined by the brim, and of a purported value exceeding half a pint, the foregoing amounts of error (as tabulated) shall be increased to double the said amounts; and of a purported value of half a pint, the prescribed limit of error shall be half a fluid ounce in excess only.
- (iv) In the case of subdivided measures, the error at any graduation shall not exceed that specified for a measure of equivalent purported value.

Approximate internal diameter of measure at the graduation tested	Error in excess or in deficiency
Inches $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ 1 $1\frac{1}{2}$ $1\frac{1}{$	Minims 1 1 2 3 4 6 7 9 11 14 18 21 25

(b) Apothecaries measures

In the case of graduated measures made of glass in the form of burettes, the foregoing amounts of error shall be decreased to half the said amounts.

(c) Dry measures

	Pur	ported	value			Error in excess only
1 pint 1 ,, 1 quart 2 gallon 1 ,, 1 peck (2 2 bushel (4 1 ,, (8)	  2 gallon 4 ,, 3 ,,	      	•••• ••• ••• ••• •••	· · · · · · · · · · · · · · · · · · ·	···· ···· ···· ···	5 fluid drachms 1 gill 1 ,, 1 ,, 1 ½ gills 1 ½ ,, 1 ½ pint 2 ,, 2 ,, 2 ,, 2 ,, 2 ,, 3 ,, 4 ,, 1 ½ ,, 4 ,, 5 ,, 1 ,,

6. Metric System

(a) Liquid measures made of metal, other than apothecaries measures.

Pu	rported	value		Error in excess only
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	· · · · · · · · · · · · · · · · · · ·	       	····	 millilitres 0.05 0.1 0.25 0.5 1 1 2 2 5 5 10 15 25 25 50 75 100

In the case of subdivided measures, the error at any graduation shall not exceed that specified for a measure of equivalent purported value.

urported	value		Error in excess only								
····	···· ··· ···	···· ··· ···	···· ··· ···	millilitres 10 25 50 100 100 200							
	urported   	urported value	urported value	urported value							

(b) Liquid measures made of earthenware, glass or enamelled-metal, and measures made of other materials approved by the Ministry, other than apothecaries measures:—

In the case of subdivided measures, the error at any graduation shall not exceed that specified for a measure of equivalent purported value.

#### (c) Apothecaries measures

Approximate internal diameter of measure in millimetres at the graduation tested	Error in excess or in deficiency
millimetres	millilitres
10	0.05
20	0.15
30	0.3
40	0.4
50	0.6
60	0.6
70	0.8
80	0.8
90	1
100	1

In the case of graduated measures made of glass in the form of burettes, the foregoing amounts of error shall be decreased to half the said amounts.

#### (d) Dry measures

Purported value						Error in excess only		
200 millilit 500 ,, 1 litre 2 litres 2 <sup>1</sup> / <sub>2</sub> ,, 5 ,, 10 ,, 20 ,,	···· ····	· · · · · · · · · · · · · · · · · · ·	···· ···· ····	     	·····	millilitres 10 25 50 100 100 150 250 300		

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#### PART III

#### Weights

7. The prescribed limits of error for weights (in relation both to passing the same as fit for use for trade and obliterating the stamp thereon) shall be those specified in paragraphs 8 and 9.

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8. Imperial system

(a) Avoirdupois weights:----

Purp	orted va	lue	Error in excess on to the obliteration in excess or Weights made of iron	of stamps, error
1       dram          1       ,,          2       drams          4       ,          8       ,          1       ounce          2       ounces          4       ,          2       ounces          2       ounces          1       pounds          4       ,          2       pounds          4       ,          1       pounds          4       ,          2       pounds          4       ,          7       ,          10       ,          14       ,          20       ,          28       ,          56       ,		···· ···· ···· ···· ···· ··· ··· ··· ·		0.5 grain 0.5 ,, 0.5 ,, 0.5 ,, 0.5 ,, 1 ,, 2 grains 2 ,, 3 ,, 5 ,, 5 ,, 5 ,, 10 ,, 10 ,, 10 ,, 10 ,, 20 ,, 25 ,,

