BS ISO 883:2013

BSI Standards Publication

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

bsi.

...making excellence a habit.™

Document Sharing Hub

National foreword

This British Standard is the UK implementation of ISO 883:2013. It supersedes BS 4193-2:1986 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MTE/18, Tools tips and inserts for cutting applications.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2013. Published by BSI Standards Limited 2013

ISBN 978 0 580 81020 6

ICS 25.100.01

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 September 2013.

Amendments issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: BS ISO 883:2013

INTERNATIONAL STANDARD

ISO 883

Fourth edition
2013-09-01

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

Reference number
ISO 883:2013(E)

Documents
Document Sharing Hub

© ISO 2013

Full document details: BS 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

© ISO 2013 – All rights reserved

Documents
Document Sharing Hub

Full document details: BS ISO 883:2013

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 2013 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS 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.

© ISO 2013 – All rights reserved
Documents
Document Sharing Hub
Full document details: BS ISO 883:2013

INTERNATIONAL STANDARD ISO 883:2013(E)

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.

© ISO 2013 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 883:2013