

1.2 DIRECT SALES, PRICE COMPUTING AND WEIGH LABELLING

General

Where a weighing instrument is used for direct sales to the public, the relevant mandatory information must be clearly displayed simultaneously to the operator and the customer. It is not uncommon to see a weighing instrument with two displays; the additional, secondary display is generally mounted for the benefit of the customers when it would be impossible for them to see the primary display.

When in use, a weighing instrument must be installed in a manner that ensures that the operator has access to the controls and has clear sight of the weighing platform.

Although the mandatory markings will include a minimum value below which the instrument should not be operated, it is not illegal to carry out transactions below the minimum level when buying or selling products other than precious metals, precious stones or pearls, or drugs and other pharmaceutical products. If it becomes the “norm” to carry out transactions below the minimum capacity then fitness for use should be questioned and consideration given to the use of an instrument of a lower maximum capacity (Max), a smaller scale division (e), and a lower minimum capacity.

It is the responsibility of the operator of a weighing instrument to ensure that it is at zero before each transaction. It is, therefore, essential that the weight display and a zero setting device are available.

Modes of Tare Operation

Tare values, which must correspond to the scale interval of the instrument, are used to remove the weight of the container from the calculation of the price to pay. Consecutive tare operations are permitted. For example, a pre-set tare may be applied with the selection of a PLU then a semi-auto tare may be applied, adding the value of an additional container. A preset tare operation can not be modified or cancelled while any subsequent tare operation is still in use.

While it is permissible to increase a tare value by repeated operations of a tare device, a tare value can not be reduced by the same method. Before a lower tare value can be established the instrument must be returned to zero.

In general, the semi-auto tare facility is used for direct sale to the public. It is possible to store a tare value but unless all the items transacted from that instrument have the same container value there is a danger of an incorrect NET weight. This problem is overcome by using a “one shot” tare. An empty container is tared; a full container replaces the empty one without allowing the instrument to see zero. Once the transaction is complete and the scale pan is clear the tare drops out and the instrument returns to zero.

Direct sales to the public can be carried out on two basic types of weighing instruments, price computing, and weight only instruments.

Price Computing Instruments

Price computing instruments are often used in an area some distance from the point of sale so a labelling facility is used to convey the relevant information. Printing must be clear and permanent and the figures must be at least 2mm high. Where transactions are printed the weight, the unit price and the price to pay shall all be printed. Under certain circumstances additional printing features may be used; explanations and conditions can be found in BS EN 45501.

When a weighing instrument is used to generate the price-to-pay based on the weight of an item, the price-to-pay must result from the weight value multiplied by the unit price. At no time is it permissible to calculate and use for trade a unit price by dividing the price-to-pay by the weight or a calculating a weight value by dividing the price-to-pay by the unit price. These practices are commonly referred to as back calculations and often result in price rounding errors and value misunderstandings.

The final calculated value of the price to pay will be influenced by the price rounding regulations of the resident country. In the UK it is normal to use 4/5 rounding, where the calculated value is 0.4p or lower the price to pay is rounded down, and if the calculated value is 0.5p or higher the price to pay is rounded up.

Weight Only Instrument

Almost all weight only instruments are associated with Electronic Point Of Sale (EPOS) devices. In this configuration the instrument only provides weight information, and is not involved in price computation or printing.

All price computation and printing activities are carried out by the EPOS and as these activities are legal metrology relevant an EPOS must have its own certificate. This certificate, usually an EC test certificate, authorises the EPOS to be connected to a non-automatic weighing instrument.

This instrument is regulated in much the same fashion as the price-computing instrument but as a result of differing installation situations additional regulation come into force.

For example, if the product to be weighed is longer than the width of the load receptor the accuracy of weighing will not be affected as long as the over hanging element of the product does not touch any other surface. By the nature of its installation within the checkout furniture the instrument is fitted flush to its surroundings so that it does not interfere with the flow of goods. In this instance a long item would rest on the surrounding surfaces and the weighing transaction would be inaccurate. Where an instrument is less than 10mm above ALL adjacent surfaces, the boundary of ALL adjacent surfaces must be durably marked in a distinctive and contrasting manner with a band at least 15mm in width. This clearly defines the area of use to the operator. If an instrument is below ANY adjacent surface it may not be used for trade.

Another feature unique to some instruments used in an EPOS is the removal of the primary display. The function of the primary has been transferred to the EPOS display, so in effect, it becomes part of the weighing instrument.

References

The Non-automatic Weighing Instruments (EEC Requirements) Regulations 1995
The Weighing Equipment (Non-automatic Weighing Machines) Regulations 2000
The Non-automatic Weighing Instruments Regulations 2000
Price labelling regulations
OIML R76
BS EN 45501