(b) Grain weights:---

	Purported value						elation of star	n excess n to the nps, err or defici	obliter or in ex	ation	
0.01 grai	n			•••				0·001 g	grain		
0.02,		•••		•••	• • • •	•	••••	0.002	·····	••	
0.03 "				.:.	·		• •	0.003	,, ·		•
0.05 "							•	0.003	"		÷
0.1 "							• *	0.005	,,		2
0·2 "				•				0.01			
n.2 <sup>"</sup>								0.02	"		
0.5	•••	•••	•••	•	•••			0.03	"		
1	•••	•••	•••		•••	••		0.03	"		
2 grai	 	•••	•••	•••				0.03	**		
3		* • •	•••	•••				0.03	"		
5,,	•••	•••	•••					0.03	,,		•
10 "		•••	•••	•••				0.03	"		
10 ,,	•••		•••	•••	••••				"		
20 ,,	•••	•••	•••	•••		·		0.05	"		
30 "	•••	•••	•••	•••		,	•	0.05	"		•
50 ,,	•••	•••	•••	•••				0.05	,,		
100 "	•••	•••	•••	•••			•	0·05	· ,,		
											.,

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Purported value							Error in excess only (or, in relation to the obliteration of stamps, error in excess or deficiency)
0.001	ounce	troy	•••				0.03 grain
0.002	,,	,,	•••		•••		Q·03 "
0.003	,,	"			•••		0.03 "
0·004	,,	"	•••		•••		0.03 "
0·005	,,	**					0.03 "
0.01	"	"					0.03 "
0.02	"	"					0·03 "
0.025	,,	,,	•••				0.03 "
0.03	,,	**					0.03 "
0.04	,,	"					0.05 "
0.05		,,					0.05 "
0.1	;,						0.05 "
Õ∙2	**	**					0.05
0. <u>3</u>	**	>5				·	0.1
0.4	"		•••	•••	•••		0.1
0.5	"	>>	•••	•••	•••		0.1 "
1	"	"	•••	•••	•••		0.2 "
	<i>"</i>	»» s trou	•••	•••	•••		0.7 "
2 0 3 4 5 10	Junce	s troy	•••	•••	•••	••••	0.3
2	,,	"	•••	•••	•••		0.3 "
4	**	"	•••	•••	•••		
2	<b>&gt;</b> 3	<b>,,</b>	•••	•••	•••	•••	0.3 "
10	,,	<b>&gt;7</b>	* *,=	•••	•••	•••	0.5 "
20	,,	**	•••	•••	•••	•••	1 ,,
30	,,	,,	•••	•••	•••		1 "
40	,,	39		•••	•••		2 grains
50	,,	**		•••	•••		2 "
100	"		•••	•••	•••		3 ,,
200	,,	**	•••	•••	• • •		3 "
300	,,	39	•••	•••			2 grains 2 ", 3 ", 3 ", 4 ", 4 ", 4 ",
400	,,	ź,		•••	•••		4 "
500	,,	,, ,,					4 "
-							**

(c)	Troy	weights :	
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(d) Apothecaries weights:-

	irported v		Error in excess only (or, in relation to the obliteration of stamps, error in excess or deficiency)		
	•* •**				0.03 grain
	•• •••	•••	•.••	•••	0.03 "
scruple					.0.03 "
		•••			0.05 "
1 scruples .					0.05 "
<u>,</u> ,		•••			0.05 "
drachm					0·05 "
2 drachms					0.1
1			,		0.1
ounce apothecar	·· ···	•••	•••		0.1 "
	165	•••	***		
2 ounces ,,	•••		•••	••••	0.2 "
,, ,,		•••	•••	•••	0.3 "
5 ,, ,,	•••	•••	•••	· · · ·	0.3 "
3 <u>,</u> , ,		•••	•••		0.5 "
10 ,, ,,		•••			0.5 "

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(e) Pennyweights:---

Purported value						Error in excess only (or, in relation to the obliteration of stamps, error in excess or deficiency)	
	nyweight		•••	•••			0.05 grain
2 peni	nyweights	•••	•••	***	***		0.02 "
5	,,	•••	•••	• • •	• • •		0.05 "
10	"	•••	•••	•••			0-1,

