

BS ISO 3286:2016



BSI Standards Publication

# Single point cutting tools — Corner radii

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**National foreword**

This British Standard is the UK implementation of ISO 3286:2016.

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.

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© The British Standards Institution 2016.  
Published by BSI Standards Limited 2016

ISBN 978 0 580 90179 9

ICS 25.100.01

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 March 2016.

**Amendments issued since publication**

| Date | Text affected |
|------|---------------|
|------|---------------|

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INTERNATIONAL  
STANDARD

**ISO**  
**3286**

Second edition  
2016-03-01

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**Single point cutting tools — Corner  
radii**

*Outils de coupe à partie active unique — Rayons de pointe*



Reference number  
ISO 3286:2016(E)



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## 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](http://www.iso.org/directives)).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 29, *Small tools*, Subcommittee SC 9, *Tools with defined cutting edges, cutting items*.

This second edition cancels and replaces the first edition (ISO 3286:1976), of which it constitutes a minor revision.

# Single point cutting tools — Corner radii

## 1 Scope

This International Standard lays down the values for the corner radius of single point cutting tools. It applies to all types of single point cutting tools (with or without inserts), the corner of which is rounded.

## 2 Dimensions

Corner radii shall have the dimensions given in [Table 1](#).

## 3 Tolerances

Tolerance on the corner radius will be given in particular tool standards, if necessary.

**Table 1**

| Corner radius, $r_E$ |       |
|----------------------|-------|
| mm                   | in    |
| 0,2                  | 0,008 |
| 0,4                  | 1/64  |
| 0,8                  | 1/32  |
| 1,2                  | 3/64  |
| 1,6                  | 1/16  |
| 2,0                  | 5/64  |
| 2,5 <sup>a</sup>     | 3/32  |
| 3,2                  | 1/8   |

<sup>a</sup> For indexable (throwaway) inserts, corner radius 2,4 mm instead of 2,5 mm is to be used.

## Annex A (informative)

### Relationship between designations in this International Standard and ISO 13399

For relationship between designations in this International Standard and preferred symbols according to ISO 13399, see [Table A.1](#).

**Table A.1 — Relationship between designations in this International Standard and the ISO 13399 series**

| Symbol in this International Standard | Reference in this International Standard            | Property name in ISO 13399 | Symbol in ISO 13399 | Reference in ISO 13399          |
|---------------------------------------|---|----------------------------|---------------------|---------------------------------|
| $r_E$                                 | <a href="#">Clause 3</a><br><a href="#">Table 1</a> | corner radius              | RE                  | ISO/TS 13399-2<br>71DD6C8ACA503 |



## Bibliography

- [1] ISO/TS 13399-2:2014, *Cutting tool data representation and exchange — Part 2: Reference dictionary for the cutting items*





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## BSI Group Headquarters

389 Chiswick High Road London W4 4AL UK

