SCHEDULE 2 Regulation 32

DISCONTINUOUS TOTALISERS

PART I

TESTING — GENERAL REQUIREMENT

1. Discontinuous totalisers to which the requirements of Regulations 9 and 24 do not apply, i.e. are provided with a display of totalised weight only, shall be subject to material testing in accordance with the provisions of Part II.

2. Discontinuous totalisers which embody the facilities in Regulation 9 but not those in Regulation 24 shall be subject to the requirements of Regulation 32(2) in addition to the provisions of Part II.

3. Discontinuous totalisers to which Regulation 9 and 24 are applicable may, as an alternative to the testing in paragraph 2, be tested in accordance with the provisions of Part III.

4.—(1) Subject to sub-paragraph (2), in testing any discontinuous totaliser, the inspector shall satisfy himself that:—

(a) it is properly balanced or set to zero when unloaded;

(b) any beam or leverwork has sufficient room for oscillation and returns to the position of equilibrium when the load is removed;

(c) any indicator returns to the zero mark or given point when the load is removed.

(2) Sub-paragraphs (1)(a) and (c) shall not apply in the case of a discontinuous totaliser of a pattern in respect of which a certificate of approval is in force, if, in the certificate of approval or the notice of examination in respect of that pattern, it is described as not being so constructed as to balance when unloaded.

PART II

TESTING — USING A SEPARATE NON-AUTOMATIC WEIGHING MACHINE

5. Before commencing material testing of the discontinuous totaliser, the inspector shall satisfy himself that the non-automatic weighing machine available in accordance with Regulation 26(2) is such that the arrangements to be used for determining the weight of material used in material testing will give weight determinations of each test load to an accuracy equal to or better than one-fifth of the prescribed limits of error for material testing, whether such test load is determined in one or more weighing operations.

6.—(1) With the load receptor of the discontinuous totaliser empty, the inspector shall ensure that—

(a) the totalisation indicating device is set to zero; and

(b) any individual weight indicating device is set to zero or a given point.

(2) A minimum of two individual tests, each consisting of 20 separate loads, shall then be carried out on the machine under normal conditions of use in accordance with sub-paragraph (3).

(3) At least two of the individual tests referred to in sub-paragraph (2) shall consist of tests involving the weighing on the machine of approximately the same quantity of suitable material, at least equal to the minimum totalised load marked on the machine.

(4) Where the quantity of material weighed by the machine can vary, each individual test referred to in sub-paragraph (2) shall be made with a quantity of suitable material as nearly as practicable equal to the minimum totalised load and another individual test consisting of 20 separate loads with a quantity of suitable material as nearly as practicable equal to the maximum capacity shall then be carried out on the machine.

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

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

(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.

(6) Subject to sub-paragraph (7), the inspector shall determine the repeatability error for each of the tests carried out in accordance with sub-paragraph (3), being the difference between the material testing errors determined in accordance with sub-paragraph (5).

(7) Before 1st January 1988, the inspector shall not carry out his duty specified in sub-paragraph (6) in respect of any discontinuous totaliser 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 III

TESTING — USING AN INTERNAL NON-AUTOMATIC WEIGHING FACILITY

7. Where a discontinuous totaliser is constructed with a weighing unit in accordance with Regulations 9 and 24(a), the machine may be tested by means of standard weights or masses for accuracy and as far as practicable otherwise satisfy those requirements which are applicable to a non-automatic weighing machine of the type and class to which the machine relates, using the individual weight indicating device.

8.—(1) The inspector shall use the subdivided scale provided in accordance with Regulation 24(b) to obtain an accuracy determination to one-tenth of a scale interval at not less than six positions of the weighing range, including zero, minimum load and maximum capacity.

(2) The inspector shall then prepare a calibration chart or graph from the results obtained.

9.—(1) After allowing the machine to weigh and discharge suitable material for at least five fillings of the load receptor by the normal automatic process, the process shall be stopped with the load receptor empty and the inspector shall:—

(a) using the subdivided scale, ensure that the individual weight indicating device is set to zero or a given point; and

(b) set the totalisation indicating device to zero.

(2) The automatic processing of material shall then be interrupted when the load receptor is loaded and ready to be discharged, the inspector, shall note the individual weight value indicated and then allow the material to be discharged by the automatic process.

(3) When the load receptor is emptied the weighing process shall again be interrupted and the indicated weight value noted; the inspector shall then determine the true net weight of material discharged, taking account of any appropriate errors of the weighing unit obtained from the calibration chart or graph.

(4) The inspector shall then:

(a) determine the total true net weight of a group of 20 separate loads in accordance with sub-paragraphs (2) and (3); and

(b) record the corresponding value of that weight of material indicated by the totalisation indicating device.

(5) The total net weight of a minimum of two groups of 20 separate loads shall be determined with at least two of the groups consisting of tests involving the weighing on the machine of approximately the same quantity of suitable material, at least equal to the minimum totalised load marked on the machine.

(6) Where the quantity of material weighed by the machine can vary, each group of tests referred to in sub-paragraph (5) shall be made with a quantity of suitable material as nearly as practicable equal to the minimum totalised load and another test consisting of a group of 20 separate loads with a quantity of suitable material as nearly as practicable equal to the maximum capacity shall then be carried out on the machine.

(7) For each group of tests carried out in accordance with sub-paragraphs (4), (5) and (6), the inspector shall determine the material test error by ascertaining the difference between the weight of material determined in accordance with sub-paragraph (4)(a) and the value for that weight of material obtained from the totalisation indicating device in accordance with sub-paragraph (4)(b).

(8) Subject to sub-paragraph (9), the inspector shall determine the repeatability error for each of the group of tests carried out in accordance with sub-paragraph (5), being the difference between the material testing errors determined in accordance with sub-paragraph (7).

(9) Before 1st January 1988, the inspector shall not carry out his duties specified in sub-paragraph (8) in respect of any discontinuous totaliser 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.