
Indexable hardmetal (carbide) inserts with rounded corners, without fixing hole — Dimensions

*Plaquettes amovibles en métaux-durs (carbures métalliques) avec
arrondi de pointe, sans trou de fixation — Dimensions*

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 883:2013

<https://standards.iteh.ai/catalog/standards/iso/376b237a-9538-440d-baf8-13695c932820/iso-883-2013>



iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 883:2013

<https://standards.iteh.ai/catalog/standards/iso/376b237a-9538-440d-baf8-13695c932820/iso-883-2013>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, 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
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Types of insert	1
4 Interchangeability	1
4.1 Tolerances	1
4.2 Thickness, s , of inserts with chip breakers	2
5 Designation and marking	2
5.1 Designation	2
5.2 Marking	2
6 Measurement	2
7 Recommended dimensions	2
7.1 General.....	2
7.2 Triangular inserts.....	3
7.3 Square inserts.....	4
Annex A (informative) Tolerances for d, m and s	7
Annex B (informative) Method of measurement of “m” dimension	8
Annex C (informative) Inserts with rounded corners without fixing hole, with shapes covered by this International Standard	10
Annex D (informative) Relationship between designations in this International Standard and ISO 13399 (all parts)	12
Bibliography	13

ISO 883:2013

<https://standards.iteh.ai/catalog/standards/iso/376b237a-9538-440d-baf8-13695c932820/iso-883-2013>

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. 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. 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.

The committee responsible for this document is ISO/TC 29, *Small tools*, Subcommittee SC 9, *Tools with cutting edges made of hard cutting materials*.

This fourth edition cancels and replaces the third edition (ISO 883:1985), of which it constitutes a minor revision.

iteh Standards
(<https://standards.iteh.ai/>)
Document Preview

ISO 883:2013

<https://standards.iteh.ai/catalog/standards/iso/376b237a-9538-440d-baf8-13695c932820/iso-883-2013>

Indexable hardmetal (carbide) inserts with rounded corners, without fixing hole — Dimensions

1 Scope

This International Standard specifies the dimensions of indexable hardmetal (carbide) inserts with rounded corners, without fixing hole and with normal clearance of 0° and 11°. These inserts are primarily intended to be mounted, by top clamping, on turning and boring tools.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable to its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 513, *Classification and application of hard cutting materials for metal removal with defined cutting edges — Designation of the main groups and groups of application*

ISO 1832, *Indexable inserts for cutting tools — Designation*

3 Types of insert

The types of indexable hardmetal (carbide) inserts specified in this International Standard are the following:

— TN: triangular inserts, with 0° normal clearance;

— TP: triangular inserts, with 11° normal clearance;

— SN: square inserts, with 0° normal clearance;

— SP: square inserts, with 11° normal clearance.

Inserts with 0° normal clearance (TN and SN) are standardized only without chip breakers. Inserts with 11° normal clearance (TP and SP) are provided with and without chip breakers.

At the time of publication, neither the shape nor the dimensions of chip breakers are standardized. Thus, if necessary, special features shall be explained by means of a diagram or additional specifications.

[Table C.1](#) gives the ranges of sizes for these inserts.

4 Interchangeability

4.1 Tolerances

Indexable hardmetal (carbide) inserts specified in this International Standard are, provided in the following tolerance classes, in accordance with ISO 1832:

a) inserts without chip breakers: tolerance classes U and G;

b) inserts with chip breakers: tolerance class M.

Inserts with chip breakers and tolerance class G are second preference (see [Annex C](#)).

The values of the tolerances in accordance with ISO 1832 are given in [Annex A](#).

Other tolerances are given in [Tables 1](#) and [2](#).

4.2 Thickness, s , of inserts with chip breakers

The thickness, s , of inserts with chip breakers is defined as the distance between the cutting edge at the corner and the opposing supporting surface of the insert; see [Figure 1 a\)](#) and [1 b\)](#).

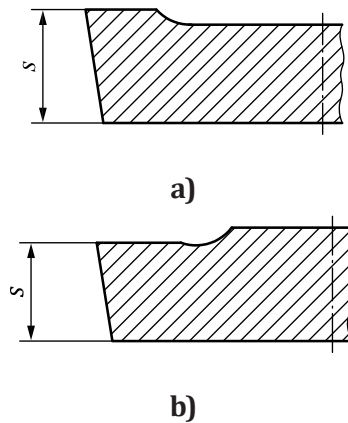


Figure 1

5 Designation and marking

5.1 Designation

The designation of the indexable hardmetal (carbide) inserts complying with this International Standard shall conform to ISO 1832.

In addition to this designation, one or both of the following may be indicated:

- the symbol of the group of application, in accordance with ISO 513;
- the commercial designation of the hardmetal (carbide) grade.

5.2 Marking

The following synnbol, at least, shall be marked on the insert itself (except when this would be difficult on the smaller inserts):

- symbol of the group of application, or commercial designation of the hardmetal (carbide) grade (or both, if possible, on large inserts).

6 Measurement

[Annex B](#) indicates the methods of measuring the dimension m of the indexable inserts covered by this International Standard.

7 Recommended dimensions

7.1 General

The choice of the more common dimensions is restricted to the specifications given in [Tables 1](#) and [2](#). It is strongly recommended that these standard inserts be used wherever possible (first preference). When other inserts are specially required, insert dimensions shall be selected from the unshaded