

1985 No. 319

WEIGHTS AND MEASURES

Weighing Equipment (Beltweighers) Regulations (Northern Ireland) 1985

Made 15th November 1985

Coming into operation 20th December 1985

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The Department of Economic Development, in exercise of the powers conferred by Articles 9(1) and (3), 10(6) and 13(1) of the Weights and Measures (Northern Ireland) Order 1981(a) and now vested in it(b) and of every other power enabling it in that behalf, hereby makes the following Regulations:—

PART I

GENERAL

Citation and commencement

1. These Regulations may be cited as the Weighing Equipment (Beltweighers) Regulations (Northern Ireland) 1985 and shall come into operation on 20th December 1985.

Interpretation

2.—(1) In these Regulations—

“analogue” means capable of assigning any value or position within a continuous range;

“authorisation” means an authorisation of modifications as referred to in Article 11(5)(b) of the Order;

“automatic weighing machine” means a machine which accomplishes a weighing operation without intervention by an operator and which sets in motion an automatic process characteristic of the machine;

“automatic zero-setting device” means a device which allows the setting to zero of the beltweigher, without intervention by an operator, after the belt has been operating empty over a whole number of revolutions;

“ballast” means any of the materials to which the expression “ballast” applies in Schedule 4 to the Order;

“belt conveyor” means a device, being part of the beltweigher which, by means of a belt resting on rollers turning about their axes, conveys material;

(a) S.I. 1981/231 (N.I. 10)

(b) By S.I. 1982/846 (N.I. 11) Art. 4

- “belt displacement transducer” means a device on the belt conveyor which supplies information either corresponding to the displacement of a defined length of the belt or proportional to the speed of the belt;
- “beltweigher” means weighing equipment of the belt conveyor type, that is to say, a continuous totalising automatic weighing machine which determines the mass of material in bulk without systematic subdivision thereof, by using the action of gravity on the material, the movement of the belt being uninterrupted;
- “certificate of approval” means a certificate of approval of a pattern of weighing equipment granted or renewed by the Department of Economic Development under Article 10 of the Order or any instrument having effect under Article 11(5) of the Order as if it were a certificate of approval so granted on 4th April 1979 or a certificate of approval of a pattern of weighing equipment deemed under Article 10(8) of the Order to have been granted and published under the provisions of the said Article 10;
- “Class I beltweigher” means any beltweigher which is not a Class II beltweigher;
- “Class II beltweigher” means any beltweigher which is marked as such on its descriptive plate or elsewhere on the beltweigher;
- “digital” means capable of assigning only certain discrete values or positions within a continuous range by a series of discontinuous steps;
- “mark of EEC initial verification” means the mark described in paragraph 5 of Schedule 1 to the Measuring Instruments (EEC Requirements) Regulations 1980(a);
- “material testing” means the testing of the beltweigher by loading suitable material on the belt;
- “material test load” means a load of suitable material used for material testing;
- “maximum capacity of the weighing unit” means the maximum instantaneous net load which the weighing unit is constructed to weigh;
- “maximum rate of flow” means the flowrate obtained by multiplying the maximum speed of the belt by the maximum capacity of the weighing unit, then dividing the product by the length of belt supported by the weighing unit;
- “maximum speed” means the speed at which the belt will normally operate when empty;
- “minimum rate of flow”, when marked on the descriptive plate or elsewhere on the beltweigher, means the lowest rate of flow at which the beltweigher is designed to operate and, when not so marked, means 20% of the maximum rate of flow;
- “minimum totalised load” means the smallest load which the beltweigher is designed to weigh;
- “nominal speed” means the speed at which the belt conveyor is designed to convey material;
- “non-automatic zero-setting device” means a device which allows an operator to observe, alter and then check the setting to zero of the beltweigher;
- “notice of examination” means a notice caused to be published by the Secretary of State(b) in pursuance of section 12(1) of the Weights and Measures Act 1963(c) giving particulars of a pattern in respect of which a certificate of approval has been granted;

(a) S.I. 1980/1058

(b) By virtue of S.I. 1970/1537

(c) 1963 c. 31. This Act was amended by the Weights and Measures &c. Act 1976 (c. 77) and the Weights and Measures Act 1979 (c. 45)

