#### SCHEDULE 1

Regulation 9

### ACCURACY CLASSIFICATION OF NON-AUTOMATIC WEIGHING MACHINES

### PART I

#### GENERAL

- 1. Non-automatic weighing machines are divided into four classes of accuracy according to specifications set out in Parts II to V. The division depends on their characteristics as well as the provisions relating to maximum capacity, the lower limit of the minimum load, the number of scale intervals and the scale interval itself.
- 2. Where self and semi-self indicating machines are provided with an indicating device on which the last figure is clearly differentiated from the other figures, the classification of the machines into accuracy classes, their number of scale intervals and their minimum load shall be determined by reference to the verification scale interval.
- 3. In each weighing mode of a machine each of the tare, weight indicating and printing devices operable in that mode has an associated verification scale interval. In a different weighing mode the same devices may have different verification scale intervals. When testing a machine it is therefore necessary to determine the verification scale interval for each device in each of the weighing modes in which it is operable.
- 4. A weight indicating or printing device which, in any single weighing mode, has its weighing range divided into parts, each part having a different scale interval, will also have a different verification scale interval for each part. When testing in a particular weighing mode the relevant verification scale intervals are those associated with those devices in that mode.
  - 5. Each verification scale interval is—
    - (a) marked on the machine in accordance with the published particulars of the approved pattern or, if there are no such markings,
    - (b) specified in the relevant Table in Parts II to V.
- 6. The presence of a tare device or of a verification device on the machine does not affect the classification of the machine, which depends on its own characteristics. These devices are considered as belonging to the class of accuracy of the machine to which they are attached irrespective of their own characteristics.
- 7. For machines provided with several weight indicating or printing devices, each of the devices—
  - (a) has its own minimum load, the value of which is determined from the appropriate Table in Parts II, III, IV or V, depending on its metrological characteristics; and
  - (b) has the same digital scale interval, which must be at most equal to the smallest of any analogue scale interval.
- 8. For machines provided with graduated tare devices the smallest scale interval of the devices must be equal to the smallest scale interval of the machine to which it is fitted. The verification scale interval of these devices shall be equal to the smallest verification scale interval of the machine.
- 9. For machines fitted with a graduated verification device the scale interval of such an incorporated device must be at most equal to one-fifth of the scale interval of the machine.

# PART II

## MACHINES DESIGNATED CLASS I

10. A machine made in accordance with an approved pattern and which is or could be marked

### is a Class I machine.

11. The specifications for non-graduated and graduated Class I machines are given in Table 1.

Table 1

Maximum capacity "Max"	Lower limit of the minimum load"Min"	Scale interval"d"	Number of scale intervals "n"	Verification scale interval"e"
Non-graduated machines				
$100 \text{ mg} \leq \text{Max}$	10 e			0.1 mg
≤ 1 g				
$1 g \leq Max$	50 e			Max
<10 g				
				10 000
$10 \text{ g} \leq \text{Max}$	50 e			1 mg
<100 g				
$100 \text{ g} \leq \text{Max}$	50 e			Max
				100 000
Graduated machines				
$0.5 \text{ mg} \leq \text{Max}$	d	$d \leq 0.005 \ mg$	$10 \le n$	d
$1 \text{ mg} \leq \text{Max}$	10 d	$0.01 \text{ mg} \leq d$	$100 \le n$	d
		$\leq$ 0.05 mg		
$10 \text{ mg} \leq \text{Max}$	50 d	$0.1 \text{ mg} \leq d$	$100 \le n$	d
		$\leq$ 0.5 mg		
100 g ≤ Max	50 d	$1 \text{ mg} \leq d$	100 000 ≤ n	d

### Notes

- 1. When a machine is provided with a rider its verification scale interval shall be the smaller of the following—
  - (i) the verification scale interval of the machine not taking into account the rider, or
  - (ii) the scale interval of the rider device.

