

This is a preview of "ISO 7711-1:2021". [Click here to purchase the full version from the ANSI store.](#)

Second edition
2021-11

Dentistry — Diamond rotary instruments —

Part 1: General requirements

*Médecine bucco-dentaire — Instruments rotatifs diamantés —
Partie 1: Exigences générales*



Reference number
ISO 7711-1:2021(E)

© ISO 2021



COPYRIGHT PROTECTED DOCUMENT

© ISO 2021

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

This is a preview of "ISO 7711-1:2021". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols	3
5 Requirements	3
5.1 Material.....	3
5.1.1 Blank.....	3
5.1.2 Shank hardness.....	3
5.1.3 Working part.....	3
5.2 Designation, colour code, grit sizes.....	3
5.2.1 Designation.....	3
5.2.2 Colour code.....	3
5.2.3 Grit size distribution.....	4
5.2.4 Grit sizes.....	4
5.3 Dimensions.....	4
5.3.1 Designated dimensions of overall length.....	4
5.3.2 Designated dimensions of the shank.....	6
5.3.3 Dimensions of working part.....	6
5.4 Bending test to verify the instrument strength.....	7
5.4.1 General.....	7
5.4.2 Effect on run-out.....	7
5.4.3 Breaking test.....	7
5.5 Resistance to processing and reprocessing.....	8
6 Measurement and test methods	8
6.1 Sampling.....	8
6.2 Testing of the dimensions.....	8
6.3 Testing of the run-out.....	9
6.4 Testing of resistance to processing and reprocessing.....	9
6.4.1 Sampling.....	9
6.4.2 Equipment.....	9
6.4.3 Reagent.....	9
6.4.4 Preparation of the test piece.....	9
6.4.5 Procedure.....	9
6.5 Visual inspection.....	9
7 Marking and packaging	10
7.1 Marking on diamond rotary instruments.....	10
7.2 Labelling on the package.....	10
8 Instructions for use, processing and reprocessing	10
Bibliography	11

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 documents 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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 106, *Dentistry*, Subcommittee SC 4, *Dental instruments*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 55, *Dentistry*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition of ISO 7711-1 cancels and replaces ISO 7711-1:1997 and ISO 7711-3:2004, which have been technically revised. It also incorporates the Amendment ISO 7711-1:1997/Amd.1:2009.

The main changes compared to the previous edition are as follows:

- the entire content of ISO 7711-3 has been included;
- definitions have been added to [Clause 3](#);
- blank materials have been added in [5.1](#);
- tables for force values were removed;
- figures and tables describing bur shapes and dimensions have been removed.

A list of all parts in the ISO 7711 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.