- “the Order” means the Weights and Measures (Northern Ireland) Order 1981;
- “prescribed limits of error” has the meaning set out in Regulation 20;
- “semi-automatic zero-setting device” means a device which, following a manual command, allows the automatic setting to zero of the beltweigher or indicates the value by which it is necessary to adjust the zero-setting;
- “the stamp” means the stamp prescribed by the Weights and Measures (Prescribed Stamp) Regulations (Northern Ireland) 1969(a);
- “totalisation device” means a device which carries out the addition of partial loads, or the integration with respect to time of the product of the load per unit length and the speed of the belt, from information supplied by the weighing unit and the belt displacement transducer;
- “totalisation indicating device” means a device which receives information from the totalisation device and indicates the mass of the load conveyed by the beltweigher;
- “totalisation scale interval” means the value expressed in units of measurement of mass equal to, in the case of an analogue indication, the smallest subdivision of the scale of the totalisation indicating device, or, in the case of a digital indication, the difference between two consecutive values indicated by that device;
- “weighing unit” means a device which provides information on the mass of the load being weighed by the beltweigher; and
- “zero totalisation indicating device” means a device associated with but separate from the totalisation indicating device fitted to an automatic, semi-automatic or non-automatic zero-setting device and allowing zero-setting to be checked when the belt is not loaded.

(2) The abbreviations of, and symbols for, units of measurement used in these Regulations refer to the relevant units as follows:—

gramme	g
hundredweight	cwt
kilogramme	kilogram or kg
pound	lb
quarter	qr
tonne	t

Application of Regulations and prescription of beltweighers

3.—(1) Subject to paragraph (2), these Regulations apply to beltweighers for use for trade which do not bear the mark of EEC initial verification.

(2) These Regulations do not apply to beltweighers which are designed to operate at more than one belt speed.

(3) Beltweighers to which these Regulations apply are hereby prescribed for the purposes of Article 9(1) of the Order.

Amendment of the Weights and Measures Regulations (Northern Ireland) 1967

4. After sub-paragraph (g) of Regulation 3(2) of the Weights and Measures Regulations (Northern Ireland) 1967(b) there shall be added the following sub-paragraph:—

“(h) beltweighers to which the Weighing Equipment (Beltweighers) Regulations (Northern Ireland) 1985 apply.”

(a) S.R. & O. (N.I.) 1969 No. 11

(b) S.R. & O. (N.I.) 1967 No. 237 as amended by S.R. 1979 No. 436 and S.R. 1984 No. 85

Purposes of use

5.—(1) A person shall not use a beltweigher except for the purpose of measuring quantities of material the values of which expressed in units of measurement of mass are not less than the value of the minimum totalised load.

(2) A person shall not use a Class II beltweigher for the purpose of weighing any material other than ballast.

PART II

MATERIALS AND PRINCIPLES OF CONSTRUCTION AND MARKING

Construction of beltweighers with removable parts

6. Every beltweigher which has removable parts, the removal of which would affect its accuracy, shall be so constructed that it cannot be used if any of the said parts are removed.

Accuracy of beltweighers with interchangeable or reversible parts

7. Where a beltweigher has interchangeable or reversible parts, the interchange or reversal thereof shall not affect its accuracy.

Approved patterns, marking and construction

8.—(1) Every beltweigher shall be made in accordance with a pattern in respect of which a certificate of approval is in force.

(2) The marking of a beltweigher as a Class II beltweigher after it has been made in accordance with such a pattern shall not in itself be a breach of paragraph (1).

(3) The marking of the minimum totalised load on a beltweigher after it has been made in accordance with such a pattern shall not in itself be a breach of paragraph (1).

(4) The constituent parts of a beltweigher shall be sufficiently strong to withstand the wear and tear of ordinary use in trade.

Uniformity of belts

9.—(1) The mass per unit length of the belt of every beltweigher shall be virtually constant.

(2) There shall not be any joint in the belt which causes any disturbance in the operation of the beltweigher.

