



International Standard

ISO 21951

Coated abrasives — Plain discs with holes for dust extraction

*Produits abrasifs appliqués — Disques simples avec trous pour
extraction de la poussière*

**Second edition
2024-10**

STANDARDSISO.COM : Click to view the full PDF of ISO 21951:2024

STANDARDSISO.COM : Click to view the full PDF of ISO 21951:2024



COPYRIGHT PROTECTED DOCUMENT

© ISO 2024

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
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Types and dimensions	1
4.1 Types.....	1
4.2 Test conditions.....	4
5 Designation	4
6 Marking	4

STANDARDSISO.COM : Click to view the full PDF of ISO 21951:2024

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 document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 5, *Grinding wheels and abrasives*.

This second edition cancels and replaces the first edition (ISO 21951:2001), which has been technically revised.

The main changes are as follows:

- addition of new type C;
- dimensions added for types A, B and C.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Coated abrasives — Plain discs with holes for dust extraction

1 Scope

This document specifies the nominal dimensions of plain discs with holes for dust extraction.

Plain discs in accordance with this document are intended for use on disc sanders with dust extraction.

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 554, *Standard atmospheres for conditioning and/or testing — Specifications*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Types and dimensions

4.1 Types

See [Figures 1, 2 and 3](#) and [Table 1](#).

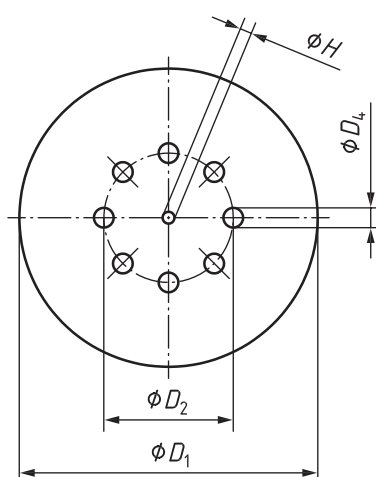


Figure 1 — Type A disc

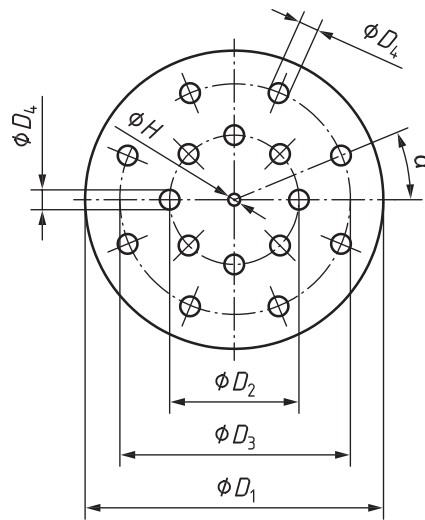


Figure 2 — Type B disc

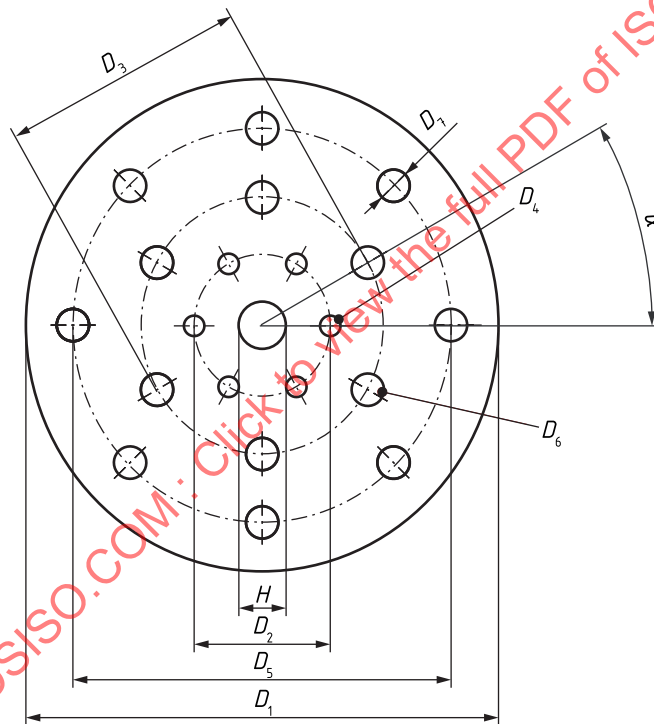


Figure 3 — Type C disc

Table 1 — Dimensions

Dimensions in millimetres

Type	Nominal code	D_1	Limit deviations	D_2	D_4	D_3	D_6	D_5	D_7	H	α	Number of holes per circle ($D_2/D_3/D_5$)								
A	1	80	$\pm 1,5$	50	$\pm 0,5$	± 1	$\pm 0,5$	± 1	$\pm 0,5$	—	—	6								
	2	100		65								8								
	3	115	$\pm 1,5$	41						6		4								
	4	115		65						—		8								
	5	125	± 2	41						6		4								
	6	125		65						—		8								
		125		65						18		8								
	7	125		72						—		5								
	8	150	65	6						8										
	9	150	65	—						8										
	10	150	80	—						6										
		150	80	15						6										
	11	150	120	—						6										
		12	150	120						18,5		8								
B	13	200	± 2	128	± 2	± 2	± 2	± 2	± 2	± 2	± 2	8								
	1	150	65	10								116	—	6	22,5°	8/8				
			65	8								120	11	10	0	8/8				
			80	10								120	12	15	0	6/8				
	2	180	90	12								140	12	6	22,5°	8/8				
			200	105								12	150			12	8/8			
	4	230	105	14								150	14			8/8				
	C	1	150	± 2								44	6	80	10	120	10	15	30	6/6/8

4.2 Test conditions

The limit deviations given in [Table 1](#) are valid under the following conditions:

- | | | |
|---|---|-------------------------------------|
| — Temperature: $20\text{ °C} \pm 2\text{ °C}$ | } | shall be in accordance with ISO 554 |
| — Relative humidity: $65\% \pm 5\%$ | | |

When plain discs are tested they shall be stored for at least 24 h under the above conditions.

5 Designation

A plain disc with holes for dust extraction conforming to this document shall be designated by

- "Abrasive disc";
- a reference to this document, i.e. ISO 21951;
- type A or B;
- nominal code.

EXAMPLE A plain disc of Type A with nominal code 4 is designated as follows:

Plain disc ISO 21951 A 4

6 Marking

Plain discs with holes for dust extraction shall be marked with

- grain size;
- manufacturer, supplier, importer or their registered trademark.