

# Aluminium and aluminium alloys — Scrap —

## Part 2: Unalloyed aluminium scrap

The European Standard EN 13920-2:2003 has the status of a  
British Standard

ICS 13.030.50; 77.120.10





# National foreword

This British Standard is the official English language version of EN 13920-2:2003.

The UK participation in its preparation was entrusted to Technical Committee NFE/35, Light metals and their alloys, 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 or European 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.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 April 2003

### Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 5 and a back cover.

The BSI copyright date displayed in this document indicates when the document was last issued.

### Amendments issued since publication

| Amd. No. | Date | Comments |
|----------|------|----------|
|          |      |          |
|          |      |          |
|          |      |          |
|          |      |          |
|          |      |          |

ICS 13.030.50; 77.120.10

English version

## Aluminium and aluminium alloys - Scrap - Part 2: Unalloyed aluminium scrap

Aluminium et alliages d'aluminium - Scrap (matières premières pour recyclage) - Partie 2: Scrap en aluminium non allié

Aluminium und Aluminiumlegierungen - Schrott - Teil 2: Schrott aus unlegiertem Aluminium

This European Standard was approved by CEN on 28 February 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

---

Contents

|  | page |
|--|------|
| Foreword.....  | 3    |
| 1 Scope .....  | 4    |
| 2 Normative references .....   | 4    |
| 3 Terms and definitions.....   | 4    |
| 4 Ordering information.....  | 4    |
| 5 Requirements.....  | 5    |
| 5.1 General.....   | 5    |
| 5.2 Characteristics.....   | 5    |
| 5.3 Chemical composition.....  | 5    |
| 5.4 Metal yield.....   | 5    |
| 6 Classification procedure, treatment of non-conformities and arbitration..... | 5    |



## Foreword

This document (EN 13920-2:2003) has been prepared by Technical Committee CEN /TC 132, "Aluminium and aluminium alloys", the secretariat of which is held AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

Within its programme of work, Technical Committee CEN/TC 132 has entrusted CEN/TC132/WG 20 "Scrap" to prepare the following standard.

EN 13920 comprises the following parts under the general title "Aluminium and aluminium alloys — Scrap" :

Part 1: General requirements, sampling and tests

Part 2: Unalloyed aluminium scrap

Part 3: Wire and cable scrap

Part 4: Scrap consisting of one single wrought alloy

Part 5: Scrap consisting of two or more wrought alloys of the same series

Part 6: Scrap consisting of two or more wrought alloys

Part 7: Scrap consisting of castings

Part 8: Scrap consisting of non-ferrous materials from shredding processes destined to aluminium separation processes

Part 9: Scrap from aluminium separation processes of non-ferrous shredded materials

Part 10: Scrap consisting of used aluminium beverage cans

Part 11: Scrap consisting of aluminium-copper radiators

Part 12: Turnings consisting of one single alloy

Part 13: Mixed turnings consisting of two or more alloys

Part 14: Scrap from post-consumer aluminium packagings

Part 15: Decoated aluminium scrap from post-consumer aluminium packagings

Part 16: Scrap consisting of skimmings, drosses, spills and metallics

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies characteristics, chemical composition and metal yield of unalloyed aluminium scrap with a chemical composition of not less than 99,5 % aluminium.

### Example

Production scrap from sheet, strip, tube etc. where unalloyed aluminium is used.

New and old scrap from lithographic sheet.

Old scrap from various products selected to meet the specifications of this standard.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

prEN 12258-3:2000, Aluminium and aluminium alloys — Terms and definitions — Part 3: Scrap.

EN 13920 –1:2003, Aluminium and aluminium alloys — Scrap — Part 1: General requirements, sampling and tests.

## 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in prEN 12258-3:2000 and EN 13920-1:2003 apply.

## 4 Ordering information

The ordering information shall include:

- number of this European Standard (EN 13920-2);
- the scrap category (unalloyed aluminium scrap);
- the gross mass of the consignment;
- the definition of the beginning and end of the period during which the scrap shall be delivered;
- any characteristics deviating from those specified under 5.1, e. g. particle size, foreign material.

The ordering information shall include:

- information about the origin of the scrap;
- any information about size and surface condition of the pieces, whenever meaningful.



## 5 Requirements

### 5.1 General

In addition to the requirements specified in EN 13920-1, the requirements given in 5.2, 5.3 and 5.4 shall be met.