Zero totalisation indicating devices

10.—(1) The scale interval of every zero totalisation indicating device shall not exceed the greater of the following, that is to say, the scale interval of its associated totalisation indicating device, and the appropriate limit mentioned in paragraph (2).

(2) The appropriate limit referred to in paragraph (1) is—

(a) in the case of a Class I beltweigher with:

(i) an analogue scale interval, $1/20,000$ of the load which would be passed in one hour over the weighing unit at the maximum rate of flow;

(ii) a digital scale interval, $1/40,000$ of the load which would be passed in one hour over the weighing unit at the maximum rate of flow;

(b) in the case of a Class II beltweigher with:

(i) an analogue scale interval, $1/10,000$ of the load which would be passed in one hour over the weighing unit at the maximum rate of flow;

(ii) a digital scale interval, $1/20,000$ of the load which would be passed in one hour over the weighing unit at the maximum rate of flow.

Provision of zero-setting device

11.—(1) Every beltweigher shall be provided with a semi-automatic or automatic zero-setting device unless the speed and length of the belt are such that it makes at least one complete revolution within three minutes.

(2) Nothing in paragraph (1) shall apply to any beltweigher which is made in accordance with a pattern in respect of which a certificate of approval was in force before the date of coming into operation of these Regulations.

Marking of beltweighers

12.—(1) Every beltweigher shall be legibly and durably marked with:—

- (a) the name of the maker or supplier;
- (b) its maximum rate of flow or the maximum capacity of the weighing unit on the descriptive plate or elsewhere; and
- (c) its minimum totalised load on the descriptive plate or elsewhere.

(2) Every beltweigher may, where first submitted for testing with a view to passing as fit for use for trade before 1st August 1986, and shall, where first submitted for such testing on or after that date, be legibly and durably marked with:—

- (a) the number of the certificate of approval or of the notice of examination in respect of the pattern in accordance with which the beltweigher is made, preceded by the words “Certification No.” or “Cert. No.” or “Notice No.” or “DED Certification No.” or “DED Cert. No.” as the case may be; and
- (b) where it is made in accordance with a pattern modified in accordance with an authorisation, an indication of the date of such authorisation preceded by the letter “M”.

Marking of units of measurement

13.—(1) Subject to Article 53(3) of the Order, where units of measurement expressed in terms of mass are marked on beltweighers first passed as fit for use for trade:

- (a) before 1st December 1980, they shall be marked in full or, except in the case of the ton, by means of one of the following abbreviations or symbols only:—
cwt, qr, lb, t, kg, kilog, g;
- (b) on or after that date, they shall be marked, in metric units or pounds, in full or by means of one of the following abbreviations or symbols only:—
lb, t, kg, g.

(2) Nothing in paragraph (1) shall authorise the use for trade of the ton, hundredweight or quarter in any circumstances other than those permitted by Regulation 10(2) and (4) of the Units of Measurement Regulations 1980(a).

PART III

MANNER OF ERECTION AND USE

Manner of erection of beltweighers and availability of suitable test weighing equipment

14.—(1) Every beltweigher shall be erected in such a way that it is possible to test it in situ, including in particular the depositing on or removal from the belt of material test loads in a reliable and easy manner, without disrupting the normal operation of the beltweigher.

(2) A person shall not use a beltweigher unless a weighing machine which meets the provisions of paragraph (3) is sited in the vicinity of the beltweigher and is available for use in conjunction with the beltweigher.

(3) The weighing machine referred to in paragraph (2) shall—

(a) have been passed as fit for use for trade or bear the mark of EEC initial verification; and

(b) be capable of weighing material equal in weight to the minimum totalised load of the beltweigher, to an accuracy which is equal to or better than one-fifth of the prescribed limits of error for material testing.

(4) Nothing in paragraphs (1) and (2) shall apply to any beltweigher which was first passed as fit for use for trade before 1st August 1986.

Loading of beltweighers

15. A person shall not use a beltweigher in such a manner as to cause—

(a) spillage of material from the belt; or

(b) loading of the weighing unit above its maximum capacity.