- 2. When graduated machines of the self and semi-self indicating type are provided with a device for interpolation of reading, this shall not be taken into account when determining the verification scale interval of the machine.
- 3. When graduated machines of the self or semi-self indicating type are provided with an indicating device on which the last figure is clearly differentiated from the other figures, the verification scale interval shall correspond to the last but one figure of the indication.
- 4. In the case of machines where the weight indicating or printing is in carat (metric) units or ounces troy the relevant capacity and verification scale interval shall be the amounts in carat (metric) or ounces troy respectively which are equivalent to those specified in the Table in terms of mg, g and kg.
- 5. Where the equivalent metric value for an ounce troy scale interval falls between ranges then the value shall be considered as belonging to the lower range.

# PART III

#### MACHINES DESIGNATED CLASS II

- 12. A machine which is:
  - (a) made in accordance with an approved pattern and which is or could be marked

, or

(b) first stamped before 1st November 1991 and marked "Class B" in accordance with the provisions for beam scales in the Weights and Measures Regulations (Northern Ireland) 1967,

is a Class II machine.

13. The specifications for non-graduated and graduated Class II machines are given in Table 2.

Table 2

Maximum capacity "Max"	Lower limit of the minimum load "Min"	Scale interval"d"	Number of scale intervals "n"	Verification scale interval"e"
Non-graduated machines				
$1 g \le Max < 5 g$	10 e			Max
				1 000
$5 g \leq Max$	10 e			5 mg
<100 g				
$100 \text{ g} \leq \text{Max}$	10 e			Max
<200 g				
				20 000

Maximum capacity "Max"	Lower limit of the minimum load "Min"	Scale interval"d"	Number of scale intervals "n"	Verification scale interval"e"
200 g ≤ Max	50 e			Max
				20 000
Graduated machines				
Non-self indicating machines				
$1 g \le Max < 50 g$	10 d	$1 \text{ mg} \le d \le 5 \text{ mg}$	$200 \le n \le 50000$	d
$10 \text{ g} \le \text{Max} < 50 \text{ g}$	50 d	$10 \text{ mg} \le d \le 50$ mg	$1\ 000 \le n < 5\ 000$	5 mg
$50 g \le Max \le 500$	10 d	$1 \text{ mg} \le d \le 5 \text{ mg}$	$\begin{array}{c} 10\ 000 \leq n \leq 100 \\ 000 \end{array}$	d
$50 \text{ g} \leq \text{Max} \leq 5 \text{ kg}$	50 d	$\begin{array}{c} 10 \text{ mg} \leq d \leq 500 \\ \text{mg} \end{array}$	$\begin{array}{c} 1 \ 000 \leq n \leq 10 \\ 000 \end{array}$	Max
				10 000
$100 \text{ g} \le \text{Max} \le 50$ kg	50 d	$10 \text{ mg} \le d \le 500$ mg	$\begin{array}{c} 10\ 000 \leq n \leq 100 \\ 000 \end{array}$	d
$5 \text{ kg} \leq \text{Max}$	50 d	$1 g \leq d$	$5\ 000 \le n \le 10$ 000	Max
				10 000
$10 \text{ kg} \leq \text{Max}$	50 d	$1 g \leq d$	$10\ 000 \le n \le 100$ $000$	d
Self and semi- self indicating machines				
$\begin{array}{c} 1 \ g \leq Max \leq 500 \\ g \end{array}$	10 d	$1 mg \le d \le 5 mg$	$\begin{array}{c} 200 \leq n \leq 100 \\ 000 \end{array}$	d
$10 g \le Max \le 50$ kg	50 d	$\begin{array}{c} 10 \text{ mg} \leq d \leq 500 \\ \text{mg} \end{array}$	$\begin{array}{c} 1 \ 000 \leq n \leq 100 \\ 000 \end{array}$	d
$5 \text{ kg} \leq \text{Max}$	50 d	$1 g \le d$	$\begin{array}{c} 5\ 000 \leq n \leq 100 \\ 000 \end{array}$	d

## Notes

- 1. When a machine is provided with a rider its verification scale interval shall be the smaller of the following—
  - (i) the verification scale interval of the machine not taking into account the rider, or

