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BS EN 1559-4:2015



BSI Standards Publication

Founding — Technical conditions of delivery

Part 4: Additional requirements for
aluminium alloy castings

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This British Standard is the UK implementation of EN 1559-4:2015. It supersedes BS EN 1559-4:1999 which is withdrawn.

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

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

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

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Fonderie - Conditions techniques de fourniture - Partie 4:
Spécifications complémentaires pour les pièces moulées en
alliages d'aluminium

Gießereiwesen - Technische Lieferbedingungen - Teil 4:
Zusätzliche Anforderungen an Gussstücke aus
Aluminiumlegierungen

This European Standard was approved by CEN on 26 December 2014.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 1559-4:2015) has been prepared by Technical Committee CEN/TC 132 "Aluminium and aluminium alloys", the secretariat of which is held by 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of an identical text or by endorsement, at the latest by August 2015 and conflicting national standards shall be withdrawn at the latest by August 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1559-4:1999.

Within its programme of work, Technical Committee CEN/TC 132 requested CEN/TC 132/WG 22 "Revision of EN 1559-4:1999" to revise the following standard:

EN 1559-4, *Founding — Technical conditions of delivery — Part 4: Additional requirements for aluminium alloy castings.*

Annex B provides details of significant technical changes between this European Standard and the previous edition.

This European Standard is part of a series of standards which specify technical delivery conditions for castings. The other standards in this series are:

EN 1559-1, *Founding — Technical conditions of delivery — Part 1: General;*

EN 1559-2, *Founding — Technical conditions of delivery — Part 2: Additional requirements for steel castings;*

EN 1559-3, *Founding — Technical conditions of delivery — Part 3: Additional requirements for iron castings;*

EN 1559-5, *Founding — Technical conditions of delivery — Part 5: Additional requirements for magnesium alloy castings;*

EN 1559-6, *Founding — Technical conditions of delivery — Part 6: Additional requirements for zinc alloy castings.*

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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Introduction

In order to assist manufacturers and purchasers to prepare proper contractual arrangements and prevent misunderstandings, CEN/TC 190 "Foundry Technology" approved the preparation of a series of standards covering technical delivery conditions. These have been prepared as separate parts.

This European Standard covers the additional technical delivery conditions for aluminium alloy casting materials and has the same structure as EN 1559-1 "*Founding - Technical conditions of delivery – Part 1: General*".

This European Standard cannot be used alone for compiling a specification for ordering and supplying aluminium alloy castings, but as a complement to EN 1559-1.

The structure of this standard is as follows:

- clauses and sub clauses preceded by ■ indicate no additional conditions to EN 1559-1;
- clauses and sub clauses marked with a single dot • indicate that conditions shall be agreed at the time of enquiry and order;
- clauses and sub clauses marked with two dots •• indicate that conditions can be agreed at the time of enquiry and order (optional);
- clauses and sub clauses without a symbol are mandatory;
- clauses and sub clauses preceded by ◆ are supplementary to those in EN 1559-1;
- clauses and sub clauses preceded by † completely replace those in EN 1559-1.

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1 Scope

This European Standard specifies the additional technical delivery conditions for aluminium alloy castings unless other conditions have been agreed at the time of enquiry and order.

This European Standard retains the same structure and numbering system as used in EN 1559-1 and repeats the numbering of clauses and sub-clauses even if nothing extra or different has been added. It also indicates items specific to aluminium alloy castings under existing or new headings.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1371-1, *Founding — Liquid penetrant testing — Part 1: Sand, gravity die and low pressure die castings*

EN 1559-1, *Founding — Technical conditions of delivery — Part 1: General*

EN 1706, *Aluminium and aluminium alloys — Castings — Chemical composition and mechanical properties*

EN 12681, *Founding — Radiographic examination*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1559-1, in the applicable material standard and the following apply.

3.1

◆ excavation

cavity produced by the removal of cast material prior to subsequent welding (or other finishing methods)