INTERNATIONAL STANDARD

ISO 6344-1

First edition
1998-04-15

Corrected and reprinted
1999-02-01

Coated abrasives — Grain size analysis —

Part 1:
Grain size distribution test

Abrasifs appliqués — Granulométrie —

Partie 1: Contrôle de la distribution granulométrique

Reference number
ISO 6344-1:1998(E)

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.

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 6344-1 was prepared by Technical Committee ISO/TC 29, *Small tools*, subcommittee SC 5, *Grinding wheels and abrasives*.

ISO 6344 consists of the following parts, under the general title *Coated abrasifs - Grain size analysis*:

— *Part 1: Grain size disribution test*

— *Part 2: Determination of grain size distribution of macrogrits P12 to P220*

— *Part 3: Determination of grain size distribution of microgrits P240 to P2500*

Annex A of this part of ISO 6344 is for information only.

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Printed in Switzerland

Coated abrasives — Grain size analysis —

Part 1:
Grain size distribution test

1 Scope

This part of ISO 6344 sets forth definitions and grain size distribution test for electro-fused aluminium oxide and silicon carbide grits for coated abrasives, i.e.:

— macrogrits P12 to P220

— microgrits P240 to P2500

Tests for grain size distribution analysis are defined in ISO 6344-2 for macrogrits and in ISO 6344-3 for microgrits.

This part of ISO 6344 applies both to those grits used in the manufacture of coated abrasive products and to those grits recovered from products for test purposes.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 6344. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part os ISO 6344 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6344-2:1998, *Coated abrasives — Grain size analysis — Part 2: Determination of grain size distribution of macrogrits P12 to P220*.

ISO 6344-3:1998, *Coated abrasives — Grain size analysis — Part 3: Determination of grain size distribution of microgrits P240 to P2500*.

ISO 8486-2:1996, *Bonded abrasives — Determination and designation of grain size distribution – Part 2: Microgrits F230 to F1200.*

ISO 9284:1992, *Abrasive grains — Test-sieving machines.*

3 Definitions

For the purposes of this part of ISO 6344 the following definitions apply.

3.1 Macrogrits: Abrasive grits of diameter between 3,35 mm and 0,053 mm whose grain size distribution is determined by sieving.

3.2 Microgrits: Abrasive grits having a median equivalent diameter (see 4.2 and 4.3) from 58,5 µm to 8,4 µm whose grain size distribution is determined by sedimentation.

3.3 Grain size distribution: Percentage of grains of different sizes composing the macrogrit or microgrit.