- (ii) the scale interval of the rider device.
- 2. When graduated self or semi-self indicating machines are provided with a device for interpolation of reading, this shall not be taken into account when determining the verification scale interval of the machine.
- 3. When graduated self or semi-self indicating machines are provided with an indicating device on which the last figure is clearly differentiated from the other figures, the verification scale interval shall correspond to the last but one figure of the indication.
- 4. Machines of a maximum capacity equal to or greater than 1 kg of an actual scale interval of 100 mg and of a verification scale interval of 1 g may belong to this class of machine, provided that the last figure is clearly differentiated from the other figures.
- 5. In the case of machines where the weight indicating or printing is in carat (metric) units or ounces troy the relevant capacity and verification scale interval shall be the amounts in carat (metric) or ounces troy respectively which are equivalent to those specified in the Table in terms of mg, g and kg.
- 6. Where the equivalent metric value for an ounce troy scale interval falls between ranges then the value shall be considered as belonging to the lower range.

## **PART IV**

#### MACHINES DESIGNATED CLASS III

- 14. A machine which is—
  - (a) made in accordance with an approved pattern and which is or could be marked

, or

- (b) first stamped before 1st November 1991 and marked "Class C" in accordance with the provisions for beam scales in the Weights and Measures Regulations (Northern Ireland) 1967, or
- (c) of a type referred to as "common form" and which was first stamped before 1st August 1991,

is a Class III machine.

15. The specifications for non-graduated and graduated Class III machines are given in Table 3.

Table 3

Maximum capacity "Max"	Lower limit of the minimum load"Min"	Scale interval"d"	Number of scale intervals "n"	Verification scale interval"e"
Non-graduated machines				
$20 \text{ g} \leq \text{Max}$	20 e			0.1 g
<100 g				
$100 \text{ g} \leq \text{Max}$	20 e			Max
<1 kg				

Maximum capacity "Max"	Lower limit of the minimum load "Min"	Scale interval"d"	Number of scale intervals "n"	Verification scale interval"e"
				1 000
$1 \text{ kg} \leq \text{Max}$	20 e			1 g
<2 kg				
$2 \text{ kg} \leq \text{Max}$	20 e			Max
				2 000
Graduated machines				
Non-self indicating machines				
$20 g \le Max < 100$	10 d	$0.1 g \le d \le 0.2 g$	$200 \le n \le 1000$	0.1 g
$100 \text{ g} \le \text{Max} < 1$ kg	20 d	$0.2~g \leq d \leq 1~g$	$200 \le n \le 1000$	Max
				1 000
$100 \text{ g} \le \text{Max} \le 10$ kg	20 d	$0.1 g \le d \le 1 g$	$\begin{array}{c} 1~000 \leq n \leq 10 \\ 000 \end{array}$	d
$400 g \le Max < 5$ kg	20 d	$2 g \le d \le 5 g$	$200 \le n \le 1000$	Max
				1 000
$2 \text{ kg} \le \text{Max} \le 50$ kg	20 d	$2 g \le d \le 5 g$	$\begin{array}{c} 1~000 \leq n \leq 10 \\ 000 \end{array}$	d
$5 \text{ kg} \leq \text{Max} < 10 \text{ t}$	20 d	$10 g \le d \le 10 kg$	$500 \le n \le 1000$	Max
				1 000
10 kg ≤ Max ≤ 100 t	20 d	$10 g \le d \le 10 kg$	$\begin{array}{c} 1 \ 000 \leq n \leq 10 \\ 000 \end{array}$	d
$15 t \le Max < 100 t$	20 d	$20 \text{ kg} \le d \le 50 \text{ kg}$	$750 \le n \le 1000$	Max
				1 000
15 $t \le Max < 100 t$	10 d	100 kg	$750 \le n \le 1000$	Max
				1 000
				1 000