#### 9. Metric system

(a) Metric weights, other than carat (metric) weights:-

Purported value		Error in excess only (or, in relation to the obliteration of stamps, error in excess or deficiency)				
		Weights made of iron	Weights not made of iron			
1 milligramme       2         2 milligrammes          5       ,,         10       ,,         20       ,,         50       ,,         100       ,,         200       ,,         100       ,,         200       ,,         100       ,,         200       ,,         100       ,,         200       ,,         1       grammes         2       ,,         50       ,,         10       ,,         20       ,,         20       ,,         100       ,,         200       ,,         100       ,,         200       ,,         100       ,         200       ,,         1       kilogramme         2       kilogrammes          2         100       ,         1       kilogrammes             2       ,         100       ,         1       ,         1	···· ··· ··· ··· ··· ··· ··· ··· ··· ·	40 milligrammes 100 ,, 200 ,, 400 ,, 1 gramme 2 grammes	0.1 milligramme 0.2 " 0.2 " 0.5 " 1 " 2 milligrammes 2 " 2 " 2 " 2 " 3 " 5 " 10 " 15 " 20 " 10 " 15 " 20 " 10 " 20 " 10 " 20 " 10 " 20 " 10 " 20 " 10 " 20 " 2			
20 " …		2 grammes 3 "	1.5 grammes			

Purported value	Error in excess only (or, in relation to the obliteration of stamps, error in excess or deficiency)		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.2 milligramme 0.2, 0.2, 0.2, 0.2, 0.5, 0.5, 1, 1, 1, 2 milligrammes 2, 5, 5,		

(b) Carat (metric) weights:---

#### SCHEDULE 3

Regulations 26(7), 29, 33, 37, 41, 45, 49, 53 and 57

#### Prescribed Limits of Error on the Testing of Weighing Instruments

1. Subject to paragraphs 2 and 3, the prescribed limits of error for weighing instruments shall be those specified in Tables I to X:

Provided that in the case of any weighing instrument of a capacity not so specified, the prescribed limits of error shall be the amounts proportionate to those so specified for an instrument of the same type, class or description.

2. In the case of any weighing instrument which weighs in units of the metric system and for which no limits of error are specified in terms of those units, the prescribed limits of error shall be the amounts in terms of metric units equivalent to those specified in terms of imperial units in the relevant Table with respect to an instrument of the same capacity, type, class or description.

3. In the case of any weighing instrument of the self-indicating or semi-selfindicating type, the prescribed limit of error, in excess or in deficiency, shall be either—

- (a) the appropriate amount specified in the relevant Table for the instrument concerned, or
- (b) (i) in relation to the obliteration of stamps, the amount corresponding to the smallest interval between consecutive graduations on the scale or dial of the instrument;

(ii) upon passing as fit for use for trade, one half of the said amount; whichever is the less.

#### No. 237

#### Weights and Measures

TABLE I

BEAM SCALES AND BALANCES

1. Beam scales marked." Class B.".

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Capacity of	Weight to be sensitiveness load	when fully	Error in excess or in deficiency when fully loaded		
instrument	Upon passing as fit for use for trade	In relation to the obliteration of stamps	Upon passing as fit for use for trade	In relation to the obliteration of stamps	
1 ounce          8 ounces          1 pound          2 pounds          4 ,,          7 ,,          10 ,,          14 ,,          28 ,,          56 ,,          112 ,,          224 ,,          Above 2          hundredweight	$\begin{array}{c} \frac{1}{2} \text{ grain} \\ 1 & , \\ 1 & , \\ 1 & , \\ 1 & , \\ 1 & , \\ 1 & , \\ 1 & , \\ 1 & , \\ 2 & , \\ 3 & , \\ 4 & , \\ 6 & , \\ 8 & , \\ 1 & , \\ 6 & , \\ 8 & , \\ 1 & , \\ 6 & , \\ 8 & , \\ 1 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 2 & , \\ 1 & , \\ 1 & , \\ 2 & , \\ 1 &$	$ \begin{array}{c} \frac{8}{2} \text{ grain} \\ 3 \text{ grains} \\ 3 \\ 9 \\ 12 \\ 9 \\ 12 \\ 12 \\ 12 \\ 12 \\ 12 \\$	$\begin{array}{c} \frac{1}{2}  \text{grain.} \\ 1  , \\ 1  , \\ 2  \text{grains} \\ 4  , \\ 6  , \\ 9  , \\ 12  , \\ 22  , \\ 40  , \\ 2\frac{1}{2}  \text{drams} \\ \frac{3\frac{1}{2}}{3\frac{1}{2}}  , \\ Add  1  dram \\ for each \\ hundred \\ weight of \\ capacity \\ \end{array}$	Figure 1 and a second secon	

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2. Beam scales marked " Class C".

