# INTERNATIONAL STANDARD

Second edition 2018-09

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

# Part 3: High-carbon cast-steel shot and grit

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

Partie 3: Grenaille ronde et angulaire en acier coulé à haut carbone



Reference number ISO 11124-3:2018(E)



#### **COPYRIGHT PROTECTED DOCUMENT**

#### © ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Page

## Contents

Forev	vord	iv
1	Scope	
2	Normative references	
3	Terms and definitions	2
4	Designation of abrasives	
5	Sampling	
6	Requirements for high-carbon cast-steel shot and grit abrasives	
7	Package identification and lot traceability	4
8	Information to be provided by the manufacturer or supplier	4
Anne	x A (informative) Approximately equivalent codings for high carbon cast-steel shot and grit abrasives	7
Biblic	Bibliography	

#### 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 <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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: <a href="http://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

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 11124-3:1993), which has been technically revised.

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

— <u>Clause 7, Tables 1, 2, 3</u> and <u>Annex A</u> have 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 blastcleaning abrasives —

## Part 3: High-carbon cast-steel shot and grit

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 14 grades of high-carbon cast-steel shot and 11 grades of high-carbon cast-steel grit, 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.

High-carbon cast-steel shot and grit are used in both static and site blasting equipment. They are most often selected where a facility exists for the 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 <u>Annex A</u>.

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