Maximum capacity "Max"	Lower limit of the minimum load "Min"	Scale interval"d"	Number of scale intervals "n"	Verification scale interval"e"
$20 t \le Max \le 1$ $000 t$	20 d	$20 \text{ kg} \le d \le 50 \text{ kg}$	$\begin{array}{c} 1~000 \leq n \leq 10 \\ 000 \end{array}$	d
$20 t \le Max \le 1$ $000 t$	10 d	100 kg	$\begin{array}{l} 1~000 \leq n \leq 10 \\ 000 \end{array}$	d
$150 t \leq Max$	10 d	$200 \text{ kg} \leq d$	$750 \le n < 1\ 000$	Max
				1 000
$200 \ t \leq Max$	10 d	$200 \text{ kg} \leq d$	$\begin{array}{c} 1~000 \leq n \leq 10 \\ 000 \end{array}$	d
Self and semi- self indicating machines				
$\begin{array}{c} 20 \text{ g} \leq \text{Max} \leq 10 \\ \text{kg} \end{array}$	10 d	$0.1~g \le d \le 1~g$	$50 \le n \le 10~000$	d
$400 g \le Max \le 50$ kg	20 d	$2 g \le d \le 5 g$	$200 \le n \le 10~000$	d
$5 \text{ kg} \le \text{Max} \le 200$ $\text{kg}$	20 d	$10 g \le d \le 20 g$	$500 \le n \le 10\ 000$	d
$25 \text{ kg} \le \text{Max} \le 100 \text{ t}$	20 d	$50 \text{ g} \le d \le 10 \text{ kg}$	$500 \le n \le 10\ 000$	d
$15 t \le Max \le 1$ $000 t$	20 d	$20 \text{ kg} \le d \le 50 \text{ kg}$	$750 \le n \le 10000$	d
$15 t \le Max \le 1$ $000 t$	10 d	100 kg	$750 \le n \le 10\ 000$	d
150 t < Max	10 d	$200 \text{ kg} \leq d$	$750 \le n \le 10\ 000$	d

# PART V

# MACHINES DESIGNATED CLASS IIII

- 16. A machine which is—
  - (a) made in accordance with an approved pattern and which is or could be marked

, or

- (b) first stamped before 1st August 1991 in accordance with the provisions for crane weighing machines constructed upon the hydraulic principle in the Weights and Measures Regulations (Northern Ireland) 1967, or
- (c) of the type referred to as "approximate weighers" and first stamped before 1st August 1991, or

(d) of a type referred to as "common form" and which was first stamped before 1st August 1991,

is a Class IIII machine.

17. The specifications for non-graduated and graduated Class IIII machines are given in Table 4.

Table 4

Maximum capacity "Max"	Lower limit of the minimum load "Min"	Scale interval"d"	Number of scale intervals "n"	Verification scale interval"e"
Non-graduated machines				
$400 \text{ g} \leq \text{Max} < 2$ kg	10 e			5 g
$2 \text{ kg} \leq \text{Max}$	10 e			Max
				400
Graduated machines				
Non-self indicating machines				
$400 \text{ g} \leq \text{Max} \leq 2$ kg	10 d	$5 g \le d \le 10 g$	$80 \le n < 400$	5 g
$2 \text{ kg} \leq \text{Max} \leq 4 \text{ t}$	10 d	$10 g \le d \le 10 kg$	$100 \le n \le 400$	Max
				 400
$2 \text{ kg} \leq \text{Max} \leq 10 \text{ t}$	10 d	$5 g \le d \le 10 kg$	$400 \le n \le 1000$	d
$4 t \leq Max$	10 d	$20 \text{ kg} \leq d$	$200 \le n \le 400$	Max
				400
$8 t \leq Max$	10 d	20 kg ≤ d	$400 \le n \le 1000$	d
Self and semi- self indicating machines	10 4	20 kg <u>-</u> u	400 2 11 2 1 000	u
$400 g \le Max \le 10$	10 d	$2 g \le d \le 10 \text{ kg}$	$60 \le n \le 1\ 000$	d
4 t ≤ Max	10 d	20 kg ≤ d	$200 \le n \le 1\ 000$	d