Capacity of	Weight to be sensitiveness load		Error in excess or in deficiency when fully loaded		
instrument	Upon passing as fit for use for trade	In relation to the obliteration of stamps	Upon passing as fit for use for trade	In relation to the obliteration of stamps	
1 ounce          8 ounces          1 pound          2 pounds          4       "         7       "         10       "         14          28       "         56          112          224       "         Above 2       hundredweight	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array}{} \begin{array}{c} \end{array} grain \\ 3 \end{array} grains \\ 3 \end{array} \\ \begin{array}{c} \end{array} grains \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \end{array} \\ \begin{array}{c} \end{array} \end{array} \\ $	11 grain 6 grains 6 , 9 , 18 , 24 , 36 , 48 , 90 , 150 , 9 drams 15 , Add 3 drams for each hundred- weight of capacity	$\begin{array}{c} \frac{3}{2} \text{ grain} \\ 3 \text{ grains} \\ 3 \text{ grains} \\ 3 \text{ grains} \\ 12 \text{ grains} \\ 12 \text{ grains} \\ 12 \text{ grains} \\ 27 \text{ grains} \\ 36 \text{ grains} \\ 66 \text{ grains} \\ 10\frac{1}{2}  gr$	1 grains 6 ,, 6 ,, 12 ,, 24 ,, 36 ,, 54 ,, 72 ,, 132 ,, 240 ,, 15 drams 21 ,, Add 6 drams for each hundred- weight of capacity	

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#### 3. Balances.

Capacity of	Weight to be sensitiveness load		Error in excess or in deficiency when fully loaded		
instrument	Upon passing as fit for use for trade	In relation to the obliteration of stamps	Upon passing as fit for use for trade	In relation to the obliteration of stamps	
1 ounce            1 pound            7 pounds            56	10 grain 10 12 12 grains	20 grain 30 ,, 12 grains 41 ,,	10 grain 3 ,, 1 ,, 2 grains	1/2         grain           2/2         grains           4         ,,	

TABLE II COUNTER MACHINES

••• Capacity of	sensitivenes	added to test s when fully ded	Error in excess or in deficiency when fully loaded		
machine	Upon passing as fit for use for trade	In relation to the obliteration of stamps	Upon passing as fit for use for trade	In relation to the obliteration of stamps	
1 pound 2 pounds 4 ",	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 60 \text{ grains} \\ 84 \\ 120 \\ , \\ 6 \text{ drams} \\ 7\frac{1}{2} \\ , \\ 9 \\ , \\ 12 \\ , \\ 18 \\ , \\ 24 \\ , \end{array}$	30 grains 11 drams 2 ,, 3 ,, 31 ,, 41 ,, 6 ,, 9 ,, 16 ,,	60 grains 3 drams 4 ", 6 ", 7 ", 9 ", 12 ", 18 ", 32 ",	