If the scrap does not meet all these requirements, the supplier shall notify the deviating characteristics to the purchaser and shall obtain his agreement before shipment.

### 5.2 Characteristics

The scrap shall consist of pieces with a minimum thickness of 0,20 mm. It shall not contain scrap with any kind of surface treatment which could affect the final composition of the melt. It shall be free from oil, grease, dust, plastics and any other type of foreign material, including in the case of containers, any residues of their former content.

### 5.3 Chemical composition

The chemical composition after melting as determined according to EN 13920-1 shall conform to the requirements given in Table 1. If aluminium is found to be less than 99,5 %, the scrap lies outside the scope of this standard.

**Table 1 — Chemical composition**

Composition in percent (mass fraction)

| Si   | Fe   | Cu   | Mn   | Mg   | Zn   | Ti   | others each | Al <sup>a</sup> |
|--|------|------|------|------|------|------|-------------|-----------------|
| max.   | max. | max. | max. | max. | max. | max. | max.        | min.            |
| 0,25   | 0,40 | 0,05 | 0,05 | 0,05 | 0,07 | 0,05 | 0,05        | 99,5            |
| a The aluminium content is the difference between 100 % and the total of all the other elements present with values no less than 0,010 % rounded to the second decimal (before the calculation is made). |      |      |      |      |      |      |             |                 |

### 5.4 Metal yield

The metal yield of scrap pertaining to this standard as determined in accordance with EN 13920-1 is typically 95 %. Lower metal yield can be expected with scrap thinner than that specified under 5.2 or containing some foreign material not affecting the chemical composition.

## 6 Classification procedure, treatment of non-conformities and arbitration

The classification procedure which includes sampling and tests, the treatment of non-conformities and arbitration shall be in accordance with EN 13920-1, as appropriate.



## BSI — British Standards Institution

BSI is the independent national body responsible for preparing British Standards. It presents the UK view on standards in Europe and at the international level. It is incorporated by Royal Charter.

### Revisions

British Standards are updated by amendment or revision. Users of British Standards should make sure that they possess the latest amendments or editions.

It is the constant aim of BSI to improve the quality of our products and services. We would be grateful if anyone finding an inaccuracy or ambiguity while using this British Standard would inform the Secretary of the technical committee responsible, the identity of which can be found on the inside front cover. Tel: +44 (0)20 8996 9000. Fax: +44 (0)20 8996 7400.

BSI offers members an individual updating service called PLUS which ensures that subscribers automatically receive the latest editions of standards.

### Buying standards

Orders for all BSI, international and foreign standards publications should be addressed to Customer Services. Tel: +44 (0)20 8996 9001. Fax: +44 (0)20 8996 7001. Email: [orders@bsi-global.com](mailto:orders@bsi-global.com). Standards are also available from the BSI website at <http://www.bsi-global.com>.

In response to orders for international standards, it is BSI policy to supply the BSI implementation of those that have been published as British Standards, unless otherwise requested.

### Information on standards

BSI provides a wide range of information on national, European and international standards through its Library and its Technical Help to Exporters Service. Various BSI electronic information services are also available which give details on all its products and services. Contact the Information Centre. Tel: +44 (0)20 8996 7111. Fax: +44 (0)20 8996 7048. Email: [info@bsi-global.com](mailto:info@bsi-global.com).

Subscribing members of BSI are kept up to date with standards developments and receive substantial discounts on the purchase price of standards. For details of these and other benefits contact Membership Administration. Tel: +44 (0)20 8996 7002. Fax: +44 (0)20 8996 7001. Email: [membership@bsi-global.com](mailto:membership@bsi-global.com).

Information regarding online access to British Standards via British Standards Online can be found at <http://www.bsi-global.com/bsonline>.

Further information about BSI is available on the BSI website at <http://www.bsi-global.com>.

### Copyright

Copyright subsists in all BSI publications. BSI also holds the copyright, in the UK, of the publications of the international standardization bodies. Except as permitted under the Copyright, Designs and Patents Act 1988 no extract may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, photocopying, recording or otherwise – without prior written permission from BSI.

This does not preclude the free use, in the course of implementing the standard, of necessary details such as symbols, and size, type or grade designations. If these details are to be used for any other purpose than implementation then the prior written permission of BSI must be obtained.

Details and advice can be obtained from the Copyright & Licensing Manager. Tel: +44 (0)20 8996 7070. Fax: +44 (0)20 8996 7553. Email: [copyright@bsi-global.com](mailto:copyright@bsi-global.com).