Operating speed of beltweighers

16. A person shall not use a beltweigher in such a manner as to cause during normal operation of the beltweigher the speed of the belt—

(a) to fall below 90% of its maximum speed, in the case of a beltweigher without any nominal speed being marked on the descriptive plate or elsewhere on the beltweigher;

(b) to fall below or exceed its nominal speed by more than 5% in the case of a beltweigher with a nominal speed being marked on the descriptive plate or elsewhere on the beltweigher.

Accessibility of information and controls to operator

17.—(1) Subject to paragraph (2), every beltweigher having either a non-automatic or semi-automatic zero-setting device shall be erected in such a manner that the operator can, notwithstanding the nature of the beltweigher or its surroundings, readily take up a single position from which he can:—

(a) read the indication on the zero totalisation indicating device,

(b) operate the zero-setting controls, and

(c) see whether or not the belt passing over the weighing unit is empty.

(2) Nothing in paragraph (1) shall apply to any beltweigher which was first passed as fit for use for trade before 1st August 1986.

PART IV

TESTING

Pre-test conditions

18.—(1) A beltweigher shall not be tested, passed as fit for use for trade and stamped unless it has been completely erected ready for use and installed at the place where it is to be used.

(2) Every beltweigher submitted for testing shall be in a clean condition.

(3) For the purposes of the performance by an inspector of his functions under the Order or these Regulations relating to inspection, testing, passing as fit for use for trade and stamping of any beltweigher, a person submitting such a beltweigher to an

inspector or who an inspector has reasonable cause to believe has possession of such a beltweigher for use for trade shall, if requested, make available for the inspector's use such material in his possession as the inspector may reasonably require, and such material shall be returned to the person in question.

Requirements relating to testing

19.—(1) For the purpose of testing any beltweigher, the inspector shall satisfy himself that the minimum totalised load is not less than—

- (a) in the case of Class I beltweighers the greatest of the following:—
 - (i) the load which would be passed in one revolution of the belt over the weighing unit at the maximum rate of flow;
 - (ii) 2% of the load which would be passed in one hour over the weighing unit at the maximum rate of flow;
 - (iii) 200 totalisation scale intervals;
- (b) in the case of Class II beltweighers, the greatest of the following:—
 - (i) the load which would be passed in one revolution of the belt over the weighing unit at the maximum rate of flow;
 - (ii) 1% of the load which would be passed in one hour over the weighing unit at the maximum rate of flow;
 - (iii) 100 totalisation scale intervals.

(2) Subject to paragraph (3), the inspector shall then proceed with the testing of the beltweigher in accordance with the provisions of Schedule 1.

(3) Before 1st August 1989, the inspector shall not carry out the tests specified in paragraphs 1 to 4, or his duties specified in paragraphs 6(5) and 7(2), of Schedule 1 in respect of any beltweigher which is made in accordance with a pattern in respect of which a certificate of approval was in force before the date of coming into operation of these Regulations.

PART V

SUPPLEMENTARY PROVISIONS

Prescribed limits of error

20. The prescribed limits of error relating to beltweighers shall be those set out in columns 2 to 4 of the Table in Schedule 2 in relation to each test set out in column 1 and carried out on the beltweigher.

Passing as fit for use for trade

21. Subject to Regulation 19(3), a beltweigher shall not be passed as fit for use for trade unless:—

- (a) it complies with all the appropriate requirements of these Regulations; and
- (b) on testing,
 - (i) it falls within the prescribed limits of error in relation to passing as fit for use for trade; and
 - (ii) it complies with the requirements of paragraph 3(2) of Schedule 1 and the appropriate requirements of paragraph 7(2) of the said Schedule.

Stamping

22.—(1) Every beltweigher shall be provided with a plug or stud made of soft metal and made irremovable by undercutting and with such sealing arrangements as may be specified in the particular pattern in accordance with which the beltweigher is

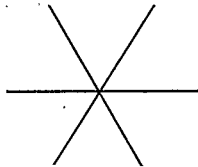
made as set out in any certificate of approval relating to it and which is in force or in the notice of examination.

(2) The stamp shall be placed on the said plug or stud and every sealing device provided in accordance with paragraph (1).

