

## BCA Guidance on bag weight 2006

### Introduction - Weights and Measures Regulations 2006

The Weights and Measures (Packaged Goods) Regulations 2006<sup>1</sup> mean that bags of cement will be marked with a *nominal* quantity, and it is the cement packers' responsibility to ensure that:

- a) the actual contents of the bags shall not be less, on average, than the nominal quantity;
- b) the proportion of the bags short of the stated quantity by a defined amount (the “tolerable negative error” or TNE) should be less than a specified level; and
- c) no bag shall be short by more than twice the TNE

For nominal quantities from 15 kg to 25 kg the TNE is set at 1% of the nominal quantity. As stated in the Regulations and Guidance<sup>2</sup>, compliance with the above requirements, known as the three packers’ rules, will, where necessary, be determined by appropriate tests including the reference test. However, the duty of packers or importers is to pack to, and maintain sufficient records to show that bags meet the rules rather than just pass a test.

### DTI Guidance

#### ***Guidance on Setting the Target Quantity***

The DTI Guidance states that to account for the variability of the process, the target quantity must be the greater of:

- the *nominal* quantity, Qn, or;
- $Qn - TNE + 2s$ , where s = standard deviation of process, or
- $Qn - 2TNE + 3.72s$

### BCA Guidance

#### ***All plants***

BCA member companies aim to pack in predetermined constant nominal quantities to meet the requirements of The Weights and Measures (Packaged Goods) Regulations 2006. BCA Member Companies shall mark bags with the nominal quantity, for example ‘Contents 25 kg’.

#### ***Plants with automated in-line checkweighers and bag rejection***

For packing plant with automated in-line checkweighers and underweight bag rejection equipment BCA Member Companies work to a standard deviation calculated from at least 50 measurements per standard production period to set the target weight and set the reject weight at 2 x TNE below the nominal weight. As a minimum the average weight, minimum weight and standard deviation of the measurements should be recorded daily.

#### ***Plants without automated in-line checkweighers***

For packing plant where the bag weight has to be manually sampled, the BCA Member Companies take a minimum of 8 bag weight measurements per 8 hour production period, or pro rata. As a minimum the average weight and minimum weight of the measurements are recorded daily, and the standard deviation should be recorded weekly.

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<sup>1</sup> Statutory Instruments 2006 No. 659 Weights and Measures. The Weights and Measures (Packaged Goods) Regulations 2006.

<sup>2</sup> DTI Weights and Measures. The Weights and Measures (Packaged Goods) Regulations 2006 – Guidance Note. 6 April 2006.