

## EU Average Weight Legislation

Within Europe, any product that has been printed with a 'e' mark indicates that it has been packed in accordance with the EU average weights legislation. This ensures that the product, on average, has been packed at least to the printed weight as shown on the package, protecting consumers against shortfalls in weight.

A package, as defined by the Weights and Measures (Packaged Goods) Regulations 2006 is:

- A product combined with the packaging of whatever nature made up without the purchaser being present
- The quantity cannot be altered without the packaging being opened.

Average weight directives provide a framework for packers and apply to most packages intended for sale in quantities between 5ml or 5 grams and 25ml or 25kg. Some products such as biscuits are exempt below 50 grams. The regulation allows a small proportion of packages to fall below the stipulated quantity printed on the packaging, but only within a defined tolerance, known as the Tolerable Negative Error (TNE).

The average weights legislation can be simplified into the "3 Packers rules" which specify that packs must comply with the following;

*Rule 1: The contents of packaged must not, on average, be less than the amount marked on the label. This is known as the Nominal Quantity (Qn)*

*Rule 2: Not more than one package in forty may contain less than the nominal quantity by more than a specified amount called the Tolerable Negative Error (TNE). This varies according to the nominal quantity and batch size*

*Rule 3: No packages may be inadequate contain less than the nominal quantity by more than twice the TNE.*

The acceptable Tolerable Negative Error (TNE) for packages, in relation to the nominal quantity (Qn), is defined below:

Qn in grams	Grams	As % of Qn
5 - 50	-	9
50 - 100	4.5	-
100 - 200	-	4.5
200 - 300	9	-
300 - 500	-	3
500 - 1000	15	-
1000 - 10000	-	1.5
10000 - 15000	150	-
+ 15000	-	1

Packers of foods sold in Europe are required to comply with the three packer's rules and to ensure these rules are followed they must perform regular and thorough checks to ensure complete conformity. The quantity of packages checked either by checking every package on suitable equipment (i.e. a DS300S Checkweigher) or by taking a statistical sample of the production run and keeping records of the results for at least one year.

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### Checkweighers

Checkweighers provide a solution allowing packers to implement a number of reject modes to be sure that their products comply with the average weights legislation; as well as combining advance hygiene with high speed and high accuracy.

The following reject modes which can help with compliance to the regulations are employed on the DS30S Checkweigher:

#### Normal Mode

Normal operation will automatically reject all packs below a predefined weight. The following pack grades pertain to this mode:

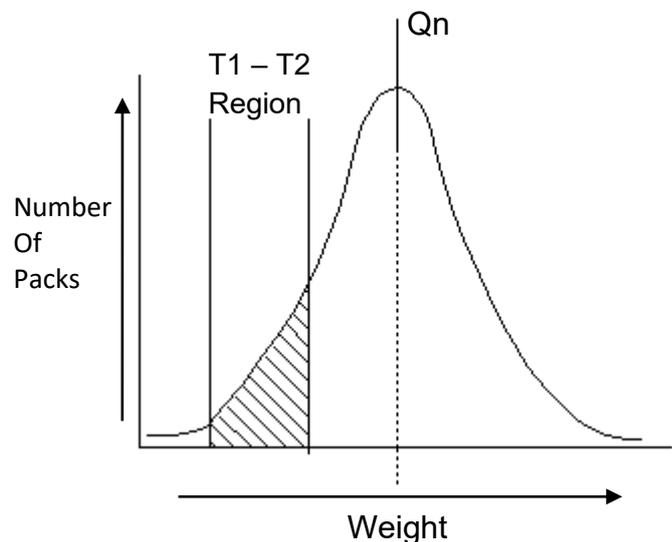
- Underweight packs
- Correct weight packs
- Accepted Overweight packs
- Rejected Overweight packs

#### T1-T2 Mode (Average Weight Mode)

This mode allows the packer to pack to average weight legislation and below the nominal quantity ( $Q_n$ ) providing that the average quantity of all the packs is at least the quantity printed on the packaging. T1 and T2 values are outlined below;

- $T1 = 1x TNE$
- $T2 = 2x TNE$

An unlimited number of packs can fall between the  $Q_n$  and T1 in accordance with the average weights legislation however it is only acceptable to have 2.5% (1 in 40) of a production run in the T1-T2 Region. Packs below T2 are considered illegal and should be removed from production.



Our DS300S Checkweighers automatically calculate T1-T2 values based on a target value when T1-T2 mode is enabled. When a production run is started the reject point will be set to T1. After accepting 40 packs the reject point will automatically switch to T2, allowing one through which weights between T1 and T2. The reject point will return to T1 ensuring that only 2.5% of the production ever falls between the T1 and T2 as required by Average Weights Legislation.

Our DS300S Checkweigher also comes with the Option to reject everything less than T1 ensuring that you always comply with Average Weights Legislation.

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### Glossary of Terms

<b>Absolute Tolerance</b>	Twice the TNE (T2). Any packages over the T2 limit are classed as illegal.
<b>“e” Mark</b>	The “e” mark when placed on a package, is declaration by a packer that the contents comply with the Average Weights Directives (Directive 75/106/EEC and Directive 76/211/EEC)
<b>Inadequate Package</b>	A package whose contents are less than the absolute tolerance limit T2. Packages over the T2 limit are classed as illegal.
<b>Negative Error</b>	The quantity by which the contents of a package are less than the nominal quantity
<b>Nominal Quantity</b>	The weight or volume marker on or in respect of a package usually expressed in litres, centilitres, or millimetres for liquids or in kilograms or grams for other products
<b>Non-Standard Package</b>	A package whose contents are less than the Tolerable Negative Error (TNE)
<b>Package</b>	A product and its individual protective wrapper or unit which is placed in another package (e.g. a case or box) without the purchaser being present
<b>Reference Test</b>	Statistical checking of batches of packages in order to meet the requirements of average weights legislation. (More information can be found in the Weights and Measures (Packaged Goods) Regulations 2006)
<b>Standard Deviation</b>	A measure of the Natural Distribution, dispersion or spread. Usually produces a “bell” shade graph
<b>Target Quantity</b>	See Nominal Quantity
<b>Tolerable Negative Error (TNE)</b>	The amount set out in Table 1. In relation to the nominal quantity of the package

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### About Driver Southall



Driver Southall has been operating in the UK since 1980, offering its customers reliable checkweighers, combination systems and vibratory conveyors to various industries including, Food & Drink Industry, Pharmaceutical Industry and Mailing Industry.

Driver Southall provide an exceptional customer support and aftersales service can provide genuine spare parts with qualified and experienced engineers available for both telephone and site support; we are also able to calibrate checkweighers, repair machine breakdowns and commission new machines.

**All of our checkweighers are compliant to the EU Average Weight Legislation and can also be offered to comply with the latest supermarket specifications.**

For more information of Driver Southall and the machines that we can offer please visit [www.driversouthall.co.uk](http://www.driversouthall.co.uk)