

Specification for

Weighing instruments for domestic cookery

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Furniture and Household Equipment Standards Committee (FHM/-) to Technical Committee FHM/30, upon which the following bodies were represented:

- British Hardware and Housewares Manufacturers Association
- British Retailers Association
- Consumer Standards Advisory Committee of BSI
- Department of Health and Social Security
- Department of Trade and Industry (National Weights and Measures Laboratory)
- Federation of British Hand Tool Manufacturers
- Good Housekeeping Institute
- Institute of Trading Standards Administration
- National Association of Teachers of Home Economics Ltd.
- National Federation of Scale and Weighing Machine Manufacturers
- Scottish Health Services
- United Kingdom Home Economics Federation

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Foreword

This revision of BS 4960 has been prepared under the direction of the Furniture and Household Equipment Standards Committee. It supersedes the 1973 edition of BS 4960 which is withdrawn.

The revision has been undertaken to reflect technical advances in domestic weighing instruments and to take account of comments received since the publication of the previous edition.

The standard does not specify limits to the capacity of the instruments but for normal domestic cookery purposes it is generally considered that weighing instruments having a maximum capacity of 1 kg are suitable. However, the upper limit may be restricted to below the apparent full scale deflection by the bulk of the material being weighed, relative to pan size, and the lower limit to above the lowest marked graduations by the inertia of spring systems, etc. Users are advised that small quantities of ingredients need to be weighed on an instrument designed for accuracy with small loads or measured out by volume, for example by using measuring spoons.

The requirement for a 25 g weight to be provided within a set of loose weights has been reviewed and it has been concluded that, because of the risk of confusion with the 20 g weight and the simplicity of achieving 25 g by means of a combination of the 20 g and 5 g weights, such a weight no longer need be included.

Attention is drawn to Statutory Instrument SI 1978 No. 1927 "Materials and Articles in Contact with Food Regulations" and subsequent amendments.

Users of this standard should note that EEC Directive 73/360/EEC applies to weighing instruments covered by this standard and that in certain European countries, notably France, such instruments must conform to that Directive. In the United Kingdom the Directive, or the equivalent national requirement, is applied only to weighing instruments intended for trade purposes and, as these are excluded from the scope of BS 4960, weighing instruments which comply with this standard are not controlled in manufacture or sale in the UK; conversely no requirement of BS 4960 should be taken to imply any restriction of the supply or use of domestic instruments complying fully with the EEC Directive.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard specifies requirements for the accuracy, general performance and reliability of weighing instruments for domestic cookery.

Consideration is given to most types of such weighing instruments including dial, digital and sliding weight types and those using loose weights. This standard is applicable to instruments designed to stand on a horizontal surface or to be mounted on a wall.

The standard does not apply to weighing instruments intended for trade purposes.

NOTE The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this British Standard the following definitions apply.

NOTE to clause 2 Where appropriate, definitions have been taken from Recommendation No. 3 of the International Organization for Legal Metrology (OIML). Where a term used by OIML differs from that in common usage, the OIML term is given in parenthesis.

2.1

maximum capacity

the highest weight value the instrument is designed to indicate

2.2

minimum capacity

the value of the load below which the weighing result may be subject to an excessive relative error

2.3

weighing range

the range between the maximum and minimum capacities

2.4

indicating device (element)

the part of the load measuring device that displays the weighing result; it may indicate both the equilibrium and the weighing result

2.5

analogue (continuous) indication

continuous visual indication, permitting the evaluation of the equilibrium position to a fraction of the scale interval

2.6

digital (discontinuous) indication

discontinuous indication in which the scale marks, generally composed of a sequence of aligned figures, do not permit interpolation to fractions of the scale interval

2.7

parallax error

the apparent displacement of an indicating scale with respect to a pointer, or indicator, caused by a change in the point of observation

2.8

repeatability

the ability of a weighing instrument to provide weighing results which agree one with the other for the same load deposited several times in a practically identical manner under reasonably constant conditions

2.9

scale

the means by which the weighing result is conveyed to the observer, e.g. a printed or engraved dial, a chart, or illuminated integers

2.10

principal indicating scale

the superior indication of the weighing result and its units, e.g. the outermost scale of a dial, the uppermost portion of a chart or that section of a scale marked in bolder type

2.11

scale division

the value, expressed in units of mass, of the difference between the values corresponding to two consecutive scale marks in analogue indication. The difference between two consecutive indicated values in digital indication

2.12

tolerance (maximum permissible error)

the maximum difference, positive or negative, allowed between the weighing result and the equivalent in standard masses of the load weighed

2.13

zeroing (zero setting) device

a device for setting to zero the indicating scale of the weighing instrument when there is no load on the load receptor

2.14

tare facility

a means for balancing the weight of a container without intruding upon the weighing range of the instrument