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#### TABLE III

## SPRING BALANCES

	Capaci	ity of	. ·		xcess or in on fully loaded
	spring b	alance		Upon passing as fit for use for trade	In relation to the obliteration of stamps
	oound         .           oounds         .           ,,,         .           ,,,         .           ,,,         .           ,,,         .           ,,,         .           ,,,         .	·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	···· ···· ····	30 grains $1\frac{1}{2}$ drams $1\frac{1}{2}$ " 2 " $2\frac{1}{2}$ " $2\frac{1}{2}$ " $2\frac{1}{2}$ " $3\frac{1}{2}$ " $3\frac{1}{2}$ "	60 grains 3 drams 3 ,, 4 ,, 5 ,, 5 ,, 6 ,,
10 11 12 13 14 15	35     •       33     •       33     •       37     •       38     •       39     •       39     •       30     •       31     •       32     •       33     •       33     •       33     •       33     •       33     •       33     •       33     •       33     •       33     •       33     •       33     •       33     •       34     •       35     •       37     •	······································	···· ···· ····	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	7 " 7 " 8 " 9 "
20 21 22 23 24 25	33     •       32     •       33     •       33     •       33     •	··· ··· ·· ··· ·· ···	•••• ••• ••• •••	$\begin{array}{c}4\\4\\4\\4\\4\\4\\4\\2\\5\\5\\5\\5\\5\\5\\5\\5\\5\\5\\5\\5\\$	10 " 10 " 10 " 11 " 11 "
23 26 27 28 29 30	39     •       93     •       93     •       93     •       93     •       93     •       93     •       93     •       93     •       93     •	··· ··· ·· ··· ·· ···	••••	6 "	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	ounds and ab	ove	•••	The weight correspon- ding to $\frac{1}{2}$ of the interval between con- secutive graduations	The weight correspon- ding to $\frac{1}{2}$ of the interval between con- secutive graduations

#### TABLE IV STEELYARDS

Capacity of steelyard		added to test s when fully ded	Error in excess or in deficiency when fully loaded			
Steelyaru	Upon passing as fit for use for trade obliteration of stamps		Upon passing as fit for use for trade	In relation to the obliteration of stamps		
56 pounds          1 hundredweight       3         3          5          7          10          20          30          40          50	12 drams 1 ounce 2 ounces 3 " 4 " 6 " 10 " 13 " 16 " 20 "	36 drams 3 ounces 6 ", 9 ", 12 ", 18 ", 30 ", 39 ", 48 ", 60 ",	18 drams 2 ounces 4 " 6 " 8 " 12 " 20 " 26 " 32 " 40 "	36 drams 4 ounces 8 " 12 " 16 " 24 " 40 " 52 " 64 " 80 "		

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# TABLE V Dead-Weight Machines

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n (j. 1777) 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -

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		Vibrating weigh	ing instruments		Accelerating weighing instruments			
Capacity of machine		added to test hen fully loaded		or in deficiency ly loaded	Error in excess	or in deficiency ly loaded	Weight required to bring back the bean from position of greatest displace- ment when fully loaded	
	Upon passing as fit for use for trade	In relation to the oblitera- tion of stamps	Upon passing as fit for use for trade	In relation to the oblitera- tion of stamps	Upon passing as fit for use for trade	In relation to the oblitera- tion of stamps	Upon passing as fit for use for trade	
1       hundredweight          3           5           7           10           20           30           40           50	$ \frac{\frac{1}{2} \text{ ounce}}{\frac{1}{2} \text{ ounces}} \\ \frac{1}{2} \text{ ounces} \\ \frac{2}{3} \text{ , } \\ \frac{3}{5} \text{ , } \\ \frac{5}{61} \text{ , } \\ \frac{8}{8} \text{ , } \\ 10 \text{ , } \\ $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1. ounce 2. ounces 3. " 4. " 6. " 10. " 13. " 16. " 20. "	2 ounces 4 ", 6 ", 8 ", 12 ", 20 ", 26 ", : 32 ", 40 ",	1 ounce 2 ounces 3 " 4 " 6 " 10 " 13 " 16 " 20 "	2 ounces 4 " 6 " 8 " 12 " 20 " 26 " 32 " 40 "	2 ounces 4 " 6 " 8 " 12 " 20 " 26 " 32 " 40 "	
	διατικό το	L		• : • • :		• •		

