

Methods of sampling and test for carbonaceous materials used in aluminium manufacture —

Part 1: Electrode pitch — Section 1.1: Sampling

ICS 71.100.10

National foreword

This British Standard reproduces verbatim ISO 6257:2002 and implements it as the UK national standard. It supersedes BS 6043-1-1:1981 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CII/24, Raw materials for the aluminium industry, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

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INTERNATIONAL STANDARD

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Carbonaceous materials used in the production of aluminium — Pitch for electrodes — Sampling

*Produits carbonés utilisés pour la production de l'aluminium — Brais pour
électrodes — Échantillonnage*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 6257 was prepared by Technical Committee ISO/TC 47, *Chemistry*, Subcommittee SC 7, *Aluminium oxide, cryolite, aluminium fluoride, sodium fluoride, carbonaceous products for the aluminium industry*.

This second edition cancels and replaces the first edition (ISO 6257:1980), which has been technically revised.

Introduction

Sampling is a vital step in analysis and testing. Its importance is recognized in this International Standard which specifies comprehensive methods of sampling the grades of pitch used for the electrolytic production of aluminium.

Such samples should be as representative as possible of the materials sampled (whether from the whole or part of a batch or consignment) and in a form that facilitates the determination of the distribution of values of properties.

Carbonaceous materials used in the production of aluminium — Pitch for electrodes — Sampling

WARNING — This International Standard may involve the use of hazardous materials, operations and equipment. This International Standard cannot address all the safety implications associated with its use. It is the responsibility of the user of this International Standard to establish appropriate health and safety practices and assess the applicability of regulatory limitations prior to use.

1 Scope

This International Standard specifies methods for sampling and preparing samples prior to testing of binder pitch used in the manufacture of electrodes for the electrolytic production of aluminium.

These methods are applicable to grades of pitch in liquid or solid form, the latter having softening points higher than 30 °C (determined according to the method specified in ISO 5940), in bulk, or in a number of containers making up one batch at sites of manufacture, storage, or delivery. Sampling methods and sampling plans for large consignments, or lots, of pitch in liquid form during the loading and unloading of ships are included.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 3165, *Sampling of chemical products for industrial use — Safety in sampling*

ISO 5940, *Carbonaceous materials for the production of aluminium — Pitch for electrodes — Determination of softening point by the ring-and-ball method*

3 Terms and definitions

For the purposes of this International Standard, the following terms and definitions apply.

3.1

sampling unit

defined quantity of material having a boundary which may be physical, for example a container, or hypothetical, for example a particular time or time interval in the case of a stream of material

NOTE 1 A number of sampling units may be gathered together, for example in a package or box.

NOTE 2 In French, the term “individu” is sometimes used, a synonym of “unité d'échantillonnage”. In English, the terms “individual”, “unit” and “item” are sometimes used in practice as synonyms of “sampling unit”.

[ISO 6206]