Teraspindade ettevalmistamine enne värvide ja nendega seotud materjalide pealekandmist. Metalliliste jugapuhastusabrasiivide tehnilised andmed. Osa 3: Kõrge süsinikusisaldusega valuterasest kuulikesed ja haavlid

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

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 11124-3:1999 sisaldab Euroopa standardi EN ISO 11124-3:1997 ingliskeelset teksti. Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 11124-3:1999 consists of the English text of the European standard EN ISO 11124-3:1997. This document is endorsed on 12.12.1999 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: EN ISO 11124 see osa määrab kindlaks nõuded 14 tüübile kõrge süsinikusisaldusega valuterasest kuulikestele ja 12 klassile kõrge süsinikusisaldusega valuterasest haavlitele, mida kasutatakse jugapuhastusabrasiividena. Esitatud on kõvaduse, tiheduse, defektide/struktuurinõuete ja keemilise koostise näitajad.	**Scope:**

ICS 25.220.10

Võtmesõnad: abrasiivid, aluspinnad, jugapuhastus, lakid, metallabrasiivid, tehnilised andmed, terastooted, tähistamine, värvid

EUROPEAN STANDARD
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EN ISO 11124-3

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Descriptors: Abrasives, blast-cleaning.

English version

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
(ISO 11124-3 : 1993)

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 moulé à haute carbone
(ISO 11124-3 : 1993)

Vorbereitung von Stahloberflächen vor dem Auftragen von Beschichtungsstoffen – Anforderungen an metallische Strahlmittel – Teil 3: Stahlguß mit hohem Kohlenstoffgehalt, kugelig und kantig (Shot und Grit)
(ISO 11124-3 : 1993)

This European Standard was approved by CEN on 1997-05-28.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 11124-3 : 1993 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,

which was prepared by ISO/TC 35 'Paints and varnishes' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 139 'Paints and varnishes', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by December 1997 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard :

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 11124-3 : 1993 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

WARNING — Equipment, materials and abrasives used for surface preparation can be hazardous if used carelessly. Many national regulations exist for those materials and abrasives that are considered to be hazardous during or after use (waste management), such as free silica or carcinogenic or toxic substances. These regulations are therefore to be observed. It is important to ensure that adequate instructions are given and that all required precautions are exercised.

1 Scope

This part of ISO 11124 specifies requirements for 14 grades of high-carbon cast-steel shot and 12 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 part of ISO 11124 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.

NOTES

1 Information on commonly referenced national standards for metallic abrasives and their approximate relationship with ISO 11124 is given in annexes A and B.

2 Although this part of ISO 11124 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 8504-2:1992, *Preparation of steel substrates before application of paints and related products — Surface preparation methods — Part 2: Abrasive blast-cleaning.*

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 11124. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 11124 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 439:1982, *Steel and cast iron — Determination of total silicon — Gravimetric method.*

ISO 629:1982, *Steel and cast iron — Determination of manganese content — Spectrophotometric method.*

ISO 4935:1989, *Steel and iron — Determination of sulfur content — Infrared absorption method after combustion in an induction furnace.*

ISO 9556:1989, *Steel and iron — Determination of total carbon content — Infrared absorption method after combustion in an induction furnace.*

ISO 10714:1992, *Steel and iron — Determination of phosphorus content — Phosphovanadomolybdate spectrophotometric method.*

ISO 11125-1:1993, *Preparation of steel substrates before application of paints and related products — Test methods for metallic blast-cleaning abrasives — Part 1: Sampling.*

ISO 11125-2:1993, *Preparation of steel substrates before application of paints and related products — Test methods for metallic blast-cleaning abrasives — Part 2: Determination of particle size distribution.*

ISO 11125-3:1993, *Preparation of steel substrates before application of paints and related products — Test methods for metallic blast-cleaning abrasives — Part 3: Determination of hardness.*

ISO 11125-4:1993, *Preparation of steel substrates before application of paints and related products — Test methods for metallic blast-cleaning abrasives — Part 4: Determination of apparent density.*

ISO 11125-5:1993, *Preparation of steel substrates before application of paints and related products — Test methods for metallic blast-cleaning abrasives — Part 5: Determination of percentage defective particles and of microstructure.*

ISO 11125-6:1993, *Preparation of steel substrates before application of paints and related products — Test methods for metallic blast-cleaning abrasives — Part 6: Determination of foreign matter.*

ISO 11125-7:1993, *Preparation of steel substrates before application of paints and related products — Test methods for metallic blast-cleaning abrasives — Part 7: Determination of moisture.*

3 Definitions

For the purposes of this part of ISO 11124, the following definitions apply.

3.1 high-carbon cast-steel shot: A metallic blast-cleaning abrasive produced by a casting process in which molten high-carbon steel is formed into shot (see also 3.3) by means of an atomization process.

3.2 high-carbon cast-steel grit: A metallic blast-cleaning abrasive obtained by crushing various high-carbon cast-steel shot sizes into sharp-edged angular particles.

3.3 shot: Particles that are predominantly round, that have a length of less than twice the maximum particle width and that do not have edges, broken faces or other sharp surface defects.

3.4 grit: Particles that are predominantly angular, that have fractured faces and sharp edges and that are less than half round in shape.

3.5 defect: A fault or weakness in an abrasive which, if present at or above a given level, may be detrimental to the performance characteristics of the abrasive (see table 3).

3.5.1 void: A smooth-surfaced internal cavity considered undesirable when greater than 10 % of the cross-sectional area of a particle.

3.5.2 shrinkage defect: An internal cavity with a rough dendritic surface or a zone of microporosity, considered undesirable when greater than 40 % of the cross-sectional area of a particle.

3.5.3 crack: A linear discontinuity that has a length-to-width ratio of 3:1 or greater, that extends over more than 20 % of the diameter or shortest dimension of a particle and that is radial in direction.

3.6 foreign matter: Any material or particles mixed with the abrasive which are not attached to the abrasive particles and which are nonmagnetic.