# INTERNATIONAL STANDARD

ISO 603-5

First edition 1999-07-15

# Bonded abrasive products — Dimensions —

#### Part 5:

Grinding wheels for surface grinding/face grinding

iTeh STANDARD PRE Dimensions —
Partie 5 Meules pour rectification plane/meulage latéral

ISO 603-5:1999 https://standards.iteh.ai/catalog/standards/sist/5ee4e563-7674-45ab-81d3-d762d99c80b1/iso-603-5-1999



#### ISO 603-5:1999(E)

Contents	Page
1 Scope	1
2 Normative references	1
3 Dimensions	2
3.1 Type 2: Cemented or clamped cylinder wheel	2
3.2 Type 6: Straight cup wheels	3
3.3 Type 31: Segments	4
3.4 Type 35: Cemented or clamped disc wheel	5
3.5 Type 36: Disc wheel with inserted nuts	6
3.6 Type 37: Cylinder wheel with inserted nuts	11
4 Designation	11
5 Specifications(standards.iteh.ai)	12
5.1 Tolerances	12
5.2 Balancinghttps://standards.heh.a/catalog/standards/slst/5ee4e563-7674-43a6-816	<sub>13</sub> 12
<b>5.3 Marking</b>	12
Ribliography	13

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International Organization for Standardization Case postale 56 • CH-1211 Genève 20 • Switzerland Internet iso@iso.ch

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#### **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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 603-5 was prepared by Technical Committee ISO/TC 29, *Small tools*, subcommittee SC 5, *Grinding wheels and abrasives*.

This first edition, together with ISO 603-1:1999 to ISO 603-4:1999 and ISO 603-6:1999 to ISO 603-16:1999, cancels and replaces ISO/R 603:1967, ISO 603-2:1981, ISO 1117:1975, ISO 2220:1972, ISO 2933:1974, ISO 3290:1976 and ISO 3921:1976 as a technical revision of these standards.

ISO 603 consists of the following parts, under the general title Bonded abrasive products — Dimensions:

- Part 1: Grinding wheels for external cylindrical grinding between centres
- Part 2: Grinding wheels for centreless 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

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### Bonded abrasive products — Dimensions —

#### Part 5:

Grinding wheels for surface grinding/face grinding

#### 1 Scope

This part of of ISO 603 specifies the nominal dimensions, in millimetres, of:

- Type 2: Cemented or clamped cylinder wheel
- Type 6: Straight cup wheel
- Type 31: Segments

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- Type 35: Cemented or clamped disc wheel (standards.iteh.ai)
- Type 36: Disc wheel with inserted nuts
- Type 37: Cylinder wheel with inserted nuts https://standards.iteh.a/catalog/standards/sist/5ee4e563-7674-45ab-81d3-

These bonded abrasive products are intended to be used for surface grinding where the workpiece is secured to a reciprocating table that moves in a straight line. The workpiece and the grinding wheel are mechanically guided.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 603. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 603 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the lates edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 525:1999, Bonded abrasive products — General requirements.

ISO 6103:1999, Bonded abrasive products — Static balancing of grinding wheels — Testing.

ISO 13942:—1), Bonded abrasive products — Limit deviations and run-out tolerances.

1

<sup>1)</sup> To be published.

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#### 3 Dimensions

#### 3.1 Type 2: Cemented or clamped cylinder wheel

See Figure 1 and Table 1.

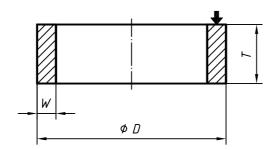


Figure 1 — Type 2

Table 1 — Dimensions of Type 2

D	T	W
150 S7	AND A ORD PR	FVIF <sup>16</sup> V
180		20
200	tandards.iteh.	20
250	ISO 309-5:1999	25
http30% tandards.iteh	.ai/catalog/standards/sist/5ee4e:	563-7674-45a <b>32</b> 81d3-
350/356	<del>d762d99c80b1/iso-603-5-19</del>	<del>1</del> 9
400/406	125	40
450/457		
500/508	125	50
600/610	123	63

## 3.2 Type 6: Straight cup wheels

See Figure 2 and Table 2.

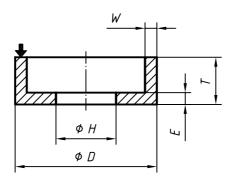


Figure 2 — Type 6

Table 2 — Dimensions of Type 6

D	T	Н	W	E
				min.
125	63	JD 4 32 D DI	D F X / 13F X X /	16
150	TTen <sub>80</sub> STAT	$DA_{32}DII$	16	20
180	80(stan	dard <sub>62</sub> iteh	.ai) 20	20
	100	100 (0076 2000	20	20
200 http	100 s://standards.iteh.ai/cata	<u>ISO 603<b>76</b>;<b>2</b>999</u> log/standards/sist/5ee46	20 :563-7674-45ab-81d3-	25
1	d762d	99c80b1/iso-603-5-19	99	20
	125	76,2	20	25
	100	76,2		
250	100	127	25	25
	125	76,2		
	125	127		
300	100	127	25	25
300	125	127	20	20

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#### 3.3 Type 31: Segments

See Figures 3, 4 and 5 and Tables 3, 4 and 5.

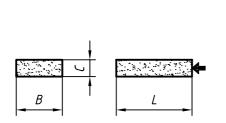


Figure 3 — Type 3101

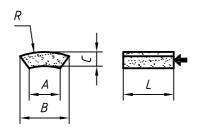


Figure 4 — Type 3104

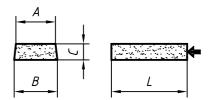


Figure 5 — Type 3109

Table 3 — Dimensions of Type 3101

50     25       60     25       80     25       80     30       90     35     200	
80 25 80 30 90 35 200	60
80     25       80     30       90     35     200	
90 35 200	80
	80
00 35 400	90
90 35 180	90
110 40 https 200	110
110 40	110
120 30 180	120
120 40	120
120 30 200	120
120 40	120

Table 4 — Dimensions of Type 3104

	В	A	С	L	R	
	95	72	25	120	170	
	103	77	25	150	200	
r <sub>o</sub> h	106	80	25	150	180	
l'eh	117	74	39	120	171,5	VIC
	143	103,5	38	200	273	
	152	108 <u>S</u> (	D 6 <del>43</del> -5	1200	179	
standard	ls.iteh.ai/	catalog/s	standards	s/sist/5ee	4e563-7	674-45

d762d99c80b1/iso-603-5-1999

Table 5 — Dimensions of Type 3109

В	A	С	L
60	54	22	110
70	64	25	110
70	64	25	150
80	70	40	150
103	94	38	150
103	94	38	180
ab-81d3- 120	106	41	200
152	135	63	200
152	135	63	250

### 3.4 Type 35: Cemented or clamped disc wheel

See Figure 6 and Table 6.

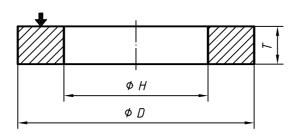


Figure 6 — Type 35

Table 6 — Dimensions of Type 35

D	T		Н
			max.
350/356	63	80	203,2
400/406			254
450/457	h STANDAI	RD PREVIE	W 304,8
500/508		• 4 1 • • • • • • • • • • • • • • • • •	V 00+,0
600/610	(standard		400
750/762	63 ISO 603-	80 5:1999	508
900/9114ps://stand	ards.iteh.ai/c <del>ata</del> log/standard	ls/sist/5ee4e <b>80</b> 3-7674-45a	

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