(3) A beltweigher shall not be stamped in accordance with paragraph (2) if it bears any mark which might reasonably be mistaken for the stamp, or any statement or mark (other than an inspector's stamp) which purports to be or might reasonably be mistaken for an expression of approval or guarantee of accuracy by any body or person.

Obliteration of stamps

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



Inspectors' powers and duties regarding obliteration of stamps

24.—(1) Subject to paragraph (2), an inspector shall obliterate the stamp on any beltweigher which—

(a) fails upon testing—

(i) to fall within the prescribed limits of error in relation to obliteration of the stamp; or

(ii) to comply with the requirements of paragraph 3(2) of Schedule 1 or the appropriate requirements of paragraph 7(2) of the said Schedule; or

(b) fails to comply with any other appropriate requirement of these Regulations.

(2) Where any beltweigher does not fully comply with the requirements of these Regulations, but the nature or degree of the non-compliance is not in the inspector's opinion such as to require the immediate obliteration of the stamp, he shall give to the proprietor or any person in charge of the beltweigher a notice calling on him to have the beltweigher corrected within a stated period, not exceeding 28 days, and shall obliterate the stamp if the correction has not been made within the stated period.

(3) An inspector shall obliterate the stamp on any beltweigher which has, since it was last stamped, had any alteration or addition made to it such that it could not be passed as fit for use for trade under Regulation 21.

(4) Without prejudice to the provisions of paragraph (3), an inspector may obliterate the stamp on any beltweigher which:—

(a) has, since it was last stamped, been the subject of any adjustment, alteration, addition, repair or replacement which could have affected its accuracy or function; or

(b) is in use for trade for a particular purpose and:—

(i) which does not meet the requirements of Regulation 5; or

(ii) for which purpose it is otherwise unsuitable.

Consequence of the obliteration of a stamp

25. For the purposes of these Regulations, the obliteration of any one stamp on any beltweigher shall be deemed to be the obliteration of all other stamps on that beltweigher.

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Weights and Measures

No. 319

Sealed with the Official Seal of the Department of Economic Development on
15th November 1985.

(L.S.)

Margaret L. Johnston

Assistant Secretary

SCHEDULE 1

(Regulation 19)

TESTING

1.—(1) Except as provided in Regulation 19(3), the inspector shall carry out on the beltweigher setting to zero testing, discrimination testing and stability at zero testing in accordance with paragraphs 2 to 4.

(2) Any automatic zero-setting devices shall be inactivated when carrying out discrimination testing and stability at zero testing.

2.—(1) The inspector shall set the beltweigher to zero and then a number of tests shall be carried out on the beltweigher to determine its setting to zero error.

(2) Subject to sub-paragraph (3), the inspector shall determine each setting to zero error by ascertaining the difference in value between the two indications of the zero totalisation indicating device obtained for each test and recorded immediately before and immediately after an interval which is as close as possible to three minutes and during which the empty belt completes a whole number of revolutions.

(3) For the purposes of the said tests, in the case of a beltweigher fitted with zero-setting and zero totalisation indicating devices which require an additional mass to be attached to the weighing unit, the said values may, at the discretion of the inspector, be amended to eliminate the effect of the additional mass before determining the setting to zero error.

3.—(1) A series of at least four tests shall be carried out on the zero totalisation indicating device of the beltweigher, each test being of a duration which is as close as possible to three minutes and during each of which the empty belt completes a whole number of revolutions, and during some of which there is added to the weighing unit a mass equal to—

(a) in the case of a Class I beltweigher, 0.1% of the maximum capacity of the weighing unit; or

(b) in the case of a Class II beltweigher, 0.2% of the maximum capacity of the weighing unit.

(2) From the indications of the zero totalisation indicating device recorded immediately before and immediately after each of the tests referred to in sub-paragraph (1) it must be possible to distinguish between the results of those tests during which the mass was added to the weighing unit and of those tests during which the mass was not added.

(3) In carrying out those tests during which the mass is added to the weighing unit—

(a) the point of application of the mass may be changed between tests; and

(b) the mass shall not be applied to any point on a lever on the weighing unit if application at such point would cause the ratio between the mass applied and the resulting force transmitted to be other than the ratio by reference to which the lever is designed.

