

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

---

**JIS Z 0311** : 2004

(JACC/JSA)

**Metallic blast-cleaning abrasives**

---

ICS 25.100.70; 25.220.10

Reference number : **JIS Z 0311 : 2004 (E)**

## Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee, as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Association of Corrosion Control (JACC)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14. Consequently JIS Z 0311 : 1996 is replaced with this Standard.

This revision has been made based on ISO 11124-1 : 1993 *Preparation of steel substrates before application of paints and related products—Specifications for metallic blast-cleaning abrasives—Part 1 : General introduction and classification*, ISO 11124-2 : 1993 *Preparation of steel substrates before application of paints and related products—Specifications for metallic blast-cleaning abrasives—Part 2 : Chilled-iron grit*, 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*, ISO 11124-4 : 1993 *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 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* and 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* for the purposes of making it easier to compare this Standard with International Standards; to prepare Japanese Industrial Standard conforming with International Standards; and to propose a draft of an International Standard which is based on Japanese Industrial Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

Date of Establishment: 1996-08-01

Date of Revision: 2004-03-20

Date of Public Notice in Official Gazette: 2004-03-22

Investigated by: Japanese Industrial Standards Committee

Standards Board

Technical Committee on Chemical Products

---

JIS Z 0311 : 2004, First English edition published in 2004-07

Translated and published by: Japanese Standards Association  
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

---

In the event of any doubts arising as to the contents,  
the original JIS is to be the final authority.

© JSA 2004

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

## Contents

	Page
Introduction .....	1
1 Scope .....	1
2 Normative references .....	2
3 Definitions .....	4
4 Classification .....	5
5 Quality .....	5
6 General matters .....	8
7 Test method .....	9
7.1 Particle size .....	9
7.2 Vickers hardness (HV) .....	9
7.3 Apparent density .....	9
7.4 Particle shape .....	10
7.5 Defective particle .....	11
7.6 Foreign matter .....	12
7.7 Microstructure of metal .....	12
7.8 Chemical composition .....	13
7.9 Free moisture .....	14
8 Marking .....	15
Annex 1 (normative) Sampling method of metal abrasives .....	16
Annex 2 (informative) Comparison table between JIS and corresponding International Standards .....	19

## Metallic blast-cleaning abrasives

**Introduction** This Japanese Industrial Standard has been prepared based on each first edition of **ISO 11124-1 : 1993** *Preparation of steel substrates before application of paints and related products—Specifications for metallic blast-cleaning abrasives—Part 1 : General introduction and classification*, **ISO 11124-2 : 1993** *Preparation of steel substrates before application of paints and related products—Specifications for metallic blast-cleaning abrasives—Part 2 : Chilled-iron grit*, **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*, **ISO 11124-4 : 1993** *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 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* and **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 with some modifications of the technical contents.*

Portions given sidelines or dotted underlines are the matters modified from the original International Standards. The list of modifications with their explanations is given in annex 2 (informative).

**1 Scope** This Standard specifies the metallic abrasives (hereafter referred to as “abrasives”) used for blasting as surface preparation before applying paints and a coat of related products to steel products for the corrosion prevention and rust prevention.

Remarks : The International Standards corresponding to this Standard are as follows.

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21**.

**ISO 11124-1 : 1993** *Preparation of steel substrates before application of paints and related products—Specifications for metallic blast-cleaning abrasives—Part 1 : General introduction and classification* (MOD)