



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 11124-4:2018

Preparation of steel substrates before application of paints and related products  
- Specifications for metallic blast-cleaning abrasives - Part 4: Low-carbon cast-steel shot (ISO 11124-4:2018)

**I.S. EN ISO 11124-4:2018**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN ISO 11124-4:2018 is the adopted Irish version of the European Document EN ISO 11124-4:2018, Preparation of steel substrates before application of paints and related products - Specifications for metallic blast-cleaning abrasives - Part 4: Low-carbon cast-steel shot (ISO 11124-4:2018)

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EUROPEAN STANDARD

EN ISO 11124-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2018

ICS 25.220.10

Supersedes EN ISO 11124-4:1997

English Version

Preparation of steel substrates before application of paints  
and related products - Specifications for metallic blast-  
cleaning abrasives - Part 4: Low-carbon cast-steel shot  
(ISO 11124-4:2018)

Préparation des subjectiles d'acier avant application de  
peintures et de produits assimilés - Spécifications pour  
abrasifs métalliques destinés à la préparation par  
projection - Partie 4: Grenaille ronde en acier coulé à  
bas carbone (ISO 11124-4:2018)

Vorbereitung von Stahloberflächen vor dem Auftragen  
von Beschichtungsstoffen - Anforderungen an  
metallische Strahlmittel - Teil 4: Stahlguss mit  
niedrigem Kohlenstoffgehalt, kugelig (Shot) (ISO  
11124-4:2018)

This European Standard was approved by CEN on 12 August 2018.

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.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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**EN ISO 11124-4:2018 (E)**

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## **European foreword**

This document (EN ISO 11124-4:2018) has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" in collaboration with Technical Committee CEN/TC 139 "Paints and varnishes" the secretariat of which is held by DIN.

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 March 2019, and conflicting national standards shall be withdrawn at the latest by March 2019.

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

This document supersedes EN ISO 11124-4:1997.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Endorsement notice**

The text of ISO 11124-4:2018 has been approved by CEN as EN ISO 11124-4:2018 without any modification.

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# INTERNATIONAL STANDARD

**ISO**  
**11124-4**

Second edition  
2018-08

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## **Preparation of steel substrates before application of paints and related products — Specifications for metallic blast-cleaning abrasives —**

### **Part 4: Low-carbon cast-steel shot**

*Préparation des subjectiles d'acier avant application de peintures  
et de produits assimilés — Spécifications pour abrasifs métalliques  
destinés à la préparation par projection —*

*Partie 4: Grenaille ronde en acier coulé à bas carbone*



Reference number  
ISO 11124-4:2018(E)

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**ISO 11124-4:2018(E)**



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## ISO 11124-4:2018(E)

### 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 12, *Preparation of steel substrates before application of paints and related products*.

This second edition cancels and replaces the first edition (ISO 11124-4:1993), which has been technically revised.

The main changes compared to the previous edition are as follows:

- [Annex A](#) has been technically revised.

A list of all parts in the ISO 11124 series can be found on the ISO website.

# Preparation of steel substrates before application of paints and related products — Specifications for metallic blast-cleaning abrasives —

## Part 4: Low-carbon cast-steel shot

**WARNING — Equipment, materials and abrasives used for surface preparation can be hazardous. It is important to ensure that adequate instructions are given and that all required precautions are exercised.**

### 1 Scope

This document specifies requirements for 12 grades of low-carbon cast-steel shot abrasive, as supplied for blast-cleaning processes. Values are specified for hardness, density, defect/structural requirements and chemical composition.

The requirements specified in this document apply to abrasives supplied in the "new" condition only. They do not apply to abrasives either during or after use.

Test methods for metallic blast-cleaning abrasives are given in the various parts of ISO 11125.

Low-carbon cast-steel shot abrasives are used in both static and site blasting equipment. They are most often selected where a facility exists for recovery and re-use of the abrasive.

NOTE 1 Information on commonly referenced national standards for metallic abrasives and their approximate relationship with ISO 11124 is given in [Annex A](#).

NOTE 2 Although this document has been developed specifically to meet requirements for preparation of steelwork, the properties specified will generally be appropriate for use when preparing other material surfaces, or components, using blast-cleaning techniques. These techniques are described in ISO 8504-2.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 439, *Steel and iron — Determination of total silicon content — Gravimetric method*

ISO 629, *Steel and cast iron — Determination of manganese content — Spectrophotometric method*

ISO 4935, *Steel and iron — Determination of sulfur content — Infrared absorption method after combustion in an induction furnace*

ISO 9556, *Steel and iron — Determination of total carbon content — Infrared absorption method after combustion in an induction furnace*

ISO 10714, *Steel and iron — Determination of phosphorus content — Phosphovanadomolybdate spectrophotometric method*

ISO 11125-1, *Preparation of steel substrates before application of paints and related products — Test methods for metallic blast-cleaning abrasives — Part 1: Sampling*

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