

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS R 6211-12 : 2003
(GIS/JSA)

**Bonded abrasive products —
Dimensions — Part 12 : Grinding
wheels for deburring and fettling on
a straight grinder**

ICS 25.100.70

Reference number : JIS R 6211-12 : 2003(E)

PROTECTED BY COPYRIGHT

 **Documents**
Document Sharing Hub

108

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 in accordance with the proposal of revising a Japanese Industrial Standard from the Japan Grinding Wheel Association (GIS)/the Japanese Standards Association (JSA), with a draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law which shall be applied by Article 14 of the same Law.

Consequently **JIS R 6211-12:1999** is replaced with **JIS R 6211-12:2003**.

In this revision, **ISO 603-12:1999 Bonded abrasive products — Dimensions — Part 12: Grinding wheels for deburring and fettling on a straight grinder** is used as a basis to make Japanese Industrial Standard to conform to the corresponding International Standard.

Attention is drawn to the possibility that some parts of this Standard, which have technical properties, 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. The Minister of Economy, Trade and Industry 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.

JIS R 6211 consists of the following 16 parts under the general title *Bonded abrasive products — Dimensions*.

- Part 1: Grinding wheels for external cylindrical grinding between centres*
- Part 2: Grinding wheels for centerless external cylindrical grinding*
- Part 3: Grinding wheels for internal cylindrical grinding*
- Part 4: Grinding wheels for surface grinding/peripheral grinding*
- Part 5: Grinding wheels for surface grinding/face grinding*
- Part 6: Grinding wheels for tool and tool room grinding*
- Part 7: Grinding wheels for manually guided grinding*
- Part 8: Grinding wheels for deburring and fettling/snagging*
- Part 9: Grinding wheels for high-pressure grinding*
- Part 10: Stones for honing and superfinishings*
- Part 11: Hand finishing sticks*
- Part 12: Grinding wheels for deburring and fettling on a straight grinder*
- Part 13: Grinding wheels for deburring and fettling on a vertical grinder*
- Part 14: Grinding wheels for deburring and fettling/snagging on an angle grinder*
- Part 15: Grinding wheels for cutting-off on stationary or mobile cutting-off machines*
- Part 16: Grinding wheels for cutting-off on hand held power tools*

Date of Establishment: 1999-02-20

Date of Revision: 2003-03-20

Date of Public Notice in Official Gazette: 2003-03-20

Investigated by: Japanese Industrial Standards Committee

Standards Board Technical Committee on Ceramics

JIS R 6211-12 : 2003, First English edition published in 2004-01

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 reference	1
3 Dimensions	2
3.1 Type 1: Straight grinding wheel	2
3.2 Type 4: Wheel tapered on both sides	3
3.3 Type 16: Cylindrical plug, tapered cone, Type 18: Cylindrical plug, flat end, Type 18R: Cylindrical plug, round end and Type 19: Cylindrical plug, taper-roll shaped	4
3.4 Type 52: Grinding wheel with axis	5
4 Designation	11
Annex (informative) Comparison table between JIS and corresponding International Standard	12

Bonded abrasive products – Dimensions – Part 12: Grinding wheels for deburring and fettling on a straight grinder

Introduction This part of JIS R 6211 has been prepared based on the first edition of ISO 603-12 *Bonded abrasive products—Dimensions—Part 12: Grinding wheels for deburring and fettling on a straight grinder* published in 1999, with modifying the technical contents of the tables in A series. The tables in B series specify the dimensions mainly used in Japanese market. However, A series shall take precedence, and B series will be restudied in five years.

The portions given sidelines or underlines with dots in this part of JIS R 6211 are the matters not included in the original International Standard.

1 Scope This part of JIS R 6211 specifies the nominal dimensions of grinding wheels for deburring and fettling on a straight grinder of:

- Type 1: Straight grinding wheel
- Type 4: Wheel tapered on both sides
- Type 16: Cylindrical plug, tapered cone
- Type 18: Cylindrical plug, flat end
- Type 18R: Cylindrical plug, round end
- Type 19: Cylindrical plug, taper-roll shaped
- Type 52: Grinding wheel with axis

Remarks 1 These bonded abrasive products are intended to be used for deburring and fettling of any surfaces of a workpiece using hand-held grinding machines (straight grinder). The workpiece is fixed, the grinding machine is guided by hand.

2 The International Standard corresponding to this part of JIS R 6211 is as follows:

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

ISO 603-12 : 1999 *Bonded abrasive products—Dimensions—Part 12: Grinding wheels for deburring and fettling on a straight grinder* (MOD)

2 Normative reference The following standard contains provisions which, through reference in this part of JIS R 6211, constitute provisions of this part of JIS R 6211. The most recent edition of the standard (including amendments) shall be applied.

JIS R 6242 *Bonded abrasive products—General—Designation, marking, range of outside diameters and tolerances*

Remarks : ISO 525:1999 *Bonded abrasive products—General requirements* is equivalent to the said standard.

3 Dimensions Dimensions shall be as follows:

3.1 Type 1: Straight grinding wheel

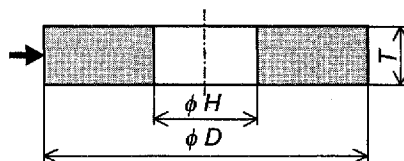


Fig. 1 Type 1: Straight grinding wheel

Table 1 Type 1: Straight grinding wheel (A series)

Unit : mm

D	T							H					
32	10	—	—	—	—	—	—	8	—	—	—	—	—
40	10	—	—	—	—	—	—	—	10	—	—	—	—
50	10	13	—	20	—	—	—	—	10	—	—	—	—
63	10	13	16	20	—	—	—	—	10	—	—	—	—
80	10	—	—	20	25	32	—	—	—	13	—	—	—
100	—	—	—	20	25	32	40	—	—	—	16	20	—
125	—	—	—	20	25	32	40	—	—	—	16	20	32
150	—	—	—	20	25	32	40	—	—	—	16	20	32
180	—	—	—	20	25	32	40	—	—	—	—	20	32
200	—	—	—	—	25	32	—	—	—	—	—	20	32

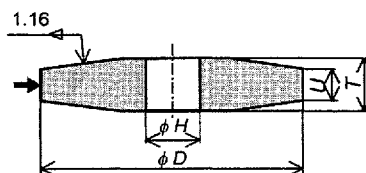
Table 2 Type 1: Straight grinding wheel (B series)

Unit : mm

D	T					H				
50	10	13	—	—	—	9.53	12.7	—	—	—
65	10	13	—	—	—	9.53	12.7	—	—	—
75	10	13	16	—	—	9.53	12.7	—	—	—
100	10	13	16	19	—	—	12.7	15.88	—	—
125	—	13	16	19	25	—	12.7	15.88	—	—
150	—	—	—	19	25	—	—	15.88	19.05	—
180	—	—	—	19	25	—	—	15.88	19.05	—
205	—	—	—	19	25	—	—	15.88	19.05	25.4
255	—	—	—	—	25	—	—	—	19.05	25.4

3.2 Type 4: Wheel tapered on both sides

Table 3 Type 4: Wheel tapered on both sides (A series)



Unit : mm

D	T	H	U
80	20	20	16
	25		21
100	20		15
	25		20
125	20		14
	25		19
150	20		13
	25		18
180	25		17
200	25	32	16