4.—(1) A series of five tests shall be carried out on the beltweigher in quick succession to determine its stability at zero without the zero setting being altered, each test being of a duration which is as close as possible to three minutes and during each of which the empty belt completes a whole number of revolutions.

(2) The difference in value between the largest and the smallest of the five zero setting indications of the zero totalisation indicating device obtained by the said tests shall be determined by the inspector and shall constitute the stability at zero error.

5.—(1) The inspector shall carry out material testing of the beltweigher in accordance with paragraph 6, and in the case of a beltweigher which has more than one totalisation indicating device, such testing shall also be in accordance with paragraph 7.

(2) Before commencing material testing, the inspector shall satisfy himself that the arrangements to be used for determining the weight of material used in material testing will give weight determinations such that in respect of each material test load the weight determination shall in total be accurate to within one-fifth of the limits of error prescribed for material testing whether such load is determined in one or more weighing operations.

6.—(1) The inspector shall—

(a) set the beltweigher to zero with the belt empty; and

(b) in the case of a beltweigher subject to setting to zero testing, the zero position shall be set to within the prescribed limits of error for that test.

(2) A minimum of two pairs of individual tests shall then be carried out on the beltweigher under normal conditions of use in accordance with sub-paragraph (3), each individual test being under the same conditions as, and using approximately the same quantity of material as is used, in the others.

(3) The individual tests referred to in sub-paragraph (2) shall each consist of weighing on the beltweigher a quantity of suitable material at least equal to the minimum totalised load at a rate of flow between the minimum and maximum rates of flow, which shall be the same for each test in the pair, but the rate of flow for each pair shall be different from that used for every other pair.

(4) For each of the tests carried out in accordance with sub-paragraphs (2) and (3), the inspector shall determine—

(a) the weight of the material used in the test using the arrangements referred to in paragraph 5(2);

(b) the material testing error by ascertaining the difference between the weight of the material determined in accordance with head (a) and the value for that weight of the material obtained from the totalisation indicating device.

(5) Subject to Regulation 19(3), the inspector shall determine the repeatability error for each pair of tests carried out in accordance with sub-paragraphs (2) and (3), being the difference between the two material testing errors determined in accordance with sub-paragraph (4).

7.—(1) In carrying out material testing in accordance with paragraph 6 of a beltweigher which has more than one totalisation indicating device, the inspector shall determine the material testing errors obtained by using each totalisation indicating device each time a test load of material is weighed on the beltweigher.

(2) Subject to Regulation 19(3), in determining under sub-paragraph (1) the material testing errors, the inspector shall ensure that the difference between any two material testing errors in respect of each test load obtained by using any two totalisation indicating devices shall not exceed—

(a) zero, where the two totalisation indicating devices both have digital indicators with the same totalisation scale interval;

(b) the larger of the totalisation scale intervals, where the two totalisation indicating devices both have digital indicators but with different totalisation scale intervals;

(c) the prescribed limits of error for material testing, where the two totalisation indicating devices both have analogue indicators; or

(d) either the prescribed limits of error for material testing or one totalisation scale interval of the digital indicator, whichever is the greater, where one of the two totalisation indicating devices has an analogue indicator and the other has a digital indicator.

(3) The references to totalisation indicating devices in sub-paragraphs (1) and (2) shall not apply to any device which is identified in the certificate of approval as a supplementary totalisation indicating device.

