

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 525

BONDED ABRASIVE PRODUCTS — GENERAL FEATURES

DESIGNATION — RANGES OF DIMENSIONS — PROFILES

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 525, *Bonded Abrasive Products — General Features — Designation — Ranges of dimensions — Profiles*, was drawn up by Technical Committee ISO/TC 29, *Small Tools*, the Secretariat of which is held by the Association Française de Normalisation (AFNOR).

Work on this question by the Technical Committee began in 1950 and led, in 1963, to the adoption of a Draft ISO Recommendation.

In September 1964, this Draft ISO Recommendation (No. 735) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Argentina	India	Spain
Australia	Iran	Sweden
Austria	Israel	Switzerland
Canada	Italy	Turkey
Chile	Japan	U.A.R.
Czechoslovakia	Korea, Rep. of	United Kingdom
France	Netherlands	U.S.A.
Germany	New Zealand	Yugoslavia
Greece	Poland	

Two Member Bodies opposed the approval of the Draft:

Belgium
U.S.S.R.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in November 1966, to accept it as an ISO RECOMMENDATION.

CONTENTS

	Page
Foreword	3
1. Scope	3
2. Commentary	3
3. Designation of bonded abrasive products	4
4. Ranges of nominal dimensions	7
5. Special profiles for plain non-cylindrical wheels	8
Annex A	8

BONDED ABRASIVE PRODUCTS — GENERAL FEATURES

DESIGNATION — RANGES OF DIMENSIONS — PROFILES

FOREWORD

The letter symbols used for dimensions in this ISO Recommendation may be replaced in national standards by those in conformity with the current practice of the country in question, until an international agreement regarding a uniform symbol system is reached.

1. SCOPE

This ISO Recommendation relates to bonded abrasive products in general, excluding diamond abrasive products. It comprises

- the designation of bonded abrasive products (shapes, sizes, specifications),
- the ranges of nominal dimensions (outside diameters, thicknesses, holes),
- the symbols for the profiles of plain non-cylindrical grinding wheels.

Tolerances on dimensions will be covered by a separate ISO Recommendation to be issued later. The dimensions standardized for each class of product are, or will be, the subject of individual ISO Recommendations, the first of which is ISO Recommendation R...,* *Bonded Abrasive Products. Grinding Wheel Dimensions (Part 1)*.

2. COMMENTARY

Designation and specification

The usefulness of a uniform system of designation and marking for grinding wheels and bonded abrasive products has been recognized by manufacturers and users.

The main obstacle to a uniform marking system, however, as far as specifications are concerned, lies in the fact that similarly marked grinding wheels produced by different manufacturers do not necessarily give the same results in use.

With regard to these specifications, therefore, it is important to emphasize that the present standardization applies solely to the marking and not to the performance of the grinding wheel in operation; grinding wheels with the same standard symbols, but from different sources, may therefore behave differently from one another when in use.

The symbols adopted constitute a codification of the practices most generally in force. Particular attention is drawn to the fact that the symbols for the size of grain are only simple conventional numbers which are valid pending some future logical standardization of the sizes of granular or powdered materials in general.

Dimensional ranges

The nominal dimensions in this ISO Recommendation have been selected to provide convenient ranges satisfying all requirements as far as possible.

Outside diameters and thicknesses are given in two columns, one in millimetres and the other in inches, which show opposite each other the values considered to be practically equivalent in the two systems of units.

* At present Draft ISO Recommendation No. 736.