Weights and Measures

					able VI Jeighing Mac	HINES			-
	v	ibrating weigh	ing instrumen	ts	Acceler	ating weighing	; instruments	Machines	with dials
Capacity of machine	of		test sensitiveness when deficiency when fully		deficiency	Error in excess or in deficiency when fully loaded Weight required to bring back the steelyard indica- tor from position of greatest dis- placement when fully loaded		Error in excess or in deficiency when fully loaded	
	Upon passing as fit for use for trade	In relation to the obliteration of stamps	Upon passing as fit for use for trade	In relation to the obliteration of stamps	Upon passing as fit for use for trade	In relation to the obliteration of stamps	Upon passing as fit for use for trade	Upon passing as fit for use for trade	In relation to the obliteration of stamps
1 hundred- weight 3 ", 5 ", 7 ", 10 ", 20 ", 30 ", 40 ", 50 ",	1 ,, 1 ,, 11 ounces 2 ,, 3 ,, 5 ,, 61 ,, 8 ,, 10 ,,	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 ounce 2 ounces 3 ", 4 ", 6 ", 10 ", 13 ", 16 ", 20 ",	2 ounces 4 ,, 6 ,, 8 ,, 12 ,, 20 ,, 26 ,, 32 ,, 40 ,,	1 ounce 2 ounces 3 ,, 4 ,, 6 ,, 10 ,, 13 ,, 16 ,, 20 ,,	2 ounces 4. ;, : : 6. ;, : : 8. ; 12. ; 20. ; 20. ; 26. ; 32. ; 40. ;, :	2 ounces 4	2 ounces 4 ,, 6 ,, 12 ,, 20 ,, 26 ,, 32 ,, 40 ,,	4 ounces 8 '' 12 .'' 16 '' 24 '' 40 '' 52 '' 64 '' 80, ''
	J			<u></u>		1	n	1 <u></u> .	1

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	TABLE V	Π	
Self-Indicating	Pit-Bank	WEIGHING	MACHINES

	Capacity	of		đ		xcess or in en fully loade	d
machine			Upon p fit for use	assing as e for trade	In relation to the obliteration of stamps		
1 hui 2 3 4 5 7 10 12 15 20 30 40 50	ndredweight ** ** ** ** ** ** ** ** ** ** ** ** **	···· ··· ··· ··· ···	•••	1 pound 1 " 2 pounds 2 " 3 " 4 " 6 " 7 "	6 ounces 9 " 12 " 15 " 2 " 8 " 4 " 9 " 0 " 12 " 14 " 0 " 8 "	1 pound 1 " 2 pounds 3 " 4 " 5 " 6 " 7 " 9 " 12 " 15 "	12 ounces 2 " 8 " 14 " 4 " 0 " 8 " 2 " 0 " 8 " 12 " 0 " 12 " 0 " 0 " 0 " 0 " 0 " 0 "

					BLE VIII GHBRIDGES	۰.				No. 237
	Vibratin	Vibrating weighing instruments without dials			Accelerating	; weighing ins dials	truments without	Instruments with dials		
Capacity of instrument	Weight to b test sensitiv fully l	eness when	Error in e. deficiency loa	when fully	deficiency	xcess or in when fully ded	Weight required to bring back the steelyard indica- tor from position of greatest dis- placement when fully loaded must not exceed—	deficiency	excess or in when fully ided	Weights
	Upon passing as fit for use for trade	In relation to the obliteration of stamps	Upon passing as fit for use for trade	In relation to the obliteration of stamps	Upon passing as fit for use for trade	In relation to the obliteration of stamps	Upon passing as fit for use for trade	Upon passing as fit for use for trade	In relation to the obliteration of stamps	and Measures
1 ton 2 tons 5 " 10 " 20 " 25 " 30 " 35 " 40 " 50 " 75 " 100 " 200 "	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 4\frac{1}{2} \text{ pounds} \\ 6 & ,, \\ 10\frac{1}{2} & , \\ 15 & ,, \\ 21 & ,, \\ 24 & ,, \\ 25\frac{1}{2} & ,, \\ 27 & ,, \\ 28\frac{1}{2} & ,, \\ 30 & ,, \\ 36 & ,, \\ 42 & ,, \\ 54 & ,, \\ \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	3 pounds 4 ", 8 ", 12 ", 20 ", 24 ", 27 ", 30 ", 32 "; 36 ", 46 ", 56 ", 84 ",	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	3 pounds 4 ", 8 ", 12 ", 20 ", 24 ", 27 ", 30 ", 32 ", 36 ", 46 ", 56 ", 84 ",	4 pounds 5 ", 10 ", 15 ", 25 ", 30 ", 34 ", 37 ", 40 ", 45 ", 58 ", 70 ", 105 ",	3 pounds 4 ", 8 ", 12 ", 20 ", 24 ", 27 ", 30 ", 32 ", 36 ", 46 ", 56 ", 84 ",	6 pounds 8 " 16 " 24 " 40 " 48 " 54 " 60 " 64 " 72 " 92 " 112 " 168 "	<i>ures</i> 893

