



**International
Standard**

ISO 603-9

**Bonded abrasive products —
Dimensions —**

**Part 9:
Grinding wheels for high-pressure
grinding**

*Produits abrasifs agglomérés — Dimensions —
Partie 9: Meules pour meulage haute pression*

**Second edition
2024-01**

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Published in Switzerland

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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.

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).

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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 603-9:1999), which has been technically revised. It also incorporates the Corrigendum ISO 603-9:1999/Cor 1:1999.

The main changes are as follows:

- the Scope has been specified;
- [Clause 2](#) has been revised;
- [Clause 3](#) has been added;
- in [Clause 4](#) (former Clause 3), introductory, explanatory sentences have been added for better understanding;
- the values in [Table 1](#) have been adapted to the state of the art and for a more global acceptance the most common dimensions for imperial sizes have also been included;
- former Clause 5 “Specifications” has been removed and the reference to ISO 13942 has been added in the Scope for information;
- the Bibliography has been revised.

A list of all parts in the ISO 603 series can be found on the ISO website.

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.

Bonded abrasive products — Dimensions —

Part 9: Grinding wheels for high-pressure grinding

1 Scope

This document specifies the nominal dimensions, in millimetres, of:

- shape type 1: straight grinding wheel.

These bonded abrasive products are intended to be used for deburring and fettling of any surface of a workpiece. The workpiece and the grinding wheel are mechanically guided.

This document does not specify limit deviations and run-out tolerances, which are given in ISO 13942.

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 525, *Bonded abrasive products — Shape types, designation and marking*

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 Shape type and dimensions

Straight grinding wheels shall be in accordance with ISO 525, shape type 1 for stationary (fixed) grinding machines.

The symbols of the dimensions to describe a type 1 wheel are given in [Figure 1](#) in accordance with ISO 525.

[Table 1](#) gives the most common dimensions.

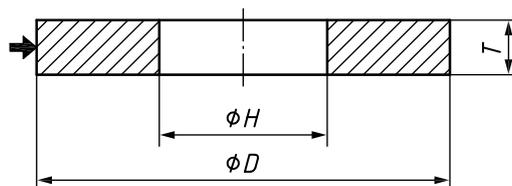


Figure 1 — Type 1

Table 1 — Dimensions of shape Type 1

Outside diameter D mm	Overall thickness T mm							Bore diameter H mm
	≤ 40 (40)	≤ 55 (51)	≤ 65 (63)	≤ 80 (76)	≤ 105 (102)	≤ 130 (125)	≤ 152 (150/152)	
$400 \leq D < 500$ (406)	X	X	X	—	—	—	—	127,0 152,4
$500 \leq D \leq 700$ (508/610)	X	X	X	X	X	X	—	127,0 152,4 203,2 304,8 305,0
$700 < D \leq 1\,000$ (762/914)	—	—	X	X	X	X	X	203,2 304,8 305,0 400,0 457,2

NOTE Values in brackets represent typically used dimensions.

5 Designation

The designation shall be done in accordance with ISO 525.