SCHEDULE 2

(Regulation 20)

PRESCRIBED LIMITS OF ERROR

TABLE

Test	Limits of error		
	Class I belt- weigher	Class II belt- weigher	
1. Setting to zero testing both in relation to passing as fit for use for trade and in relation to obliteration of the stamp	plus or minus 0.1%	plus or minus 0.2%	of the load which would have been totalised had the beltweigher been operating at the maximum rate of flow, in accordance with the value marked on the beltweigher, for the duration of the setting to zero testing.
2. Stability at zero testing both in relation to passing as fit for use for trade and in relation to obliteration of the stamp	0.0035%	0.007%	of the load which would have been totalised had the beltweigher been operating for one hour at the maximum rate of flow in accordance with the value marked on the beltweigher.
3. Material testing:—			
(a) in relation to passing as fit for use for trade	plus or minus 0.5%	plus or minus 1.0%	} of the weight of material used in each test determined as described in paragraph 6(4)(a) of Schedule 1.
(b) in relation to obliteration of the stamp	plus or minus 1%	plus or minus 2%	
4. Repeatability:—			
(a) in relation to passing as fit for use for trade	0.5%	1%	} of half the sum of the two loads used in each pair of tests, the weight of material used in each test being determined as described in paragraph 6(4)(a) of Schedule 1.
(b) in relation to obliteration of the stamp	1%	2%	

(This note is not part of the Regulations.)

These Regulations prescribe beltweighers for the purposes of Article 9(1) of the Weights and Measures (Northern Ireland) Order 1981 and exclude them from the application of the Weights and Measures Regulations (Northern Ireland) 1967, where they were formerly prescribed within the class of automatic weighing machines.

The Regulations make provision as to:

- (a) the purpose for which beltweighers may be used for trade (Regulation 5);
- (b) the materials and principles of construction of beltweighers and their marking, so that, inter alia, each beltweigher shall be made in accordance with a pattern approved or deemed to have been approved under Article 10 of the Order and shall be marked with the corresponding number of the approval (Regulations 6-13);
- (c) their manner of erection and use for trade (Regulations 14-17) and
- (d) their testing, passing as fit for use for trade and stamping and the obliteration of such stamps (Regulations 18, 19 and 21-25 and Schedule 1).

The Regulations also prescribe limits of error (Regulation 20 and Schedule 2).

The following types of weighing machine, although not prescribed by these Regulations, remain prescribed by the Weights and Measures Regulations (Northern Ireland) 1967 for the purposes of Article 9(1) of the Order:

- (aa) beltweighers which are designed to operate at more than one belt speed; and
- (bb) continuous totalising automatic weighing machines of the belt conveyor type which determine the mass of material other than by using the action of gravity on the material.

The Regulations make the following changes of substance:—

- (i) two classes of accuracy — Class I and Class II — have been introduced for beltweighers (Regulation 2(1));
- (ii) the prescribed limits of error for Class I beltweighers are half of the limits of error permitted for Class II beltweighers but only ballast is allowed to be weighed for trade purposes on the latter machines (Regulations 5(2) and 20 and Schedule 2);
- (iii) the testing procedures to be carried out by an inspector have been altered and augmented in order to test the beltweighers performance more accurately (Regulations 18 and 19 and Schedule 1);
- (iv) a value for the minimum totalised load has to be marked on every beltweigher which must not be used for weighing quantities of material which are less than the marked value (Regulations 5(1) and 12(1)(c)); and
- (v) as from 1st August 1986, new beltweigher installations will have to incorporate facilities allowing for the easy loading or unloading of test loads and there will also have to be, in the vicinity of the new beltweigher, a suitable weighing machine capable of checkweighing the test load to the required accuracy (Regulation 14).

Contravention of Regulations 5, 13, 14, 15, 16 and 17 is an offence under Article 13(1) of the Weights and Measures (Northern Ireland) Order 1981. It is also an

offence under Article 9(2) of that Order for a person to use for trade or have in his possession for such use any beltweigher prescribed by Regulation 3 which has not been passed as fit for such use and which does not bear a stamp indicating that it has been so passed which remains undefaced otherwise than by reason of fair wear and tear. A beltweigher is required by these Regulations to be passed and stamped only after it has been installed at the place where it is to be used and it is an offence under Article 9(11) of the Order knowingly to use a beltweigher if it has been dismantled and reinstalled unless it has been passed again after reinstallation. It is also an offence knowingly to cause or permit any other person so to use it or, knowing that the beltweigher has to be passed again, to dispose of it to some other person without informing him of that requirement. The penalty on summary conviction for all these offences is a fine not exceeding £400 and the beltweigher in respect of which the offence is committed is liable to forfeiture.