Directive 2014/32/EU of the European Parliament and of the Council of 26 February
2014 on the harmonisation of the laws of the Member States relating to the making
available on the market of measuring instruments (recast) (Text with EEA relevance)

ANNEX VIII

SPECIFIC REQUIREMENTS

CHAPTER II

Automatic Catchweighers

1.   **Accuracy Classes**

1.1.   Instruments are divided into primary categories designated by:

X or Y

as specified by the manufacturer.

1.2.   These primary categories are further divided into four accuracy classes:
XI, XII, XIII & XIIII

and
Y(I), Y(II), Y(a) & Y(b)

which shall be specified by the manufacturer.

2.   **Category X Instruments**

2.1.   Category X applies to instruments used to check prepackages made up in accordance with the requirements of Council Directive 76/211/EEC of 20 January 1976 on the approximation of the laws of the Member States relating to the making-up by weight or by volume of certain prepackaged products[1] applicable to prepackages.

2.2.   The accuracy classes are supplemented by a factor (x) that quantifies the maximum permissible standard deviation as specified in point 4.2.

The manufacturer shall specify the factor (x), where (x) shall be ≤ 2 and in the form 1×10^k, 2×10^k or 5×10^k, where k is a negative whole number or zero.

3.   **Category Y Instruments**

Category Y applies to all other automatic catchweighers.

4.   **MPE**

4.1.   *Mean error Category X/MPE Category Y instruments*

TABLE 1

Net Load (m) in verification scale intervals (e)								Maximum permissible mean error	Maximum permissible error
XI	Y(I)	XII	Y(II)	XIII	Y(a)	XIIII	Y(b)	X	Y
$0 < m \leq 50\ 000$		$0 < m \leq 5\ 000$		$0 < m \leq 500$		$0 < m \leq 50$		± 0,5 e	± 1 e
$50\ 000 < m \leq 200\ 000$		$5\ 000 < m \leq 20\ 000$		$500 < m \leq 2\ 000$		$50 < m \leq 200$		± 1,0 e	± 1,5 e

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200 000 < m	20 000 < m ≤ 100 000	2 000 < m ≤ 10 000	200 < m ≤ 1 000	± 1,5 e	± 2 e

4.2.   *Standard deviation*

Maximum permissible value for the standard deviation of a class X (x) instrument is the result of the multiplication of the factor (x) by the value in Table 2 below.

TABLE 2

Net Load (m)	Maximum permissible standard deviation for class X(1)
m ≤ 50 g	0,48 %
50 g < m ≤ 100 g	0,24 g
100 g < m ≤ 200 g	0,24 %
200 g < m ≤ 300 g	0,48 g
300 g < m ≤ 500 g	0,16 %
500 g < m ≤ 1 000 g	0,8 g
1 000 g < m ≤ 10 000 g	0,08 %
10 000 g < m ≤ 15 000 g	8 g
15 000 g < m	0,053 %

For class XI and XII (x) shall be less than 1.

For class XIII (x) shall be not greater than 1.

For class XIIII (x) shall be greater than 1.

4.3.   *Verification scale interval — single interval instruments*

TABLE 3

Accuracy classes		Verification scale interval	Number of verification scale intervals $n = Max / e$	
			Minimum	Maximum
XI	Y(I)	0,001 g ≤ e	50 000	—
XII	Y(II)	0,001 g ≤ e ≤ 0,05 g	100	100 000
		0,1 g ≤ e	5 000	100 000
XIII	Y(a)	0,1 g ≤ e ≤ 2 g	100	10 000
		5 g ≤ e	500	10 000
XIIII	Y(b)	5 g ≤ e	100	1 000

4.4. *Verification scale interval — multi-interval instruments*

TABLE 4

Accuracy classes		Verification scale interval	Number of verification scale intervals $n = Max / e$	
			Minimum value[a] $n = Max_i / e_{(i+1)}$	**Maximum value** $n = Max_i / e_i$
XI	Y(I)	$0{,}001 \text{ g} \leq e_i$	50 000	—
XII	Y(II)	$0{,}001 \text{ g} \leq e_i \leq 0{,}05 \text{ g}$	5 000	100 000
		$0{,}1 \text{ g} \leq e_i$	5 000	100 000
XIII	Y(a)	$0{,}1 \text{ g} \leq e_i$	500	10 000
XIIII	Y(b)	$5 \text{ g} \leq e_i$	50	1 000

a For $i = r$ the corresponding column of Table 3 applies with e replaced by e_r.

Where:

i	=	1, 2, … r
i	=	partial weighing range
r	=	total number of partial ranges

5. **Measurement Range**

In specifying the measurement range for class Y instruments the manufacturer shall take account that the minimum capacity shall not be less than:

class Y(I)	:	100 e
class Y(II)	:	20 e for $0{,}001 \text{ g} \leq e \leq 0{,}05 \text{ g}$, and 50 e for $0{,}1 \text{ g} \leq e$
class Y(a)	:	20 e
class Y(b)	:	10 e
Scales used for grading, e.g. postal scales and garbage weighers	:	5 e

6. **Dynamic Setting**

6.1. The dynamic setting facility shall operate within a load range specified by the manufacturer.

6.2. When fitted, a dynamic setting facility that compensates for the dynamic effects of the load in motion shall be inhibited from operating outside the load range, and shall be capable of being secured.

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7.   **Performance Under Influence Factors And Electromagnetic Disturbances**

7.1.   The MPEs due to influence factors are:

7.1.1.   For category X instruments:
—   For automatic operation; as specified in Tables 1 and 2,
—   For static weighing in non-automatic operation; as specified in Table 1.

7.1.2.   For category Y instruments
—   For each load in automatic operation; as specified in Table 1,
—   For static weighing in non-automatic operation; as specified for category X in Table 1.

7.2.   The critical change value due to a disturbance is one verification scale interval.

7.3.   Temperature range:
—   For class XI and Y(I) the minimum range is 5 °C,
—   For class XII and Y(II) the minimum range is 15 °C.

(1)   OJ L 46, 21.2.1976, p. 1.