		Machines with st	Machines	with dials		
Capacity of machine	Weight to be	added to test	Error in excess	or in deficiency	Error in excess	or in deficiency
	sensitiveness wh	an fully loaded	when ful	ly loaded	when ful	lly loaded
	Upon passing	In relation to	Upon passing	In relation to	Upon passing	In relation to
	as fit for	the obliteration	as fit for	the obliteration	as fit for	the obliteration
	use for trade	of stamps	use for trade	of stamps	use for trade	of stamps
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} \frac{1}{2} \text{ ounce} \\ 1\frac{1}{2} \text{ ounces} \\ 3 \\ 1\frac{1}{2} \text{ pounds} \\ 2 \\ 3\frac{1}{2} $	$\begin{array}{c} 1\frac{1}{2} \text{ ounces} \\ 4\frac{1}{2} & ,, \\ 9 & ,, \\ 4\frac{1}{2} \text{ pounds} \\ 6 & ,, \\ 10\frac{1}{2} & ,, \\ 15 & ,, \\ 21 & ,, \\ 24 & ,, \\ 25\frac{1}{2} & ,, \\ 27 & ,, \\ 28\frac{1}{2} & ,, \\ 30 & ,, \\ 36 & ,, \\ 42 & ,, \\ 54 & ,, \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2 ounces 6 ", 12 ", 3 pounds 4 ", 8 ", 12 ", 20 ", 24 ", 27 ", 30 ", 32 ", 36 ", 46 ", 56 ", 84 ",	2 ounces 6 ", 12 ", 3 pounds 4 ", 8 ", 12 ", 20 ", 24 ", 27 ", 30 ", 32 ", 36 ", 46 ", 56 ", 84 ",	$\begin{array}{c} 4 \text{ ounces} \\ 12 \\ 12 \\ 12 \\ pounds \\ 6 \\ 8 \\ 16 \\ 24 \\ 24 \\ 16 \\ 3 \\ 24 \\ 3 \\ 40 \\ 3 \\ 40 \\ 3 \\ 40 \\ 3 \\ 40 \\ 3 \\ 16 \\ 3 \\ 12 \\ 3 \\ 16 \\ 3 \\ 12 \\ 3 \\ 16 \\ 3 \\ 3 \\ 12 \\ 3 \\ 3 \\ 16 \\ 3 \\ 3 \\ 1 \\ 3 \\ 1 \\ 1 \\ 3 \\ 1 \\ 1 \\ 3 \\ 1 \\ 1$

2. Crane weighing machines constructed upon the hydraulic principle An amount equal to one-half of the weight represented by the interval between consecutive graduations.

#### TABLE X

## AUTOMATIC WEIGHING MACHINES

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		Error in relation	n to the passing as fit	for use for trade	Error in re	lation to the obliteratio	n of stamps
Description of machine	Capacity	For the purp	oses of Test A		For the purposes of Test A		
	of machine	When tested by means of test load	When tested by means of the direct application of appropriate weights	For the purposes of Test B	When tested by means of test load	When tested by means of the direct application of appropriate weights	For the purposes of Test B
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column ?	Column 8
All automatic weighing machines, other than those hereinafter described in columns 1 and 2 of this table	Under 10 pounds	per cent., in excess only, of the pur- ported weight of each test load		<sup>1</sup> / <sub>2</sub> per cent., in excess only, of the pur- ported weight of the test load	1 per cent., in excess only. of the pur- ported weight of each test load		i per cent., in excess only, of the pur- ported weight of the test load
	10 pounds or more	t per cent., in excess or in deficiency, of the purported weight of each test load			1 per cent., in excess or in deficiency, of the purported weight of each test load		
Automatic weighing machines for use only for weighing grain	10 pounds or more	‡ per cent., in excess or deficiency, of the purported weight of each test load	Prescribed limit of error applicable to the type, class		t per cent., in excess or deficiency, of the purported weight of each test load	Prescribed limit of error applicable to the type, class	
Automatic weighing machines for use only for weighing solid fuel	2 hundred- weight or less	2 per cent., in excess only, of the pur- ported weight of each test load	or description of the weighing in- strument to which the machine most	Test not applicable	2 per cent., in excess only. of the pur- ported weight of each test load	or description of weighing instru- ment to which the machine most	Test not applicable
Automatic weighing machines for use only for weighing potato crisps	Any capacity	20 per cent., in excess only, of the total purported weight of 20 test loads and no error in deficiency in the purported weight of any of those test loads	nearly relates		20 per cent., in excess only, of the total purported weight of 20 test loads and no error in deficiency in the purported weight of any of those test loads	nearly relates	
Totalising weighing machines	Any capacity	per cent., in excess or in deficiency, of the total pur- ported weight of 40 test loads			1 per cent., in excess or in deficiency, of the total pur- ported weight of 40 test loads		

