

Methods for

Sampling cereals and pulses (as milled products)

[ISO title: Cereals and pulses — Sampling of milled products]

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- Agricultural Research Council, Meat Research Institute
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- Department of Agriculture (Government of Northern Ireland)
- Department of Industry (Laboratory of the Government Chemist)*
- Flour Milling and Baking Research Association*
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- Ministry of Agriculture, Fisheries and Food*
- National Farmers' Union*
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The organizations marked with an asterisk in the above list, together with the following, were directly represented on the Technical Committee entrusted with the preparation of this British Standard:

- Association of Public Analysts
- British Edible Pulse Association
- British Maize Refiners' Association
- Grain and Feed Trade Association Limited
- Home Grown Cereals Authority
- Institute of Food Science and Technology
- National Association of Commodity Cargo Superintendents and Surveyors
- Society of Chemical Industry
- Ulster Farmers' Union
- United Kingdom Agricultural Supply Trade Association Ltd.

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National foreword

This British Standard has been prepared under the direction of the Food and Agriculture Standards Committee and is identical with ISO 2170 “*Cereals and pulses — Sampling of milled products*” published by the International Organization for Standardization (ISO) and prepared by Sub-committee 4, Cereals and pulses, of Technical Committee 34 Agricultural food products. This standard has been prepared taking into account Standard No. 101 of the International Association for Cereal Chemistry (ICC) and supersedes BS 5333:1976 which is therefore withdrawn.

Terminology and conventions. The text of the International Standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is especially drawn to the following. Wherever the words “International Standard” appear, referring to this standard, they should be read as “British Standard”.

Cross-references

International Standard	Corresponding British Standard
ISO 950:1979	BS 4510:1980 <i>Methods for sampling cereals (as grain)</i> (Identical)
ISO 951:1979	BS 4511:1980 <i>Methods for sampling pulses (in bags)</i> (Identical)

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.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, 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.

0 Introduction

Correct sampling is an operation that requires most careful attention. Emphasis cannot therefore be too strongly laid on the necessity of obtaining a properly representative sample of milled cereal or pulse. Careless or inaccurate sampling could lead to misunderstanding and unwarranted financial adjustment.

The procedures given in this International Standard are recognized as good practice and it is strongly recommended that they be followed whenever practicable. It is recognized that it is difficult to lay down fixed rules to be followed in every case, and particular circumstances may render some modification of the method desirable, for example if it is desired to check the uniformity of a consignment by the examination of individual increments.

In certain areas there are widely recognized trade associations which prescribe rules for the sampling procedures to be used in contracts under their auspices. In no case will the methods described in this International Standard override the rules laid down in such contracts, or the rules of official inspecting organizations.

1 Scope and field of application

This International Standard specifies general conditions relating to the sampling for assessment of quality and condition of milled products from cereals and pulses, intended for human or animal consumption, in powder, particulate or agglomerated form.

It does not apply to whole unprocessed cereal grains or pulses, to seed grains or pulses, or to partially milled cereals or pulses which retain the form of the original material¹⁾. Starches and oils obtained from cereals or pulses are also excluded from the scope of this International Standard.

2 Definitions

For the purpose of this International Standard, the following definitions apply.

2.1 consignment

the quantity of product dispatched or received at one time and covered by a particular contract or shipping document. It may be composed of one or more lots

2.2 lot

a part of a consignment or a consignment with presumed uniform characteristics, to which a given scheme of investigation can be applied

2.3 increment

a small quantity of product taken from a single position in the lot

a series of increments should be taken from different positions in the lot such that, when bulked, they will be representative of the lot

2.4 bulk sample

the quantity of product formed by combining and mixing the increments taken from a specific lot

2.5 laboratory sample; final lot sample

the quantity of product removed from the bulk sample and intended for analysis or other examination

3 General

3.1 Samples shall be taken jointly by sampling superintendents appointed by buyers and sellers, or by a sampling superintendent appointed jointly.

3.2 Samples shall be fully representative of the lots from which they are taken. Therefore, as the composition of the lot is seldom uniform, a sufficient number of increments shall be taken and carefully mixed, thus giving a bulk sample from which are obtained, by successive divisions, the laboratory samples. If the lot consists of a number of freight containers, samples shall be taken from each freight container.

3.3 It is essential that a product which is sea-damaged or otherwise damaged in transit or out of condition is kept separate from the sound product and sampled separately. Samples of the unsound material shall not be mixed with samples of the sound material.

3.4 Special care is necessary to ensure that all sampling apparatus is clean, dry and free from foreign odours.

Sampling shall be carried out in such a manner as to protect the samples, the sampling instruments and the containers in which the samples are placed from adventitious contamination such as rain, dust, etc.

¹⁾ For the sampling of cereals as grain, see ISO 950, *Cereals — Sampling (as grain)*. This method is also suitable for the partially milled cereals mentioned. For the sampling of whole pulses, see ISO 951, *Pulses in bags — Sampling*. Examples of products which present difficulties in classification are given in Annex B.