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#### **SCHEDULE** 4

Regulation 20(7)

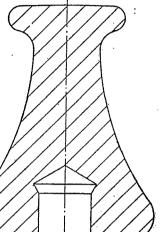
PRINCIPLES OF CONSTRUCTION OF AVOIRDUPOIS WEIGHTS OF THE BELL TYPE

#### Table

Purported values and heights

n	lanuana	
υ	iagram	

			- Showing vertical section through centre
Column 1	Colu	mn 2	(top to base)
Purported	(a)	(b)	
value of weight	Height of weight	Limits	
1       ounce          2           1           2       ounces          4           1       pounds          2           4           7           14	inches $\frac{1}{5}$ $1\frac{1}{5}$ $1\frac{1}{5}$ $2\frac{1}{5}$ $2\frac{1}{5}$ $2\frac{1}{5}$ $2\frac{1}{5}$ $3\frac{1}{5}$	inches Te Te Te Te Te Te Te Te Te Te	



#### EXPLANATORY NOTE

# (This Note is not part of the Regulations, but is intended to indicate their general purport.)

These Regulations will come into operation (simultaneously with Parts I, II and V of the Weights and Measures Act (Northern Ireland) 1967) on the 25th October 1967. They will substantially replace the Weights and Measures Regulations 1907, as amended, which will cease to have effect on that date.

The Regulations, which apply to all weighing and measuring equipment for use for trade of the classes specified in Regulation 3, deal with the materials, principles of construction, inspection, testing, passing as fit for use for trade and stamping of such equipment.

The present Regulations in substance repeat the provisions of the earlier Regulations, subject to some drafting alterations and to such adaptations as are necessary to enable the present Regulations, operating within the framework of the Weights and Measures Act (Northern Ireland) 1967, to produce the same effect as was produced by the earlier Regulations operating within the framework of the Acts repealed by the Act of 1967. Except as respects the matters mentioned below, the alterations have not made any changes of substance in the requirements under the earlier Regulations.

The only changes of substance which have been made are to extend to all equipment in the class to which they relate, those requirements which the Ministry of Commerce formerly imposed in relation to particular equipment in those classes as a condition of granting a dispensation from the general requirements of the earlier Regulations. The changes are as follows:—

- (a) in Regulation 12(6), the maximum permitted increase in the capacity of metal milk churns caused by the addition of a top rim, lip or retaining edge has been raised from 10 per cent. to 25 per cent., in accordance with British Standard Specifications for such churns;
- (b) in Regulation 12(17), the requirements as to the marking of the maximum purported value on liquid capacity measures made of sheet metal have been varied;
- (c) in Regulation 20(8), certain apothecaries and troy weights may now be made of stainless steel;
- (d) in Regulation 20(10), the permitted shape of certain metric weights has been varied;
- (e) in Regulation 20(17), avoirdupois weights made of stainless steel are no longer required to have an adjusting hole;
- (f) in Regulation 26(2), the requirement that a weighing instrument shall be properly balanced when unloaded has been varied;
- (g) in Regulation 30, the requirements as to the position of the stamping plug on beam scales and balances have been varied;
- (h) in Regulation 43(1), the requirements as to the fitting of knife edges of dead-weight machines have been varied;
- (i) in Regulations 56 and 57 and in Table X of Schedule 3, the requirements as to the testing of automatic weighing machines have been varied.